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PRE-DESIGN INVESTIGATION (PDI) COMPLETION REPORT FOR SEDIMENT AREA A WETLAND SITE 2B WITH TRANSMITTAL NSB NEW LONDON CT

2/1/2012

TETRA TECH

TETRA TECH

PITT-02-12-075

February 21, 2012

Project Number 112G03271

NAVFAC MID-ATLANTIC, Northeast IPT
Attn: Mr. Dominic O'Connor (Code OPTE3-1)
Bldg Z-144
9742 Maryland Avenue
Norfolk, Virginia 23511-3095

Reference: CLEAN Contract No. N62470-08-D-1001
Contract Task Order WE055

Subject: Draft Pre-Design Investigation (PDI) Completion Report for
Area A Wetland - Site 2B Sediment
Naval Submarine Base-New London, Groton, Connecticut

Dear Mr. O'Connor:

Please find enclosed two hard copies and two electronic copies (CDs) of the subject document for your review and comment. Copies of the document were also distributed to the other members of the Naval Submarine Base – New London team per the distribution list provided below for their review and comment.

Please provide your comments on the document by March 23, 2012. If you have any questions regarding the enclosed document, please contact me at (412) 921-8433.

Sincerely,

Aaron Bernhardt
Project Manager

AB/mlg
Enclosure(s)

c: Ms. Kymberlee Keckler, EPA (3 Copies and 3 CDs)
Mr. Mark Lewis, CTDEEP (1 CD)
Mr. Ken Finkelstein, NOAA (1 CD)
Ms. Tracey McKenzie, NSB-NLON (2 CDs)
Mr. Paul Steinberg, Mabbett (2 Copies and 2 CDs)
Mr. Garth Glenn, Tetra Tech – Norfolk (letter only)
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Pre-Design Investigation (PDI) Completion Report for Sediment at Area A Wetland - Site 2B

at

Naval Submarine Base New London

Groton, Connecticut

Naval Facilities Engineering Command Mid-Atlantic

Contract Number N62470-08-D-1001

Contract Task Order WE55

February 2012

PRE-DESIGN INVESTIGATION (PDI) COMPLETION REPORT FOR SEDIMENT AT AREA A WETLAND - SITE 2B

NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT

COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

Submitted to:
Naval Facilities Engineering Command Mid-Atlantic
9742 Maryland Avenue
Norfolk, Virginia 23511-3095

Submitted by:
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234 Mall Boulevard, Suite 260
King of Prussia, Pennsylvania 19406

CONTRACT NUMBER N62470-08-D-1001
CONTRACT TASK ORDER WE55

FEBRUARY 2012

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TABLE OF CONTENTS

SECTION **PAGE NO.**

ACRONYMS AND ABBREVIATIONS v

1.0 INTRODUCTION 1-1
1.1 PURPOSE AND SCOPE 1-1
1.2 REPORT ORGANIZATION 1-1
1.3 SITE BACKGROUND 1-2
1.4 PREVIOUS INVESTIGATIONS 1-2

2.0 SAMPLING INVESTIGATION 2-1
2.1 SAMPLING PROGRAM 2-1
2.1.1 Sediment Sample Collection 2-2
2.1.2 Field Quality Control Sample Collection 2-2
2.2 FIELD DOCUMENTATION 2-3
2.3 ANALYTICAL PROGRAM 2-3

3.0 EVALUATION OF ANALYTICAL RESULTS 3-1
3.1 EXCAVATION AREA 1 3-1
3.2 EXCAVATION AREA 2 3-1
3.3 EXCAVATION AREA 3 3-2
3.4 EXCAVATION AREA 4 3-2
3.5 EXCAVATION AREA 5 3-3

4.0 SUMMARY AND CONCLUSIONS 4-1

REFERENCES R-1

APPENDICES

A WETLAND DELINEATION FIGURES
B FIELD TASK MODIFICATION REQUEST FORMS AND PHOTOGRAPHS OF THE SEDIMENT CORER
C FIELD DOCUMENTATION
D DATA VALIDATION REPORTS
E ANALYTICAL RESULTS

TABLES

NUMBER

2-1 Summary of PDI Sediment Sample Analyses
3-1 Chemical Concentrations Compared to RGs and TECs - Excavation Area 1
3-2 Chemical Concentrations Compared to RGs and TECs - Excavation Area 2
3-3 Chemical Concentrations Compared to RGs and TECs - Excavation Area 3
3-4 Chemical Concentrations Compared to RGs and TECs - Excavation Area 4
3-5 Chemical Concentrations Compared to RGs and TECs - Excavation Area 5

FIGURES

NUMBER

1-1 Facility Location Map
1-2 Site Location Map
1-3 Surface Features
1-4 Soil and Sediment Sampling Locations
2-1 Extent of Contamination – Excavation Area 1
2-2 Extent of Contamination – Excavation Area 2
2-3 Extent of Contamination – Excavation Area 3
2-4 Extent of Contamination – Excavation Areas 4 and 5

ACRONYMS AND ABBREVIATIONS

bss	below sediment surface
CLEAN	Comprehensive Long-Term Environmental Action Navy
CTO	Contract Task Order
ERA	Ecological Risk Assessment
FS	Feasibility Study
FTMR	Field Task Modification Request
NAVFAC	Naval Facilities Engineering Command
NSB-NLON	Naval Submarine Base – New London
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PDI	Pre-Design Investigation
RG	Remediation Goal
RI	Remedial Investigation
SAP	Sampling and Analysis Plan
TEC	Threshold Effect Concentration

1.0 INTRODUCTION

This Pre-Design Investigation (PDI) Completion Report for Sediment at Area A Wetland – Site 2B at Naval Submarine Base – New London (NSB-NLON), Groton, Connecticut, was prepared for the U.S. Department of Navy (Navy), Naval Facilities Engineering Command (NAVFAC) by Tetra Tech under the Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract Number N62470-08-D-1001, Contract Task Order (CTO) WE55.

1.1 PURPOSE AND SCOPE

The purpose of this Completion Report is to present the results of sediment sampling conducted in accordance with the PDI Sampling and Analysis Plan (SAP) for Area A Wetland – Site 2B Sediment (Tetra Tech, March 2011) to refine the extent of contaminated sediment that needs to be excavated to eliminate risks to sediment invertebrates. The sampling was also conducted in accordance with three Field Task Modification Request (FTMR) forms (see Section 2.1 for more details). Sediment was determined to be contaminated if chemical concentrations were greater than Remediation Goals (RGs) based on the protection of sediment invertebrates (see Section 1.4 for more details).

Sampling was conducted during three sampling events in 2011, with sediment samples from each sampling event analyzed in two phases. Sampling occurred in April (Phase I and II), September (Phase III and IV), and November (Phase V and VI) 2011. Samples collected in the second phase of each sampling event (Phases II, IV, and VI) were only analyzed if chemical concentrations in the adjacent samples from the first phase of each sampling event (Phases I, III, and V, respectively) exceeded at least one of the RGs.

1.2 REPORT ORGANIZATION

This Completion Report is divided into the following sections:

- Section 1.0, Introduction, provides background information including the location and description of Site 2B and a summary of previous investigations.

- Section 2.0, Sampling Investigation, describes the most recent sampling events and deviations from the SAP.

- Section 3.0, Evaluation of Analytical Data, presents the results of the most recent sampling events and final excavation areas.

- Section 4.0, Summary and Conclusions, presents a summary and overall conclusions of the PDI.

1.3 SITE BACKGROUND

A detailed description of the site history and background of Site 2B is presented in the Remedial Investigation (RI) Update/Feasibility Study (FS) Report (Tetra Tech, June 2010). A brief summary is presented below.

NSB-NLON is located in southeastern Connecticut in the Towns of Ledyard and Groton and is situated on the eastern bank of the Thames River, approximately 6 miles north of Long Island Sound (see Figure 1-1). Site 2B is located in the northeastern portion of NSB-NLON (see Figure 1-2) and encompasses approximately 19.3 acres. The site was formed in the late 1950s when dredge spoils from the Thames River were pumped to the site and contained within an earthen dike that extends from the Area A Landfill to the southern side of the Area A Weapons Center (see Figure 1-3). Site 2B is a relatively flat-lying, swampy, vegetated area with areas of open water (generally shallow) scattered across the wetland. The soft organic sediments that characterize the wetland support a monoculture of the reed *Phragmites communis*. However, the Navy is in the process of removing the reed from the area under their Natural Resources Program by mowing the plants and treating them with a herbicide. The three primary sources of contamination to Site 2B were: (1) placement of DDT bricks for mosquito control, (2) runoff from the Area A Landfill, and (3) runoff from the Area A Weapons Center.

1.4 PREVIOUS INVESTIGATIONS

Several investigations have been conducted at Site 2B and adjacent sites (Site 2A - Area A Landfill and Site 20 - Area A Weapons Center) since 1990. The results from those investigations are summarized in the RI Update/FS Report (Tetra Tech, June 2010). Figure 1-4 shows all of the PDI and historical sediment/soil sample locations in or within the general area of Site 2B. Some historical samples located along the western boundary of Site 2B are no longer considered within Site 2B as these locations have since been covered by rip-rap, which was installed during a remedial action for the adjacent landfill. Only the samples located outside of the areas proposed for excavation are labeled on this figure; samples located within the excavation areas are labeled on Figures 2-1 through 2-4.

The Human Health Risk Assessment conducted as part of the RI Update/FS Report concluded that risks to construction workers and older child trespassers associated with Site 2B were acceptable; residents or industrial workers are not present at the site, so risks to those receptors were not evaluated.

The Ecological Risk Assessment (ERA) completed in the RI Update/FS Report identified potential risk to sediment invertebrates. Although other receptors (i.e., plants, birds, and mammals) are present at the site, risks to those receptors were not evaluated in the RI Update/FS Report because previous risk assessments conducted for Site 2B indicated that potential risks to those receptors were not significant.

As part of the ERA, toxicity tests were conducted on sediment samples to determine whether chemicals in the sediment within Site 2B were impacting sediment invertebrates, and these data were used to develop site-specific risk-based RGs. Based on an evaluation of the data, the following RGs were developed:

- Total polycyclic aromatic hydrocarbons (PAHs) – 6,585 µg/kg
- Total DDT – 1,504 µg/kg
- Total Aroclor – 532 µg/kg

Also, samples with 10 or more chemicals (total PAHs, 4,4'-DDT, total DDT, total Aroclor, arsenic, cadmium, chromium, copper, lead, nickel, and zinc) detected at concentrations exceeding threshold effects concentrations (TECs) from MacDonald et al. (2000) were considered to exceed a RG, unless toxicity testing at that location indicated that the sample was not toxic to sediment invertebrates.

An evaluation of the data was then conducted in the RI Update/FS Report to determine which sediment samples within Site 2B had chemical concentrations that exceeded the RGs. Based on this evaluation, it was determined that five areas, designated as Excavation Areas 1 through 5, had chemical concentrations exceeding the RGs. These five areas are presented on Figure 1-4. The sizes and locations of the five areas were adjusted from the areas presented in the RI Update/FS Report (Tetra Tech, June 2010) based on PDI results. The area adjustments are discussed in more detail in Section 3.

Finally, it should be noted that the Site 2B boundary is slightly different than the one presented in the RI Update/FS Report; the area of the wetland decreased from 26 acres to approximately 19.3 acres. This decrease is the result of the wetland boundary being redelineated in October 2010. Appendix A includes two figures showing the updated wetland delineation boundary. Figure 1 lists the coordinates for each of the wetland boundary points determined during wetland delineation, and the second figure (Sheet 1 of 1) and accompanying text presents the metes and bounds description of the wetland boundary.

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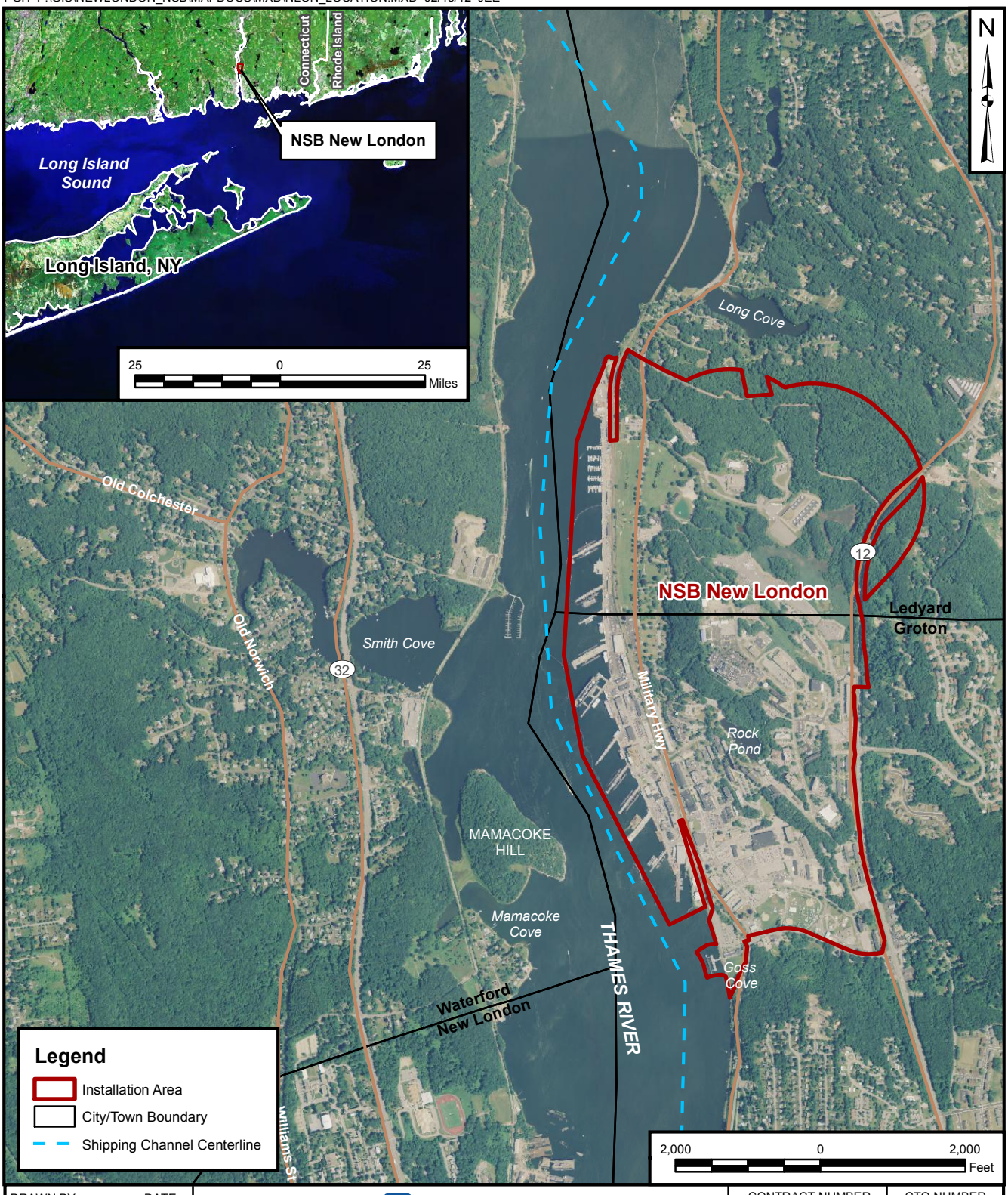
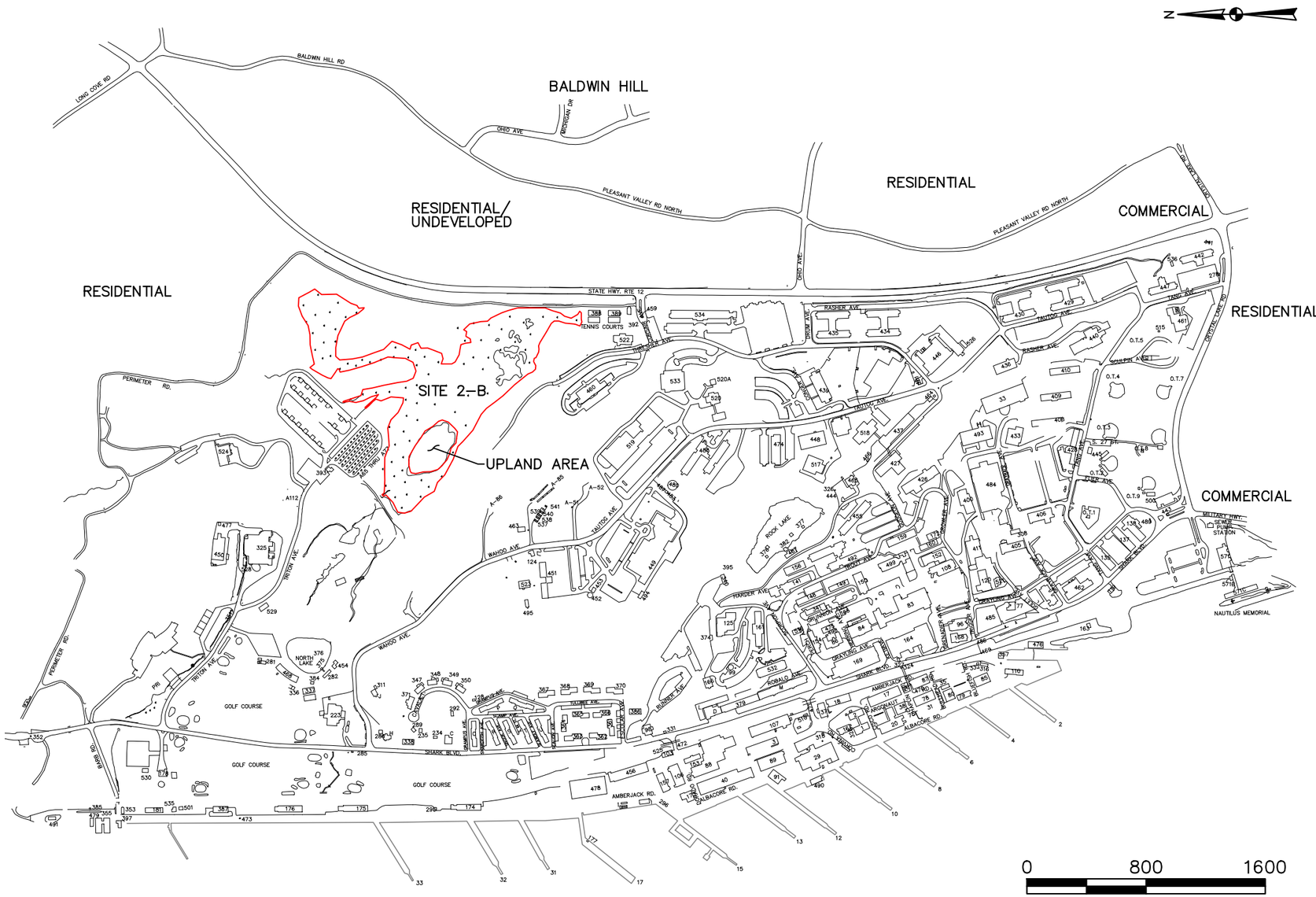


DRAWN BY: T. WHEATON	DATE: 04/07/10	TETRA TECH	CONTRACT NUMBER: 2625 / CTO NUMBER: WE55
CHECKED BY: L. GANSER	DATE: 02/15/12	FACILITY LOCATION MAP AREA A WETLAND - SITE 2B NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY / DATE
REVISED BY	DATE		APPROVED BY / DATE
SCALE: AS NOTED			FIGURE NO.: FIGURE 1-1 / REV: 0



LEGEND:

SITE BOUNDARY

SITE IDENTIFICATION:

SITE 2B – AREA A WETLAND

NOTES:

1. SITE BOUNDARY IS APPROXIMATE.

DRAWN BY MF	DATE 8/16/11	Tetra Tech NUS, Inc.	SITE LOCATION MAP AREA A WETLAND – SITE 2B NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	CONTRACT NO. WE55
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REVISED BY	DATE			APPROVED BY DATE
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DRAWN BY: J. ENGLISH	DATE: 03/05/10	TETRA TECH	CONTRACT NUMBER: 2625 / CTO NUMBER: WE55
CHECKED BY: L. GANSER	DATE: 02/16/12	SURFACE FEATURES AREA A WETLAND - SITE 2B NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY: — / DATE: —
REVISED BY: —	DATE: —		APPROVED BY: — / DATE: —
SCALE: AS NOTED			FIGURE NO.: FIGURE 1-3 / REV: 0

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DRAWN BY: J. ENGLISH	DATE: 01/16/12	TETRA TECH	CONTRACT NUMBER: 2625 / CTO NUMBER: WE55
CHECKED BY: L. GANSER	DATE: 02/15/12	SOIL AND SEDIMENT SAMPLING LOCATIONS AREA A WETLAND - SITE 2B NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY: — / DATE: —
REVISED BY: —	DATE: —		APPROVED BY: — / DATE: —
SCALE: AS NOTED			FIGURE NO.: FIGURE 1-4 / REV: 0

2.0 SAMPLING INVESTIGATION

This section provides a summary of the sampling activities conducted at Site 2B during the sediment PDI. Samples were collected in accordance with the SAP (Tetra Tech, March 2011) and FTMR forms provided in Appendix B. Supporting documents for the field activities are provided in Appendix C.

2.1 SAMPLING PROGRAM

Sediment samples were collected during three sampling events in 2011 [April (Phases I and II), September (Phases III and IV), and November (Phases V and VI)] to determine the extent of sediment with chemical concentrations greater than RGs. The first sampling event was described in the SAP (Tetra Tech, March 2011). Three FTMRs were prepared after the SAP was finalized to modify sample collection methods and to identify additional samples for collection. The first FTMR presented a revised sediment collection method using a plastic core tube, described in more detail in Section 2.1.1., the second FTMR presented a summary of Phase I and II results and recommended the locations for Phase III and IV sediment samples, and the third FTMR presented a summary of Phase III and IV results and recommended the locations for Phase V and VI sediment samples. Copies of the FTMRs are provided in Appendix B.

Each sampling event included a phased approach for sample analysis. Samples collected during the first phase of each sampling event (Phases I, III, and V) were analyzed, and if chemical concentrations in any of those samples exceeded an RG, the adjacent second phase sample (Phases II, IV, and VI) was analyzed.

Surficial sediment samples were collected from 0 to 4 inches below sediment surface (bss) for this investigation. This sampling interval was selected because it was the expected maximum depth of the biotic zone at most locations and was consistent with the depth of sediment collected during other recent investigations. The depth of contaminated sediment, which overlies dredge spoils, was not evaluated during the PDI because previous analysis of dredge spoils indicated that chemical concentrations in dredge spoils were less than RGs.

The following sections summarize the sediment samples collected during the PDI.

2.1.1 Sediment Sample Collection

Table 2-1 presents the samples collected as part of the PDI and analytical parameters analyzed for in each sample. Sediment samples were collected from five areas within Site 2B, identified as Excavations Areas 1 through 5 (see Figures 2-1 through 2-4).

The samples were collected from the top 4 inches of sediment after first removing the larger pieces of organic material/detritus from the ground surface (typically 1 to 2 inches of debris). Because most of the locations were under water at the time of sampling, a sediment corer was used to collect the majority of the sediment samples. A photograph of the corer is presented in Appendix B. A new plastic liner, approximately 20 inches in length, was attached to the corer to collect each sample. The plastic liner was pushed into the ground until refusal or until the necessary sediment depth was reached. At some locations where the water was shallow (less than approximately 6 inches), the plastic liner was pushed directly into the sediment by hand without being attached to the corer. In most cases, the corer was pushed into the sediment dredge spoils, which formed a plug at the end to help retain the sediment in the liner. After the sediment was collected, the liner was detached from the corer, and the sediment was extruded out of the top of the liner into a clean aluminum pan. The top portion of the sample was discarded if it consisted of mostly woody debris. The next 4 inches of sediment were then separated from the rest of the core, and the remaining sediment was discarded. This approach was repeated, if necessary, to obtain an adequate volume of sediment to fill all of the sample containers. After enough sediment was collected to fill the sample containers for a sample location, the sediment was homogenized, large pieces of woody debris were removed, and the sediment was placed into appropriate sample jars. The sample jars were then placed on ice in a cooler until they were prepared for shipment.

At some locations where water was not covering the sediment, a clean shovel was used to collect the sediment. The shovel was used to remove about a 10-inch-deep section of the sediment that was then placed on the ground. The top 4 inches (after large woody pieces were removed) of sediment were removed with a clean stainless steel spoon and placed into an aluminum pan, where it was subsequently homogenized and then placed into appropriate sample containers

2.1.2 Field Quality Control Sample Collection

Duplicate sediment samples were collected during the first phase of each sampling event. Duplicate sediment samples were not collected during the second phases because it was not known which of those samples, if any, would be selected for analysis. Equipment rinsate blanks were not collected for reasons presented in the SAP. Cooler temperature blanks were collected for the laboratory to confirm that the samples were cooled to the proper temperature.

2.2 FIELD DOCUMENTATION

Field observations were recorded in a field logbook and/or on field log sheets. Field sample log sheets were used to document sample collection details, and other observations and activities were recorded in the field logbook. Copies of the field logbook and log sheets are provided in Appendix C.

2.3 ANALYTICAL PROGRAM

Sediment samples were analyzed for the following:

- PAHs
- Polychlorinated biphenyls (PCBs) (by Aroclor)
- Select pesticides (4,4'-DDD, 4,4'-DDE, and 4,4'-DDT)
- Select metals (arsenic, cadmium, chromium, copper, lead, nickel, and zinc)

Because the typical holding time for sediment samples being analyzed for PAHs and pesticides is 14 days if the sample is held at or below 6 degrees Celsius until sample extraction, the second phase samples to be analyzed for these parameters for each sampling event were frozen at the laboratory until the first phase results were reviewed. The sample jars were filled no more than three-quarters full to reduce the likelihood of sample container breakage if the sample expanded during freezing. Because the holding times for PCBs and metals are 1 year and 6 months, respectively, the second phase samples for these chemicals were refrigerated at the laboratory until it was determined whether the samples needed to be analyzed.

The laboratory (Katahdin Analytical Services, Inc., Scarborough, Maine) analyzed the sediment in accordance with the analytical methods identified in the SAP (Tetra Tech, March 2011). Sediment sample results reported by the laboratory are presented in Section 3.0, and data validation reports are presented in Appendix D.

TABLE 2-1

SUMMARY OF PDI SAMPLE ANALYSES
AREA A WETLAND - SITE 2B
NSB-NLON, GROTON, CONNECTICUT

Location ID	Phase	Date Collected	Analytical Parameters[1]			
			PAHs	PCBs	Pesticides	Metals
Area 1						
2W-SD-SD87	I	4/07/2011	X			
2W-SD-SD88	I	4/07/2011	X			
2W-SD-SD89	I	4/07/2011	X			
2W-SD-SD90	I	4/07/2011	X			
2W-SD-SD94	I	4/07/2011	X			
2W-SD-SD95	I	4/07/2011	X			
2W-SD-SD96	I	4/07/2011	X			
2W-SD-SD97	I	4/07/2011	X			
2W-SD-SD98	I	4/07/2011	X			
2W-SD-SD99	I	4/07/2011	X			
2W-SD-SD100	I	4/07/2011	X			
2W-SD-SD85	II	4/07/2011	X			
2W-SD-SD86	II	4/07/2011	X			
2W-SD-SD91	II	4/07/2011	X			
2W-SD-SD92	II	4/07/2011	X			
2W-SD-SD93	II	4/07/2011	X			
2W-SD-SD163	III	9/08/2011	X			
2W-SD-SD164	III	9/08/2011	X			
2W-SD-SD165	III	9/08/2011	X			
2W-SD-SD166	IV	9/08/2011	X			
2W-SD-SD167	IV	9/08/2011	X			
2W-SD-SD168	IV	9/08/2011	X			
2W-SD-SD169	IV	9/08/2011	X			
2W-SD-SD170	IV	9/08/2011	X			
2W-SD-SD171	IV	9/08/2011	X			
2W-SD-SD183	V	11/02/2011	X			
2W-SD-SD184	V	11/03/2011	X			
2W-SD-SD185	V	11/02/2011	X			
2W-SD-SD186	V	11/02/2011	X			
2W-SD-SD187	V	11/02/2011	X			
2W-SD-SD188	V	11/03/2011	X			
2W-SD-SD189	V	11/03/2011	X			
2W-SD-SD190	V	11/03/2011	X			
2W-SD-SD191	V	11/03/2011	X			
2W-SD-SD192	VI	11/03/2011	X[2]			
2W-SD-SD193	VI	11/03/2011	X			
2W-SD-SD194	VI	11/03/2011	X			
2W-SD-SD195	VI	11/03/2011	X			

TABLE 2-1

SUMMARY OF PDI SAMPLE ANALYSES
AREA A WETLAND - SITE 2B
NSB-NLON, GROTON, CONNECTICUT

Location ID	Phase	Date Collected	Analytical Parameters[1]			
			PAHs	PCBs	Pesticides	Metals
Area 1 (continued)						
2W-SD-SD196	VI	11/03/2011	X			
2W-SD-SD197	VI	11/03/2011	X			
2W-SD-SD198	VI	11/03/2011	X[2]			
2W-SD-SD199	VI	11/03/2011	X[2]			
2W-SD-SD200	VI	11/03/2011	X[2]			
2W-SD-SD201	VI	11/03/2011	X[2]			
2W-SD-SD202	VI	11/03/2011	X[2]			
2W-SD-SD203	VI	11/03/2011	X[2]			
2W-SD-SD204	VI	11/02/2011	X[2]			
Area 2						
2W-SD-SD103	I	4/06/2011	X			
2W-SD-SD105	I	4/06/2011	X			
2W-SD-SD107	I	4/06/2011	X			
2W-SD-SD108	I	4/06/2011	X			
2W-SD-SD110	I	4/06/2011	X			
2W-SD-SD112	I	4/06/2011	X			
2W-SD-SD101	II	4/06/2011	X			
2W-SD-SD102	II	4/06/2011	X			
2W-SD-SD104	II	4/06/2011	X			
2W-SD-SD106	II	4/06/2011	X			
2W-SD-SD109	II	4/06/2011	X			
2W-SD-SD111	II	4/06/2011	X			
2W-SD-SD113	II	4/06/2011	X			
Area 3						
2W-SD-SD116	I	4/06/2011	X	X	X	X
2W-SD-SD117	I	4/06/2011	X	X	X	X
2W-SD-SD118	I	4/05/2011	X	X	X	X
2W-SD-SD119	I	4/05/2011	X	X	X	X
2W-SD-SD120	I	4/05/2011	X	X	X	X
2W-SD-SD121	I	4/05/2011	X	X	X	X
2W-SD-SD122	I	4/05/2011	X	X	X	X
2W-SD-SD123	I	4/06/2011	X	X	X	X
2W-SD-SD126	I	4/05/2011	X			
2W-SD-SD127	I	4/05/2011	X	X	X	X
2W-SD-SD130	I	4/05/2011	X	X	X	X
2W-SD-SD134	I	4/05/2011	X	X	X	X
2W-SD-SD135	I	4/06/2011	X	X	X	X
2W-SD-SD136	I	4/05/2011	X	X	X	X

TABLE 2-1

SUMMARY OF PDI SAMPLE ANALYSES
AREA A WETLAND - SITE 2B
NSB-NLON, GROTON, CONNECTICUT

Location ID	Phase	Date Collected	Analytical Parameters[1]			
			PAHs	PCBs	Pesticides	Metals
Area 3 (continued)						
2W-SD-SD138	I	4/05/2011	X	X	X	X
2W-SD-SD140	I	4/05/2011	X	X	X	X
2W-SD-SD142	I	4/06/2011	X	X	X	X
2W-SD-SD144	I	4/05/2011	X	X	X	X
2W-SD-SD146	I	4/05/2011	X	X	X	X
2W-SD-SD114	II	4/06/2011	X	X	X	X
2W-SD-SD115	II	4/06/2011	X[2]	X[2]	X[2]	X[2]
2W-SD-SD124	II	4/05/2011	X	X	X	X
2W-SD-SD125	II	4/05/2011	X	X	X	X
2W-SD-SD128	II	4/05/2011	X	X	X	X
2W-SD-SD129	II	4/06/2011	X	X	X	X
2W-SD-SD131	II	4/05/2011	X	X	X	X
2W-SD-SD132	II	4/06/2011	X	X	X	X
2W-SD-SD133	II	4/05/2011	X	X	X	X
2W-SD-SD137	II	4/05/2011	X	X	X	X
2W-SD-SD139	II	4/06/2011	X	X	X	X
2W-SD-SD141	II	4/05/2011	X	X	X	X
2W-SD-SD143	II	4/06/2011	X	X	X	X
2W-SD-SD145	II	4/06/2011	X	X	X	X
2W-SD-SD172	III	9/07/2011			X	
2W-SD-SD173	III	9/07/2011			X	
2W-SD-SD174	III	9/07/2011			X	
2W-SD-SD175	III	9/07/2011			X	
2W-SD-SD176	IV	9/07/2011	X[2]	X[2]	X[2]	X[2]
2W-SD-SD177	IV	9/07/2011	X[2]	X[2]	X[2]	X[2]
2W-SD-SD178	IV	9/07/2011	X[2]	X[2]	X[2]	X[2]
2W-SD-SD179	IV	9/07/2011	X[2]	X[2]	X[2]	X[2]
Area 4						
2W-SD-SD147	I	4/04/2011	X	X	X	X
2W-SD-SD149	I	4/04/2011	X	X	X	X
2W-SD-SD152	I	4/04/2011	X	X	X	X
2W-SD-SD154	I	4/04/2011	X	X	X	X
2W-SD-SD148	II	4/04/2011	X[2]	X[2]	X[2]	X[2]
2W-SD-SD150	II	4/05/2011	X[2]	X[2]	X[2]	X[2]
2W-SD-SD151	II	4/04/2011	X[2]	X[2]	X[2]	X[2]
2W-SD-SD153	II	4/04/2011	X	X	X	X

TABLE 2-1

SUMMARY OF PDI SAMPLE ANALYSES
AREA A WETLAND - SITE 2B
NSB-NLON, GROTON, CONNECTICUT

Location ID	Phase	Date Collected	Analytical Parameters[1]			
			PAHs	PCBs	Pesticides	Metals
Area 5						
2W-SD-SD158	I	4/04/2011	X	X	X	X
2W-SD-SD159	I	4/04/2011	X	X	X	X
2W-SD-SD161	I	4/04/2011	X	X	X	X
2W-SD-SD155	II	4/04/2011	X	X	X	X
2W-SD-SD156	II	4/04/2011	X	X	X	X
2W-SD-SD157	II	4/04/2011	X	X	X	X
2W-SD-SD160	II	4/04/2011	X	X	X	X
2W-SD-SD162	II	4/04/2011	X	X	X	X
2W-SD-SD180	III	9/07/2011	X	X	X	X
2W-SD-SD181	III	9/07/2011	X	X	X	X
2W-SD-SD182	IV	9/07/2011	X[2]	X[2]	X[2]	X[2]

1 - The lists below present the parameters included in each group of analyses.
2 - Sample was collected but not analyzed in accordance with the Sampling and Analysis Plan.

PAHs	PCBs	Pesticides	Metals
1-Methylnaphthalene	Aroclor-1016	4,4'-DDD	Arsenic
2-Methylnaphthalene	Aroclor-1221	4,4'-DDE	Cadmium
Acenaphthene	Aroclor-1232	4,4'-DDT	Chromium
Acenaphthylene	Aroclor-1242		Copper
Anthracene	Aroclor-1248		Lead
Benzo(a)anthracene	Aroclor-1254		Nickel
Benzo(a)pyrene	Aroclor-1260		Zinc
Benzo(b)fluoranthene			
Benzo(g,h,i)perylene			
Benzo(k)Fluoranthene			
Chrysene			
Dibenzo(a,h)Anthracene			
Fluoranthene			
Fluorene			
Indeno(1,2,3-cd)Pyrene			
Naphthalene			
Phenanthrene			
Pyrene			

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Aerial photograph taken in 2010.

N

2WSD9
2WSD57 / 2WSD62
2WSD16
2WCSD12
2WCSD11
2WSD100
2WSD86
2WSD85
2WSD99
2WSD88
2WSD87
2WSD98
2WCSD14 / 2WSD79
2WSD97
2WSD96
2WSD56
2WSD89
2WSD95
2WSD94
2WSD90
2WCSD15
2WSD93
2WSD92
2WSD91
2WCSD13
2WSD169
2WSD170
2WSD171
2WSD21
2WSD166
2WSD167
2WSD168
2WSD163
2WSD164
2WSD165
2WSD183
2WSD55 / 2WSD60
2WSD185
2WSD186
2WSD187
2WSD184
2WSD193
2WSD188
2WSD189
2WSD190
2WSD191
2WSD194
2WSD195
2WSD196
2WSD197
2WSD29
2WSD30
2WSD5

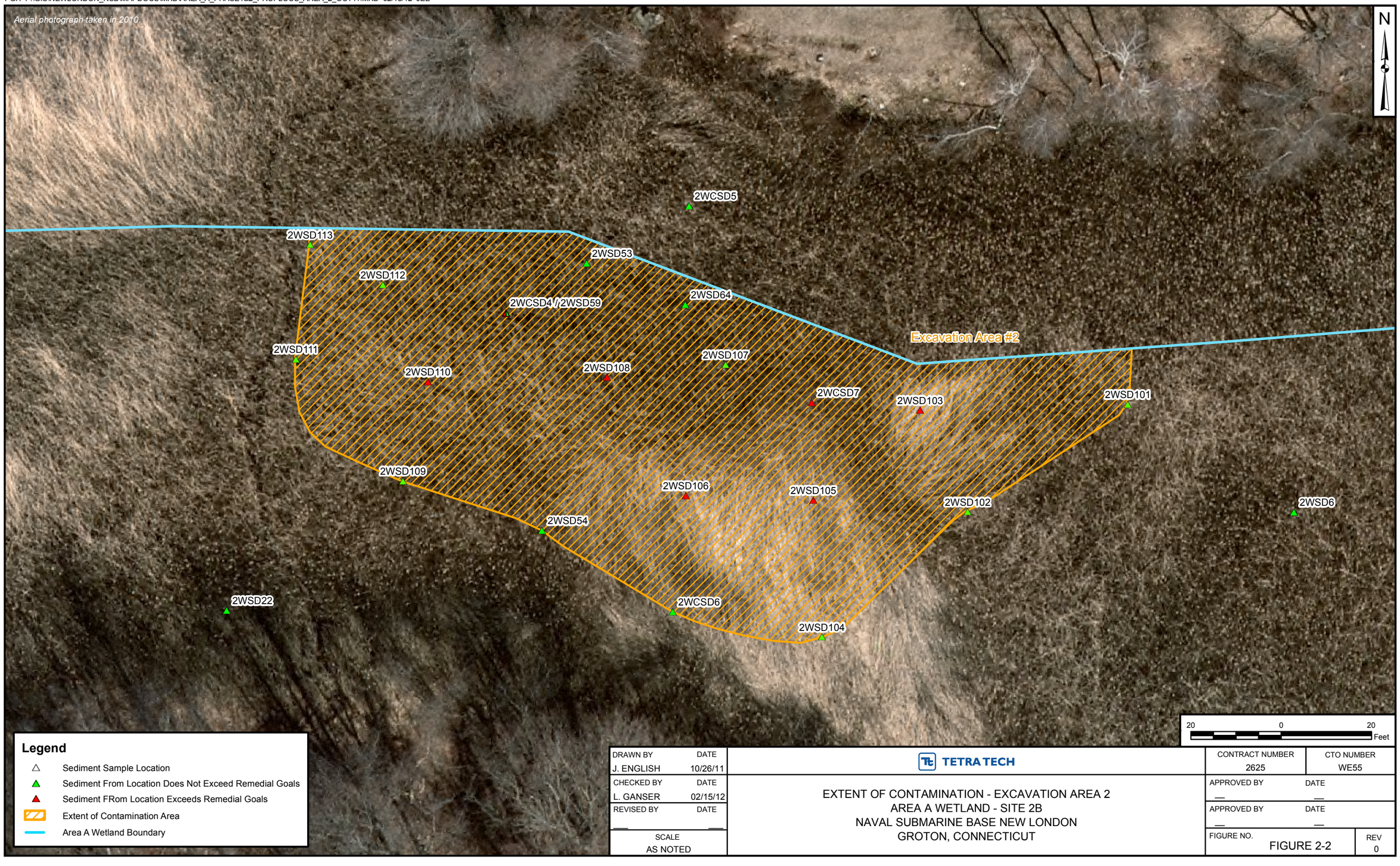
Legend

- Sediment Sample Location
- Sediment From Location Does Not Exceed Remedial Goals
- Sediment From Location Exceeds Remedial Goals
- Extent of Contamination Area
- Area A Wetland Boundary

40 0 40 Feet

DRAWN BY: J. ENGLISH	DATE: 12/01/11	TETRA TECH	CONTRACT NUMBER: 2625 / CTO NUMBER: WE55
CHECKED BY: A. BERNHARDT	DATE: 02/16/12	EXTENT OF CONTAMINATION - EXCAVATION AREA 1 AREA A WETLAND - SITE 2B NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY: ___ / DATE: ___
REVISED BY: ___	DATE: ___		APPROVED BY: ___ / DATE: ___
SCALE: AS NOTED			FIGURE NO.: FIGURE 2-1 / REV: 0

PGH P:\GIS\NEWLONDON_NSB\MAPDOCS\MXD\AREA_A_PHASE1&2_PROPLOCS_AREA_2_OCT11.MXD 02/15/12 JEE



Legend

- Sediment Sample Location
- Sediment From Location Does Not Exceed Remedial Goals
- Sediment FRom Location Exceeds Remedial Goals
- Extent of Contamination Area
- Area A Wetland Boundary

DRAWN BY / DATE	J. ENGLISH 10/26/11
CHECKED BY / DATE	L. GANSER 02/15/12
REVISED BY / DATE	— —
SCALE	AS NOTED

TETRA TECH

EXTENT OF CONTAMINATION - EXCAVATION AREA 2
AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE NEW LONDON
GROTON, CONNECTICUT

CONTRACT NUMBER	2625
CTO NUMBER	WE55
APPROVED BY / DATE	— —
APPROVED BY / DATE	— —
FIGURE NO.	FIGURE 2-2
REV	0

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Aerial photograph taken in 2010.

N

2WSD26
2WSD117
2WSD52 / 2WSD71
2WSD25 / 2WSD77
2WSD116
2WSD114
2WSD50
2WSD65
2WSD66
2WSD24 / 2WSD78
Excavation Area #3
2WSD121
2WSD118
2WSD119
2WSD120
2WSD51
2WSD22
2WSD122
2WSD23
2WSD123
2WSD124
2WSD127
2WSD126
2WSD125
2WSD49 / 2WSD70
2WSD172
2WSD129
2WSD131
2WSD130
2WSD128
2WSD132
2WSD134
2WSD133
2WSD47
2WSD72
2WSD173
T1B
2WSD139
2WSD135
2WSD137
T1A
2WSD136
2WSD1
2WSD138
2WSD140
2WSD141
T2B
2WSD142
2WSD174
T2A
2WSD143
2WSD48 / 2WSD69
2WMW39DS
2WSD74
T3B
2WSD144
2WSD145
2WSD175
2WSD75
T3A
2WSD146
T4B
2WSD45
T4A
2WSD27
2WSD46
T5B
2WSD147
2WSD76
2WSD149
T5A
Excavation Area #4
2WSD153
T6B
2WSD152
2WSD63
T6A
2WSD154

Legend

- Sediment Sample Location
- Sediment From Location Does Not Exceed Remedial Goals
- Sediment From Location Exceeds Remedial Goals
- Extent of Contamination Area
- Area A Wetland Boundary

35 0 35 Feet

DRAWN BY: J. ENGLISH	DATE: 10/26/11	TETRA TECH	CONTRACT NUMBER: 2625	CTO NUMBER: WE55
CHECKED BY: L. GANSER	DATE: 02/15/12	EXTENT OF CONTAMINATION - EXCAVATION AREA 3 AREA A WETLAND - SITE 2B NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY: —	DATE: —
REVISED BY: —	DATE: —		APPROVED BY: —	DATE: —
SCALE: AS NOTED			FIGURE NO.: FIGURE 2-3	REV: 0

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Legend

- Sediment Sample Location
- Sediment From Location Does Not Exceed Remedial Goals
- Sediment From Location Exceeds Remedial Goals
- Extent of Contamination Area
- Area A Wetland Boundary

DRAWN BY	DATE	TETRA TECH		CONTRACT NUMBER	CTO NUMBER
J. ENGLISH	10/26/11			2625	WE55
CHECKED BY	DATE	EXTENT OF CONTAMINATION - EXCAVATION AREAS 4 AND 5 AREA A WETLAND - SITE 2B NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT		APPROVED BY	DATE
L. GANSER	02/15/12			—	—
REVISED BY	DATE			APPROVED BY	DATE
—	—			—	—
SCALE				FIGURE NO.	REV
AS NOTED				FIGURE 2-4	0

3.0 EVALUATION OF ANALYTICAL RESULTS

This section presents the results of PDI sampling and evaluates the data in accordance with the decision rules presented in the SAP (Tetra Tech, March 2011). Tables 3-1 to 3-5 summarize chemical concentrations in sediment samples collected as part of the current and historical investigations for each of the five excavation areas, respectively. The tables only include sediment samples collected within each of the five Excavation Areas; analytical results for all of the surficial sediment samples collected at Site 2B are presented in Appendix E. Figures 2-1 through 2-4 present expanded views of Excavation Areas 1, 2, 3, and 4/5, respectively, and indicate which samples have chemical concentrations exceeding RGs.

3.1 EXCAVATION AREA 1

Sediment samples from Excavation Area 1 were only analyzed for PAHs because total PAHs was the only parameter that exceeded an RG in samples collected during previous investigations. Six phases of sample analyses were needed to define the extent of PAH contamination in this area, and the excavation area increased nearly seven times in size from 4,759 square feet (from the RI Update/FS Report) to 31,768 square feet (final excavation boundary). Assuming a 2-foot excavation depth, which is the approximate average depth to dredge spoils, the volume of sediment within Excavation Area 1 is 2,353 cubic yards.

PAH concentrations followed a distinct pattern, with concentrations decreasing from north to south across the excavation area apparently following the low-lying topography and heading west in the direction of the dike before concentrations decreased to less than the RG. PAH concentrations are generally bounded to the east and west by the topography and the wetland boundary.

3.2 EXCAVATION AREA 2

Sediment samples from Excavation Area 2 were only analyzed for PAHs because total PAHs was the only parameter that exceeded an RG in samples collected during previous investigations. Only two phases of sample analyses were needed to define the extent of PAH contamination in this area. The excavation area decreased slightly in size from 11,620 square feet (from the RI Update/FS Report) to 9,997 square feet (final excavation boundary), and also shifted slightly to the west. Assuming a 2-foot excavation depth, the volume of sediment within Excavation Area 2 is 739 cubic yards.

3.3 EXCAVATION AREA 3

Three phases of sample analyses were needed to define the extent of contamination in this area. Phase I and II sediment samples from Excavation Area 3, except the sample from 2WSD126, were analyzed for PAHs, PCBs, select pesticides, and select metals. The sample from 2WSD126 was only analyzed for PAHs because the adjacent location (2WSD23), which was initially proposed to bound the contamination in that area based on historical results, was not analyzed for PAHs. Phase III sediment samples from Excavation Area 3 were only analyzed for select pesticides because concentrations of PAHs, PCBs, and metals were not as elevated in excess of their RGs than were the pesticides in this area. It was assumed that if the contamination is bounded for the pesticides, it will be bounded for the other parameters as well. Phase IV sediment samples were collected for all parameters but were not analyzed because the extent of contamination exceeding RGs was bounded using Phase III samples and/or the historical samples.

Based on PDI results, Excavation Area 3 expanded to the east and approximately doubled in size from 22,308 square feet (from the RI Update/FS Report) to 46,557 square feet (final excavation boundary). Assuming a 2-foot excavation depth, the volume of sediment within Excavation Area 3 is 3,449 cubic yards.

3.4 EXCAVATION AREA 4

Excavation Area 4 was divided into two smaller areas after the wetland was redelineated in October 2010. Sample location 2WSD63 (collected in 2008) and historical sample location T6A (collected in 1994) were originally intended to be co-located. Based on the redelineation of the wetland, it was determined that the samples were not co-located. When sample location 2WSD63 was located, the *Phragmites* was very high, which likely decreased the accuracy of the global positioning system unit, which showed 2WSD63 as being close to T6A. The area west of the wetland boundary and the historical sample location T6A are under rip-rap installed during a remedial action for the adjacent landfill. Because the samples from 2WSD63 were collected in 2008 (several years after the rip-rap was installed), it could not have been co-located with T6A. Therefore, the location was moved on the figures to be just inside of the wetland boundary. Because of that and based on the current wetland boundary, the original Excavation Area 4 could be divided into two areas because chemical concentrations at 2WSD63 were less than the RGs.

Sediment samples from Excavation Area 4 were analyzed for PAHs, PCBs, select pesticides, and select metals. The extent of contaminated sediment was defined after the first sampling event (Phase I and II), and the overall size of the excavation area decreased from 4,334 square feet (from the RI Update/FS Report) to 3,195 square feet (final excavation boundary). Assuming a 2-foot excavation depth, the volume of sediment within Excavation Area 4 is 237 cubic yards.

3.5 EXCAVATION AREA 5

Sediment samples from Excavation Area 5 were analyzed for PAHs, PCBs, select pesticides, and select metals. The extent of contaminated sediment was defined after three phases. Phase IV sediment samples were collected for all parameters but were not analyzed because the extent of contamination exceeding RGs was bounded using Phase II and III samples. The overall size of the excavation area almost tripled from 665 square feet (from the RI Update/FS Report) to 1,709 square feet (final excavation boundary). Assuming a 2-foot excavation depth, the volume of sediment within Excavation Area 5 is 127 cubic yards.

TABLE 3-1

CHEMICAL CONCENTRATIONS COMPARED TO RGs AND TECs - EXCAVATION AREA 1
AREA A WETLAND - SITE 2B
NSB-NLON, GROTON, CONNECTICUT

SAMPLE LOCATION	SAMPLE ID	PHASE	SAMPLE DEPTH (FT)	SAMPLE DATE	RG COMPARISONS (UG/KG)			TEC COMPARISONS (UG/KG)				TEC COMPARISONS (MG/KG)							NUMBER OF TEC EXCEEDANCES[1]
					TOTAL PAHS	TOTAL DDT	TOTAL AROCLOR	TOTAL PAHS	4,4'-DDE	TOTAL DDT	TOTAL AROCLOR	ARSENIC	CADMIUM	CHROMIUM	COPPER	LEAD	NICKEL	ZINC	
					RG = 6585	RG = 1504	RG = 532	RG = 1610	TEC = 3.16	TEC = 5.28	TEC = 59.8	TEC = 9.79	TEC = 0.99	TEC = 43.4	TEC = 31.6	TEC = 35.8	TEC = 22.7	TEC = 121	
2WSD9	112690-2WSD9(0-0.5)	Historical	0 - 0.5	11/26/1990	**411400**	ND	ND	**411400**	64 UJ	ND	ND	**11.8 J**	**6.1**	**63.7**	**39.6 J**	**241 J**	21.2	109	6
2WCSD11	2WCSD11	Historical	0 - 1	12/20/1993	230	ND	ND	230	41 UJ	ND	ND	1.4	0.49 U	11.4	5 U	7.9	5.6	50.4	0
2WCSD14	2WCSD14	Historical	0 - 1	12/21/1993	**31334**	--	--	**31334**	--	--	--	**11.5**	0.8 U	36.1	**37.7**	**127**	**25.8**	**173**	6
2WCSD14	2WCSD14-D	Historical	0 - 1	12/21/1993	**31195**	--	--	**31195**	--	--	--	9	0.72 U	27.6	28.7	**84.6**	18.7	**134**	3
2WCSD15	2WCSD15	Historical	0 - 1	12/21/1993	1921	--	--	**1921**	--	--	--	9.6	0.82 U	**65.2**	26	35.1	16.3	42.6	2
2WSD56	2W-SD-SD56-0001	Historical	0 - 0.33	10/18/2007	**16171**	8.7	ND	**16171**	2.7 J	**8.7**	ND	7.3	0.02 U	29.2	20	**58.4**	12.4	78.6	3
2WSD57	2W-SD-SD57-0001	Historical	0 - 0.33	10/18/2007	**48109**	--	--	**48109**	--	--	--	4.3 J	**1.1 J**	9.5	19.2	**159**	11.2 J	**339**	4
2WSD62	2W-SD-SD62-0001	Historical	0 - 0.33	10/29/2008	**38215**	8.5	ND	**38215**	4.9 UJ	**8.5**	ND	1.5	0.34	6.2	8	**46.7**	5.6	118	3
2WSD79	2W-SD-SD79-0001	Historical	0 - 0.33	10/29/2008	**63873**	ND	ND	**63873**	9.6 UJ	ND	ND	9.1	0.84 J	35.7	**40.4**	**104**	21.3	**206**	4
2WSD85	2W-SD-SD85-0001	II	0 - 0.33	04/07/2011	1766	--	--	**1766**	--	--	--	--	--	--	--	--	--	--	1
2WSD86	2W-SD-SD86-0001	II	0 - 0.33	04/07/2011	2690	--	--	**2690**	--	--	--	--	--	--	--	--	--	--	1
2WSD87	2W-SD-SD87-0001	I	0 - 0.33	04/07/2011	**9833**	--	--	**9833**	--	--	--	--	--	--	--	--	--	--	1
2WSD88	2W-SD-SD88-0001	I	0 - 0.33	04/07/2011	**15376**	--	--	**15376**	--	--	--	--	--	--	--	--	--	--	1
2WSD89	2W-SD-SD89-0001	I	0 - 0.33	04/07/2011	**21932**	--	--	**21932**	--	--	--	--	--	--	--	--	--	--	1
2WSD90	2W-SD-SD90-0001	I	0 - 0.33	04/07/2011	**12181**	--	--	**12181**	--	--	--	--	--	--	--	--	--	--	1
2WSD91	2W-SD-SD91-0001	II	0 - 0.33	04/07/2011	**81934**	--	--	**81934**	--	--	--	--	--	--	--	--	--	--	1
2WSD92	2W-SD-SD92-0001	II	0 - 0.33	04/07/2011	**41448**	--	--	**41448**	--	--	--	--	--	--	--	--	--	--	1
2WSD93	2W-SD-SD93-0001	II	0 - 0.33	04/07/2011	**10227**	--	--	**10227**	--	--	--	--	--	--	--	--	--	--	1
2WSD94	2W-SD-SD94-0001	I	0 - 0.33	04/07/2011	**26564**	--	--	**26564**	--	--	--	--	--	--	--	--	--	--	1
2WSD95	2W-SD-SD95-0001	I	0 - 0.33	04/07/2011	**13454**	--	--	**13454**	--	--	--	--	--	--	--	--	--	--	1
2WSD96	2W-SD-SD96-0001	I	0 - 0.33	04/07/2011	**34109**	--	--	**34109**	--	--	--	--	--	--	--	--	--	--	1
2WSD96	2W-SD-SD96-0001-D	I	0 - 0.33	04/07/2011	**29185**	--	--	**29185**	--	--	--	--	--	--	--	--	--	--	1
2WSD97	2W-SD-SD97-0001	I	0 - 0.33	04/07/2011	**21517**	--	--	**21517**	--	--	--	--	--	--	--	--	--	--	1
2WSD98	2W-SD-SD98-0001	I	0 - 0.33	04/07/2011	**23375**	--	--	**23375**	--	--	--	--	--	--	--	--	--	--	1
2WSD99	2W-SD-SD99-0001	I	0 - 0.33	04/07/2011	**53807**	--	--	**53807**	--	--	--	--	--	--	--	--	--	--	1
2WSD100	2W-SD-SD100-0001	I	0 - 0.33	04/07/2011	**7337**	--	--	**7337**	--	--	--	--	--	--	--	--	--	--	1
2WSD163	2W-SD-SD163-0001	III	0 - 0.33	09/08/2011	3067	--	--	**3067**	--	--	--	--	--	--	--	--	--	--	1
2WSD164	2W-SD-SD164-0001	III	0 - 0.33	09/08/2011	**21025**	--	--	**21025**	--	--	--	--	--	--	--	--	--	--	1
2WSD165	2W-SD-SD165-0001	III	0 - 0.33	09/08/2011	1861	--	--	**1861**	--	--	--	--	--	--	--	--	--	--	1
2WSD165	2W-SD-SD165-0001-D	III	0 - 0.33	09/08/2011	1444	--	--	1444	--	--	--	--	--	--	--	--	--	--	0
2WSD166	2W-SD-SD166-0001	IV	0 - 0.33	09/08/2011	**11000**	--	--	**11000**	--	--	--	--	--	--	--	--	--	--	1
2WSD167	2W-SD-SD167-0001	IV	0 - 0.33	09/08/2011	**20179**	--	--	**20179**	--	--	--	--	--	--	--	--	--	--	1
2WSD168	2W-SD-SD168-0001	IV	0 - 0.33	09/08/2011	3754	--	--	**3754**	--	--	--	--	--	--	--	--	--	--	1
2WSD169	2W-SD-SD169-0001	IV	0 - 0.33	09/08/2011	6390	--	--	**6390**	--	--	--	--	--	--	--	--	--	--	1
2WSD170	2W-SD-SD170-0001	IV	0 - 0.33	09/08/2011	**29731**	--	--	**29731**	--	--	--	--	--	--	--	--	--	--	1
2WSD171	2W-SD-SD171-0001	IV	0 - 0.33	09/08/2011	5394	--	--	**5394**	--	--	--	--	--	--	--	--	--	--	1
2WSD184	2W-SD-SD184-0001	V	0 - 0.33	11/03/2011	2839	--	--	**2839**	--	--	--	--	--	--	--	--	--	--	1
2WSD185	2W-SD-SD185-0001	V	0 - 0.33	11/02/2011	2261	--	--	**2261**	--	--	--	--	--	--	--	--	--	--	1
2WSD186	2W-SD-SD186-0001	V	0 - 0.33	11/02/2011	**15088**	--	--	**15088**	--	--	--	--	--	--	--	--	--	--	1
2WSD187	2W-SD-SD187-0001	V	0 - 0.33	11/02/2011	1239	--	--	1239	--	--	--	--	--	--	--	--	--	--	0
2WSD188	2W-SD-SD188-0001	V	0 - 0.33	11/03/2011	**8182**	--	--	**8182**	--	--	--	--	--	--	--	--	--	--	1
2WSD189	2W-SD-SD189-0001	V	0 - 0.33	11/03/2011	**11119**	--	--	**11119**	--	--	--	--	--	--	--	--	--	--	1
2WSD190	2W-SD-SD190-0001	V	0 - 0.33	11/03/2011	**10066**	--	--	**10066**	--	--	--	--	--	--	--	--	--	--	1
2WSD190	2W-SD-SD190-0001-D	V	0 - 0.33	11/03/2011	**8799**	--	--	**8799**	--	--	--	--	--	--	--	--	--	--	1
2WSD191	2W-SD-SD191-0001	V	0 - 0.33	11/03/2011	1567	--	--	1567	--	--	--	--	--	--	--	--	--	--	0
2WSD193	2W-SD-SD193-0001	VI	0 - 0.33	11/03/2011	3419	--	--	**3419**	--	--	--	--	--	--	--	--	--	--	1
2WSD194	2W-SD-SD194-0001	VI	0 - 0.33	11/03/2011	2511	--	--	**2511**	--	--	--	--	--	--	--	--	--	--	1
2WSD195	2W-SD-SD195-0001	VI	0 - 0.33	11/03/2011	3802	--	--	**3802**	--	--	--	--	--	--	--	--	--	--	1
2WSD196	2W-SD-SD196-0001	VI	0 - 0.33	11/03/2011	4726	--	--	**4726**	--	--	--	--	--	--	--	--	--	--	1
2WSD197	2W-SD-SD197-0001	VI	0 - 0.33	11/03/2011	3170	--	--	**3170**	--	--	--	--	--	--	--	--	--	--	1

Shaded cells indicate an exceedance of RG or TEC, or the sample has 10 or more TEC exceedances.

1 - Samples with 10 or more chemicals that exceed a TEC are considered to exceed an RG.

J = Estimated concentration
U = Non-detect
UJ = Non-detect estimated concentration
-- = Not analyzed
ND = Not detected
RG = Remediation Goal
TEC = Threshold Effects Concentration

TABLE 3-2

CHEMICAL CONCENTRATIONS COMPARED TO RGs AND TECs - EXCAVATION AREA 2
AREA A WETLAND - SITE 2B
NSB-NLON, GROTON, CONNECTICUT

SAMPLE LOCATION	SAMPLE ID	PHASE	SAMPLE DEPTH (FT)	SAMPLE DATE	RG COMPARISONS (UG/KG)			TEC COMPARISONS (UG/KG)				TEC COMPARISONS (MG/KG)							NUMBER OF TEC EXCEEDANCES[1]
					TOTAL PAHS	TOTAL DDT	TOTAL AROCLOR	TOTAL PAHS	4,4'-DDE	TOTAL DDT	TOTAL AROCLOR	ARSENIC	CADMIUM	CHROMIUM	COPPER	LEAD	NICKEL	ZINC	
					RG = 6585	RG = 1504	RG = 532	TEC = 1610	TEC = 3.16	TEC = 5.28	TEC = 59.8	TEC = 9.79	TEC = 0.99	TEC = 43.4	TEC = 31.6	TEC = 35.8	EC = 22.7	TEC = 121	
2WCSD4	2WCSD4	Historical	0 - 1	12/20/1993	**24326**	66.5	ND	**24326**	60 UJ	**66.5**	ND	6.9	**1.1 J**	**66.3**	**39.4**	**49.9**	19	61.9	6
2WCSD6	2WCSD6	Historical	0 - 1	12/21/1993	2865	--	--	**2865**	--	--	--	**13.5**	0.85 U	**97.5**	**52.8**	**69.6**	22	54.9	5
2WCSD7	2WCSD7	Historical	0 - 1	12/20/1993	**10947**	ND	ND	**10947**	35 UJ	ND	ND	1.2	0.43 U	5.7 U	4.6 U	3.5	3.3 J	10.3 U	1
2WSD53	2W-SD-SD53-0001	Historical	0 - 0.5	10/18/2007	2872	11.8	ND	**2872**	3 J	**11.8**	ND	**28.2 J**	0.1 UJ	**47.3**	**57.3 J**	**65.8**	19 J	**138**	7
2WSD53	2W-SD-SD53-0001-D	Historical	0 - 0.5	10/18/2007	2954	8	ND	**2954**	**3.4 J**	**8**	ND	**29.2 J**	0.08 UJ	39.6	**57.2 J**	**61.4**	18 J	**125**	7
2WSD54	2W-SD-SD54-0001	Historical	0 - 0.5	10/18/2007	1900	6.4	120	**1900**	**6.4 J**	**6.4**	**120**	**24.3 J**	0.88 J	36.8 J	**55 J**	**48 J**	16 J	39.7 J	7
2WSD59	2W-SD-SD59-0001	Historical	0 - 0.33	10/30/2008	6260	--	--	**6260**	--	--	--	--	--	--	--	--	--	--	1
2WSD64	2W-SD-SD64-0001	Historical	0 - 0.33	10/30/2008	--	--	--	--	--	--	--	--	0.42	--	--	**68**	--	**123**	2
2WSD101	2W-SD-SD101-0001	II	0 - 0.33	04/06/2011	2882	--	--	**2882**	--	--	--	--	--	--	--	--	--	--	1
2WSD102	2W-SD-SD102-0001	II	0 - 0.33	04/06/2011	2522	--	--	**2522**	--	--	--	--	--	--	--	--	--	--	1
2WSD103	2W-SD-SD103-0001	I	0 - 0.33	04/06/2011	**25384**	--	--	**25384**	--	--	--	--	--	--	--	--	--	--	1
2WSD104	2W-SD-SD104-0001	II	0 - 0.33	04/06/2011	5297	--	--	**5297**	--	--	--	--	--	--	--	--	--	--	1
2WSD105	2W-SD-SD105-0001	I	0 - 0.33	04/06/2011	**15753**	--	--	**15753**	--	--	--	--	--	--	--	--	--	--	1
2WSD106	2W-SD-SD106-0001	II	0 - 0.33	04/06/2011	**8645**	--	--	**8645**	--	--	--	--	--	--	--	--	--	--	1
2WSD107	2W-SD-SD107-0001	I	0 - 0.33	04/06/2011	4406	--	--	**4406**	--	--	--	--	--	--	--	--	--	--	1
2WSD108	2W-SD-SD108-0001	I	0 - 0.33	04/06/2011	**6918**	--	--	**6918**	--	--	--	--	--	--	--	--	--	--	1
2WSD109	2W-SD-SD109-0001	II	0 - 0.33	04/06/2011	3693	--	--	**3693**	--	--	--	--	--	--	--	--	--	--	1
2WSD110	2W-SD-SD110-0001	I	0 - 0.33	04/06/2011	**44400**	--	--	**44400**	--	--	--	--	--	--	--	--	--	--	1
2WSD111	2W-SD-SD111-0001	II	0 - 0.33	04/06/2011	2094	--	--	**2094**	--	--	--	--	--	--	--	--	--	--	1
2WSD112	2W-SD-SD112-0001	I	0 - 0.33	04/06/2011	3775	--	--	**3775**	--	--	--	--	--	--	--	--	--	--	1
2WSD112	2W-SD-SD112-0001-D	I	0 - 0.33	04/06/2011	4622	--	--	**4622**	--	--	--	--	--	--	--	--	--	--	1
2WSD113	2W-SD-SD113-0001	II	0 - 0.33	04/06/2011	2335	--	--	**2335**	--	--	--	--	--	--	--	--	--	--	1

Shaded cells indicate an exceedance of RG or TEC, or the sample has 10 or more TEC exceedances.

1 - Samples with 10 or more chemicals that exceed a TEC are considered to exceed an RG.

J = Estimated concentration
U = Non-detect
UJ = Non-detect estimated concentration
-- = Not analyzed
ND = Not detected
RG = Remediation Goal
TEC = Threshold Effects Concentration

TABLE 3-3

CHEMICAL CONCENTRATIONS COMPARED TO RGs AND TECs - EXCAVATION AREA 3
AREA A WETLAND - SITE 2B
NSB-NLON, GROTON, CONNECTICUT

SAMPLE LOCATION	SAMPLE ID	PHASE	SAMPLE DEPTH (FT)	SAMPLE DATE	RG COMPARISONS (UG/KG)			TEC COMPARISONS (UG/KG)				TEC COMPARISONS (MG/KG)							NUMBER OF TEC EXCEEDANCES[1]
					TOTAL PAHS	TOTAL DDT	TOTAL AROCLOR	TOTAL PAHS	4,4'-DDE	TOTAL DDT	TOTAL AROCLOR	ARSENIC	CADMIUM	CHROMIUM	COPPER	LEAD	NICKEL	ZINC	
					RG = 6585	RG = 1504	RG = 532	TEC = 1610	TEC = 3.16	TEC = 5.28	TEC = 59.8	TEC = 9.79	TEC = 0.99	TEC = 43.4	TEC = 31.6	TEC = 35.8	TEC = 22.7	TEC = 121	
T1B	T1-B	Historical	0 - 1	11/28/1994	2200	45	180	**2200**	3.8 U	**45**	**180**	1.6	0.12 J	9.6	**45.5**	28.7	9.1 J	100 J	4
T2A	T2-A	Historical	0 - 1	11/28/1994	3398	724	ND	**3398**	**30 J**	**724**	ND	2.5	0.29	15.2	**104**	**123**	**61.5 J**	**225 J**	7
T2A	T2-A-D	Historical	0 - 1	11/28/1994	**9126**	323	ND	**9126**	**13 J**	**323**	ND	2.5	0.46	16.9	**101**	**142**	**53 J**	**378 J**	7
T2B	T2-B	Historical	0 - 1	11/28/1994	3235	317	ND	**3235**	**19 J**	**317**	ND	2.2	0.3	19.5	**44.9**	**42**	17 J	95.4 J	5
T3B	T3-B	Historical	0 - 1	11/28/1994	5588	**4630**	ND	**5588**	**330**	**4630**	ND	2.6	0.43	11.1	**52.6**	**61.5**	18.9 J	**284 J**	6
T4B	T4-B	Historical	0 - 1	11/29/1994	947	4.5	ND	947	4 U	4.5	ND	1.4	0.21 J	7	**36.7**	32.4	10.3 J	45.1 J	1
2WSD1	112690-2WSD1(0-0.5)	Historical	0 - 0.5	11/26/1990	4430	176	ND	**4430**	**36 J**	**176**	ND	9.2 J	**4.2**	**57.1**	**33 J**	**51**	**26**	90.6	8
2WSD1	112690-2WSD1(0-0.5)-	Historical	0 - 0.5	11/26/1990	ND	--	--	ND	--	--	--	**10.2 J**	**4.8**	**74.4**	**49.2 J**	**60.6**	**26.4**	110	6
2WSD23	2WSD23(0.0-1.0)	Historical	0 - 1	10/29/1993	--	693	ND	--	**93**	**693**	ND	--	--	--	--	--	--	--	2
2WSD24	2WSD24(0.0-1.0)	Historical	0 - 1	10/29/1993	--	**3340**	ND	--	**240 J**	**3340**	ND	--	--	--	--	--	--	--	2
2WSD25	2WSD25(0.0-1.0)	Historical	0 - 1	10/29/1993	--	**8420**	ND	--	**720 J**	**8420**	ND	--	--	--	--	--	--	--	2
2WSD45	2W-SD-SD45-0001	Historical	0 - 0.33	10/18/2007	1019	48.5	100	1019	**9.5 J**	**48.5**	**100**	**16.9 J**	0.15 UR	10.7 J	25.4 J	14 J	15.7 J	**342 J**	5
2WSD47	2W-SD-SD47-0001	Historical	0 - 0.5	10/19/2007	6401	635	380	**6401**	**23 J**	**635**	**380**	9.1 J	**1.7 J**	29.6 J	**100 J**	**79.1 J**	**33.2 J**	**344 J**	9
2WSD47	2W-SD-SD47-0001-D	Historical	0 - 0.5	10/19/2007	**8171**	989	430	**8171**	**37 J**	**989**	**430**	7.5 J	**2.6 J**	31.8 J	**120 J**	**94.8 J**	**36 J**	**322 J**	9
2WSD48	2W-SD-SD48-0001	Historical	0 - 0.33	10/19/2007	**11479**	515	**580**	**11479**	**95**	**515**	**580**	**11.5**	**1.2**	25.9	**59.9**	**49.7**	**30.2**	**624**	**10**
2WSD49	2W-SD-SD49-0001	Historical	0 - 0.33	10/18/2007	1640	87	ND	**1640**	**11 J**	**87**	ND	**14.6 J**	**1.2 J**	8.5 J	**92.3 J**	**39.2**	**28.3 J**	**646**	9
2WSD50	2W-SD-SD50-0001	Historical	0 - 0.33	10/18/2007	2430	118	370	**2430**	**12 J**	**118**	**370**	**43.6 J**	0.14 UR	20.7 J	**64 J**	**54 J**	**28.8 J**	**447 J**	9
2WSD51	2W-SD-SD51-0001	Historical	0 - 0.5	10/18/2007	622	139	120	622	**13 J**	**139**	**120**	**13.9 J**	**1.2 J**	16.3 J	**36.1 J**	24.6 J	**25.9 J**	82.4 J	7
2WSD65	2W-SD-SD65-0001	Historical	0 - 0.33	10/30/2008	--	--	--	--	--	--	--	**52.1 J**	--	--	--	--	--	--	1
2WSD66	2W-SD-SD66-0001	Historical	0 - 0.33	10/30/2008	3392	137	480	**3392**	**18 J**	**137**	**480**	**38.3 J**	**2.7 J**	19.1 J	**77.3 J**	**52.3 J**	**38.6 J**	**698 J**	**10**
2WSD69	2W-SD-SD69-0001	Historical	0 - 0.33	10/29/2008	4556	640	**590**	**4556**	**150 J**	**640**	**590**	7.6	0.62 J	21.8	**70.4**	**43.6**	**31.4**	**247**	8
2WSD70	2W-SD-SD70-0001	Historical	0 - 0.33	10/29/2008	**9342**	252	**1100**	**9342**	**42 J**	**252**	**1100**	**17.8 J**	**2.8 J**	34.1 J	**233 J**	**114 J**	**41.1 J**	**733 J**	**10**
2WSD72	2W-SD-SD72-0001	Historical	0 - 0.33	10/29/2008	5176	671	480	**5176**	**21 J**	**671**	**480**	8.3 J	**1.5 J**	21.6 J	**81.8 J**	**54.8 J**	**28.2 J**	**264 J**	9
2WSD74	2W-SD-SD74-0001	Historical	0 - 0.33	10/29/2008	**30284**	**3390**	ND	**30284**	**680**	**3390**	ND	**12.9**	0.33 J	20.5	**33.6**	**43.8**	17.7	**139**	7
2WSD75	2W-SD-SD75-0001	Historical	0 - 0.33	10/29/2008	--	**3370**	ND	--	**540**	**3370**	ND	9.1	**1.1 J**	20.5	**76.1**	**56.8**	**32.3**	**242**	7
2WSD75	2W-SD-SD75-0001-D	Historical	0 - 0.33	10/29/2008	**50953**	**2710**	--	**50953**	**410**	**2710**	--	--	--	--	--	--	--	--	3
2WSD77	2W-SD-SD77-0001	Historical	0 - 0.33	10/30/2008	--	38.3	--	--	**7.3 J**	**38.3**	--	--	--	--	--	--	--	--	2
2WSD78	2W-SD-SD78-0001	Historical	0 - 0.33	10/29/2008	--	103	--	--	**14 J**	**103**	--	--	--	--	--	--	--	--	2
2WSD114	2W-SD-SD114-0001	II	0 - 0.33	04/06/2011	6500	167	ND	**6500**	**18 J**	**167**	ND	**15.7 J**	1.6 UJ	**53.4 J**	**77.8 J**	**77.9 J**	**24.7 J**	79.6 J	8
2WSD116	2W-SD-SD116-0001	I	0 - 0.33	04/06/2011	1636	235	ND	**1636**	**24 J**	**235**	ND	**21.4 J**	1.6 UJ	38.1 J	**74.1 J**	**57.7 J**	**23 J**	71.3 J	7
2WSD117	2W-SD-SD117-0001	I	0 - 0.33	04/06/2011	1118	55.9	ND	1118	**7.9 J**	**55.9**	ND	7.3 J	1 UJ	23 J	**72.8 J**	31.8 J	16 J	23.7 J	3
2WSD118	2W-SD-SD118-0001	I	0 - 0.33	04/05/2011	1548	**3614**	ND	1548	**320 J**	**3614**	ND	**14.1 J**	**1.2 J**	**94.2 J**	**68.5 J**	**113 J**	**41.5 J**	**218 J**	9
2WSD119	2W-SD-SD119-0001	I	0 - 0.33	04/05/2011	578	**1874**	ND	578	**54 J**	**1874**	ND	**10.9 J**	**2.8 J**	32.2 J	**82.8 J**	**47 J**	**50.2 J**	**366 J**	8
2WSD120	2W-SD-SD120-0001	I	0 - 0.33	04/05/2011	2369	494	220	**2369**	**23 J**	**494**	**220**	**14 J**	**1.9 J**	**48.8 J**	**102 J**	**91.3 J**	**29.3 J**	**334 J**	**11**
2WSD121	2W-SD-SD121-0001	I	0 - 0.33	04/05/2011	2025	228	**640**	**2025**	**33 J**	**228**	**640**	**18.2 J**	**2.1 J**	**45.8 J**	**133 J**	**91.7 J**	**39.8 J**	**563 J**	**11**
2WSD122	2W-SD-SD122-0001	I	0 - 0.33	04/05/2011	2595	83	180	**2595**	**21 J**	**83**	**180**	**11.7 J**	0.79 J	**58.1 J**	**92.8 J**	**74.1 J**	**26 J**	**180 J**	**10**
2WSD122	2W-SD-SD122-0001-D	I	0 - 0.33	04/05/2011	2777	80	190	**2777**	**22 J**	**80**	**190**	**10.9 J**	0.81 J	**55 J**	**89.6 J**	**70.4 J**	**25.7 J**	**182 J**	**10**
2WSD123	2W-SD-SD123-0001	I	0 - 0.33	04/06/2011	4916	930	**2300**	**4916**	**110 J**	**930**	**2300**	**10.7 J**	**3 J**	**51.4 J**	**316 J**	**174 J**	**53.8 J**	**778 J**	**11**
2WSD124	2W-SD-SD124-0001	II	0 - 0.33	04/05/2011	2119	**27719**	ND	**2119**	**2700 J**	**27719**	ND	**9.8**	**3.8**	40	**37**	23.4	**45.1**	**569**	8
2WSD125	2W-SD-SD125-0001	II	0 - 0.33	04/05/2011	2520	**4310**	ND	**2520**	**530 J**	**4310**	ND	5.8 J	0.14 J	**75.6 J**	**61.2 J**	**67 J**	**25.7 J**	**151 J**	8
2WSD126	2W-SD-SD126-0001	I	0 - 0.33	04/05/2011	5007	--	--	**5007**	--	--	--	--	--	--	--	--	--	--	1
2WSD127	2W-SD-SD127-0001	I	0 - 0.33	04/05/2011	379	11.2	ND	379	1.8 J	**11.2**	ND	6.9	0.52 U	4.5	30.5 J	12.8	6.2 J	**139 J**	2
2WSD127	2W-SD-SD127-0001-D	I	0 - 0.33	04/05/2011	355	13.4	ND	355	2.8 J	**13.4**	ND	6	0.41 U	3.5	27.4	11.6	5.6	119	1
2WSD128	2W-SD-SD128-0001	II	0 - 0.33	04/05/2011	2727	554	ND	**2727**	**69**	**554**	ND	**12.2**	**1.1 J**	**84.4**	**87.2**	**53.9**	**35.9**	95.9	9
2WSD129	2W-SD-SD129-0001	II	0 - 0.33	04/06/2011	4221	**2700**	310	**4221**	**73 J**	**2700**	**310**	**11.9 J**	0.52 J	**83 J**	**84.5 J**	**90.3 J**	**28.8 J**	**159 J**	**10**
2WSD130	2W-SD-SD130-0001	I	0 - 0.33	04/05/2011	3087	168	360	**3087**	**19 J**	**168**	**360**	**13 J**	**2.4 J**	15.7 J	**157 J**	**75.3 J**	**72.2 J**	**1350 J**	**10**
2WSD131	2W-SD-SD131-0001	II	0 - 0.33	04/05/2011	2913	201	ND	**2913**	**28 J**	**201**	ND	**30.1 J**	**7.2 J**	13.6 J	**320 J**	**114 J**	**57 J**	**1870 J**	9
2WSD132	2W-SD-SD132-0001	II	0 - 0.33	04/06/2011	**7279**	**24900**	**770**	**7279**	**2100 J**	**24900**	**770**	**10.9 J**	**1.6 J**	**60.5 J**	**139 J**	**142 J**	**28.6 J**	**264 J**	**11**
2WSD133	2W-SD-SD133-0001	II	0 - 0.33	04/05/2011	3837	114	450	**3837**	**24 J**	**114**	**450**	6.7 J	0.22 J	28.4 J	**176 J**	**98 J**	**38 J**	**372 J**	8
2WSD134	2W-SD-SD134-0001	I	0 - 0.33	04/05/2011	2664	**3110**	250	**2664**	**280 J**	**3110**	**250**	**12.3 J**	**1.6 J**	**83.2 J**	**85 J**	**77.4 J**	**31.6 J**	**220 J**	**11**
2WSD135	2W-SD-SD135-0001	I	0 - 0.33	04/06/2011	3429	**197000**	ND	**3429**	**11000 J**	**197000**	ND	7.4 J	**2 J**	37.4 J	**75.6 J**	**59.2 J**	**27.5 J**	**325 J**	8
2WSD136	2W-SD-SD136-0001	I	0 - 0.33	04/05/2011	2099	**13700**	290	**2099**	**1700 J**	**13700**	**290**	**10.3 J**	**4.3 J**	**46 J**	**115 J**	**92.9 J**	**37 J**	**532 J**	**11**
2WSD137	2W-SD-SD137-0001	II	0 - 0.33	04/05/2011	5032	**10170**	ND	**5032**	**1400**	**10170**	ND	**11.6**	**2**	**93.3**	**58.9**	**71.9**	**31**	**166**	**10**
2WSD138	2W-SD-SD138-0001	I	0 - 0.33	04/05/2011	3242	**8390**	ND	**3242**	**930**	**8390**	ND	**12.6 J**	**1.3 J**	**79.1 J**	**51.7 J**	**53.1 J**	**28.2**	**138**	**10**
2WSD139	2W-SD-SD139-0001	II	0 - 0.33	04/06/2011	6250	**50100**	ND	**6250**	**4600 J**	**50100**	ND	**18.6 J**	**2.1 J**	**83.2 J**	**155 J**	**121 J**	**45.9 J**	**473 J**	**10**
2WSD140	2W-SD-SD140-0001	I	0 - 0.33	04/05/2011	4694	123	**560**	**4694**	**24 J**	**123**	**560**	9.4 J	0.3 J	18.1 J	**95.8 J**	**48 J**	**37.9 J**	**954 J**	8
2WSD141	2W-SD-SD141-0001	II	0 - 0.33	04/05/2011	5574	**2380**	ND	**5574**	**180 J**	**2380**	ND	3.2 J	2.4 UJ	15.9 J	**53.9 J**	**40 J**	17.7 J	**192 J**	6
2WSD142	2W-SD-SD142-0001	I	0 - 0.33	04/06/2011	**17384**	1140	ND	**17384**	**240**	**1140**	ND	**20.6**	0.8 J	36	**69.7**	**72**	**30.4**	**320**	8
2WSD143	2W-SD-SD143-0001	II	0 - 0.33	04/06/2011	**15136**	**145000**	ND	**15136**	**10000 J**	**145000**	ND	**10.2 J**	**1.6 J**	**47.5 J**	**85.7 J**	**67.5 J**	**28.3 J**	**338 J**	**10**
2WSD144	2W-SD-SD144-0001	I	0 - 0.33	04/05/2011	**12407**	610	ND	**12407**	**100 J**	**610**	ND	**14.8 J**	1.3 UJ	18.1 J	**35.5 J**	**38.7 J**	19 J	**298 J**	7
2WSD145	2W-SD-SD145-0001	II	0 - 0.33	04/06/2011	**6819**	**19900**	ND	**6819**	**2400 J**	**19900**	ND	**12.8 J**	**1.1 J**	**68 J**	**69.6 J**	**63.1 J**	**30.4 J**	**204 J**	**10**
2WSD146	2W-SD-SD146-0001	I	0 - 0.33	04/05/2011	5262	1200	ND	**5262**	**280 J**	**1200**	ND	9.2 J	3.6 UJ	9.4 J	**37.3 J**	24.7 J	**33 J**	**1200 J**	6
2WSD172	2W-SD-SD172-0001	III	0 - 0.33	09/07/2011	--	315	--	--	**17 J**	**315**	--	--	--	--	--	--	--	--	2
2WSD173	2W-SD-SD173-0001	III	0 - 0.33	09/07/2011	--	**1741**	--	--	**330 J**	**1741**	--	--	--	--	--	--	--	--	2
2WSD173	2W-SD-SD173-0001-D	III	0 - 0.33	09/07/2011	--	**3324**	--	--	**610 J**	**3324**	--	--	--	--	--	--	--	--	2
2WSD174	2W-SD-SD174-0001	III	0 - 0.33	09/07/2011	--	**2340**	--	--	**330**	**2340**	--	--	--	--	--	--	--	--	2
2WSD175	2W-SD-SD175-0001	III	0 - 0.33	09/07/2011	--	**6180**	--	--	**840**	**6180**	--	--	--	--	--	--	--	--	2

Shaded cells indicate an exceedance of RG or TEC, or the sample has 10 or more TEC exceedances.

1 - Samples with 10 or more chemicals that exceed a TEC are considered to exceed an RG.

J = Estimated concentration
U = Non-detect
UJ = Non-detect estimated concentration
-- = Not analyzed
ND = Not detected
RG = Remediation Goal
TEC = Threshold Effects Concentration

TABLE 3-4

CHEMICAL CONCENTRATIONS COMPARED TO RGs AND TECs - EXCAVATION AREA 4
AREA A WETLAND - SITE 2B
NSB-NLON, GROTON, CONNECTICUT

SAMPLE LOCATION	SAMPLE ID	PHASE	SAMPLE DEPTH (FT)	SAMPLE DATE	RG COMPARISONS			TEC COMPARISONS (UG/KG)				TEC COMPARISONS (MG/KG)							NUMBER OF TEC EXCEEDANCES[1]
					TOTAL PAHS RG = 6585	TOTAL DDT RG = 1504	TOTAL AROCLOR RG = 532	TOTAL PAHS TEC = 1610	4,4'-DDE TEC = 3.16	TOTAL DDT TEC = 5.28	TOTAL AROCLOR TEC = 59.8	ARSENIC TEC = 9.79	CADMIUM TEC = 0.99	CHROMIUM TEC = 43.4	COPPER TEC = 31.6	LEAD TEC = 35.8	NICKEL TEC = 23	ZINC TEC = 121	
T5B	T5-B	Historical	0 - 1	11/29/1994	**24326**	66.5	ND	**24326**	60 UJ	**66.5**	ND	6.9	**1.1 J**	**66.3**	**39.4**	**49.9**	18.5	61.9	6
T7A	T7-A	Historical	0 - 1	11/29/1994	4596	ND	82	**4596**	6.2 U	ND	**82**	2.5	0.23 J	13.7	**33.8**	17.4	12.2 J	76.3 J	3
T7B	T7-B	Historical	0 - 1	11/29/1994	4280	140	**550**	**4280**	**140 J**	**140**	**550**	8.1 J	**1.6 J**	**44.3 J**	**173 J**	**110 J**	**47.7 J**	**702 J**	**10**
2WTB2	090690-2WTB2(0-2)-D	Historical	0 - 2	09/06/1990	1240	ND	370	1240	31 U	ND	**370**	**52.1**	**6.9**	41.2	20.2	11.2 J	**25.9**	75.5 J	4
2WSD44	2W-SD-SD44-0001	Historical	0 - 0.33	10/19/2007	**7633**	122	150	**7633**	**10 J**	**122**	**150**	**12.8 J**	**1.1 J**	19.6 J	**82.3 J**	**45.2 J**	19.6 J	**600 J**	9
2WSD63	2W-SD-SD63-0001	Historical	0 - 0.33	10/29/2008	--	--	ND	--	--	--	ND	--	--	--	--	--	--	--	0
2WSD63	2W-SD-SD63-0001-D	Historical	0 - 0.33	10/29/2008	--	--	ND	--	--	--	ND	--	--	--	--	--	--	--	0
2WSD67	2W-SD-SD67-0001	Historical	0 - 0.33	10/29/2008	--	--	--	--	--	--	--	--	--	--	**95.8 J**	--	--	**1010 J**	2
2WSD68	2W-SD-SD68-0001	Historical	0 - 0.33	10/29/2008	5735	39.7	160	**5735**	**9.7 J**	**39.7**	**160**	4.7 J	0.92 J	11.6 J	**48.5 J**	20 J	15.7 J	**1060 J**	6
2WSD76	2W-SD-SD76-0001	Historical	0 - 0.33	10/29/2008	**7561**	511	180	**7561**	**52**	**511**	**180**	5.2	0.16 J	16.1	**54.4**	**36.8**	13.4	**323**	7
2WSD147	2W-SD-SD147-0001	I	0 - 0.33	04/04/2011	5578	203	ND	**5578**	**35 J**	**203**	ND	6.1 J	0.34 J	17.4 J	**50.5 J**	34.3 J	14.3	**264**	5
2WSD149	2W-SD-SD149-0001	I	0 - 0.33	04/04/2011	159	0.82	ND	159	1.7 U	0.82	ND	1.8 J	0.09 J	10 J	16.3 J	4.9 J	6.5	19.8	0
2WSD152	2W-SD-SD152-0001	I	0 - 0.33	04/04/2011	1747	68.5	170	**1747**	**6.5 J**	**68.5**	**170**	**15 J**	**1.6 J**	22.3 J	**62.6 J**	**37.1 J**	17.4 J	**453 J**	9
2WSD153	2W-SD-SD153-0001	II	0 - 0.33	04/04/2011	4658	19.4	ND	**4658**	**9.6 J**	**19.4**	ND	**12.4 J**	3.7 UJ	21.1 J	**41.4 J**	28.9 J	17.2 J	**396 J**	6
2WSD154	2W-SD-SD154-0001	I	0 - 0.33	04/04/2011	2311	1120	ND	**2311**	**390 J**	**1120**	ND	**18.4 J**	**3.5 J**	**100 J**	**109 J**	**77.4 J**	**47.9 J**	**400 J**	**10**

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1 - Samples with 10 or more chemicals that exceed a TEC are considered to exceed an RG.

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UJ = Non-detect estimated concentration
-- = Not analyzed
ND = Not detected
RG = Remediation Goal
TEC = Threshold Effects Concentration

TABLE 3-5

CHEMICAL CONCENTRATIONS COMPARED TO RGs AND TECs - EXCAVATION AREA 5
AREA A WETLAND - SITE 2B
NSB-NLON, GROTON, CONNECTICUT

SAMPLE LOCATION	SAMPLE ID	PHASE	SAMPLE DEPTH (FT)	SAMPLE DATE	RG COMPARISONS (UG/KG)			TEC COMPARISONS (UG/KG)				TEC COMPARISONS (MG/KG)							NUMBER OF TEC EXCEEDANCES[1]
					TOTAL PAHS	TOTAL DDT	TOTAL AROCLOR	TOTAL PAHS	4,4'-DDE	TOTAL DDT	TOTAL AROCLOR	ARSENIC	CADMIUM	CHROMIUM	COPPER	LEAD	NICKEL	ZINC	
					RG = 6585	RG = 1504	RG = 532	TEC = 1610	TEC = 3.2	TEC = 5.28	TEC = 59.8	TEC = 9.79	TEC = 0.99	TEC = 43.4	TEC = 31.6	TEC = 35.8	TEC = 23	TEC = 121	
2WSD43	2W-SD-SD43-0001	Historical	0 - 0.33	10/19/2007	3115	1355	300	**3115**	**55 J**	**1355**	**300**	**16.6 J**	**1.8 J**	**76.9 J**	**161 J**	**127 J**	**30.9 J**	**654 J**	**11**
2WSD73	2W-SD-SD73-0001	Historical	0 - 0.33	10/29/2008	1499	24.3	110	1499	2.4 UR	**24.3**	**110**	7.9 J	0.97 J	8.1 J	**75 J**	13.6 J	12.4 J	**538 J**	4
2WSD155	2W-SD-SD155-0001	II	0 - 0.33	04/04/2011	2613	113	150	**2613**	**6 J**	**113**	**150**	7 J	0.82 UJ	**59 J**	**72.3 J**	**76.8 J**	19.6 J	**245 J**	8
2WSD156	2W-SD-SD156-0001	II	0 - 0.33	04/04/2011	3262	26.9	ND	**3262**	**7.9 J**	**26.9**	ND	**13.3 J**	1.6 UJ	**64.1 J**	**82.2 J**	**78.1 J**	**50.5 J**	**298 J**	9
2WSD157	2W-SD-SD157-0001	II	0 - 0.33	04/04/2011	4427	3.9	ND	**4427**	**3.9 J**	3.9	ND	5 J	0.89 UJ	9.6 J	**33.6 J**	15.2 J	12.8 J	**433 J**	4
2WSD158	2W-SD-SD158-0001	I	0 - 0.33	04/04/2011	2194	118	280	**2194**	**16 J**	**118**	**280**	**11.4 J**	**1.1 J**	30 J	**73.3 J**	**51 J**	**22.9**	**327**	**10**
2WSD159	2W-SD-SD159-0001	I	0 - 0.33	04/04/2011	3977	67	150	**3977**	**11 J**	**67**	**150**	**12.6 J**	**1.1 J**	**63.5 J**	**106 J**	**82.4 J**	**27.1 J**	**352 J**	**11**
2WSD159	2W-SD-SD159-0001-D	I	0 - 0.33	04/04/2011	1981	78.5	130	**1981**	**6.6 J**	**78.5**	**130**	4.3 J	0.54 J	16 J	**59.8 J**	34 J	9.8	**256**	6
2WSD160	2W-SD-SD160-0001	II	0 - 0.33	04/04/2011	**7916**	142	ND	**7916**	**13 J**	**142**	ND	**26.3 J**	2.1 UJ	**218 J**	**842 J**	**355 J**	**93.2 J**	**901 J**	9
2WSD161	2W-SD-SD161-0001	I	0 - 0.33	04/04/2011	3071	ND	47	**3071**	4.2 UJ	ND	47	5.8 J	**1.8 J**	17.2 J	**246 J**	**42.8 J**	17.8	**659**	5
2WSD162	2W-SD-SD162-0001	II	0 - 0.33	04/04/2011	1073	25	ND	1073	**7.4 J**	**25**	ND	**13.6 J**	2.3 UJ	9.4 J	**43.3 J**	21.9 J	15 J	**753 J**	5
2WSD180	2W-SD-SD180-0001	III	0 - 0.33	09/07/2011	3484	**18030**	ND	**3484**	**2000 J**	**18030**	ND	**15.9 J**	**2.9 J**	**100 J**	**106 J**	**87 J**	**50.2 J**	**397 J**	**10**
2WSD180	2W-SD-SD180-0001-D	III	0 - 0.33	09/07/2011	--	--	ND	--	--	--	ND	7.6 J	0.59 J	32.7 J	**48.1 J**	**40.3 J**	18.6 J	**220 J**	3
2WSD181	2W-SD-SD181-0001	III	0 - 0.33	09/07/2011	1211	26.7	ND	1211	**3.9 J**	**26.7**	ND	**16.8 J**	0.63 J	33.4 J	**66.2 J**	**44.5 J**	**30.1 J**	**302 J**	7

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1 - Samples with 10 or more chemicals that exceed a TEC are considered to exceed an RG.

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RG = Remediation Goal
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4.0 SUMMARY AND CONCLUSIONS

This section summarizes the overall conclusions concerning Area A Wetland - Site 2B sediment requiring remediation.

A total of six phases of sediment samples were collected during three sampling events in 2011 as part of the PDI. Results from these samples and from historical samples were used to refine the five excavation areas identified in the RI Update/FS Report. The samples from each phase were analyzed iteratively to limit the number of unnecessary analyses. The general conclusions of the PDI are as follows:

- All five excavation areas were fully defined after the six phases of sampling, and some areas were delineated after only two phases.

- Overall, the combined size of the excavation areas more than doubled from 43,685 square feet (from the RI Update/FS Report) to 93,206 square feet (final excavation boundaries).

- Correspondingly, the overall volume of sediment requiring removal from the excavation areas because of RG exceedances more than doubled from 3,236 cubic feet (from the RI Update/FS Report) to 6,904 cubic feet (final excavation boundaries), assuming 2-foot excavation depths in all areas.

- The largest size and volume increases occurred at Excavation Areas 1 and 3.

REFERENCES

MacDonald, D.D., C.G. Ingersoll, and T.A. Berger. 2000. Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems. Archives of Environmental, Contamination and Toxicology. Vol. 39, pp. 20-31.

Tetra Tech, June 2010. Remedial Investigation Update/Feasibility Study for Sediment at Area A Wetland - Site 2B. Naval Submarine Base New London, Groton, Connecticut. King of Prussia, Pennsylvania.

Tetra Tech, March 2011. Final SAP for Pre-Design Investigation for Sediment for Area A Wetland – Site 2B. Naval Submarine Base New London, Groton, Connecticut. King of Prussia, Pennsylvania.

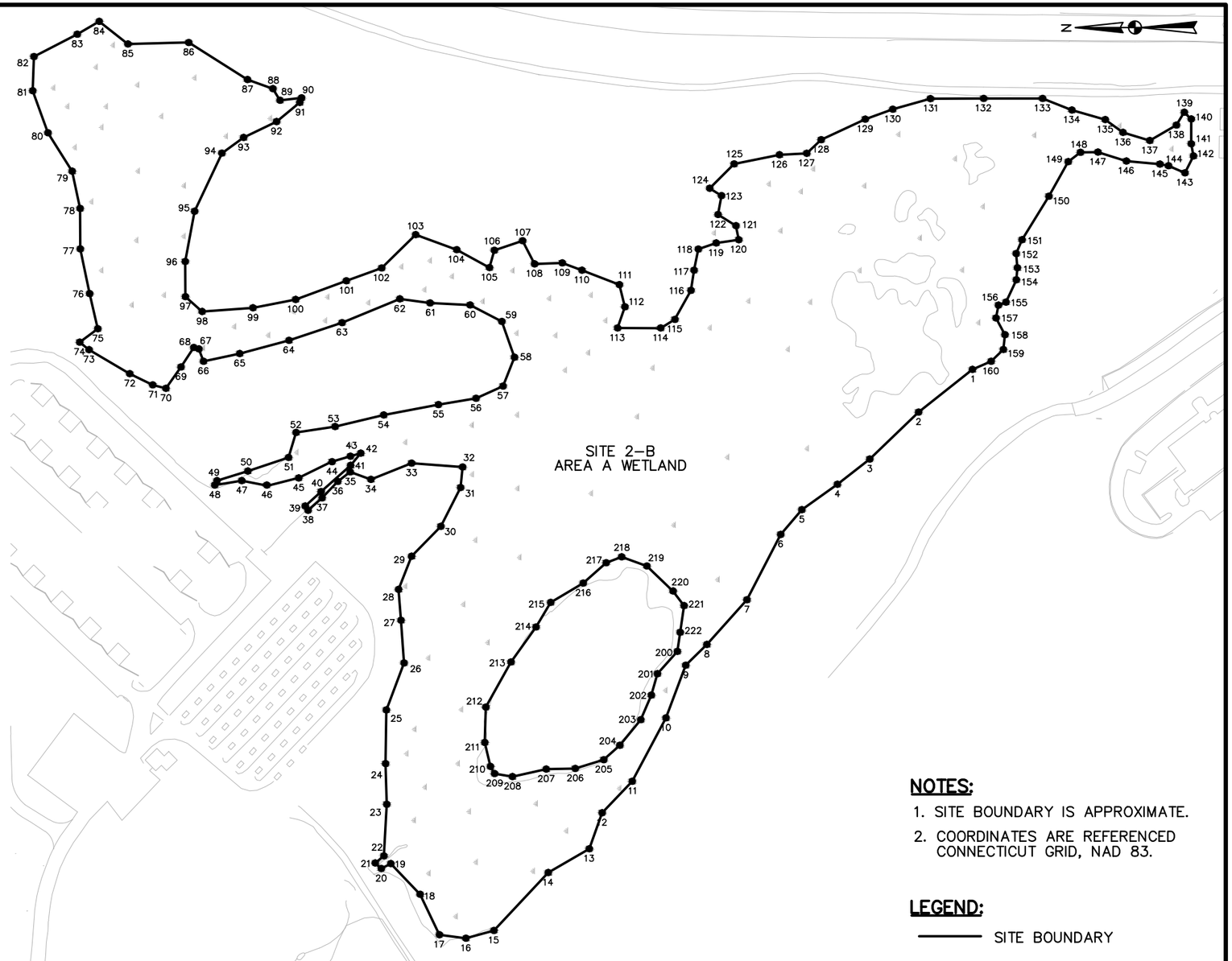
APPENDIX A

WETLAND DELINEATION FIGURES

Point Table		
Point #	Northing	Easting
1	707264.6130	1183113.8910
2	707353.0535	1183043.9513
3	707433.1101	1182966.9767
4	707485.8487	1182925.7531
5	707544.1363	1182884.0115
6	707578.9960	1182843.4290
7	707634.2160	1182736.4630
8	707699.8250	1182662.9380
9	707734.4630	1182628.8770
10	707766.8570	1182542.5180
11	707822.1320	1182438.6890
12	707871.6910	1182387.0360
13	707892.6720	1182328.0020
14	707959.8410	1182288.9350
15	708048.9665	1182193.9745
16	708094.7540	1182181.2340
17	708138.3160	1182187.1120
18	708169.7930	1182253.2420
19	708217.9553	1182303.5555
20	708233.6471	1182295.5596
21	708243.3549	1182304.7018
22	708229.3430	1182316.4567
23	708224.6710	1182401.1250
24	708226.5110	1182467.7080
25	708225.3260	1182555.5040
26	708196.0900	1182632.7190
27	708201.0780	1182702.5070
28	708183.6890	1182807.5660
29	708205.1470	1182753.1720
30	708136.0110	1182856.7330
31	708103.5590	1182920.3790
32	708100.1840	1182953.9560
33	708183.7076	1182960.4221
34	708250.4760	1182933.6150
35	708284.3600	1182945.8920
36	708304.9800	1182930.2590
37	708330.5155	1182903.2756
38	708353.5084	1182883.1187
39	708358.1720	1182889.8080
40	708332.2634	1182913.7257
41	708283.6917	1182956.4854
42	708267.1268	1182976.5144
43	708284.0620	1182971.6790
44	708314.1970	1182962.6930
45	708368.8970	1182935.9570
46	708421.0920	1182924.3240
47	708462.1980	1182931.5860
48	708506.3670	1182924.3510
49	708502.7750	1182931.4630
50	708452.3050	1182947.4650
51	708385.3380	1182969.5880
52	708373.0390	1183010.4610
53	708309.2820	1183020.2510
54	708229.4200	1183039.1800
55	708139.8828	1183056.3564
56	708078.2790	1183066.6030
57	708034.0199	1183086.7463
58	708015.2038	1183133.8234
59	708035.9050	1183192.7171
60	708087.8970	1183219.7300
61	708153.6402	1183222.9979
62	708203.0794	1183229.5035

Point Table		
Point #	Northing	Easting
63	708297.8195	1183190.7104
64	708384.7060	1183161.5780
65	708465.5320	1183139.9200
66	708524.9130	1183127.2498
67	708532.5807	1183147.4681
68	708540.7840	1183149.9240
69	708561.7416	1183118.0382
70	708586.3990	1183082.9070
71	708608.1882	1183088.7726
72	708645.6236	1183106.9932
73	708712.5803	1183146.3554
74	708727.8900	1183158.6360
75	708697.9892	1183180.7334
76	708711.5845	1183238.2011
77	708726.8497	1183311.5168
78	708727.0841	1183377.8314
79	708739.9454	1183438.9080
80	708779.7394	1183501.7790
81	708804.8994	1183570.8129
82	708802.8190	1183626.7593
83	708731.7806	1183663.4657
84	708695.6280	1183684.4340
85	708648.8650	1183647.5840
86	708549.0912	1183650.0572
87	708452.6700	1183589.2195
88	708411.0977	1183574.2379
89	708399.4160	1183555.1936
90	708364.0570	1183559.0890
91	708367.0825	1183551.4251
92	708405.1740	1183520.3930
93	708459.0557	1183494.1419
94	708494.7720	1183468.6150
95	708539.5587	1183373.3299
96	708554.7982	1183291.0715
97	708554.5150	1183233.2050
98	708527.0433	1183208.7695
99	708443.7263	1183214.9435
100	708373.9120	1183228.5630
101	708290.6900	1183259.1949
102	708232.9686	1183280.1263
103	708177.1109	1183334.7680
104	708109.9900	1183310.1930
105	708056.1470	1183280.8105
106	708048.0680	1183309.3040
107	708001.9522	1183324.6337
108	707982.2240	1183287.0010
109	707936.8930	1183288.6770
110	707904.5790	1183276.6121
111	707843.3331	1183253.0081
112	707834.2260	1183216.6220
113	707846.3830	1183181.8020
114	707775.4926	1183181.7667
115	707752.4208	1183196.0825
116	707726.0467	1183243.6776
117	707720.8840	1183276.6000
118	707713.8270	1183311.3210
119	707684.7380	1183321.1210
120	707647.7370	1183326.6910
121	707652.2130	1183349.7250
122	707681.4532	1183367.8210
123	707676.0260	1183398.9540

Point Table		
Point #	Northing	Easting
124	707695.1380	1183410.9760
125	707655.2090	1183450.8120
126	707580.8947	1183465.8785
127	707536.1860	1183468.2480
128	707512.6050	1183490.7170
129	707440.4331	1183524.3011
130	707395.2220	1183540.4400
131	707333.5670	1183558.0620
132	707246.4700	1183558.3030
133	707149.6920	1183558.1670
134	707101.5850	1183539.1770
135	707046.9500	1183523.4560
136	707017.9529	1183502.4456
137	706973.9257	1183489.1019
138	706930.5150	1183514.5640
139	706917.5590	1183535.4496
140	706906.1550	1183524.7200
141	706906.0950	1183483.9080
142	706902.4140	1183463.9020
143	706916.4130	1183436.3790
144	706943.3744	1183447.8482
145	706957.5272	1183450.5954
146	707012.5254	1183455.6842
147	707058.8690	1183470.2460
148	707087.5920	1183470.0500
149	707107.7422	1183454.5324
150	707139.4180	1183397.9830
151	707183.3673	1183326.5323
152	707192.9393	1183303.9383
153	707190.9956	1183280.5641
154	707192.7310	1183260.7690
155	707209.8308	1183224.2219
156	707222.1207	1183219.2810
157	707226.0290	1183198.3040
158	707211.4790	1183170.7960
159	707213.8750	1183146.5880
160	707234.1140	1183127.1530
200	707748.1686	1182651.6663
201	707780.9260	1182614.9500
202	707790.8850	1182579.8670
203	707808.2140	1182539.6210
204	707842.4820	1182497.7000
205	707869.0590	1182474.1190
206	707915.6150	1182459.7830
207	707963.2170	1182458.6430
208	708018.4737	1182446.3001
209	708048.0003	1182451.4665
210	708054.5841	1182462.8897
211	708063.9070	1182502.3010
212	708062.2061	1182560.4375
213	708020.7790	1182634.3100
214	707979.9181	1182691.7895
215	707955.7950	1182731.8380
216	707902.6055	1182763.6031
217	707864.9150	1182797.0330
218	707839.4600	1182806.7450
219	707798.2257	1182791.5380
220	707755.3396	1182750.4791
221	707737.4021	1182726.5817
222	707743.6714	1182682.8574



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SCALE: 1" = 200'

NOTES:

1. SITE BOUNDARY IS APPROXIMATE.
2. COORDINATES ARE REFERENCED CONNECTICUT GRID, NAD 83.

LEGEND:

——— SITE BOUNDARY

REFERENCE: CME ASSOCIATES, INC. DRAWING "WETLAND PERIMETER SURVEY, AREA "A" SURVEY – SITE 2B, DATED NOV. 22, 2010.

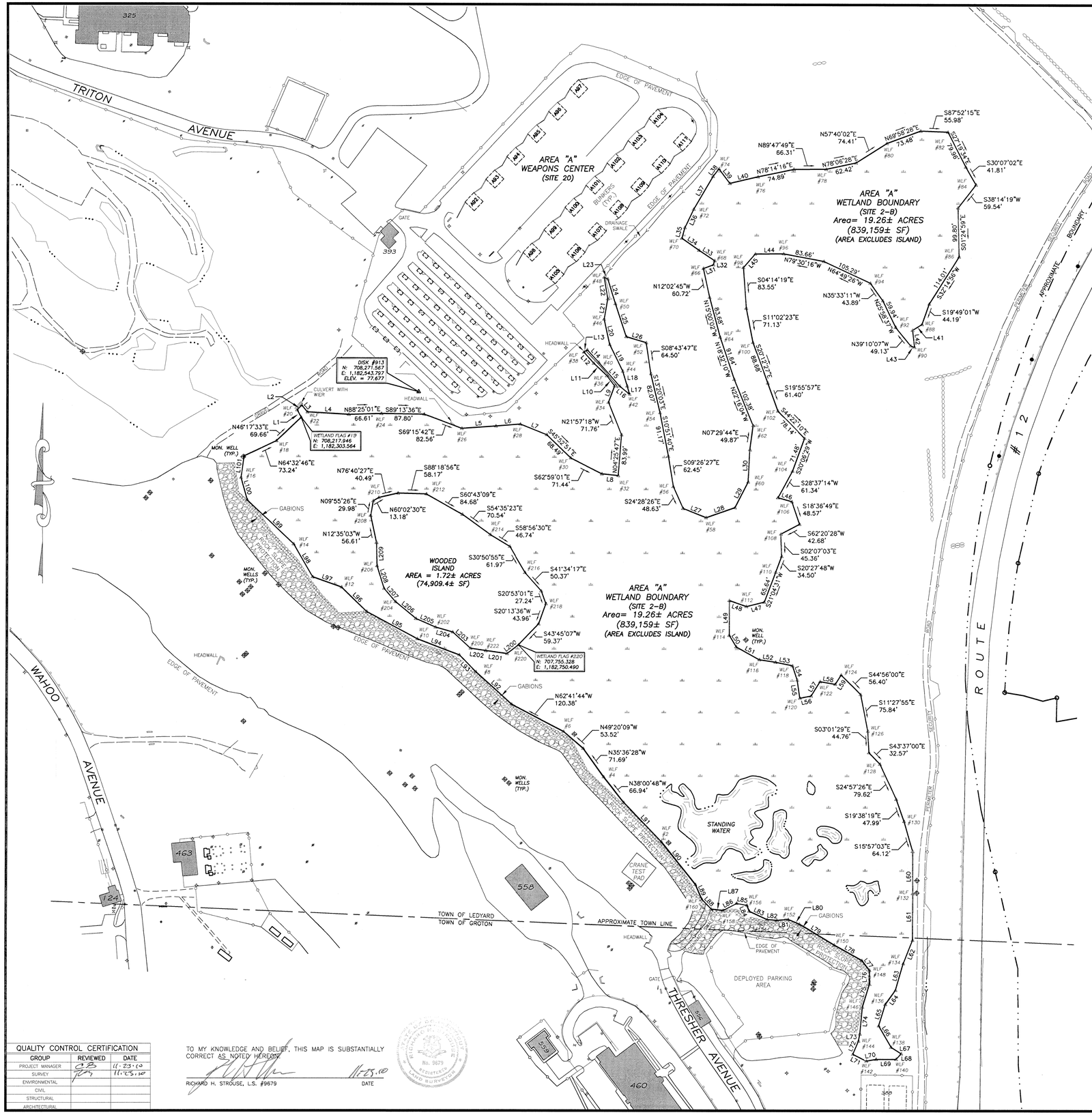
DRAWN BY MF	DATE 8/17/11
CHECKED BY	DATE
REVISED BY	DATE
SCALE 1" = 200'	

Tetra Tech NUS, Inc.

SITE 2B SURVEY POINTS NSB–NLON GROTON, CONNECTICUT

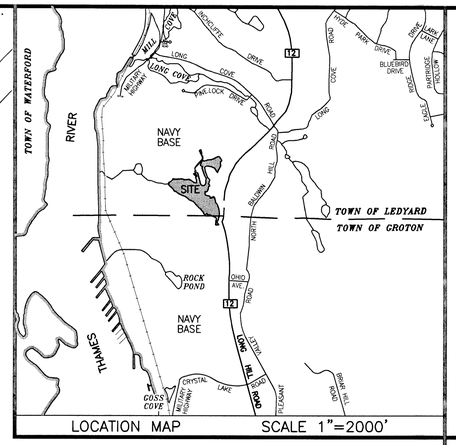
CONTRACT NO. WE55	
OWNER NO. 2526	
APPROVED BY	DATE
DRAWING NO. FIGURE 1	REV.

R:\2623 – NSB New London\Figures\2623CM07.dwg PIT NICHOLE.DILLA 8/17/2011 1:27:42 PM



WETLAND BOUNDARY LINE TABLE		
LINE	BEARING	LENGTH
L1	N27°00'05"W	17.61'
L2	N43°16'48"E	13.33'
L3	S39°59'39"E	18.29'
L4	S86°50'51"E	84.79'
L5	N85°54'43"E	69.97'
L6	N85°24'30"E	50.83'
L7	S68°28'16"E	58.47'
L8	S84°15'37"E	33.75'
L9	N19°55'00"E	36.04'
L10	N37°10'03"W	25.88'
L11	N46°34'46"W	37.15'
L12	N41°14'23"W	30.58'
L13	N55°05'38"E	8.15'
L14	S42°42'43"E	35.26'
L15	S41°21'32"E	64.71'
L16	S50°24'27"E	25.99'
L17	N15°56'27"W	17.62'
L18	N16°36'15"W	31.45'
L19	N26°02'54"W	60.88'
L20	N12°33'52"W	53.48'
L21	N10°01'08"E	41.74'
L22	N09°18'09"W	44.76'
L23	S63°12'12"E	7.97'
L24	S17°20'12"E	52.87'
L25	S18°28'18"E	70.60'
L26	S73°15'11"E	42.68'
L27	S68°12'51"E	50.70'
L28	N70°37'57"E	62.43'
L29	N27°26'58"E	58.59'
L30	N02°50'51"E	65.82'
L31	N69°13'48"E	21.62'
L32	N16°41'04"E	8.56'
L33	N56°41'05"W	38.16'
L34	N54°56'08"W	42.92'
L35	N15°03'31"E	22.57'
L36	S25°57'07"E	41.63'
L37	N30°26'56"E	77.67'
L38	N38°45'12"E	19.63'
L39	S36°27'51"E	37.17'
L40	N76°41'21"E	59.05'
L41	S58°28'27"W	22.34'
L42	S06°17'31"E	35.58'
L43	N68°26'33"W	8.24'
L44	S89°42'57"W	57.86'
L45	S41°39'29"W	36.77'
L46	S74°10'03"E	29.61'
L47	S75°57'34"W	37.51'
L48	N70°45'14"W	36.88'
L49	S00°01'21"W	70.90'
L50	S31°49'09"E	27.15'
L51	S61°00'28"E	54.41'
L52	S81°05'56"E	33.32'
L53	S78°30'40"E	35.43'
L54	S18°37'07"E	30.70'
L55	S08°33'39"E	37.42'
L56	N79°00'12"E	23.46'
L57	N31°46'07"E	34.38'
L58	S80°07'19"E	31.59'
L59	N32°10'16"E	22.58'
L60	S00°09'31"E	87.10'
L61	S00°04'50"W	96.78'
L62	S21°32'29"W	51.72'
L63	S16°03'11"W	56.85'
L64	S35°53'36"W	35.81'
L65	S16°51'35"W	46.01'
L66	S30°23'15"E	50.31'
L67	S58°10'29"E	24.60'
L68	S43°20'09"W	15.66'
L69	S89°54'57"W	40.81'
L70	S79°34'28"W	20.34'
L71	N63°02'27"W	30.88'
L72	N23°05'08"E	29.29'
L73	N10°59'03"E	14.42'
L74	N05°17'08"E	55.23'
L75	N17°25'17"E	48.59'
L76	N00°23'27"W	28.72'
L77	N37°35'42"W	25.41'
L78	N60°44'23"W	64.84'
L79	N58°24'28"W	83.67'
L80	N67°02'24"W	24.54'
L81	S85°14'44"W	23.45'
L82	N84°57'05"W	19.89'
L83	N64°56'11"W	40.33'
L84	N21°54'07"W	13.25'
L85	N79°24'51"W	21.36'
L86	S62°07'26"W	31.12'
L87	N84°20'51"W	24.33'
L88	N43°50'21"W	28.06'
L89	N23°30'04"W	33.26'
L90	N38°20'11"W	112.73'
L91	N43°52'32"W	111.06'
L92	N48°15'23"W	98.54'
L93	N44°31'08"W	48.58'
L94	N69°26'19"W	92.23'
L95	N61°58'14"W	117.63'
L96	N46°11'07"W	71.58'
L97	N70°26'04"W	62.65'
L98	N30°11'00"W	77.70'
L99	N46°48'58"W	130.22'
L100	N15°32'59"W	47.53'
L101	N07°40'06"E	43.97'

BOUNDARY LINE TABLE		
LINE	BEARING	LENGTH
L200	S53°06'24"W	29.88'
L201	N81°50'27"W	44.17'
L202	N81°47'45"W	31.51'
L203	N48°15'34"W	49.22'
L204	N74°09'09"W	36.47'
L205	N66°42'16"W	43.82'
L206	N50°44'10"W	54.14'
L207	N41°34'54"W	35.53'
L208	N17°06'55"W	48.71'
L209	N01°22'19"W	47.62'



MAP REFERENCES

1.) "DEPARTMENT OF THE NAVY, NAVAL FACILITIES ENGINEERING COMMAND NAVAL SUBMARINE BASE NEW LONDON GROTON, CONN. BASE TRAVERSE AND MONUMENTS NAVFAC DRAWING No. 2098578 CODE IDENT No. 80091 SCALE: 1"=200' REVISED 4/16/97–ELEVATIONS FOR #263" BY DAVID L. STEIN, LAND SURVEYOR.

2.) "DEPARTMENT OF THE NAVY, NAVAL FACILITIES ENGINEERING COMMAND NAVAL SUBMARINE BASE NEW LONDON GROTON, CONN. PERIMETER BOUNDARY SURVEY PROPERTY OF U.S.A. GROTON/LEDYARD, CONNECTICUT CODE IDENT No. 80091 SHEET 1 & 2 OF 2 SCALE: 1"=200'" BY RESOURCE MANAGEMENT AND MAPPING, F.W. GUENTHER CT LS 16528.

NOTES

1.) THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20–300b–1 THROUGH 20–300b–20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS PREPARED AND ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

THE TYPE OF SURVEY PERFORMED IS A PERIMETER SURVEY CONFORMING TO THE STANDARDS OF ACCURACY FOR A HORIZONTAL CLASS A–2. THIS IS AN ORIGINAL SURVEY OF THE WETLAND AREAS.

THIS MAP WAS PREPARED FROM OTHER MAPS, LIMITED FIELD MEASUREMENTS AND OTHER SOURCES. IT IS INTENDED TO DEPICT THE BOUNDARY OF THE WETLAND AREA FIELD LOCATED ON NOVEMBER 2 & 3, 2010.

2.) THE SUBJECT AREA IS SHOWN ON THE TOWN OF GROTON TAX ASSESSOR MAP No. 178010 OF BLOCK 27, 36 & 37, AS LOT 5199 E.

THE SUBJECT AREA IS SHOWN ON THE TOWN OF LEDYARD TAX ASSESSOR MAP No's 120 & 130 AS LOT 1431.

3.) A PORTION OF THIS SITE IS WITHIN A COASTAL AREA MANAGMENT ZONE.

4.) COORDINATES DEPICTED HEREON ARE REFERENCED TO THE CONNECTICUT COORDINATE GRID – NAD83 AND ELEVATIONS ARE BASED ON NAVD88 DERIVED FROM MAP REFERENCE No.1.

5.) UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES, FROM PAROL TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE. THE EXISTENCE OF WHICH ARE UNKNOWN TO CME ASSOCIATES, INC. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1–800–922–4455.

LEGEND

SF	SQUARE FEET
	DRAINAGE SWALE
	MONITORING WELL
MON.	MONITORING
	STONE WALL
	RETAINING WALL
	CHAIN LINK FENCE
WLF#	LIMITS OF INLAND WETLANDS

100' 50' 0 100'
GRAPHIC SCALE IN FEET

QUALITY CONTROL CERTIFICATION		
GROUP	REVIEWED	DATE
PROJECT MANAGER	CB	11.23.10
SURVEY	RHS	11.23.10
ENVIRONMENTAL		
CIVIL		
STRUCTURAL		
ARCHITECTURAL		

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

RICHARD H. STROUSE, L.S. #9679 — DATE 11.23.10

REGISTERED No. 9679 LAND SURVEYOR

CME Associates, Inc.
32 Crestbrae Lane, Woodstock, CT 06281
50 Bridge Street, Suite 240, Hartford, CT 06103
333 East River Drive, East Hartford, CT 06108
59 Elm Street, Southbridge, MA 01550
Phone 888-291-3227
www.cmeengineering.com

WETLAND PERIMETER SURVEY
AREA "A" WETLAND – SITE 2B
PREPARED FOR
TETRA TECH NUS, INC.
ON PROPERTY OF
UNITED STATES OF AMERICA
NAVAL SUBMARINE BASE NEW LONDON
THRESHER AVENUE
GROTON, CONNECTICUT

REVISIONS		
NO.	DATE	DESCRIPTION

JOB DATA	
PROJECT	2010164 Tetratech
BOOK NO.	166
DESIGNED	–
DRAWN	CB
CHECKED	CB, RHS
COGO FILE	20100316333 MG.ASC
FILE	2010039 WET.dwg

DATE: NOV. 22, 2010
SCALE: 1" = 100'
PROJECT: #2010164

SHEET
1 OF 1

A certain tract or parcel of land located westerly of Connecticut Route 12 in the Towns of Groton and Ledyard, and as shown on the hereinafter referred to map as AREA “A”. Said tract being an area of wetlands and bounded and described as follows:

Beginning at a point in the Northerly line of the herein described tract, said point being located at wetland flag #19 on the hereinafter referred to map and having coordinates on the State of Connecticut NAD83 coordinate grid of North 708,217.946 feet, and East 1,182,303.564 feet and thence running the following 160 courses and distances: North 27°00'05" West, 17.61 feet, North 43°16'48" East 13.33 feet, South 39°59'39" East 18.29 feet, South 86°50'51" East 84.79 feet, North 88°25'01" East 66.61 feet, South 89°13'36" East 87.80 feet, South 69°15'42" East 82.56 feet, North 85°54'43" East 69.97 feet, North 85°24'30" East 50.83 feet, South 68°28'16" East 58.47 feet, South 45°52'51" East 68.49 feet, South 62°59'01" East 71.44 feet, South 84°15'37" East 33.75 feet, North 04°25'47" East 83.99 feet, North 21°57'18" West 71.76 feet, North 19°55'00" East 36.04 feet, North 37°10'03" West 25.88 feet, North 46°34'46" West 37.15 feet, North 41°14'23" West 30.58 feet, North 55°05'38" East 8.15 feet, South 42°42'43" East 35.26 feet, South 41°21'32" East 64.71 feet South 50°24'27" East 25.99 feet, North 15°56'27" West 17.62 feet, North 16°36'15" West 31.45 feet, North 26°02'54" West 60.88 feet, North 12°33'52" West 53.48 feet, North 10°01'08" East 41.74 feet, North 09°18'09" West 44.76 feet, South 63°12'12" East 7.97 feet, South 17°20'12" East 52.87 feet, South 18°28'18" East 70.60 feet, South 73°15'11" East 42.68 feet, South 08°43'47" East 64.50 feet, South 13°20'03" East 82.07 feet, South 10°51'40" East 91.17 feet, South 09°26'27" East 62.45 feet, South 24°28'26" East 48.63 feet, South 68°12'51" East 50.70 feet, North 70°37'57" East 62.43 feet, North 27°26'58" East 58.59 feet, North 02°50'51" East 65.82 feet, North 07°29'44" East 49.87 feet, North 22°16'04" West 102.38 feet, North 18°32'10" West 91.64 feet, North 15°00'02" West 83.68 feet, North 12°02'45" West 60.72 feet, North 69°13'48" East 21.62 feet, North 16°41'04" East 8.56 feet, North 56°41'05" West 38.16 feet, North 54°56'08" West 42.92 feet, North 15°03'31" East 22.57 feet, North 25°57'07" East 41.63 feet, North 30°26'56" East 77.67 feet, North 38°45'12" East 19.63 feet, South 36°27'51" East 37.17 feet, North 76°41'21" East 59.05 feet, North 78°14'16" East 74.89 feet, North 89°47'49" East 66.31 feet, North 78°06'28" East 62.42 feet, North 57°40'02" East 74.41 feet, North 69°58'28" East 73.48 feet, South 87°52'15" East 55.98 feet, South 27°19'34" East 79.96 feet, South 30°07'02" East 41.81 feet, South 38°14'19" West 59.54 feet, South 01°24'59" East 99.80 feet, South 32°14'56" West 114.01 feet, South 19°49'01" West 44.19 feet, South 58°28'27" West 22.34 feet, South 06°17'31" East 35.58 feet, North 68°26'33" West 8.24 feet, North 39°10'07" West 49.13 feet, North 25°58'37" West 59.94 feet, North 35°33'11" West 43.89 feet, North 64°49'26" West 105.29 feet, North 79°30'16" West 83.66 feet, South 89°42'57" West 57.86 feet, South 41°39'29" West 36.77 feet, South 04°14'19" East 83.55 feet, South 11°02'23" East 71.13 feet, South 20°12'27" East 88.68 feet, South 19°55'57" East 61.40 feet, South 44°22'10" East 78.14 feet, South 20°06'29" West 71.48 feet, South 28°37'14" West 61.34 feet, South 74°10'03" East 29.61 feet, South 18°36'49" East 48.57 feet, South 62°20'28" West 42.68 feet, South 02°07'03" East 45.36 feet, South 20°27'48" West 34.50 feet, South 21°04'31" West 65.64 feet, South 75°57'34" West 37.51 feet, North 70°45'14" West 36.88 feet, South 00°01'21" West 70.90 feet, South 31°49'09" East 27.15 feet, South 61°00'28" East 54.41 feet, South 81°05'56" East 33.32 feet, South 78°30'40" East 35.43 feet, South 18°37'07" East 30.70

feet, South 08°33'39" East 37.42 feet, North 79°00'12" East 23.46 feet, North 31°46'07" East 34.38 feet, South 80°07'19" East 31.59 feet, North 32°10'16" East 22.58 feet, South 44°56'00" East 56.40 feet, South 11°27'55" East 75.84 feet, South 03°01'29" East 44.76 feet, South 43°37'00" East 32.57 feet, South 24°57'26" East 79.62 feet, South 19°38'19" East 47.99 feet, South 15°57'03" East 64.12 feet, South 00°09'31" East 87.10 feet, South 00°04'50" West 96.78 feet, South 21°32'29" West 51.72 feet, South 16°03'11" West 56.85 feet, South 35°53'36" West 35.81 feet, South 16°51'35" West 46.01 feet, South 30°23'15" East 50.31 feet, South 58°10'29" East 24.60 feet, South 43°20'09" West 15.66 feet, South 89°54'57" West 40.81 feet, South 79°34'28" West 20.34 feet, North 63°02'27" West 30.88 feet, North 23°05'08" East 29.29 feet, North 10°59'03" East 14.42 feet, North 05°17'08" East 55.23 feet, North 17°25'17" East 48.59 feet, North 00°23'27" West 28.72 feet, North 37°35'42" West 25.41 feet, North 60°44'23" West 64.84 feet, North 58°24'28" West 83.87 feet, North 67°02'24" West 24.54 feet, South 85°14'44" West 23.45 feet, North 84°57'05" West 19.89 feet, North 64°56'11" West 40.33 feet, North 21°54'07" West 13.25 feet, North 79°24'51" West 21.35 feet, South 62°07'26" West 31.12 feet, North 84°20'51" West 24.33 feet, North 43°50'21" West 28.06 feet, North 23°30'04" West 33.26 feet, North 38°20'11" West 112.73 feet, North 43°52'32" West 111.06 feet, North 38°00'48" West 66.94 feet, North 35°36'28" West 71.69 feet, North 49°20'09" West 53.52 feet, North 62°41'44" West 120.38 feet, North 48°15'23" West 98.54 feet, North 44°31'08" West 48.58 feet, North 69°26'19" West 92.23 feet, North 61°58'14" West 117.63 feet, North 46°11'07" West 71.58 feet, North 70°26'04" West 62.65 feet, North 30°11'00" West 77.70 feet, North 46°48'58" West 130.22 feet, North 15°32'59" West 47.53 feet, North 07°40'06" East 43.97 feet, North 64°32'46" East 73.24 feet, and North 46°17'33" East 69.66 feet to the point and place of beginning. The entire described parcel abuts other land of The United States of America.

Excluding from above described parcel is a tract of land shown as the “Wooded Island” on the hereinafter referred to map. Said excluded parcel being bounded and described as follows:
Beginning at a point in the Southeasterly line of the herein described tract, said point being at wetland flag #220 on the hereinafter referred to map and having coordinates on the State of Connecticut NAD83 coordinate grid of North 707,755.328 feet, and East 1,182,750.490 feet and thence running the following 23 courses and distances:
South 53°06'24" West 29.88 feet, North 81°50'27" West 44.17 feet, North 81°47'45" West 31.51 feet, North 48°15'34" West 49.22 feet, North 74°09'09" West 36.47 feet, North 66°42'16" West 43.82 feet, North 50°44'10" West 54.14 feet, North 41°34'54" West 35.53 feet, North 17°06'55" West 48.71 feet, North 01°22'19" West 47.62 feet, North 12°35'03" West 56.61 feet, North 09°55'26" East 29.98 feet, North 60°02'30" East 13.18 feet, North 76°40'27" East 40.49 feet, South 88°18'56" East 58.17 feet, South 60°43'09" East 84.68 feet, South 54°35'23" East 70.54 feet, South 58°56'30" East 46.74 feet, South 30°50'55" East 61.97 feet, South 41°34'17" East 50.37 feet, South 20°53'01" East 27.24 feet, South 20°13'36" West 43.96 feet, and South 43°45'07" West 59.37 feet to the point and place of beginning.

Said tract or parcel of land is shown as area “A” on the hereinafter referred to map and contains 19.26 acres more or less.

Being shown on “Wetland perimeter survey, Area “A” wetland – site 2B prepared for Tetra Tech NUS, Inc. on property of United States of America, Naval Submarine Base New London, Thresher Avenue, Groton, Connecticut” Dated Nov. 22, 2010 Scale 1”=100’ Project #2010164 Sheet 1 of 1 by CME Associates, Inc. 32 Crabtree Lane, Woodstock, CT 06281.

APPENDIX B

FIELD TASK MODIFICATION REQUEST FORMS AND PHOTOGRAPHS OF THE SEDIMENT CORER

TETRA TECH NUS
FIELD TASK MODIFICATION REQUEST FORM

NSB New London, Groton CT Project/Installation Name	**CTO WE55/112G02625** CTO & Project Number	**Mod. 1** Task Mod. Number
PDI SAP – March 2011 Modification To (e.g. Work Plan)	**Area A Wetland PDI** Site/Sample Location	**March 22, 2011** Date

Activity Description: Sediment sampling in the Area A Wetland for the Pre-Design Investigation.

Reason for Change: Because of the high percent moisture of the sediment, the amount of overlying water above the sediment, and the thick layer of organic material at the surface from the recently cut phragmites, it was determined that the sediment procedures presented in the SAP needed to be revisited and clarified to ensure that: 1) the percent moisture of the sediment would be reduced, and, 2) the amount of organic material collected would be minimized.

Recommended Disposition: The Navy (represented by Tetra Tech) and EPA conducted a site visit on March 16, 2011 to finalize the sediment collection procedure. It was agreed that a shovel could be used to collect sediment samples in areas where there is little or no overlying water. The shovel will be inserted into the ground on four sides, and the sediment will be removed and placed on the surface adjacent to the hole. The layer of sediment that contacted the shovel will be scrapped off with a clean stainless steel spatula or disposable plastic trowel. The mostly organic layer at the surface will also be removed with the spatula. Sediment from the top 4 inches (under the organic layer) will be collected with the spatula and placed into a disposal aluminum pan, homogenized, and treated as per the requirements presented in the final SAP.

A clean plastic sediment core tube (2.75 inches in diameter) will be used to collect sediment samples in areas where there is overlying water. The core tube will be pressed into the sediment using one of three methods: 1) by hand, 2) by hammering the core tube using a wooden block with a small hole in the middle to allow air to escape, or 3) by using the sediment percussion corer (from Aquatic Research Instruments) with the slide hammer. A plastic cap will be placed over the top of the corer to create a suction, and then the core tube will be slowly removed from the sediment. A cap will be placed over the bottom of the core to prevent sediment from sliding out the bottom (if needed), and the top of the core will be placed onto a new disposal aluminum pan (or a baking sheet that is covered with a new piece of heavy duty aluminum foil). The extruder will be used to push the sediment through the top of the core tube and onto the aluminum pan. The mostly organic layer at the surface will be removed with the spatula. Sediment from the top 4 inches will be collected with the spatula and placed into a smaller new disposal aluminum pan for homogenization before placement to the sample jars. Note that multiple cores may be necessary to obtain enough sediment to fill two 8-ounce jars.

Note that dredge spoils will not be included in any sample. All equipment touching the sample, including the shovel, non-disposable spatulas, and core tubes will be decontaminated in accordance with the SAP between sample locations.

After receipt but prior to analysis, the laboratory will slowly decant any overlying water in the sample container making sure not to decant off fine sediment. The laboratory will first conduct a percent solids analysis on the sediment samples. If the percent solids in a sample are less than 30 percent, the laboratory will increase the aliquot size to offset the low solids to prevent non-detect results from being rejected.

Aaron Bernhardt _____ **March 22, 2011**
Field Operations Leader (Signature) Date

Approved Disposition: Approved as recommended.

Aaron Bernhardt _____ **March 22, 2011**
Project Manager (Signature) Date

Distribution:

Program/Project File – 112G02625
Tetra Tech PM – Aaron Bernhardt
Tetra Tech Base Coordinator – Corey Rich
NAVFAC MID-ATLANTIC – Jim Gravette
NSB-NLON - Richard Conant
EPA Region 1 – Kymberlee Keckler
CTDEP – Mark Lewis

Photographs of sediment sampler

Notes:

1. **Plastic liner is approximately 2.75 inches in diameter and can be cut to required length**
2. **There is a “flapper” inside the white piece of plasctc that provides suction when closed to help retain the sediment in the plastic liner.**

TETRA TECH NUS
FIELD TASK MODIFICATION REQUEST FORM

LTM/NSB-NLON Project/Installation Name	**CTO WE55, 112G02625** CTO & Project Number	**01** Task Mod. Number
SAP for PDI for Sediment Modification To (e.g. Work Plan)	**Area A Wetland – Site 2B** Site/Sample Location	**7/25/11** Date

Activity Description: A Remedial Investigation (RI) Update/Feasibility Study (FS) Report prepared for the Area A Wetland-Site 2B presented the nature and extent of contamination at the site, documented the associated risks to potential human and ecological receptors, developed preliminary remediation goals (PRGs) and developed and evaluated remedial alternatives for addressing impacted sediment in the Area A Wetland. The preferred remedial alternatives were then presented in the Proposed Plan, and the selected remedial alternative was presented in the Record of Decision.

The RI Update/FS report identified the need to collect additional sediment samples to better define the horizontal extent of contaminated sediment with concentrations greater than PRGs and to remove the uncertainty of impacts at one location. Two phases (Phases I and II) of the Pre-Design Investigation (PDI) for sediment were conducted in accordance with the final Sampling and Analysis Plan (SAP) for the site. Attachment A presents a summary of the Phase I and II PDI results.

Reason for Change: The results of Phases I and II of the PDI did not fully define the extent of contaminated sediment; therefore, additional sediment samples need to be collected to fully define the extent of contaminated sediment with concentrations greater than PRGs.

Recommended Disposition: Collect additional sediment samples following the same procedures used during Phases I and II of the PDI and the same SAP and Health and Safety Plan. All samples will be collected during one investigation, but the samples will be analyzed in two phases, Phase 3 and Phase 4. Similar collection and analysis processes were followed during the first two phases of the PDI . Attachment A presents the recommendations for additional sediment sampling. The sampling is proposed to be completed in August/September 2011.

Quality Assurance Manager (QAPP lead developer) _____ Date _____

Approved Disposition:

Project/Task Order Manager (Signature) _____ Date 7-27-11

Distribution:

Program/Project File – 112G02625
Project/Project Manager – Aaron Bernhardt
Field Operations Leader –Aaron Bernhardt
Navy RPM – Dominic O'Connor

Other: _____

Attachment A
Results of the Phase I and Phase II PDI Sampling and
Proposed Additional Phase III and Phase IV PDI Sampling at Area A Wetland

This attachment presents an evaluation of the Phase I and Phase II Pre-Design Investigation (PDI) sediment sampling for the Area A Wetland-Site 2B at Naval Submarine Base-New London, in Groton, Connecticut. This attachment also provides recommendations for additional sediment sampling (Phases III and IV) to better define the extent of contamination. Although the evaluation focuses primarily on the Phase II results (the Phase I results were discussed in a separate memorandum), Table 1 presents the analytical results for both the Phase I and Phase II sediment samples to aid in the overall evaluation of the site. Also, note that the phases described in this document relate only to the phases of the PDI investigation; they do not relate to the phases of previous investigations conducted at the site.

Table 1 is divided into the Phase I and Phase II samples, and further divided by the samples within each excavation area. Five figures are also attached. Figure 1 shows all five excavation areas but only has the Phase III and Phase IV proposed sediment sample locations labeled. The figure would be difficult to read if every location was labeled. Figures 2 through 5 show expanded views of each of the excavation areas, with all previous and proposed sample locations labeled. The previous samples locations are shown in red if the chemical concentrations at those locations exceeded at least one PRG and in green if none of the chemical concentrations exceeded a PRG. The proposed sample locations are shaded blue if they are Phase III samples are shaded yellow if they are Phase IV samples. The "extent of contamination" areas in Excavation Areas No. 2 and 4 have been adjusted to the "clean" Phase I and Phase II sample results, as was the northern portion of Excavation Area No. 1. However, the "extent of contamination" areas were not adjusted in areas that require further sampling as described below.

The following text provides a brief evaluation of the Phase II data, and presents the Navy's recommendations for additional sediment sampling to better refine the extent of contamination.

Excavation Area 1

- The area is bounded to the north (see Figure 2)
- Nine additional sediment samples are proposed to be collected to the south. The three southernmost samples (Phase III samples) will be analyzed first. It will be assumed that if those three samples have concentrations that exceed the PRG than the other six samples to the north will also have concentrations that exceed the PRG so they will not be analyzed. If the concentrations in the three Phase III samples do not exceed the PRGs, than all six Phase IV samples will be analyzed. These samples will only be analyzed for PAHs.

Excavation Area 2

- The area is bounded in all directions by clean samples (see Figure 3). The excavation area shifted slightly to the west.
- No additional samples are proposed to be collected in this area.

Excavation Area 3

- This area is bounded to the northeast and southeast, but not to the east (it is bounded by upland areas to the north, south, and west) (see Figure 4).
- Eight additional sediment samples are proposed to be collected to the east. The furthest four samples (Phase II samples) will be analyzed first. Based on the results of those samples, either all or some of the Phase IV samples will be analyzed. The approach is similar to what is being done in Excavation Area No. 1 except that all of the Phase IV samples may not need to be analyzed. It is proposed that these samples only be analyzed for pesticides because the concentrations of PAHs, PCBs, and metals were much lower with respect to their PRGs/TECs than were the pesticides in this area (see Table 1).

Excavation Area 4

- No Phase I samples exceeded PRGs in the western portion of the excavation area (see Figure 5). The excavation area will decrease slightly and will be confined to the area bounded by sample locations 2WSD147, T5B, and 2WSD149.
- The chemical concentrations in the one sediment sample (2WSD153) from this area were less than PRGs.

Excavation Area 5

- One of the Phase II samples (from location 2WSD160) had a PAH concentration that slightly exceeded its PRG (see Figure 5). No other PRGs were exceeded in any of the Phase II samples from this area.
- Three additional sediment samples are proposed to be collected to the east. Two of the samples will be analyzed in Phase III and if necessary the third sample will be analyzed in Phase IV.
- These samples will only be analyzed for PAHs.

TABLE 1

PHASE I AND PHASE 2 ANALYTICAL RESULTS IN SEDIMENT AND CALCULATION OF TEC AND PRG - QUOTIENT IN EACH SAMPLE
AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Location	Sample Code	Sample Name	Concentrations																											
			TOTAL PAHS (ug/kg)		TOTAL DDT POS (ug/kg)		TOTAL AROCLOR (ug/kg)		TOTAL PAHS (ug/kg)		4,4'-DDD (ug/kg)		4,4'-DDE (ug/kg)		4,4'-DDT (ug/kg)		TOTAL DDT POS (ug/kg)		TOTAL AROCLOR (ug/kg)		ARSENIC (mg/kg)		CADMIUM (mg/kg)		CHROMIUM (mg/kg)		COPPER (mg/kg)		LEAD (mg/kg)		NICKEL (mg/kg)		ZINC (mg/kg)	
			PRG = 6,585		PRG = 1,504		PRG = 532		TEC = 1,610				TEC = 3.16				TEC = 5.28		TEC = 59.8		TEC = 9.79		TEC = 0.99		TEC = 43.4		TEC = 31.6		TEC = 35.8		TEC = 22.7		TEC = 121	
PHASE I SAMPLES																																
Excavation Area No. 1																																
2W-SD-SD87		**2W-SD-SD87-0001**	**9,833**		--		--		**9,833**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD88		**2W-SD-SD88-0001**	**15,376**		--		--		**15,376**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD89		**2W-SD-SD89-0001**	**21,932**		--		--		**21,932**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD90		**2W-SD-SD90-0001**	**12,181**		--		--		**12,181**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD94		**2W-SD-SD94-0001**	**26,568**		--		--		**26,568**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD95		**2W-SD-SD95-0001**	**13,458**		--		--		**13,458**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD96	ORIG	**2W-SD-SD96-0001**	**34,114**		--		--		**34,114**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD96	DUP	**2W-SD-SD96-0001**	**29,189**		--		--		**29,189**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD97		**2W-SD-SD97-0001**	**21,520**		--		--		**21,520**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD98		**2W-SD-SD98-0001**	**23,375**		--		--		**23,375**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD99		**2W-SD-SD99-0001**	**53,814**		--		--		**53,814**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD100		**2W-SD-SD100-0001**	**7,337**		--		--		**7,337**		--		--		--		--		--		--		--		--		--		--		--	
Excavation Area No. 2																																
2W-SD-SD103		**2W-SD-SD103-0001**	**25,391**		--		--		**25,391**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD105		**2W-SD-SD105-0001**	**15,753**		--		--		**15,753**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD107		**2W-SD-SD107-0001**	4,406		--		--		**4,406**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD108		**2W-SD-SD108-0001**	**6,939**		--		--		**6,939**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD110		**2W-SD-SD110-0001**	**46,400**		--		--		**46,400**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD112	ORIG	**2W-SD-SD112-0001**	3,775		--		--		**3,775**		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD112	DUP	**2W-SD-SD112-0001**	4,622		--		--		**4,622**		--		--		--		--		--		--		--		--		--		--		--	
Excavation Area No. 3																																
2W-SD-SD116		**2W-SD-SD116-0001**	1,636		235		0	U	**1,636**		170	J	**24**	J	41	J	**235**		0	U	**21.4**	J	**1.6**	UJ	38.1	J	**74.1**	J	**57.7**	J	**23**	J	71.3	J
2W-SD-SD117		**2W-SD-SD117-0001**	1,118		55.9		0	U	1,118		11	J	**7.9**	J	37	J	**55.9**		0	U	7.3	J	**1**	UJ	23	J	**72.8**	J	31.8	J	16	J	23.7	J
2W-SD-SD118		**2W-SD-SD118-0001**	1,561		**3,614**		0	U	1,561		3,200	J	**320**	J	94	J	**3,614**		0	U	**14.1**	J	**1.2**	J	**94.2**	J	**68.5**	J	**113**	J	**41.5**	J	**218**	J
2W-SD-SD119		**2W-SD-SD119-0001**	587		**1,874**		0	U	587		1,800	J	**54**	J	20	J	**1,874**		0	U	**10.9**	J	**2.8**	J	32.2	J	**82.8**	J	**47**	J	**50.2**	J	**366**	J
2W-SD-SD120		**2W-SD-SD120-0001**	2,379		494		220		**2,379**		460	J	**23**	J	11	J	**494**		**220**		**14**	J	**1.9**	J	**48.8**	J	**102**	J	**91.3**	J	**29.3**	J	**334**	J
2W-SD-SD121		**2W-SD-SD121-0001**	2,030		228		**640**		**2,030**		150	J	**33**	J	45	J	**228**		**640**		**18.2**	J	**2.1**	J	**45.8**	J	**133**	J	**91.7**	J	**39.8**	J	**563**	J
2W-SD-SD122	ORIG	**2W-SD-SD122-0001**	2,595		83		180		**2,595**		41	J	**21**	J	21	J	**83**		**180**		**11.7**	J	0.79	J	**58.1**	J	**92.8**	J	**74.1**	J	**26**	J	**180**	J
2W-SD-SD122	DUP	**2W-SD-SD122-0001**	2,777		80		190		**2,777**		39	J	**22**	J	19	J	**80**		**190**		**10.9**	J	0.81	J	**55**	J	**89.6**	J	**70.4**	J	**25.7**	J	**182**	J
2W-SD-SD123		**2W-SD-SD123-0001**	4,916		930		**2300**		**4,916**		680	J	**110**	J	140	J	**930**		**2,300**		**10.7**	J	**3**	J	**51.4**	J	**316**	J	**174**	J	**53.8**	J	**778**	J
2W-SD-SD126		**2W-SD-SD126-0001**	5,022		--		--		**5,022**		--		--		--		--		--		--		--		--		--		--		--		--	
2W-SD-SD127	ORIG	**2W-SD-SD127-0001**	379		11.2		0	U	379		3.7	J	1.8	J	5.7	J	**11.2**		0	U	6.9		0.52	U	4.5		30.5	J	12.8		6.2	J	**139**	J
2W-SD-SD127	DUP	**2W-SD-SD127-0001**	355		13.4		0	U	355		3.4	J	2.8	J	7.2		**13.4**		0	U	6		0.41	U	3.5		27.4		11.6		5.6		119	
2W-SD-SD130		**2W-SD-SD130-0001**	3,087		168		360		**3,087**		110	J	**19**	J	39	J	**168**		**360**		**13**	J	**2.4**	J	15.7	J	**157**	J	**75.3**	J	**72.2**	J	**1,350**	J
2W-SD-SD134		**2W-SD-SD134-0001**	2,681		**3,110**		250		**2,681**		2,000	J	**280**	J	830	J	**3,110**		**250**		**12.3**	J	**1.6**	J	**83.2**	J	**85**	J	**77.4**	J	**31.6**	J	**220**	J
2W-SD-SD135		**2W-SD-SD135-0001**	3,454		**197,000**		0	U	**3,454**		130,000	J	**11,000**	J	56000	J	**197,000**		0	U	7.4	J	**2**	J	37.4	J	**75.6**	J	**59.2**	J	**27.5**	J	**325**	J
2W-SD-SD136		**2W-SD-SD136-0001**	2,134		**13,700**		290		**2,134**		12,000	J	**1,700**	J	2.6	UJ	**13,700**		**290**		**10.3**	J	**4.3**	J	**46**	J	**115**	J	**92.9**	J	**37**	J	**532**	J
2W-SD-SD138		**2W-SD-SD138-0001**	3,256		**8,390**		0	U	**3,256**		7,100		**930**		360	J	**8,390**		0	U	**12.6**	J	**1.3**	J	**79.1**	J	**51.7**	J	**53.1**	J	**28.2**		**138**	
2W-SD-SD140		**2W-SD-SD140-0001**	4,694		123		**560**		**4,694**		64	J	**24**	J	35	J	**123**		**560**		9.4	J	0.3	J	18.1	J	**95.8**	J	**48**	J	**37.9**	J	**954**	J
2W-SD-SD142		**2W-SD-SD142-0001**	**17,410**		1,140		0	U	**17,410**		640		**240**		260	J	**1,140**		0	U	**20.6**		0.8	J	36		**69.7**		**72**		**30.4**		**320**	
2W-SD-SD144		**2W-SD-SD144-0001**	**12,433**		610		0	U	**12,433**		230	J	**100**	J	280	J	**610**		0	U	**14.8**	J	**1.3**	UJ	18.1	J	**35.5**	J	**38.7**	J	19	J	**298**	J
2W-SD-SD146		**2W-SD-SD146-0001**	5,306		1,200		0	U	**5,306**		210	J	**280**	J	710	J	**1,200**		0	U	9.2	J	**3.6**	UJ	9.4	J	**37.3**	J	24.7	J	**33**	J	**1,200**	J
Excavation Area No. 4																																
2W-SD-SD147		**2W-SD-SD147-0001**	5,583		203		0	U	**5,583**		120	J	**35**	J	48	J	**203**		0	U	6.1	J	0.34	J	17.4	J	**50.5**	J	34.3	J	14.3		**264**	
2W-SD-SD149		**2W-SD-SD149-0001**	159		0.82		0	U	159		0.82	J	1.7	U	1.7	UJ	0.82		0	U	1.8	J	0.09	J	10	J	16.3	J	4.9	J	6.5		19.8	
2W-SD-SD152		**2W-SD-SD152-0001**	1,754		68.5		170		**1,754**		51	J	**6.5**	J	11	J	**68.5**		**170**		**15**	J	**1.6**	J	22.3	J	**62.6**	J	**37.1**	J	17.4	J	**453**	J
2W-SD-SD154		**2W-SD-SD154-0001**	2,331		1,120		0	U	**2,331**		730	J	**390**	J	0.86	UJ	**1,120**		0	U	**18.4**	J	**3.5**	J	**100**	J	**109**	J	**77.4**	J	**47.9**	J	**400**	J
Excavation Area No. 5																																
2W-SD-SD158		**2W-SD-SD158-0001**	2,209		118		280		**2,209**		82		**16**	J	20	J	**118**		**280**		**11.4**	J	**1.1**	J	30	J	**73.3**	J	**51**	J	**22.9**		**327**	
2W-SD-SD159	ORIG	**2W-SD-SD159-0001**	4,547		67		150		**4,547**		56	J	**11**	J	0.93	UJ	**67**		**150**		**12.6**	J	**1.1**	J	**63.5**	J	**106**	J	**82.4**	J	**27.1**	J	**352**	J
2W-SD-SD159	DUP	**2W-SD-SD159-0001**	2,371		78.5		130		**2,371**		62		**6.6**	J	9.9	J	**78.5**		**130**		4.3	J	0.54	J	16	J	**59.8**	J	34	J	9.8		**256**	
2W-SD-SD161		**2W-SD-SD161-0001**	3,082		0	U	47		**3,082**		4.2	U	**4.2**	UJ	4.2	UJ	0	U	47		5.8	J	**1.8**	J	17.2	J	**246**	J	**42.8**	J	17.8		**659**	

TABLE 1

PHASE I AND PHASE 2 ANALYTICAL RESULTS IN SEDIMENT AND CALCULATION OF TEC AND PRG - QUOTIENT IN EACH SAMPLE
AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Location	Sample Code	Sample Name	Concentrations																									
			TOTAL PAHS (ug/kg) PRG = 6,585		TOTAL DDT POS (ug/kg) PRG = 1,504		TOTAL AROCLOR (ug/kg) PRG = 532		TOTAL PAHS (ug/kg) TEC = 1,610		4,4'-DDD (ug/kg)		4,4'-DDE (ug/kg) TEC = 3.16		4,4'-DDT (ug/kg)		TOTAL DDT POS (ug/kg) TEC = 5.28		TOTAL AROCLOR (ug/kg) TEC = 59.8		ARSENIC (mg/kg) TEC = 9.79		CADMIUM (mg/kg) TEC = 0.99		CHROMIUM (mg/kg) TEC = 43.4		COPPER (mg/kg) TEC = 31.6		LEAD (mg/kg) TEC = 35.8		NICKEL (mg/kg) TEC = 22.7		ZINC (mg/kg) TEC = 121	
PHASE II SAMPLES																												
Excavation Area No. 1																												
2W-SD-SD85		2W-SD-SD85-0001	1,766		--		--		1,766		--		--		--		--		--		--		--		--		--	
2W-SD-SD86		2W-SD-SD86-0001	2,690		--		--		2,690		--		--		--		--		--		--		--		--		--	
2W-SD-SD91		2W-SD-SD91-0001	81,979		--		--		81,979		--		--		--		--		--		--		--		--		--	
2W-SD-SD92		2W-SD-SD92-0001	41,459		--		--		41,459		--		--		--		--		--		--		--		--		--	
2W-SD-SD93		2W-SD-SD93-0001	10,242		--		--		10,242		--		--		--		--		--		--		--		--		--	
Excavation Area No. 2																												
2W-SD-SD101		2W-SD-SD101-0001	2,882		--		--		2,882		--		--		--		--		--		--		--		--		--	
2W-SD-SD102		2W-SD-SD102-0001	2,522		--		--		2,522		--		--		--		--		--		--		--		--		--	
2W-SD-SD104		2W-SD-SD104-0001	5,297		--		--		5,297		--		--		--		--		--		--		--		--		--	
2W-SD-SD106		2W-SD-SD106-0001	8,663		--		--		8,663		--		--		--		--		--		--		--		--		--	
2W-SD-SD109		2W-SD-SD109-0001	3,708		--		--		3,708		--		--		--		--		--		--		--		--		--	
2W-SD-SD111		2W-SD-SD111-0001	2,094		--		--		2,094		--		--		--		--		--		--		--		--		--	
2W-SD-SD113		2W-SD-SD113-0001	2,335		--		--		2,335		--		--		--		--		--		--		--		--		--	
Excavation Area No. 3																												
2W-SD-SD114		2W-SD-SD114-0001	6,500		167		0	U	6,500		110	J	18	J	39	J	167		0	U	15.7	J	1.6	UJ	53.4	J	77.8	J	77.9	J	24.7	J	79.6	J
2W-SD-SD124		2W-SD-SD124-0001	2,148		27,719		0	U	2,148		25,000		2,700	J	19	J	27,719		0	U	9.8		3.8		40		37		23.4		45.1		569	
2W-SD-SD125		2W-SD-SD125-0001	2,532		4,310		0	U	2,532		3,400	J	530	J	380	J	4,310		0	U	5.8	J	0.14	J	75.6	J	61.2	J	67	J	25.7	J	151	J
2W-SD-SD128		2W-SD-SD128-0001	2,744		554.3		0	U	2,744		480	J	69		5.3	J	554.3		0	U	12.2		1.1	J	84.4		87.2		53.9		35.9		95.9	
2W-SD-SD129		2W-SD-SD129-0001	4,253		2,700		310		4,253		2,600	J	73	J	27	J	2,700		310		11.9	J	0.52	J	83	J	84.5	J	90.3	J	28.8	J	159	J
2W-SD-SD131		2W-SD-SD131-0001	2,913		201		0	U	2,913		140	J	28	J	33	J	201		0	U	30.1	J	7.2	J	13.6	J	320	J	114	J	57	J	1,870	J
2W-SD-SD132		2W-SD-SD132-0001	7,311		24,900		770		7,311		20,000	J	2,100	J	2800	J	24,900		770		10.9	J	1.6	J	60.5	J	139	J	142	J	28.6	J	264	J
2W-SD-SD133		2W-SD-SD133-0001	3,837		114		450		3,837		54	J	24	J	36	J	114		450		6.7	J	0.22	J	28.4	J	176	J	98	J	38	J	372	J
2W-SD-SD137		2W-SD-SD137-0001	5,060		10,170		0	U	5,060		8,300		1,400		470	J	10,170		0	U	11.6		2		93.3		58.9		71.9		31		166	
2W-SD-SD139		2W-SD-SD139-0001	6,275		50,100		0	U	6,275		39,000	J	4,600	J	6500	J	50,100		0	U	18.6	J	2.1	J	83.2	J	155	J	121	J	45.9	J	473	J
2W-SD-SD141		2W-SD-SD141-0001	5,629		2,380		0	U	5,629		2,200	J	180	J	350	UJ	2,380		0	U	3.2	J	2.4	UJ	15.9	J	53.9	J	40	J	17.7	J	192	J
2W-SD-SD143		2W-SD-SD143-0001	15,198		145,000		0	U	15,198		120,000	J	10,000	J	15000	J	145,000		0	U	10.2	J	1.6	J	47.5	J	85.7	J	67.5	J	28.3	J	338	J
2W-SD-SD145		2W-SD-SD145-0001	6,868		19,900		0	U	6,868		14,000	J	2,400	J	3500	J	19,900		0	U	12.8	J	1.1	J	68	J	69.6	J	63.1	J	30.4	J	204	J
Excavation Area No. 4																												
2W-SD-SD153		2W-SD-SD153-0001	4,838		19.4		0	U	4,838		50	U	9.6	J	9.8	J	19.4		0	U	12.4	J	3.7	UJ	21.1	J	41.4	J	28.9	J	17.2	J	396	J
Excavation Area No. 5																												
2W-SD-SD155		2W-SD-SD155-0001	2,723		113		150		2,723		95	J	6	J	12	J	113		150		7	J	0.82	UJ	59	J	72.3	J	76.8	J	19.6	J	245	J
2W-SD-SD156		2W-SD-SD156-0001	3,284		26.9		0	U	3,284		38	U	7.9	J	19	J	26.9		0	U	13.3	J	1.6	UJ	64.1	J	82.2	J	78.1	J	50.5	J	298	J
2W-SD-SD157		2W-SD-SD157-0001	4,427		3.9		0	U	4,427		13	U	3.9	J	7.5	UJ	3.9		0	U	5	J	0.89	UJ	9.6	J	33.6	J	15.2	J	12.8	J	433	J
2W-SD-SD160		2W-SD-SD160-0001	7,970		142		0	U	7,970		110	J	13	J	19	J	142		0	U	26.3	J	2.1	UJ	218	J	842	J	355	J	93.2	J	901	J
2W-SD-SD162		2W-SD-SD162-0001	1,073		25		0	U	1,073		9.2	J	7.4	J	8.4	J	25		0	U	13.6		2.3	U	9.4	J	43.3		21.9		15	J	753	

TABLE 1

PHASE I AND PHASE 2 ANALYTICAL RESULTS IN SEDIMENT AND CALCULATION OF TEC AND PRG - QUOTIENT IN EACH SAMPLE
AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Location	Sample Code	Sample Name	PRG Quotients (unitless)			TEC Quotients (unitless)										Number of TEC-Qs Greater than 1.0
			TOTAL PAHS PRG = 6,585	TOTAL DDT POS PRG = 1,504	TOTAL AROCLOR PRG = 532	TOTAL PAHS TEC = 1610	TOTAL DDT POS TEC = 5.28	TOTAL AROCLOR TEC = 59.8	4,4'-DDE TEC = 3.16	ARSENIC TEC = 9.79	CADMIUM TEC = 0.99	CHROMIUM TEC = 43.4	COPPER TEC = 31.6	LEAD TEC = 35.8	NICKEL TEC = 22.7	ZINC TEC = 121	
PHASE I SAMPLES																
Excavation Area No. 1																
2W-SD-SD87		2W-SD-SD87-0001	1.5	--	--	6.1	--	--	--	--	--	--	--	--	--	1
2W-SD-SD88		2W-SD-SD88-0001	2.3	--	--	9.6	--	--	--	--	--	--	--	--	--	1
2W-SD-SD89		2W-SD-SD89-0001	3.3	--	--	13.6	--	--	--	--	--	--	--	--	--	1
2W-SD-SD90		2W-SD-SD90-0001	1.8	--	--	7.6	--	--	--	--	--	--	--	--	--	1
2W-SD-SD94		2W-SD-SD94-0001	4.0	--	--	16.5	--	--	--	--	--	--	--	--	--	1
2W-SD-SD95		2W-SD-SD95-0001	2.0	--	--	8.4	--	--	--	--	--	--	--	--	--	1
2W-SD-SD96	ORIG	2W-SD-SD96-0001	5.2	--	--	21.2	--	--	--	--	--	--	--	--	--	1
2W-SD-SD96	DUP	2W-SD-SD96-0001	4.4	--	--	18.1	--	--	--	--	--	--	--	--	--	1
2W-SD-SD97		2W-SD-SD97-0001	3.3	--	--	13.4	--	--	--	--	--	--	--	--	--	1
2W-SD-SD98		2W-SD-SD98-0001	3.5	--	--	14.5	--	--	--	--	--	--	--	--	--	1
2W-SD-SD99		2W-SD-SD99-0001	8.2	--	--	33.4	--	--	--	--	--	--	--	--	--	1
2W-SD-SD100		2W-SD-SD100-0001	1.1	--	--	4.6	--	--	--	--	--	--	--	--	--	1
Excavation Area No. 2																
2W-SD-SD103		2W-SD-SD103-0001	3.9	--	--	15.8	--	--	--	--	--	--	--	--	--	1
2W-SD-SD105		2W-SD-SD105-0001	2.4	--	--	9.8	--	--	--	--	--	--	--	--	--	1
2W-SD-SD107		2W-SD-SD107-0001	0.7	--	--	2.7	--	--	--	--	--	--	--	--	--	1
2W-SD-SD108		2W-SD-SD108-0001	1.1	--	--	4.3	--	--	--	--	--	--	--	--	--	1
2W-SD-SD110		2W-SD-SD110-0001	7.0	--	--	28.8	--	--	--	--	--	--	--	--	--	1
2W-SD-SD112	ORIG	2W-SD-SD112-0001	0.6	--	--	2.3	--	--	--	--	--	--	--	--	--	1
2W-SD-SD112	DUP	2W-SD-SD112-0001	0.7	--	--	2.9	--	--	--	--	--	--	--	--	--	1
Excavation Area No. 3																
2W-SD-SD116		2W-SD-SD116-0001	0.2	0.2	U	1.0	44.5	U	7.6 J	2.2 J	UJ	0.9 J	2.3 J	1.6 J	1.0 J	0.6 J	7
2W-SD-SD117		2W-SD-SD117-0001	0.2	0.04	U	0.7	10.6	U	2.5 J	0.7 J	UJ	0.5 J	2.3 J	0.9 J	0.7 J	0.2 J	3
2W-SD-SD118		2W-SD-SD118-0001	0.2	2.4	U	1.0	684	U	101 J	1.4 J	1.2 J	2.2 J	2.2 J	3.2 J	1.8 J	1.8 J	9
2W-SD-SD119		2W-SD-SD119-0001	0.1	1.2	U	0.4	355	U	17.1 J	1.1 J	2.8 J	0.7 J	2.6 J	1.3 J	2.2 J	3.0 J	8
2W-SD-SD120		2W-SD-SD120-0001	0.4	0.3	0.4	1.5	93.6	3.7	7.3 J	1.4 J	1.9 J	1.1 J	3.2 J	2.6 J	1.3 J	2.8 J	11
2W-SD-SD121		2W-SD-SD121-0001	0.3	0.2	1.2	1.3	43.2	10.7	10.4 J	1.9 J	2.1 J	1.1 J	4.2 J	2.6 J	1.8 J	4.7 J	11
2W-SD-SD122	ORIG	2W-SD-SD122-0001	0.4	0.1	0.3	1.6	15.7	3.0	6.6 J	1.2 J	0.8 J	1.3 J	2.9 J	2.1 J	1.1 J	1.5 J	10
2W-SD-SD122	DUP	2W-SD-SD122-0001	0.4	0.1	0.4	1.7	15.2	3.2	7.0 J	1.1 J	0.8 J	1.3 J	2.8 J	2.0 J	1.1 J	1.5 J	10
2W-SD-SD123		2W-SD-SD123-0001	0.7	0.6	4.3	3.1	176	38.5	34.8 J	1.1 J	3.0 J	1.2 J	10.0 J	4.9 J	2.4 J	6.4 J	11
2W-SD-SD126		2W-SD-SD126-0001	0.8	--	--	3.1	--	--	--	--	--	--	--	--	--	--	1
2W-SD-SD127	ORIG	2W-SD-SD127-0001	0.1	0.01	U	0.2	2.1	U	0.6 J	0.7 J	U	0.1 J	1.0 J	0.4 J	0.3 J	1.1 J	2
2W-SD-SD127	DUP	2W-SD-SD127-0001	0.1	0.01	U	0.2	2.5	U	0.9 J	0.6 J	U	0.1 J	0.9 J	0.3 J	0.2 J	1.0 J	1
2W-SD-SD130		2W-SD-SD130-0001	0.5	0.1	0.7	1.9	31.8	6.0	6.0 J	1.3 J	2.4 J	0.4 J	5.0 J	2.1 J	3.2 J	11.2 J	10
2W-SD-SD134		2W-SD-SD134-0001	0.4	2.1	0.5	1.7	589	4.2	88.6 J	1.3 J	1.6 J	1.9 J	2.7 J	2.2 J	1.4 J	1.8 J	11
2W-SD-SD135		2W-SD-SD135-0001	0.5	131	U	2.1	37,311	U	3,481 J	0.8 J	2.0 J	0.9 J	2.4 J	1.7 J	1.2 J	2.7 J	8
2W-SD-SD136		2W-SD-SD136-0001	0.3	9.1	0.5	1.3	2,595	4.8	538 J	1.1 J	4.3 J	1.1 J	3.6 J	2.6 J	1.6 J	4.4 J	11
2W-SD-SD138		2W-SD-SD138-0001	0.5	5.6	U	2.0	1,589	U	294	1.3 J	1.3 J	1.8 J	1.6 J	1.5 J	1.2	1.1	10
2W-SD-SD140		2W-SD-SD140-0001	0.7	0.1	1.1	2.9	23.3	9.4	7.6 J	1.0 J	0.3 J	0.4 J	3.0 J	1.3 J	1.7 J	7.9 J	8
2W-SD-SD142		2W-SD-SD142-0001	2.6	0.8	U	10.8	216	U	75.9	2.1	0.8 J	0.8	2.2	2.0	1.3	2.6	8
2W-SD-SD144		2W-SD-SD144-0001	1.9	0.4	U	7.7	116	U	31.6 J	1.5 J	UJ	0.4 J	1.1 J	1.1 J	0.8 J	2.5 J	7
2W-SD-SD146		2W-SD-SD146-0001	0.8	0.8	U	3.3	227	U	88.6 J	0.9 J	UJ	0.2 J	1.2 J	0.7 J	1.5 J	9.9 J	6
Excavation Area No. 4																
2W-SD-SD147		2W-SD-SD147-0001	0.8	0.1	U	3.5	38.4	U	11.1 J	0.6 J	0.3 J	0.4 J	1.6 J	1.0 J	0.6	2.2	5
2W-SD-SD149		2W-SD-SD149-0001	0.02	0.001	U	0.1	0.2	U	U	0.2 J	0.1 J	0.2 J	0.5 J	0.1 J	0.3	0.2	0
2W-SD-SD152		2W-SD-SD152-0001	0.3	0.05	0.3	1.1	13.0	2.8	2.1 J	1.5 J	1.6 J	0.5 J	2.0 J	1.0 J	0.8 J	3.7 J	9
2W-SD-SD154		2W-SD-SD154-0001	0.4	0.7	U	1.4	212	U	123 J	1.9 J	3.5 J	2.3 J	3.4 J	2.2 J	2.1 J	3.3 J	10
Excavation Area No. 5																
2W-SD-SD158		2W-SD-SD158-0001	0.3	0.1	0.5	1.4	22.3	4.7	5.1 J	1.2 J	1.1 J	0.7 J	2.3 J	1.4 J	1.0	2.7	10
2W-SD-SD159	ORIG	2W-SD-SD159-0001	0.7	0.04	0.3	2.8	12.7	2.5	3.5 J	1.3 J	1.1 J	1.5 J	3.4 J	2.3 J	1.2 J	2.9 J	11
2W-SD-SD159	DUP	2W-SD-SD159-0001	0.4	0.1	0.2	1.5	14.9	2.2	2.1 J	0.4 J	0.5 J	0.4 J	1.9 J	0.9 J	0.4	2.1	6
2W-SD-SD161		2W-SD-SD161-0001	0.5	U	0.1	1.9	U	0.8	UJ	0.6 J	1.8 J	0.4 J	7.8 J	1.2 J	0.8	5.4	5

TABLE 1

PHASE I AND PHASE 2 ANALYTICAL RESULTS IN SEDIMENT AND CALCULATION OF TEC AND PRG - QUOTIENT IN EACH SAMPLE
AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Location	Sample Code	Sample Name	PRG Quotients (unitless)			TEC Quotients (unitless)										Number of TEC-Qs Greater than 1.0
			TOTAL PAHS PRG = 6,585	TOTAL DDT POS PRG = 1,504	TOTAL AROCLOR PRG = 532	TOTAL PAHS TEC = 1610	TOTAL DDT POS TEC = 5.28	TOTAL AROCLOR TEC = 59.8	4,4'-DDE TEC = 3.16	ARSENIC TEC = 9.79	CADMIUM TEC = 0.99	CHROMIUM TEC = 43.4	COPPER TEC = 31.6	LEAD TEC = 35.8	NICKEL TEC = 22.7	ZINC TEC = 121	
PHASE II SAMPLES																
Excavation Area No. 1																
2W-SD-SD85		2W-SD-SD85-0001	0.3	--	--	1.1	--	--	--	--	--	--	--	--	--	1
2W-SD-SD86		2W-SD-SD86-0001	0.4	--	--	1.7	--	--	--	--	--	--	--	--	--	1
2W-SD-SD91		2W-SD-SD91-0001	12.4	--	--	50.9	--	--	--	--	--	--	--	--	--	1
2W-SD-SD92		2W-SD-SD92-0001	6.3	--	--	25.8	--	--	--	--	--	--	--	--	--	1
2W-SD-SD93		2W-SD-SD93-0001	1.6	--	--	6.4	--	--	--	--	--	--	--	--	--	1
Excavation Area No. 2																
2W-SD-SD101		2W-SD-SD101-0001	0.4	--	--	1.8	--	--	--	--	--	--	--	--	--	1
2W-SD-SD102		2W-SD-SD102-0001	0.4	--	--	1.6	--	--	--	--	--	--	--	--	--	1
2W-SD-SD104		2W-SD-SD104-0001	0.8	--	--	3.3	--	--	--	--	--	--	--	--	--	1
2W-SD-SD106		2W-SD-SD106-0001	1.3	--	--	5.4	--	--	--	--	--	--	--	--	--	1
2W-SD-SD109		2W-SD-SD109-0001	0.6	--	--	2.3	--	--	--	--	--	--	--	--	--	1
2W-SD-SD111		2W-SD-SD111-0001	0.3	--	--	1.3	--	--	--	--	--	--	--	--	--	1
2W-SD-SD113		2W-SD-SD113-0001	0.4	--	--	1.5	--	--	--	--	--	--	--	--	--	1
Excavation Area No. 3																
2W-SD-SD114		2W-SD-SD114-0001	1.0	0.1	0.0 U	4.0	31.6	U	5.7 J	1.6 J		UJ 1.2 J	2.5 J	2.2 J	1.1 J	0.7 J	8
2W-SD-SD124		2W-SD-SD124-0001	0.3	18.4	0.0 U	1.3	5,250	U	854 J	1.0	3.8	0.9	1.2	0.7	2.0	4.7	8
2W-SD-SD125		2W-SD-SD125-0001	0.4	2.9	0.0 U	1.6	816	U	168 J	0.6 J	0.1 J	1.7 J	1.9 J	1.9 J	1.1 J	1.2 J	8
2W-SD-SD128		2W-SD-SD128-0001	0.4	0.4	0.0 U	1.7	105	U	21.8	1.2	1.1 J	1.9	2.8	1.5	1.6	0.8	9
2W-SD-SD129		2W-SD-SD129-0001	0.6	1.8	0.6	2.6	511	5.2	23.1 J	1.2 J	0.5 J	1.9 J	2.7 J	2.5 J	1.3 J	1.3 J	10
2W-SD-SD131		2W-SD-SD131-0001	0.4	0.1	0.0 U	1.8	38.1	U	8.9 J	3.1 J	7.3 J	0.3 J	10.1 J	3.2 J	2.5 J	15.5 J	9
2W-SD-SD132		2W-SD-SD132-0001	1.1	16.6	1.4	4.5	4,716	12.9	665 J	1.1 J	1.6 J	1.4 J	4.4 J	4.0 J	1.3 J	2.2 J	11
2W-SD-SD133		2W-SD-SD133-0001	0.6	0.1	0.8	2.4	21.6	7.5	7.6 J	0.7 J	0.2 J	0.7 J	5.6 J	2.7 J	1.7 J	3.1 J	8
2W-SD-SD137		2W-SD-SD137-0001	0.8	6.8	0.0 U	3.1	1,926	U	443	1.2	2.0	2.1	1.9	2.0	1.4	1.4	10
2W-SD-SD139		2W-SD-SD139-0001	1.0	33.3	0.0 U	3.9	9,489	U	1,456 J	1.9 J	2.1 J	1.9 J	4.9 J	3.4 J	2.0 J	3.9 J	10
2W-SD-SD141		2W-SD-SD141-0001	0.9	1.6	0.0 U	3.5	451	U	57.0 J	0.3 J		UJ 0.4 J	1.7 J	1.1 J	0.8 J	1.6 J	6
2W-SD-SD143		2W-SD-SD143-0001	2.3	96.4	0.0 U	9.4	27,462	U	3,165 J	1.0 J	1.6 J	1.1 J	2.7 J	1.9 J	1.2 J	2.8 J	10
2W-SD-SD145		2W-SD-SD145-0001	1.0	13.2	0.0 U	4.3	3,769	U	759 J	1.3 J	1.1 J	1.6 J	2.2 J	1.8 J	1.3 J	1.7 J	10
Excavation Area No. 4																
2W-SD-SD153		2W-SD-SD153-0001	0.7	0.01	0.0 U	3.0	3.7	U	3.0 J	1.3 J		UJ 0.5 J	1.3 J	0.8 J	0.8 J	3.3 J	6
Excavation Area No. 5																
2W-SD-SD155		2W-SD-SD155-0001	0.4	0.1	0.3	1.7	21.4	2.5	1.9 J	0.7 J		UJ 1.4 J	2.3 J	2.1 J	0.9 J	2.0 J	8
2W-SD-SD156		2W-SD-SD156-0001	0.5	0.02	0.0 U	2.0	5.1	U	2.5 J	1.4 J		UJ 1.5 J	2.6 J	2.2 J	2.2 J	2.5 J	9
2W-SD-SD157		2W-SD-SD157-0001	0.7	0.00	0.0 U	2.7	0.7	U	1.2 J	0.5 J		UJ 0.2 J	1.1 J	0.4 J	0.6 J	3.6 J	4
2W-SD-SD160		2W-SD-SD160-0001	1.2	0.1	0.0 U	5.0	26.9	U	4.1 J	2.7 J		UJ 5.0 J	26.6 J	9.9 J	4.1 J	7.4 J	9
2W-SD-SD162		2W-SD-SD162-0001	0.2	0.02	0.0	0.7	4.7	U	2.3 J	1.4		U 0.2 J	1.4	0.6	0.7 J	6.2	5

Shaded cells indicate a TEC or PRG Quotient greater than or equal to 1.
The cell containing sample location is shaded when a sample has 10 or more TEC Quotients greater than 1.
TEC and PRG Quotients are calculated by dividing the chemical concentration by the TEC and PRG.
TEC - Threshold Effects Concentration
PEC - Probable Effects Concentration
J = Estimated concentration
U = Non-detect (non-detected values can be found in analytical data tables in Appendix A)
UJ = Non-detect estimated concentration (non-detected values can be found in analytical data tables in Appendix A)
UR = Non-detect rejected concentration (non-detected values can be found in analytical data tables in Appendix A)
-- = Not analyzed

TABLE 2

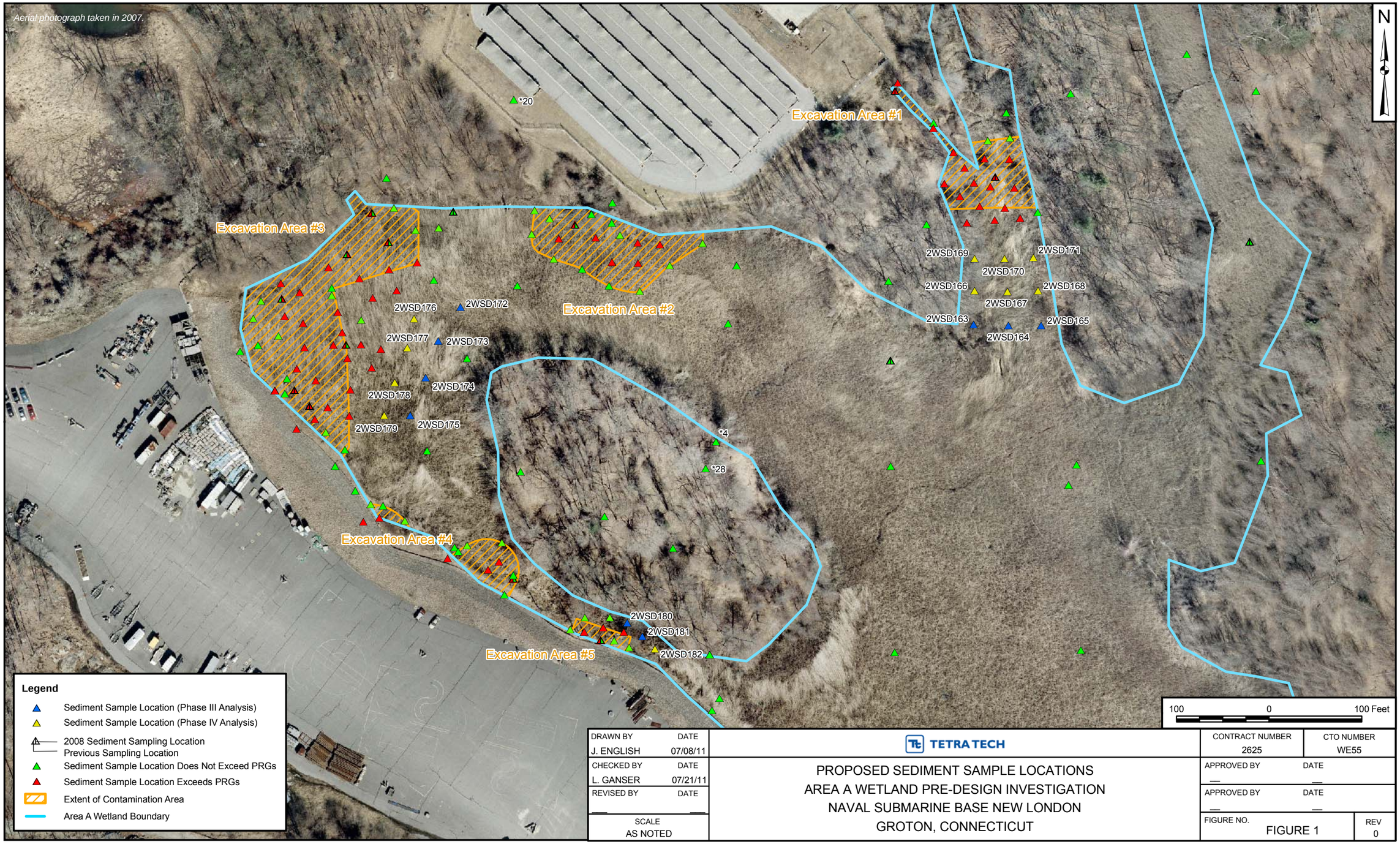
ANALYTICAL SAMPLING SUMMARY FOR PHASE III AND IV SAMPLES
AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

SEDIMENT				
Chemicals of Concern	**Number of Samples**	**Sample ID**	**Number of QC Samples**	**Laboratory Method**
PAHs: 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, and Pyrene	12	2WSD163, 2WSD164, 2WSD165, 2WSD166, 2WSD167, 2WSD168, 2WSD169, 2WSD170, 2WSD171, 2WSD180, 2WSD181, 2WSD182	2 field duplicates and 1 MS/MSD	SW-846 8270D SIM
Pesticides: 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT	8	2WSD172, 2WSD173, 2WSD174, 2WSD175, 2WSD176, 2WSD177, 2WSD178, 2WSD179	1 field duplicate and 1 MS/MSD per analyte group	SW-846 8081B

Abbreviations:

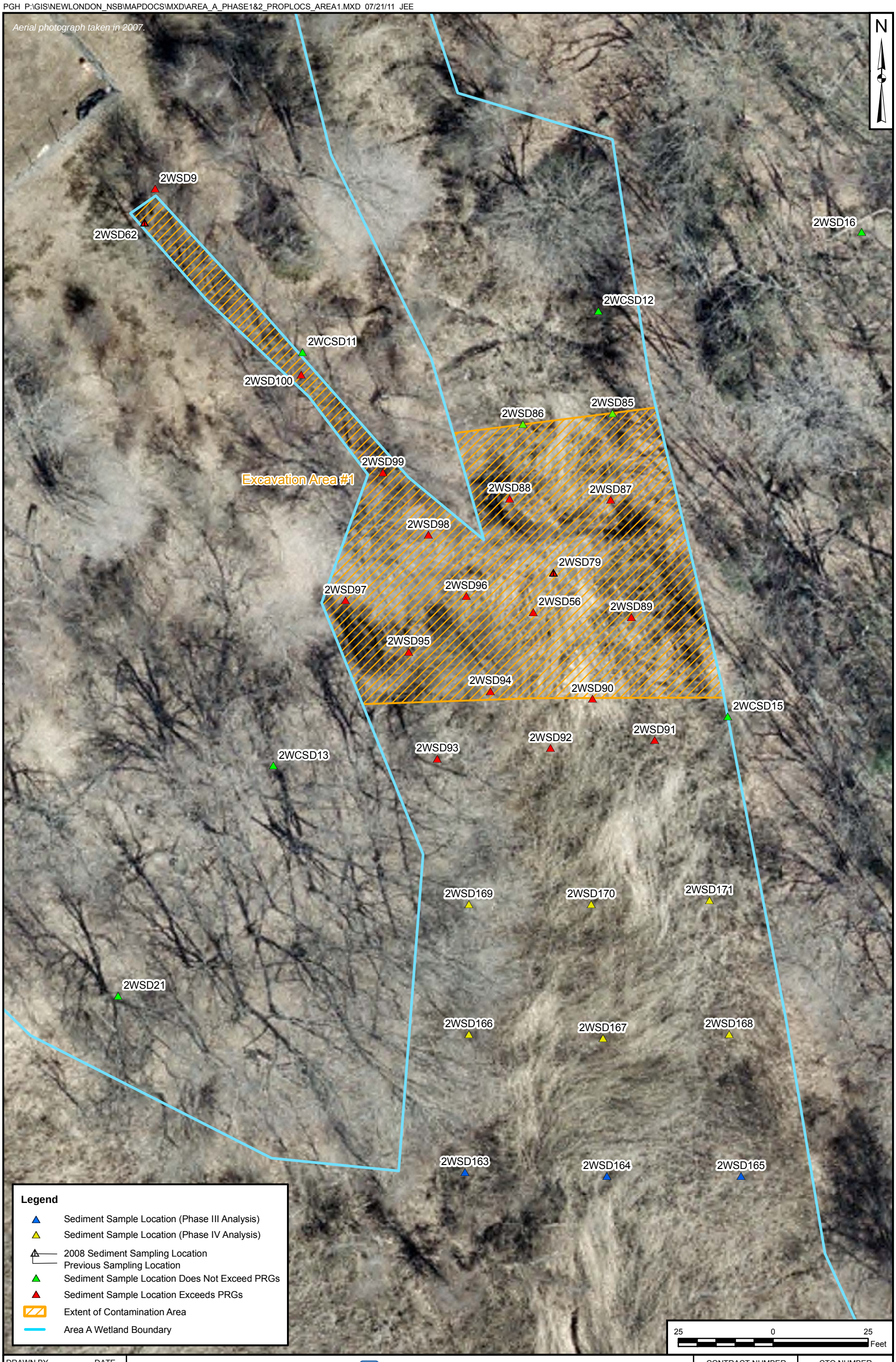
MS/MSD - Matrix spike/matrix spike duplicate
PAH - Polycyclic aromatic hydrocarbon
QC - Quality control
SIM - Selected ion monitoring

PGH P:\GIS\NEWLONDON_NSB\MXD\AREA_A_SEDIMENT_PHASE1&2_ADDL_SAMPLOCS_ALT.MXD 07/21/11 JEE



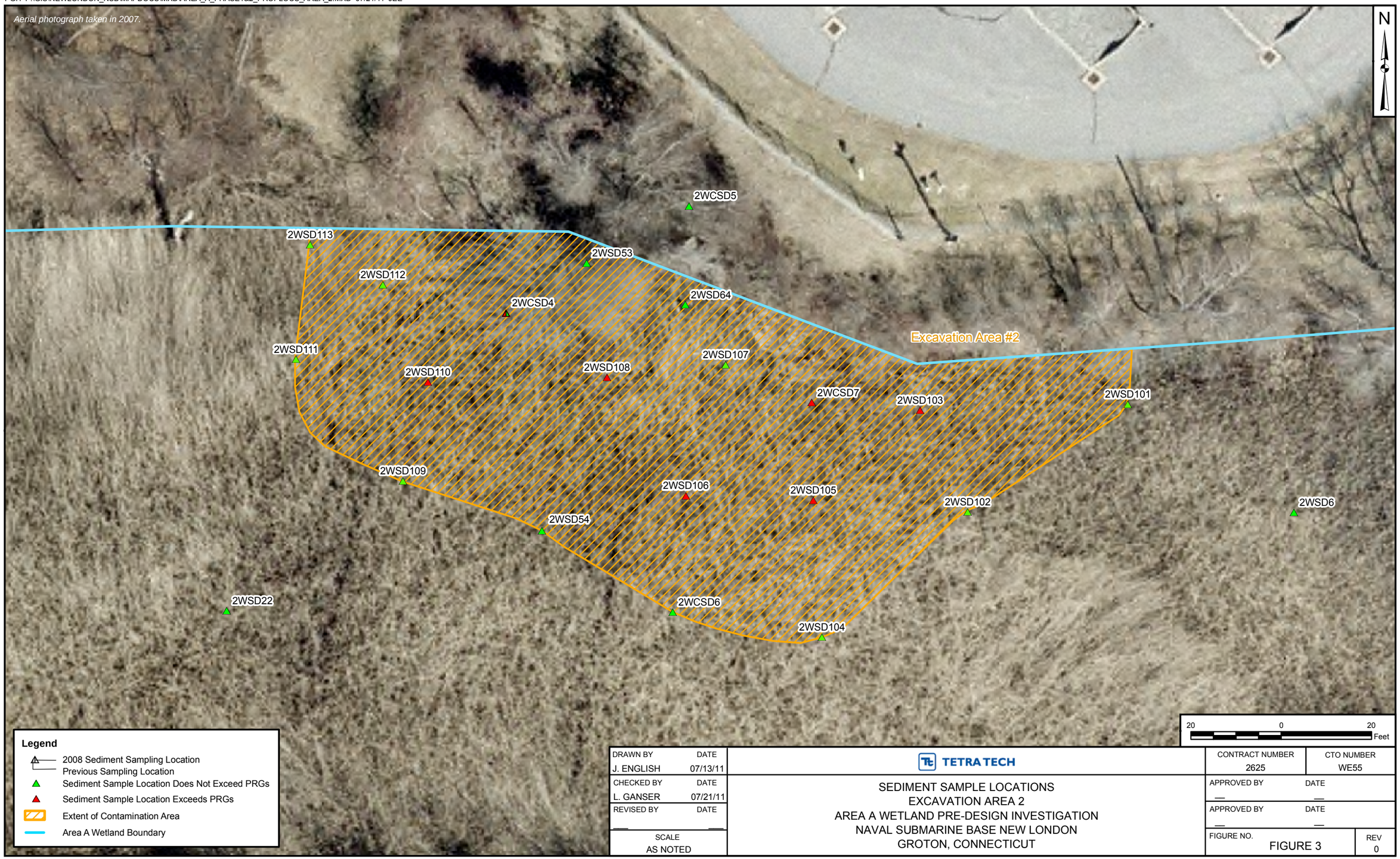
DRAWN BY J. ENGLISH	DATE 07/08/11	TETRA TECH	CONTRACT NUMBER 2625 / CTO NUMBER WE55
CHECKED BY L. GANSER	DATE 07/21/11	PROPOSED SEDIMENT SAMPLE LOCATIONS AREA A WETLAND PRE-DESIGN INVESTIGATION NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — / DATE —
REVISED BY —	DATE —		APPROVED BY — / DATE —
SCALE AS NOTED			FIGURE NO. FIGURE 1 / REV 0

PGH P:\GIS\NEWLONDON_NSB\MAPDOCS\MXD\AREA_A_PHASE1&2_PROPLOCS_AREA1.MXD 07/21/11 JEE



DRAWN BY: J. ENGLISH — DATE: 07/13/11	TETRA TECH	CONTRACT NUMBER: 2625	CTO NUMBER: WE55
CHECKED BY: L. GANSER — DATE: 07/21/11	PROPOSED SEDIMENT SAMPLE LOCATIONS EXCAVATION AREA 1 AREA A WETLAND PRE-DESIGN INVESTIGATION NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY: — — DATE: —	
REVISED BY: — — DATE: —		APPROVED BY: — — DATE: —	
SCALE: AS NOTED		FIGURE NO.: FIGURE 2	REV: 0

PGH P:\GIS\NEWLONDON_NSB\MAPDOCS\MXD\AREA_A_PHASE1&2_PROPLOCS_AREA_2.MXD 07/21/11 JEE



DRAWN BY J. ENGLISH	DATE 07/13/11	TETRA TECH	CONTRACT NUMBER 2625 / CTO NUMBER WE55
CHECKED BY L. GANSER	DATE 07/21/11	SEDIMENT SAMPLE LOCATIONS EXCAVATION AREA 2 AREA A WETLAND PRE-DESIGN INVESTIGATION NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — DATE —
REVISED BY —	DATE —		APPROVED BY — DATE —
SCALE AS NOTED			FIGURE NO. FIGURE 3 / REV 0

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N

2WSD26
2WSD117
2WSD52 / 2WSD71
2WSD25 / 2WSD77
2WSD114
2WSD116
2WSD24 / 2WSD78
Excavation Area #3
2WSD50 / 2WSD66
2WSD118
2WSD121
2WSD119
2WSD120
2WSD51
2WSD22
2WSD122
2WSD23
2WSD123
2WSD124
2WSD125
2WSD127
2WSD126
2WSD49 / 2WSD70
2WSD172
2WSD129
2WSD131
2WSD130
2WSD128
2WSD176
2WSD132
2WSD134
2WSD47
2WSD72
2WSD133
2WSD173
T1B
2WSD139
2WSD135
2WSD137
2WSD177
2WSD136
T1A
2WSD1
2WSD138
2WSD140
2WSD141
T2B
2WSD142
2WSD174
2WSD178
2WSD143
T2A
2WSD48 / 2WSD69
2WMW39DS
2WSD74
2WSD144
T3B
2WSD145
2WSD179
2WSD175
2WSD75
T3A
2WSD146
T4B
2WSD45
T4A
2WSD27
2WSD46
T5B
2WSD147
2WSD76
2WSD149
T5A
Excavation Area #4
2WSD153
T6B
2WSD152
2WSD63
T6A
2WSD154

Legend

- Sediment Sample Location (Phase III Analysis)
- Sediment Sample Location (Phase IV Analysis)
- 2008 Sediment Sampling Location / Previous Sampling Location
- Sediment Sample Location Does Not Exceed PRGs
- Sediment Sample Location Exceeds PRGs
- Extent of Contamination Area
- Area A Wetland Boundary

35 0 35 Feet

DRAWN BY: J. ENGLISH	DATE: 07/13/11	TETRA TECH	CONTRACT NUMBER: 2625 / CTO NUMBER: WE55
CHECKED BY: L. GANSER	DATE: 07/21/11	PROPOSED SEDIMENT SAMPLE LOCATIONS EXCAVATION AREA 3 AREA A WETLAND PRE-DESIGN INVESTIGATION NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY: — / DATE: —
REVISED BY: —	DATE: —		APPROVED BY: — / DATE: —
SCALE: AS NOTED			FIGURE NO.: FIGURE 4 / REV: 0

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DRAWN BY J. ENGLISH	DATE 07/13/11	TETRA TECH	CONTRACT NUMBER 2625 / CTO NUMBER WE55
CHECKED BY L. GANSER	DATE 07/21/11	PROPOSED SEDIMENT SAMPLE LOCATIONS EXCAVATION AREAS 4 AND 5 AREA A WETLAND PRE-DESIGN INVESTIGATION NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — / DATE —
REVISED BY —	DATE —		APPROVED BY — / DATE —
SCALE AS NOTED			FIGURE NO. FIGURE 5 / REV 0

TETRA TECH NUS
FIELD TASK MODIFICATION REQUEST FORM

LTM/NSB-NLON Project/Installation Name	CTO WE55, 112G02625 CTO & Project Number	01 Task Mod. Number
SAP for PDI for Sediment Modification To (e.g. Work Plan)	Area A Wetland – Site 2B Site/Sample Location	10/25/2011 Date

Activity Description: A Remedial Investigation (RI) Update/Feasibility Study (FS) Report prepared for the Area A Wetland-Site 2B presented the nature and extent of contamination at the site, documented the associated risks to potential human and ecological receptors, preliminary remediation goals (RGs) and developed and evaluated remedial alternatives for addressing impacted sediment in the Area A Wetland. The preferred remedial alternatives were then presented in the Proposed Plan, and the selected remedial alternative was presented in the Record of Decision.

The RI Update/FS report identified the need to collect additional sediment samples to better define the horizontal extent of contaminated sediment with concentrations greater than RGs and to remove the uncertainty of impacts at one location. Four phases (Phases I through IV) of the Pre-Design Investigation (PDI) for sediment were conducted to date. Attachment A presents a summary of the Phase I through III PDI results, although the Phase III results have not yet been validated. The Phase IV results are in the process of being analyzed, but the results of the analysis will not affect the additional sampling being proposed as part of this form. The RI/FS report contains the data collected prior to the PDI samples.

Reason for Change: The results of Phase III of the PDI did not fully define the extent of contaminated sediment in Excavation Area No. 1; therefore, additional sediment samples need to be collected in this area to fully define the extent of contaminated sediment with PAH concentrations greater than RGs.

Recommended Disposition: Collect additional sediment samples following the same procedures and analysis processes used during the previous phases of the PDI and the same SAP and Health and Safety Plan. All samples will be collected during one investigation, and the samples will be analyzed in two phases (Phase V and Phase VI). Attachment A presents the recommendations for additional sediment sampling. The sampling is proposed to be completed in November 2011.

_____ _____

Quality Assurance Manager (QAPP lead developer) Date

Approved Disposition:

_____

_____

_____

_____

_____

_____ 10-27-11

Project/Task Order Manager (Signature) Date

Distribution:

Program/Project File – 112G02625
Project/Project Manager – Aaron Bernhardt
Field Operations Leader –Aaron Bernhardt
Navy RPM – Dominic O'Connor

Other: _____

Attachment A
Results of Phase III Sampling for the Pre-Design Investigation
Site 2B – Area A Wetland
Naval Submarine Base, New London, Groton, CT
October 25, 2011

This attachment presents the preliminary results of the Phase III sampling conducted as part of the Pre-Design Investigation at Site 2B - Area A Wetland, Naval Submarine Base, New London, Groton, CT. The sediment samples were collected September 7th and 8th, 2011 in accordance with the field task modification request form (FTMR) that was submitted on July 27, 2011 and in accordance with the responses to EPA comments e-mailed to the project team on August 15, 2011.

Table 1 presents the analytical results for both the Phase I and Phase II sediment samples to aid in the overall evaluation of the site. Also, note that the phases described in this document relate only to the phases of the PDI investigation; they do not relate to the phases of previous investigations conducted at the site. Table 1 is divided into the Phase I and Phase II samples, and further divided by the samples within each excavation area.

Table 2 presents the preliminary analytical results for each Phase III sample. The data are currently undergoing data validation but it is not likely that the results will change significantly. The Phase IV samples in Excavation Area No. 1 are in the process of being analyzed.

The preliminary Phase III data were plotted on Figures 1a, 2, and 3 for excavation areas 1, 3, and 4/5, respectively. The concentrations of the Phase III data are approximations and may change slightly after data validation. Figures 1a and 2 also show analytical results for nearby samples so concentration patterns can be observed. There are a few different colors on the figures that are defined as follows:

- The Remediation Goals (RGs) are shown in boxes with black borders.
- Phase III samples with concentrations that exceed a RG are shown in boxes with blue borders.
- Phase III samples with concentrations that do not exceed a RG are shown in boxes with green borders.
- Previous sample results are shown in boxes with red borders.
- The new excavation boundary is shown with the yellow dashed line for Excavation Areas 3 and 5. A new boundary line was not added to Figure 1a because the extent of contamination is not yet determined for Excavation Area 1.

The following text provides a brief evaluation of the Phase III data, and presents the Navy's recommendations for further actions in each of the areas.

Excavation Area 1

- Three Phase III samples and six Phase IV samples were collected from this area (see Figure 1a). The Phase III samples were analyzed for polycyclic aromatic hydrocarbons (PAHs) and the positive results were summed to obtain total PAH values for each sample location.
- The PAH results for one of the Phase III samples (~21,000 ug/kg) exceeded the RG of 6,585 ug/kg. The total PAH concentrations in the other two samples were lower than the RG.
- The PAH concentrations in the closest previous samples (2WSD91, 2WSD92, and 2WSD93) were greater than the concentrations in the Phase III samples located in the same east-to west orientation. This indicates that the concentrations are decreasing with distance from the presumed source (Area A Weapons center).
- Because PAH concentrations in Samples 2WSD163 and 2WSD165 were less than the RGs, all of the Phase IV samples are being analyzed for PAHs to determine whether the entire wetland in that area needs to be excavated or just a portion of the wetland.
- Because the extent of contamination to the south is not fully defined, the Navy will collect 22 additional sediment samples as part of Phase V and VI of the PDI sampling (see Figure 1b). These samples will only be analyzed for PAHs (see Table 3). The Phase V samples will be

analyzed first on a quick-turn (7-day) basis, and based on those results, the appropriate Phase VI samples will be selected for analysis to bound the contamination. Note that on Figure 1b, samples from locations 2WSD5 and 2WSD55/2WSW60 had PAH concentrations less than the RG. Samples from locations 2WSD29 and 2WSD30 were not analyzed for PAHs.

Excavation Area 3

- Four Phase III samples and four Phase IV samples were collected from this area (see Figure 2). The Phase III samples were analyzed for 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT and the positive results were summed to obtain total DDT values.
- The total DDT results for three of the four Phase III samples exceeded the RG of 1,504 ug/kg. The total DDT concentration in the other sample was lower than the RG.
- The total DDT concentrations in the closest previous samples were generally greater than the concentrations in the Phase III samples which indicate that the concentrations are decreasing with distance from the edge of the wetland.
- The excavation line was redrawn using the previous and current samples with concentrations less than the RG as the boundary.

Excavation Area 5

- Two Phase III samples and one Phase IV sample were collected from this area (see Figure 3). The Phase III samples were analyzed for PAHs, PCBs, 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT and metals. The positive results were summed to obtain total PAH, total PCB, and total DDT values.
- The total DDT results exceeded the RG of 1,504 ug/kg in one of the Phase III samples (at 2WSD156), and ten chemicals had concentrations that exceeded the Threshold Effects Concentration (TEC) in that sample. No chemicals exceeded the RG in the other Phase III sample, and only seven chemicals had concentrations greater than their respective TEC.
- Because the samples with concentrations that exceed the RGs are bounded, there is no need to analyze the Phase IV sample.
- The excavation line was redrawn using the previous and current samples with concentrations less than the RG as the boundary.

TABLE 1

PHASE I AND PHASE 2 ANALYTICAL RESULTS IN SEDIMENT AND CALCULATION OF
TEC AND PRG - QUOTIENT IN EACH SAMPLE
AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Location	Sample Code	Sample Name	Concentrations															
			TOTAL PAHS (ug/kg) PRG = 6,585	TOTAL DDT POS (ug/kg) PRG = 1,504	TOTAL AROCLOR (ug/kg) PRG = 532	TOTAL PAHS (ug/kg) TEC = 1,610	4,4'-DDD (ug/kg)	4,4'-DDE (ug/kg) TEC = 3.16	4,4'-DDT (ug/kg)	TOTAL DDT POS (ug/kg) TEC = 5.28	TOTAL AROCLOR (ug/kg) TEC = 59.8	ARSENIC (mg/kg) TEC = 9.79	CADMIUM (mg/kg) TEC = 0.99	CHROMIUM (mg/kg) TEC = 43.4	COPPER (mg/kg) TEC = 31.6	LEAD (mg/kg) TEC = 35.8	NICKEL (mg/kg) TEC = 22.7	ZINC (mg/kg) TEC = 121
PHASE I SAMPLES																		
Excavation Area No. 1																		
2W-SD-SD87		2W-SD-SD87-0001	9,833	--	--	9,833	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD88		2W-SD-SD88-0001	15,376	--	--	15,376	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD89		2W-SD-SD89-0001	21,932	--	--	21,932	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD90		2W-SD-SD90-0001	12,181	--	--	12,181	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD94		2W-SD-SD94-0001	26,568	--	--	26,568	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD95		2W-SD-SD95-0001	13,458	--	--	13,458	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD96	ORIG	2W-SD-SD96-0001	34,114	--	--	34,114	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD96	DUP	2W-SD-SD96-0001	29,189	--	--	29,189	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD97		2W-SD-SD97-0001	21,520	--	--	21,520	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD98		2W-SD-SD98-0001	23,375	--	--	23,375	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD99		2W-SD-SD99-0001	53,814	--	--	53,814	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD100		2W-SD-SD100-0001	7,337	--	--	7,337	--	--	--	--	--	--	--	--	--	--	--	--
Excavation Area No. 2																		
2W-SD-SD103		2W-SD-SD103-0001	25,391	--	--	25,391	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD105		2W-SD-SD105-0001	15,753	--	--	15,753	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD107		2W-SD-SD107-0001	4,406	--	--	4,406	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD108		2W-SD-SD108-0001	6,939	--	--	6,939	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD110		2W-SD-SD110-0001	46,400	--	--	46,400	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD112	ORIG	2W-SD-SD112-0001	3,775	--	--	3,775	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD112	DUP	2W-SD-SD112-0001	4,622	--	--	4,622	--	--	--	--	--	--	--	--	--	--	--	--
Excavation Area No. 3																		
2W-SD-SD116		2W-SD-SD116-0001	1,636	235	0 U	1,636	170 J	24 J	41 J	235	0 U	21.4 J	1.6 UJ	38.1 J	74.1 J	57.7 J	23 J	71.3 J
2W-SD-SD117		2W-SD-SD117-0001	1,118	55.9	0 U	1,118	11 J	7.9 J	37 J	55.9	0 U	7.3 J	1 UJ	23 J	72.8 J	31.8 J	16 J	23.7 J
2W-SD-SD118		2W-SD-SD118-0001	1,561	3,614	0 U	1,561	3,200 J	320 J	94 J	3,614	0 U	14.1 J	1.2 J	94.2 J	68.5 J	113 J	41.5 J	218 J
2W-SD-SD119		2W-SD-SD119-0001	587	1,874	0 U	587	1,800 J	54 J	20 J	1,874	0 U	10.9 J	2.8 J	32.2 J	82.8 J	47 J	50.2 J	366 J
2W-SD-SD120		2W-SD-SD120-0001	2,379	494	220	2,379	460 J	23 J	11 J	494	220	14 J	1.9 J	48.8 J	102 J	91.3 J	29.3 J	334 J
2W-SD-SD121		2W-SD-SD121-0001	2,030	228	640	2,030	150 J	33 J	45 J	228	640	18.2 J	2.1 J	45.8 J	133 J	91.7 J	39.8 J	563 J
2W-SD-SD122	ORIG	2W-SD-SD122-0001	2,595	83	180	2,595	41 J	21 J	21 J	83	180	11.7 J	0.79 J	58.1 J	92.8 J	74.1 J	26 J	180 J
2W-SD-SD122	DUP	2W-SD-SD122-0001	2,777	80	190	2,777	39 J	22 J	19 J	80	190	10.9 J	0.81 J	55 J	89.6 J	70.4 J	25.7 J	182 J
2W-SD-SD123		2W-SD-SD123-0001	4,916	930	2300	4,916	680 J	110 J	140 J	930	2,300	10.7 J	3 J	51.4 J	316 J	174 J	53.8 J	778 J
2W-SD-SD126		2W-SD-SD126-0001	5,022	--	--	5,022	--	--	--	--	--	--	--	--	--	--	--	--
2W-SD-SD127	ORIG	2W-SD-SD127-0001	379	11.2	0 U	379	3.7 J	1.8 J	5.7 J	11.2	0 U	6.9	0.52 U	4.5	30.5 J	12.8	6.2 J	139 J
2W-SD-SD127	DUP	2W-SD-SD127-0001	355	13.4	0 U	355	3.4 J	2.8 J	7.2	13.4	0 U	6	0.41 U	3.5	27.4	11.6	5.6	119
2W-SD-SD130		2W-SD-SD130-0001	3,087	168	360	3,087	110 J	19 J	39 J	168	360	13 J	2.4 J	15.7 J	157 J	75.3 J	72.2 J	1,350 J
2W-SD-SD134		2W-SD-SD134-0001	2,681	3,110	250	2,681	2,000 J	280 J	830 J	3,110	250	12.3 J	1.6 J	83.2 J	85 J	77.4 J	31.6 J	220 J
2W-SD-SD135		2W-SD-SD135-0001	3,454	197,000	0 U	3,454	130,000 J	11,000 J	56000 J	197,000	0 U	7.4 J	2 J	37.4 J	75.6 J	59.2 J	27.5 J	325 J
2W-SD-SD136		2W-SD-SD136-0001	2,134	13,700	290	2,134	12,000 J	1,700 J	2.6 UJ	13,700	290	10.3 J	4.3 J	46 J	115 J	92.9 J	37 J	532 J
2W-SD-SD138		2W-SD-SD138-0001	3,256	8,390	0 U	3,256	7,100	930	360 J	8,390	0 U	12.6 J	1.3 J	79.1 J	51.7 J	53.1 J	28.2	138
2W-SD-SD140		2W-SD-SD140-0001	4,694	123	560	4,694	64 J	24 J	35 J	123	560	9.4 J	0.3 J	18.1 J	95.8 J	48 J	37.9 J	954 J
2W-SD-SD142		2W-SD-SD142-0001	17,410	1,140	0 U	17,410	640	240	260 J	1,140	0 U	20.6	0.8 J	36	69.7	72	30.4	320
2W-SD-SD144		2W-SD-SD144-0001	12,433	610	0 U	12,433	230 J	100 J	280 J	610	0 U	14.8 J	1.3 UJ	18.1 J	35.5 J	38.7 J	19 J	298 J
2W-SD-SD146		2W-SD-SD146-0001	5,306	1,200	0 U	5,306	210 J	280 J	710 J	1,200	0 U	9.2 J	3.6 UJ	9.4 J	37.3 J	24.7 J	33 J	1,200 J
Excavation Area No. 4																		
2W-SD-SD147		2W-SD-SD147-0001	5,583	203	0 U	5,583	120 J	35 J	48 J	203	0 U	6.1 J	0.34 J	17.4 J	50.5 J	34.3 J	14.3	264
2W-SD-SD149		2W-SD-SD149-0001	159	0.82	0 U	159	0.82 J	1.7 U	1.7 UJ	0.82	0 U	1.8 J	0.09 J	10 J	16.3 J	4.9 J	6.5	19.8
2W-SD-SD152		2W-SD-SD152-0001	1,754	68.5	170	1,754	51 J	6.5 J	11 J	68.5	170	15 J	1.6 J	22.3 J	62.6 J	37.1 J	17.4 J	453 J
2W-SD-SD154		2W-SD-SD154-0001	2,331	1,120	0 U	2,331	730 J	390 J	0.86 UJ	1,120	0 U	18.4 J	3.5 J	100 J	109 J	77.4 J	47.9 J	400 J
Excavation Area No. 5																		
2W-SD-SD158		2W-SD-SD158-0001	2,209	118	280	2,209	82	16 J	20 J	118	280	11.4 J	1.1 J	30 J	73.3 J	51 J	22.9	327
2W-SD-SD159	ORIG	2W-SD-SD159-0001	4,547	67	150	4,547	56 J	11 J	0.93 UJ	67	150	12.6 J	1.1 J	63.5 J	106 J	82.4 J	27.1 J	352 J
2W-SD-SD159	DUP	2W-SD-SD159-0001	2,371	78.5	130	2,371	62	6.6 J	9.9 J	78.5	130	4.3 J	0.54 J	16 J	59.8 J	34 J	9.8	256
2W-SD-SD161		2W-SD-SD161-0001	3,082	0 U	47	3,082	4.2 U	4.2 UJ	4.2 UJ	0 U	47	5.8 J	1.8 J	17.2 J	246 J	42.8 J	17.8	659

TABLE 1

PHASE I AND PHASE 2 ANALYTICAL RESULTS IN SEDIMENT AND CALCULATION OF TEC AND PRG - QUOTIENT IN EACH SAMPLE
AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Location	Sample Code	Sample Name	Concentrations																									
			TOTAL PAHS (ug/kg) PRG = 6,585		TOTAL DDT POS (ug/kg) PRG = 1,504		TOTAL AROCLOR (ug/kg) PRG = 532		TOTAL PAHS (ug/kg) TEC = 1,610		4,4'-DDD (ug/kg)		4,4'-DDE (ug/kg) TEC = 3.16		4,4'-DDT (ug/kg)		TOTAL DDT POS (ug/kg) TEC = 5.28		TOTAL AROCLOR (ug/kg) TEC = 59.8		ARSENIC (mg/kg) TEC = 9.79		CADMIUM (mg/kg) TEC = 0.99		CHROMIUM (mg/kg) TEC = 43.4		COPPER (mg/kg) TEC = 31.6		LEAD (mg/kg) TEC = 35.8		NICKEL (mg/kg) TEC = 22.7		ZINC (mg/kg) TEC = 121	
PHASE II SAMPLES																												
Excavation Area No. 1																												
2W-SD-SD85		2W-SD-SD85-0001	1,766		--		--		1,766		--		--		--		--		--		--		--		--		--	
2W-SD-SD86		2W-SD-SD86-0001	2,690		--		--		2,690		--		--		--		--		--		--		--		--		--	
2W-SD-SD91		2W-SD-SD91-0001	81,979		--		--		81,979		--		--		--		--		--		--		--		--		--	
2W-SD-SD92		2W-SD-SD92-0001	41,459		--		--		41,459		--		--		--		--		--		--		--		--		--	
2W-SD-SD93		2W-SD-SD93-0001	10,242		--		--		10,242		--		--		--		--		--		--		--		--		--	
Excavation Area No. 2																												
2W-SD-SD101		2W-SD-SD101-0001	2,882		--		--		2,882		--		--		--		--		--		--		--		--		--	
2W-SD-SD102		2W-SD-SD102-0001	2,522		--		--		2,522		--		--		--		--		--		--		--		--		--	
2W-SD-SD104		2W-SD-SD104-0001	5,297		--		--		5,297		--		--		--		--		--		--		--		--		--	
2W-SD-SD106		2W-SD-SD106-0001	8,663		--		--		8,663		--		--		--		--		--		--		--		--		--	
2W-SD-SD109		2W-SD-SD109-0001	3,708		--		--		3,708		--		--		--		--		--		--		--		--		--	
2W-SD-SD111		2W-SD-SD111-0001	2,094		--		--		2,094		--		--		--		--		--		--		--		--		--	
2W-SD-SD113		2W-SD-SD113-0001	2,335		--		--		2,335		--		--		--		--		--		--		--		--		--	
Excavation Area No. 3																												
2W-SD-SD114		2W-SD-SD114-0001	6,500		167		0	U	6,500		110	J	18	J	39	J	167		0	U	15.7	J	1.6	UJ	53.4	J	77.8	J	77.9	J	24.7	J	79.6	J
2W-SD-SD124		2W-SD-SD124-0001	2,148		27,719		0	U	2,148		25,000		2,700	J	19	J	27,719		0	U	9.8		3.8		40		37		23.4		45.1		569	
2W-SD-SD125		2W-SD-SD125-0001	2,532		4,310		0	U	2,532		3,400	J	530	J	380	J	4,310		0	U	5.8	J	0.14	J	75.6	J	61.2	J	67	J	25.7	J	151	J
2W-SD-SD128		2W-SD-SD128-0001	2,744		554.3		0	U	2,744		480	J	69		5.3	J	554.3		0	U	12.2		1.1	J	84.4		87.2		53.9		35.9		95.9	
2W-SD-SD129		2W-SD-SD129-0001	4,253		2,700		310		4,253		2,600	J	73	J	27	J	2,700		310		11.9	J	0.52	J	83	J	84.5	J	90.3	J	28.8	J	159	J
2W-SD-SD131		2W-SD-SD131-0001	2,913		201		0	U	2,913		140	J	28	J	33	J	201		0	U	30.1	J	7.2	J	13.6	J	320	J	114	J	57	J	1,870	J
2W-SD-SD132		2W-SD-SD132-0001	7,311		24,900		770		7,311		20,000	J	2,100	J	2800	J	24,900		770		10.9	J	1.6	J	60.5	J	139	J	142	J	28.6	J	264	J
2W-SD-SD133		2W-SD-SD133-0001	3,837		114		450		3,837		54	J	24	J	36	J	114		450		6.7	J	0.22	J	28.4	J	176	J	98	J	38	J	372	J
2W-SD-SD137		2W-SD-SD137-0001	5,060		10,170		0	U	5,060		8,300		1,400		470	J	10,170		0	U	11.6		2		93.3		58.9		71.9		31		166	
2W-SD-SD139		2W-SD-SD139-0001	6,275		50,100		0	U	6,275		39,000	J	4,600	J	6500	J	50,100		0	U	18.6	J	2.1	J	83.2	J	155	J	121	J	45.9	J	473	J
2W-SD-SD141		2W-SD-SD141-0001	5,629		2,380		0	U	5,629		2,200	J	180	J	350	UJ	2,380		0	U	3.2	J	2.4	UJ	15.9	J	53.9	J	40	J	17.7	J	192	J
2W-SD-SD143		2W-SD-SD143-0001	15,198		145,000		0	U	15,198		120,000	J	10,000	J	15000	J	145,000		0	U	10.2	J	1.6	J	47.5	J	85.7	J	67.5	J	28.3	J	338	J
2W-SD-SD145		2W-SD-SD145-0001	6,868		19,900		0	U	6,868		14,000	J	2,400	J	3500	J	19,900		0	U	12.8	J	1.1	J	68	J	69.6	J	63.1	J	30.4	J	204	J
Excavation Area No. 4																												
2W-SD-SD153		2W-SD-SD153-0001	4,838		19.4		0	U	4,838		50	U	9.6	J	9.8	J	19.4		0	U	12.4	J	3.7	UJ	21.1	J	41.4	J	28.9	J	17.2	J	396	J
Excavation Area No. 5																												
2W-SD-SD155		2W-SD-SD155-0001	2,723		113		150		2,723		95	J	6	J	12	J	113		150		7	J	0.82	UJ	59	J	72.3	J	76.8	J	19.6	J	245	J
2W-SD-SD156		2W-SD-SD156-0001	3,284		26.9		0	U	3,284		38	U	7.9	J	19	J	26.9		0	U	13.3	J	1.6	UJ	64.1	J	82.2	J	78.1	J	50.5	J	298	J
2W-SD-SD157		2W-SD-SD157-0001	4,427		3.9		0	U	4,427		13	U	3.9	J	7.5	UJ	3.9		0	U	5	J	0.89	UJ	9.6	J	33.6	J	15.2	J	12.8	J	433	J
2W-SD-SD160		2W-SD-SD160-0001	7,970		142		0	U	7,970		110	J	13	J	19	J	142		0	U	26.3	J	2.1	UJ	218	J	842	J	355	J	93.2	J	901	J
2W-SD-SD162		2W-SD-SD162-0001	1,073		25		0	U	1,073		9.2	J	7.4	J	8.4	J	25		0	U	13.6		2.3	U	9.4	J	43.3		21.9		15	J	753	

TABLE 1

PHASE I AND PHASE 2 ANALYTICAL RESULTS IN SEDIMENT AND CALCULATION OF TEC AND PRG - QUOTIENT IN EACH SAMPLE
AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Location	Sample Code	Sample Name	PRG Quotients (unitless)			TEC Quotients (unitless)										Number of TEC-Qs Greater than 1.0
			TOTAL PAHS PRG = 6,585	TOTAL DDT POS PRG = 1,504	TOTAL AROCLOR PRG = 532	TOTAL PAHS TEC = 1610	TOTAL DDT POS TEC = 5.28	TOTAL AROCLOR TEC = 59.8	4,4'-DDE TEC = 3.16	ARSENIC TEC = 9.79	CADMIUM TEC = 0.99	CHROMIUM TEC = 43.4	COPPER TEC = 31.6	LEAD TEC = 35.8	NICKEL TEC = 22.7	ZINC TEC = 121	
PHASE I SAMPLES																
Excavation Area No. 1																
2W-SD-SD87		2W-SD-SD87-0001	1.5	--	--	6.1	--	--	--	--	--	--	--	--	--	1
2W-SD-SD88		2W-SD-SD88-0001	2.3	--	--	9.6	--	--	--	--	--	--	--	--	--	1
2W-SD-SD89		2W-SD-SD89-0001	3.3	--	--	13.6	--	--	--	--	--	--	--	--	--	1
2W-SD-SD90		2W-SD-SD90-0001	1.8	--	--	7.6	--	--	--	--	--	--	--	--	--	1
2W-SD-SD94		2W-SD-SD94-0001	4.0	--	--	16.5	--	--	--	--	--	--	--	--	--	1
2W-SD-SD95		2W-SD-SD95-0001	2.0	--	--	8.4	--	--	--	--	--	--	--	--	--	1
2W-SD-SD96	ORIG	2W-SD-SD96-0001	5.2	--	--	21.2	--	--	--	--	--	--	--	--	--	1
2W-SD-SD96	DUP	2W-SD-SD96-0001	4.4	--	--	18.1	--	--	--	--	--	--	--	--	--	1
2W-SD-SD97		2W-SD-SD97-0001	3.3	--	--	13.4	--	--	--	--	--	--	--	--	--	1
2W-SD-SD98		2W-SD-SD98-0001	3.5	--	--	14.5	--	--	--	--	--	--	--	--	--	1
2W-SD-SD99		2W-SD-SD99-0001	8.2	--	--	33.4	--	--	--	--	--	--	--	--	--	1
2W-SD-SD100		2W-SD-SD100-0001	1.1	--	--	4.6	--	--	--	--	--	--	--	--	--	1
Excavation Area No. 2																
2W-SD-SD103		2W-SD-SD103-0001	3.9	--	--	15.8	--	--	--	--	--	--	--	--	--	1
2W-SD-SD105		2W-SD-SD105-0001	2.4	--	--	9.8	--	--	--	--	--	--	--	--	--	1
2W-SD-SD107		2W-SD-SD107-0001	0.7	--	--	2.7	--	--	--	--	--	--	--	--	--	1
2W-SD-SD108		2W-SD-SD108-0001	1.1	--	--	4.3	--	--	--	--	--	--	--	--	--	1
2W-SD-SD110		2W-SD-SD110-0001	7.0	--	--	28.8	--	--	--	--	--	--	--	--	--	1
2W-SD-SD112	ORIG	2W-SD-SD112-0001	0.6	--	--	2.3	--	--	--	--	--	--	--	--	--	1
2W-SD-SD112	DUP	2W-SD-SD112-0001	0.7	--	--	2.9	--	--	--	--	--	--	--	--	--	1
Excavation Area No. 3																
2W-SD-SD116		2W-SD-SD116-0001	0.2	0.2	U	1.0	44.5		7.6 J	2.2 J	UJ	0.9 J	2.3 J	1.6 J	1.0 J	7
2W-SD-SD117		2W-SD-SD117-0001	0.2	0.04	U	0.7	10.6		2.5 J	0.7 J	UJ	0.5 J	2.3 J	0.9 J	0.7 J	3
2W-SD-SD118		2W-SD-SD118-0001	0.2	2.4	U	1.0	684		101 J	1.4 J	1.2 J	2.2 J	2.2 J	3.2 J	1.8 J	9
2W-SD-SD119		2W-SD-SD119-0001	0.1	1.2	U	0.4	355		17.1 J	1.1 J	2.8 J	0.7 J	2.6 J	1.3 J	2.2 J	8
2W-SD-SD120		2W-SD-SD120-0001	0.4	0.3	0.4	1.5	93.6	3.7	7.3 J	1.4 J	1.9 J	1.1 J	3.2 J	2.6 J	1.3 J	11
2W-SD-SD121		2W-SD-SD121-0001	0.3	0.2	1.2	1.3	43.2	10.7	10.4 J	1.9 J	2.1 J	1.1 J	4.2 J	2.6 J	1.8 J	11
2W-SD-SD122	ORIG	2W-SD-SD122-0001	0.4	0.1	0.3	1.6	15.7	3.0	6.6 J	1.2 J	0.8 J	1.3 J	2.9 J	2.1 J	1.1 J	10
2W-SD-SD122	DUP	2W-SD-SD122-0001	0.4	0.1	0.4	1.7	15.2	3.2	7.0 J	1.1 J	0.8 J	1.3 J	2.8 J	2.0 J	1.1 J	10
2W-SD-SD123		2W-SD-SD123-0001	0.7	0.6	4.3	3.1	176	38.5	34.8 J	1.1 J	3.0 J	1.2 J	10.0 J	4.9 J	2.4 J	11
2W-SD-SD126		2W-SD-SD126-0001	0.8	--	--	3.1	--	--	--	--	--	--	--	--	--	1
2W-SD-SD127	ORIG	2W-SD-SD127-0001	0.1	0.01	U	0.2	2.1		0.6 J	0.7	U	0.1	1.0 J	0.4	0.3 J	1.1 J	2
2W-SD-SD127	DUP	2W-SD-SD127-0001	0.1	0.01	U	0.2	2.5		0.9 J	0.6	U	0.1	0.9	0.3	0.2	1.0	1
2W-SD-SD130		2W-SD-SD130-0001	0.5	0.1	0.7	1.9	31.8	6.0	6.0 J	1.3 J	2.4 J	0.4 J	5.0 J	2.1 J	3.2 J	11.2 J	10
2W-SD-SD134		2W-SD-SD134-0001	0.4	2.1	0.5	1.7	589	4.2	88.6 J	1.3 J	1.6 J	1.9 J	2.7 J	2.2 J	1.4 J	1.8 J	11
2W-SD-SD135		2W-SD-SD135-0001	0.5	131	U	2.1	37,311		3,481 J	0.8 J	2.0 J	0.9 J	2.4 J	1.7 J	1.2 J	2.7 J	8
2W-SD-SD136		2W-SD-SD136-0001	0.3	9.1	0.5	1.3	2,595	4.8	538 J	1.1 J	4.3 J	1.1 J	3.6 J	2.6 J	1.6 J	4.4 J	11
2W-SD-SD138		2W-SD-SD138-0001	0.5	5.6	U	2.0	1,589		294 U	1.3 J	1.3 J	1.8 J	1.6 J	1.5 J	1.2	1.1	10
2W-SD-SD140		2W-SD-SD140-0001	0.7	0.1	1.1	2.9	23.3	9.4	7.6 J	1.0 J	0.3 J	0.4 J	3.0 J	1.3 J	1.7 J	7.9 J	8
2W-SD-SD142		2W-SD-SD142-0001	2.6	0.8	U	10.8	216		75.9	2.1	0.8 J	0.8	2.2	2.0	1.3	2.6	8
2W-SD-SD144		2W-SD-SD144-0001	1.9	0.4	U	7.7	116		31.6 J	1.5 J	UJ	0.4 J	1.1 J	1.1 J	0.8 J	2.5 J	7
2W-SD-SD146		2W-SD-SD146-0001	0.8	0.8	U	3.3	227		88.6 J	0.9 J	UJ	0.2 J	1.2 J	0.7 J	1.5 J	9.9 J	6
Excavation Area No. 4																
2W-SD-SD147		2W-SD-SD147-0001	0.8	0.1	U	3.5	38.4		11.1 J	0.6 J	0.3 J	0.4 J	1.6 J	1.0 J	0.6	2.2	5
2W-SD-SD149		2W-SD-SD149-0001	0.02	0.001	U	0.1	0.2		U	0.2 J	0.1 J	0.2 J	0.5 J	0.1 J	0.3	0.2	0
2W-SD-SD152		2W-SD-SD152-0001	0.3	0.05	0.3	1.1	13.0	2.8	2.1 J	1.5 J	1.6 J	0.5 J	2.0 J	1.0 J	0.8 J	3.7 J	9
2W-SD-SD154		2W-SD-SD154-0001	0.4	0.7	U	1.4	212		123 J	1.9 J	3.5 J	2.3 J	3.4 J	2.2 J	2.1 J	3.3 J	10
Excavation Area No. 5																
2W-SD-SD158		2W-SD-SD158-0001	0.3	0.1	0.5	1.4	22.3	4.7	5.1 J	1.2 J	1.1 J	0.7 J	2.3 J	1.4 J	1.0	2.7	10
2W-SD-SD159	ORIG	2W-SD-SD159-0001	0.7	0.04	0.3	2.8	12.7	2.5	3.5 J	1.3 J	1.1 J	1.5 J	3.4 J	2.3 J	1.2 J	2.9 J	11
2W-SD-SD159	DUP	2W-SD-SD159-0001	0.4	0.1	0.2	1.5	14.9	2.2	2.1 J	0.4 J	0.5 J	0.4 J	1.9 J	0.9 J	0.4	2.1	6
2W-SD-SD161		2W-SD-SD161-0001	0.5	U	0.1	1.9	U	0.8	UJ	0.6 J	1.8 J	0.4 J	7.8 J	1.2 J	0.8	5.4	5

TABLE 1

PHASE I AND PHASE 2 ANALYTICAL RESULTS IN SEDIMENT AND CALCULATION OF TEC AND PRG - QUOTIENT IN EACH SAMPLE
AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Location	Sample Code	Sample Name	PRG Quotients (unitless)						TEC Quotients (unitless)																		Number of TEC-Qs Greater than 1.0
			TOTAL PAHS PRG = 6,585		TOTAL DDT POS PRG = 1,504		TOTAL AROCLOR PRG = 532		TOTAL PAHS TEC = 1610		TOTAL DDT POS TEC = 5.28		TOTAL AROCLOR TEC = 59.8		4,4'-DDE TEC = 3.16		ARSENIC TEC = 9.79		CADMIUM TEC = 0.99		CHROMIUM TEC = 43.4		COPPER TEC = 31.6		LEAD TEC = 35.8		NICKEL TEC = 22.7		ZINC TEC = 121		
PHASE II SAMPLES																													
Excavation Area No. 1																													
2W-SD-SD85		**2W-SD-SD85-0001**	0.3		--		--		**1.1**		--		--		--		--		--		--		--		--		--		**1**
2W-SD-SD86		**2W-SD-SD86-0001**	0.4		--		--		**1.7**		--		--		--		--		--		--		--		--		--		**1**
2W-SD-SD91		**2W-SD-SD91-0001**	**12.4**		--		--		**50.9**		--		--		--		--		--		--		--		--		--		**1**
2W-SD-SD92		**2W-SD-SD92-0001**	**6.3**		--		--		**25.8**		--		--		--		--		--		--		--		--		--		**1**
2W-SD-SD93		**2W-SD-SD93-0001**	**1.6**		--		--		**6.4**		--		--		--		--		--		--		--		--		--		**1**
Excavation Area No. 2																													
2W-SD-SD101		**2W-SD-SD101-0001**	0.4		--		--		**1.8**		--		--		--		--		--		--		--		--		--		**1**
2W-SD-SD102		**2W-SD-SD102-0001**	0.4		--		--		**1.6**		--		--		--		--		--		--		--		--		--		**1**
2W-SD-SD104		**2W-SD-SD104-0001**	0.8		--		--		**3.3**		--		--		--		--		--		--		--		--		--		**1**
2W-SD-SD106		**2W-SD-SD106-0001**	**1.3**		--		--		**5.4**		--		--		--		--		--		--		--		--		--		**1**
2W-SD-SD109		**2W-SD-SD109-0001**	0.6		--		--		**2.3**		--		--		--		--		--		--		--		--		--		**1**
2W-SD-SD111		**2W-SD-SD111-0001**	0.3		--		--		**1.3**		--		--		--		--		--		--		--		--		--		**1**
2W-SD-SD113		**2W-SD-SD113-0001**	0.4		--		--		**1.5**		--		--		--		--		--		--		--		--		--		**1**
Excavation Area No. 3																													
2W-SD-SD114		**2W-SD-SD114-0001**	1.0		0.1		0.0	U	**4.0**		**31.6**			U	**5.7**	J	**1.6**	J		UJ	**1.2**	J	**2.5**	J	**2.2**	J	**1.1**	J	0.7	J	**8**
2W-SD-SD124		**2W-SD-SD124-0001**	0.3		**18.4**		0.0	U	**1.3**		**5,250**			U	**854**	J	**1.0**		**3.8**		0.9		**1.2**		0.7		**2.0**		**4.7**		**8**
2W-SD-SD125		**2W-SD-SD125-0001**	0.4		**2.9**		0.0	U	**1.6**		**816**			U	**168**	J	0.6	J	0.1	J	**1.7**	J	**1.9**	J	**1.9**	J	**1.1**	J	**1.2**	J	**8**
2W-SD-SD128		**2W-SD-SD128-0001**	0.4		0.4		0.0	U	**1.7**		**105**			U	**21.8**		**1.2**		**1.1**	J	**1.9**		**2.8**		**1.5**		**1.6**		0.8		**9**
2W-SD-SD129		**2W-SD-SD129-0001**	0.6		**1.8**		0.6		**2.6**		**511**		**5.2**		**23.1**	J	**1.2**	J	0.5	J	**1.9**	J	**2.7**	J	**2.5**	J	**1.3**	J	**1.3**	J	**10**
2W-SD-SD131		**2W-SD-SD131-0001**	0.4		0.1		0.0	U	**1.8**		**38.1**			U	**8.9**	J	**3.1**	J	**7.3**	J	0.3	J	**10.1**	J	**3.2**	J	**2.5**	J	**15.5**	J	**9**
2W-SD-SD132		**2W-SD-SD132-0001**	**1.1**		**16.6**		**1.4**		**4.5**		**4,716**		**12.9**		**665**	J	**1.1**	J	**1.6**	J	**1.4**	J	**4.4**	J	**4.0**	J	**1.3**	J	**2.2**	J	**11**
2W-SD-SD133		**2W-SD-SD133-0001**	0.6		0.1		0.8		**2.4**		**21.6**		**7.5**		**7.6**	J	0.7	J	0.2	J	0.7	J	**5.6**	J	**2.7**	J	**1.7**	J	**3.1**	J	**8**
2W-SD-SD137		**2W-SD-SD137-0001**	0.8		**6.8**		0.0	U	**3.1**		**1,926**			U	**443**		**1.2**		**2.0**		**2.1**		**1.9**		**2.0**		**1.4**		**1.4**		**10**
2W-SD-SD139		**2W-SD-SD139-0001**	1.0		**33.3**		0.0	U	**3.9**		**9,489**			U	**1,456**	J	**1.9**	J	**2.1**	J	**1.9**	J	**4.9**	J	**3.4**	J	**2.0**	J	**3.9**	J	**10**
2W-SD-SD141		**2W-SD-SD141-0001**	0.9		**1.6**		0.0	U	**3.5**		**451**			U	**57.0**	J	0.3	J		UJ	0.4	J	**1.7**	J	**1.1**	J	0.8	J	**1.6**	J	**6**
2W-SD-SD143		**2W-SD-SD143-0001**	**2.3**		**96.4**		0.0	U	**9.4**		**27,462**			U	**3,165**	J	**1.0**	J	**1.6**	J	**1.1**	J	**2.7**	J	**1.9**	J	**1.2**	J	**2.8**	J	**10**
2W-SD-SD145		**2W-SD-SD145-0001**	**1.0**		**13.2**		0.0	U	**4.3**		**3,769**			U	**759**	J	**1.3**	J	**1.1**	J	**1.6**	J	**2.2**	J	**1.8**	J	**1.3**	J	**1.7**	J	**10**
Excavation Area No. 4																													
2W-SD-SD153		**2W-SD-SD153-0001**	0.7		0.01		0.0	U	**3.0**		**3.7**			U	**3.0**	J	**1.3**	J		UJ	0.5	J	**1.3**	J	0.8	J	0.8	J	**3.3**	J	**6**
Excavation Area No. 5																													
2W-SD-SD155		**2W-SD-SD155-0001**	0.4		0.1		0.3		**1.7**		**21.4**		**2.5**		**1.9**	J	0.7	J		UJ	**1.4**	J	**2.3**	J	**2.1**	J	0.9	J	**2.0**	J	**8**
2W-SD-SD156		**2W-SD-SD156-0001**	0.5		0.02		0.0	U	**2.0**		**5.1**			U	**2.5**	J	**1.4**	J		UJ	**1.5**	J	**2.6**	J	**2.2**	J	**2.2**	J	**2.5**	J	**9**
2W-SD-SD157		**2W-SD-SD157-0001**	0.7		0.00		0.0	U	**2.7**		0.7			U	**1.2**	J	0.5	J		UJ	0.2	J	**1.1**	J	0.4	J	0.6	J	**3.6**	J	**4**
2W-SD-SD160		**2W-SD-SD160-0001**	**1.2**		0.1		0.0	U	**5.0**		**26.9**			U	**4.1**	J	**2.7**	J		UJ	**5.0**	J	**26.6**	J	**9.9**	J	**4.1**	J	**7.4**	J	**9**
2W-SD-SD162		**2W-SD-SD162-0001**	0.2		0.02		0.0		0.7		**4.7**			U	**2.3**	J	**1.4**			U	0.2	J	**1.4**		0.6		0.7	J	**6.2**		**5**

Shaded cells indicate a TEC or PRG Quotient greater than or equal to 1.
The cell containing sample location is shaded when a sample has 10 or more TEC Quotients greater than 1.
TEC and PRG Quotients are calculated by dividing the chemical concentration by the TEC and PRG.
TEC - Threshold Effects Concentration
PEC - Probable Effects Concentration
J = Estimated concentration
U = Non-detect (non-detected values can be found in analytical data tables in Appendix A)
UJ = Non-detect estimated concentration (non-detected values can be found in analytical data tables in Appendix A)
UR = Non-detect rejected concentration (non-detected values can be found in analytical data tables in Appendix A)
-- = Not analyzed

TABLE 2

PRELIMINARY PHASE III SEDIMENT RESULTS - PRE-DESIGN INVESTIGATION
SITE 2B - AREA A WETLAND
NAVAL SUBMARINE BASE NEW LONDON, GROTON, CT

SAMPLE ID SAMPLE DATE DUPLICATE OF	2W-SD-SD163-0001 09/08/2011	2W-SD-SD164-0001 09/08/2011	2W-SD-SD165-0001 09/08/2011	2W-SD-DUP03 09/08/2011 2W-SD-SD165-0001	2W-SD-SD172-0001 09/07/2011	2W-SD-SD173-0001 09/07/2011	2W-SD-DUP01 09/07/2011 2W-SD-SD173-0001	2W-SD-SD174-0001 09/07/2011	2W-SD-SD175-0001 09/07/2011	2W-SD-SD180-0001 09/07/2011	2W-SD-DUP02 09/07/2011 2W-SD-SD180-0001	2W-SD-SD181-0001 09/07/2011
Metals (mg/kg)												
ARSENIC										15.9	7.6	16.8
CADMIUM										2.9 J	0.59 J	0.63 J
CHROMIUM										100	32.7	33.4
COPPER										106	48.1	66.2
LEAD										87	40.3	44.5
NICKEL										50.2	18.6	30.1
ZINC										397	220	302
PAHs (ug/kg)												
1-METHYLNAPHTHALENE	24 U	38 U	55 U	54 U						66 U		50 U
2-METHYLNAPHTHALENE	24 U	38 U	55 U	54 U						66 U		50 U
ACENAPHTHENE	7.2 J	16 J	55 U	54 U						110 J		40 J
ACENAPHTHYLENE	13 J	11 J	55 U	54 U						66 U		13 J
ANTHRACENE	25 J	44 J	8.9 J	16 J						68 J		15 J
BENZO(A)ANTHRACENE	220	2100	150	120						260		89 J
BENZO(A)PYRENE	280	2300	210	140						250		100
BENZO(B)FLUORANTHENE	540	3500	320	250						66 U		190
BENZO(G,H,I)PERYLENE	160	1200	110 J	81 J						220		70 J
BENZO(K)FLUORANTHENE	140	1200	110 J	67 J						66 U		60 J
CHRYSENE	320	2000	150	120						400		99 J
DIBENZO(A,H)ANTHRACENE	52	410	32 J	54 U						66 U		50 U
FLUORANTHENE	380	3000	230	200						360		130
FLUORENE	12 J	14 J	55 U	54 U						120 J		33 J
INDENO(1,2,3-CD)PYRENE	270	2000	180	130						290		96 J
NAPHTHALENE	7.8 J	38 U	55 U	54 U						29 J		50 U
PHENANTHRENE	210	430	100 J	110 J						240		86 J
PYRENE	430	2800	260	210						1100		190
Total PAHs	3067	21025	1861	1444						3447		1171
PCBs (ug/kg)												
AROCLOR-1016										59 U	46 U	43 U
AROCLOR-1221										59 U	46 U	43 U
AROCLOR-1232										70 U	54 U	51 U
AROCLOR-1242										59 U	46 U	43 U
AROCLOR-1248										59 U	46 U	43 U
AROCLOR-1254										59 U	46 U	43 U
AROCLOR-1260										59 U	46 U	43 U
Pesticides (ug/kg)												
4,4'-DDD					290	1400	2700	2000	4800	16000		16 J
4,4'-DDE					17 J	330	610	330	840	2000 J		3.9 J
4,4'-DDT					7.9 JJ	11 J	14 J	9.7 J	540 J	30		6.8 JJ
Total DDT					315	1741	3324	2340	6180	18030		26.7
Miscellaneous (%)												
TOTAL SOLIDS	38	24	17	18	7.9	11	12	20	26	14		19

TABLE 3

ANALYTICAL SAMPLING SUMMARY FOR PHASE V and VI SAMPLES
AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Site Sample Summary

Excavation Area	Phase of Analysis	Sample Location ID	Number of Samples	Analytical Group
1	V	2WSD183 through 2WSD191	9	PAHs
	VI	2WSD192 through 2WSD204	13	

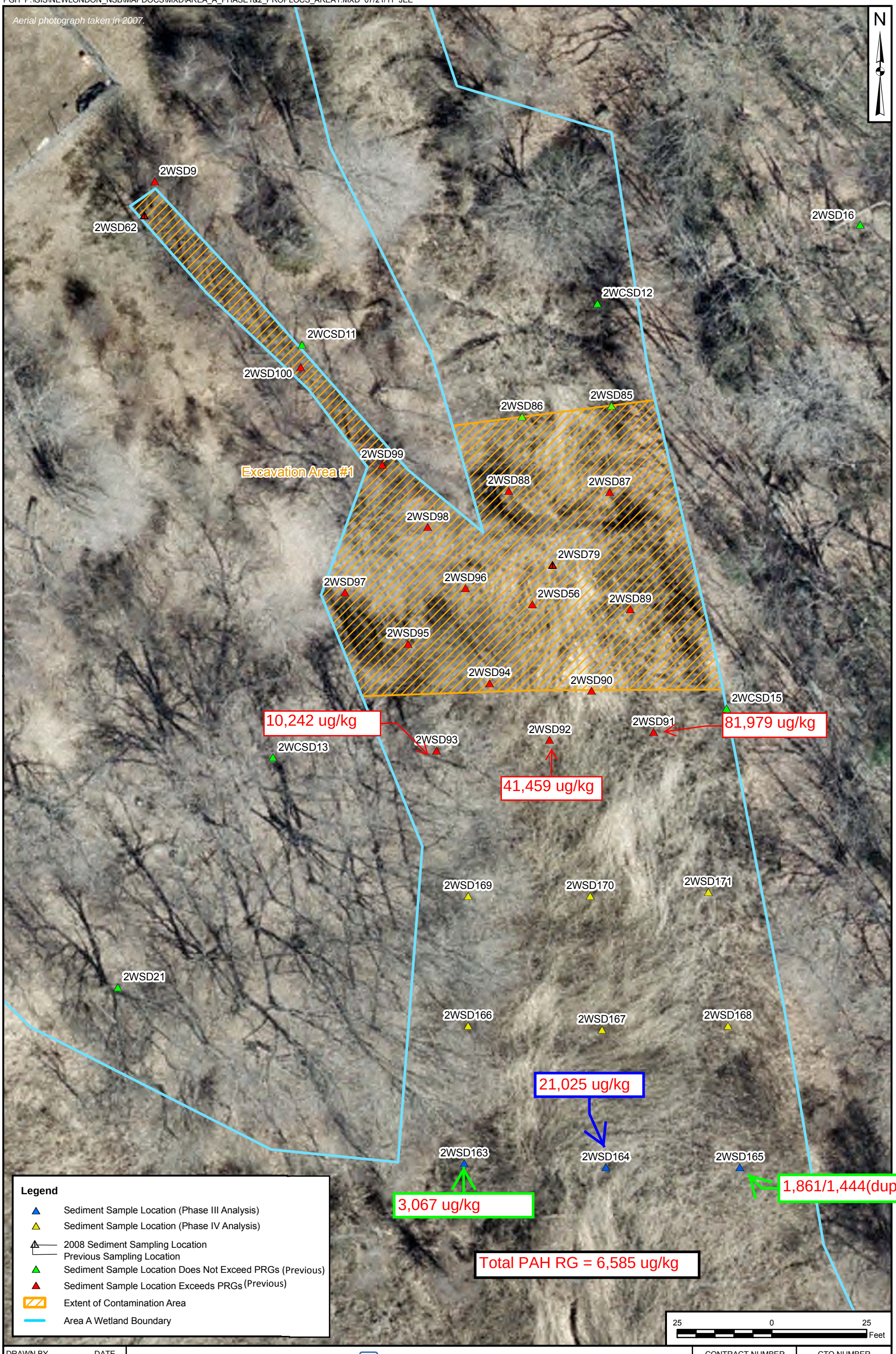
Field Quality Control Sample Summary

Matrix	Analytical Group	Number of Phase V Sampling Locations(1)	Number of Field Duplicate Pairs	Number of MS/MSDs	Laboratory Method
Sediment	PAHs	9	1	1	SW-846 8270D SIM

1- Duplicate samples will not be collected for the Phase VI samples, because it is not know which of the samples, if any, will be selected for analysis.

Abbreviations:
MS/MSD - Matrix spike/matrix spike duplicate
PAH - Polycyclic aromatic hydrocarbon
SIM - Selected ion monitoring
PAHs: 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, and Pyrene

PGH P:\GIS\NEWLONDON_NSB\MAPDOCS\MXD\AREA_A_PHASE1&2_PROPLOCS_AREA1.MXD 07/21/11 JEE



DRAWN BY: J. ENGLISH	DATE: 07/13/11	TETRA TECH	CONTRACT NUMBER: 2625 / CTO NUMBER: WE55
CHECKED BY: L. GANSER	DATE: 07/21/11	PRELIMINARY TOTAL PAH RESULTS EXCAVATION AREA 1 AREA A WETLAND PRE-DESIGN INVESTIGATION NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY: — / DATE: —
REVISED BY: —	DATE: —		APPROVED BY: — / DATE: —
SCALE: AS NOTED			FIGURE NO.: FIGURE 1A / REV: 0

PGH P:\GIS\NEWLONDON_NSB\MAPDOCS\MXD\AREA_A_PHASE1&2_PROPLOCS_AREA1_OCT11.MXD 10/27/11 JEE

DRAWN BY J. ENGLISH	DATE 10/25/11	TETRA TECH	CONTRACT NUMBER 2625 / CTO NUMBER WE55
CHECKED BY A. BERNHARDT	DATE 10/27/11	PROPOSED SEDIMENT SAMPLE LOCATIONS EXCAVATION AREA 1 AREA A WETLAND PRE-DESIGN INVESTIGATION NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — / DATE —
REVISED BY —	DATE —		APPROVED BY — / DATE —
SCALE AS NOTED			FIGURE NO. FIGURE 1B / REV 0

PGH P:\GIS\NEWLONDON_NSB\MAPDOCS\MXD\AREA_A_PHASE1&2_PROPLOCS_AREA3.MXD 07/21/11 JEE

N

2WSD26
2WSD117
2WSD52 / 2WSD71
2WSD25 / 2WSD77
2WSD114
2WSD116
2WSD24 / 2WSD78
2WSD50 / 2WSD66
Excavation Area #3
Total DDT RG = 1,504 ug/kg
3,614 ug/kg
2WSD118
2WSD121
1,874 ug/kg
2WSD119
2WSD120
2WSD51
2WSD22
2WSD122
27,719 ug/kg
2WSD124
2WSD123
4,310 ug/kg
2WSD125
2WSD127
2WSD49 / 2WSD70
2WSD172
315 ug/kg
2WSD129
2WSD131
2WSD130
2WSD128
2WSD176
2WSD132
2WSD134
2WSD47
2WSD72
2WSD133
2WSD173
1,741/3,324(dup) ug/kg
T1B
2WSD139
13,700 ug/kg
2WSD137
2WSD177
2WSD136
T1A
10,170 ug/kg
2WSD1
2WSD138
2WSD140
2,380 ug/kg
2WSD141
T2B
2WSD142
2WSD174
2,340 ug/kg
2WSD178
T2A
145,000 ug/kg
2WSD143
2WMW39DS
2WSD74
2WSD144
T3B
2WSD145
2WSD179
2WSD175
19,900 ug/kg
6,180 ug/kg
T3A
2WSD146
T4B
2WSD45
New boundary line
T4A
2WSD27
2WSD46
T5B
2WSD147
2WSD76
2WSD149
T5A
Excavation Area #4
2WSD153
T6B
2WSD152
2WSD63
T6A
2WSD154

Legend

- Sediment Sample Location (Phase III Analysis)
- Sediment Sample Location (Phase IV Analysis)
- 2008 Sediment Sampling Location / Previous Sampling Location
- Sediment Sample Location Does Not Exceed PRGs(Previous)
- Sediment Sample Location Exceeds PRGs(Previous)
- Extent of Contamination Area
- Area A Wetland Boundary

35 0 35 Feet

DRAWN BY: J. ENGLISH	DATE: 07/13/11	TETRA TECH	CONTRACT NUMBER: 2625 / CTO NUMBER: WE55
CHECKED BY: L. GANSER	DATE: 07/21/11	PRELIMINARY TOTAL DDT RESULTS EXCAVATION AREA 3 AREA A WETLAND PRE-DESIGN INVESTIGATION NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY: — / DATE: —
REVISED BY: —	DATE: —		APPROVED BY: — / DATE: —
SCALE: AS NOTED			FIGURE NO.: FIGURE 2 / REV: 0

PGH P:\GIS\NEWLONDON_NSB\MAPDOCS\MXD\AREA_A_PHASE1&2_PROPLOCS_AREAS4_5.MXD 07/21/11 JEE

Aerial photograph taken in 2007.

RGs
PAH = 6,585 ug/kg
Total DDT = 1,504 ug/kg
10 Chemicals with concentrations that exceed the TEC

Total PAH = 3,447 ug/kg (<PRG)
PCBs = ND
Total DDT = 18,030 ug/kg (>PRG)
10 Chemicals > TEC:
1. As
2. Cd
3. Cr
4. Cu
5. Pb
6. Ni
7. Zn
8. PAHs
9. DDE
10. Total DDT

Total PAH = 1,171 ug/kg (<PRG)
PCBs = ND
Total DDT = 27 ug/kg (<PRG)
Less than 10 Chemicals > TEC:
1. As
2. Cu
3. Pb
4. Ni
5. Zn
6. DDE
7. Total DDT

New Boundary Line

Excavation Area #4

Excavation Area #5

2WSD46, 2WSD147, T5B, 2WSD76, 2WSD149, T5A, 2WSD153, T6B, 2WSD152, 2WSD63, T6A, 2WSD154, 2WSD44, 2WTB2, 2WSD68, T7B, T7A, 2WTB4, 2WSD2, 2WSD155, 2WSD156, 2WSD180, 2WSD159, 2WSD158, 2WSD157, 2WSD160, 2WSD181, 2WSD161, 2WSD43 / 2WSD73, 2WSD162, 2WSD182

Legend
- Sediment Sample Location (Phase III Analysis)
- Sediment Sample Location (Phase IV Analysis)
- 2008 Sediment Sampling Location / Previous Sampling Location
- Sediment Sample Location Does Not Exceed PRGs(Previous)
- Sediment Sample Location Exceeds PRGs(Previous)
- Extent of Contamination Area
- Area A Wetland Boundary

N

25 0 25 Feet

DRAWN BY J. ENGLISH	DATE 07/13/11	TETRA TECH	CONTRACT NUMBER 2625 / CTO NUMBER WE55
CHECKED BY L. GANSER	DATE 07/21/11	PRELIMINARY TOTAL PAH, TOTAL DDT, TOTAL PCB, AND METALS RESULTS EXCAVATION AREAS 4 AND 5 AREA A WETLAND PRE-DESIGN INVESTIGATION NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — DATE —
REVISED BY —	DATE —		APPROVED BY — DATE —
SCALE AS NOTED			FIGURE NO. FIGURE 3 / REV 0

APPENDIX C

FIELD DOCUMENTATION

SAMPLE LOG SHEETS

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 85 -0001
Sample Location: 2W-SD 85
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

II

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1100	0-4"	BRN	SILT w/ ABUNDANT ORG MAT trace SAND
Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan.			WET - SAT
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrigerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? ND

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Sample ID No.: 2W-SD-SD 86 -0001
Sample Location: 2W-SD 86
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1110	0-4"	REDDISH BRN - Grey	SILT W/ ABUNDANT O.M MAT
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			WET - SAT
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Terry Royal

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

I

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD 87 -0001
Sample Location: 2W-SD 87
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1115	0-4"	BRN	Silt w/ ABUNDANT ORGANIC TRACE SAND WET-SAT
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Ty Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Sample ID No.: 2W-SD-SD 88 -0001
Sample Location: 2W-SD 88
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1105	0-4 "	BRN	SiH w/ ABUNDANT ORG MAT TR. SAND
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed:_____ inches

Dredge spoils observed? Yes No

Organisms observed? Yes No

Water present at location? (Yes) No

Sediment odors? _____

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Ter Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

I

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD 89 -0001
Sample Location: 2W-SD 89
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1125	0-4 "	REDDISH BRN	SILT W/ ABUNDANT ORG MAT
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			WET - SAT
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD
Duplicate ID No.:

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Sample ID No.: 2W-SD-SD 90 -0001
Sample Location: 2W-SD 90
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0840	0-4 "	REDDISH BRN	Silt some org mat moist
Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD 91 -0001
Sample Location: 2W-SD 91
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1125	0-4"	REDDISH BRN	SILT W/ABUNDANT ORG MAT WET-SAT
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes No
Organisms observed? Yes (No) ?
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Sample ID No.: 2W-SD-SD 92 -0001
Sample Location: 2W-SD 92
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4.07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0935	0-4 "	REDDISH BRN - Grey	SILT ABUNDANT ORG. MAT Moist - VERY moist
Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.: —

Signature(s):

Ted Nagel

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Sample ID No.: 2W-SD-SD 93 -0001
Sample Location: 2W-SD 93
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0850	0-4"	Grey BRN	Silt Tr. SAND moist some org mat
Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Ty Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 94 -0001
Sample Location: 2W-SD 94
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0845	0-4"	BRN - REDDISH BRN	SILT TRACE SAND SOME ORG MAT MOIST
Method: Plastic Core or (Shovel) SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

T Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

I

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD 95 -0001
Sample Location: 2W-SD 95
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1055	0-4"	BRN & Grey mottled	SANDY silt clay moist tr. org. mat.
Method: Plastic Core or (Shovel) SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? (Yes) (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Terry Rozak

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Sample ID No.: 2W-SD-SD 96 -0001
Sample Location: 2W-SD 96
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0855	0-4 "	BRN	SILT TRACE SAND moist
Method: Plastic Core or (Shovel) SS scoop to homognize in disposal aluminum pan.			SOME ORG MAT
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: <1 inches
Dredge spoils observed? Yes (No)
Organisms observed? (Yes) No
Water present at location? Yes (No)
Sediment odors?

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	FD040711-01

Signature(s):

Ty Royal

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Sample ID No.: 2W-SD-SD 97 -0001
Sample Location: 2W-SD 97
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1043	0-4 "	REDDISH BRN	SANDY SILT moist + ORGANIC MAT
Method: Plastic Core or (Shovel) SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? _____

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 98 -0001
Sample Location: 2W-SD 98
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1050	0-4 "	REDDISH BRN	SANDY (FINE-MED) SILT + ORGANIC MAT VERY MOIST
Method: Plastic Core (or) Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? No

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tay Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

I

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD 99 -0001
Sample Location: 2W-SD 99
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0830	0-4"	BRN	SANDY silt
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			moist - V. moist
Monitor Reading (ppm): N/A			some org. mat.

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar		✓
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: < 1 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tej Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Sample ID No.: 2W-SD-SD100-0001
Sample Location: 2W-SD 100
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-07-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1130	0-4"	REDDISH BRN - Grey	silt w/ organic mat, tr. Grey = sandy silt & GRAVEL (FINE to COARSE SAND)
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No) ?
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Ty Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 101 -0001
Sample Location: 2W-SD 101
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1605	0-4"	BRN	ABUNDANT org matw/silt
Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan.			SAT
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? No

Other Notes:

MAP:

Circle if Applicable:

MS/MSD — Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

II

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD102-0001
Sample Location: 2W-SD 102
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1440	0-4 "	BRN - DARK GREY	ABUNDANT org mat w/ Silt SOME DREDGE MAT.
Method: ~~Plastic Core or~~ Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes No
Organisms observed? Yes No
Water present at location? Yes No
Sediment odors? No

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

I

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD103 -0001
Sample Location: 2W-SD 103
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9-06-11 / Time: 1455 / Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan. / Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4"	BRN	ABUNDANT ORG MAT W/ SILT WET - SAT.

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? No

Other Notes:

MAP:

Circle If Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 104-0001
Sample Location: 2W-SD 104
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1425	0-4 "	BRN	Abund. org. mat w/ silt
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			SAT
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? N/O

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 105 -0001
Sample Location: 2W-SD 105
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11 / Time: 1510 / Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan. / Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4 "	BRN	ABUNDANT org. mat w/ silt SAT

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? No

Other Notes:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tony Lopez

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

II

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD 106 -0001
Sample Location: 2W-SD 106
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1540	0-4"	BRN - DARK GREY	DREDGE MAT. W/ ABUNDANT ~~THE~~ ORGANIC MAT W/ SILT
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Tay Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 107-0001
Sample Location: 2W-SD 107
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

I

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1610	0-4 "	BRN - REDDISH BRN	ABUNDANT org mat w/ silt
Method: Plastic Core or (Shovel) SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

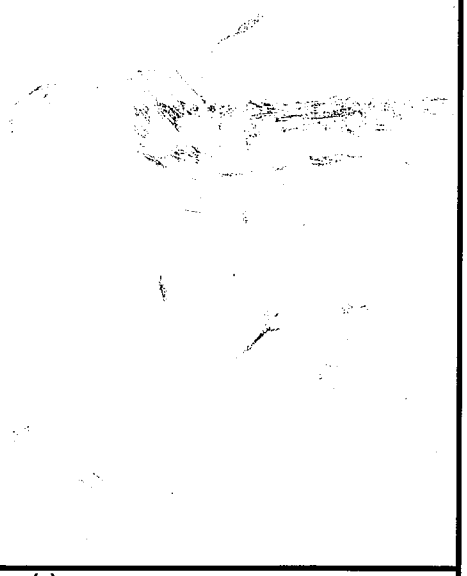
Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD108-0001
Sample Location: 2W-SD 108
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1550	0-4 "	BRN	ABUNDANT ORG MATL / SILT (SAT)
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? No

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 109-0001
Sample Location: 2W-SD 109
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11 / Time: 1520 / Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan. / Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4 "	BRN	ABUNDANT ORGANIC MAT + TRACE Dredge mat. SAT

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? No

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tay Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

I

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD 110 -0001
Sample Location: 2W-SD 110
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11 Time: 1530 Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan. Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4"	BRN - DARK GREY	ABUNDANT ORG. MAT W/SILT AND DREDGE MAT (SILTY CLAY) WET - SAT

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? No

Other Notes:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Sample ID No.: 2W-SD-SD 111 -0001
Sample Location: 2W-SD 111
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11 / Time: 1615 / Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan. / Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4 "	BRN	silt & org mat sat

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? No

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

T Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD112 -0001
Sample Location: 2W-SD112
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11 / Time: 1630 / Method: Plastic Core or Shovel SS scoop to homognize in disposal aluminum pan. / Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4 "	BRN	SANDY SILT TRACE ROOTS (MOIST

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD (YES)

Duplicate ID No.: FD040611-01

Signature(s):

Tom Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Sample ID No.: 2W-SD-SD 113 -0001
Sample Location: 2W-SD 113
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1620	0-4 "	BRN	SANDY SILT TRACE ORG MAT MOIST
Method: Plastic Core or (Shovel) SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? N/O

Other Notes:

MAP:

Circle if Applicable:

~~MS/MSD~~ Duplicate ID No.:

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 114-0001
Sample Location: 2W-SD 114
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1215	0-4 "	BAN - DARK GREY	Abundant org. mat Sm amount of Dredge mat (wet - sat)
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? No

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:
✓	

Signature(s):

Ty Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 115 -0001
Sample Location: 2W-SD 115
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1240	0-4 "	BRN - GREY	ABUNDANT dry mat w/ silt some Dredge mat (silty clay)
Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? No

Other Notes:

MAP:

Circle If Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Ty Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD116-0001
Sample Location: 2W-SD 116
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1155	0-4 "	BRN	ABUNDANT ORG MAT W/ SILT
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			SAT.
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Terry Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Sample ID No.: 2W-SD-SD117-0001
Sample Location: 2W-SD 117
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1230	0-4 "	Dark Brn	Silt & org. mat. moist
Method: Plastic Core or (Shovel) SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? No

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tay Kpal

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD118-0001
Sample Location: 2W-SD 118
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1015	0-4 "	BRN - DARK GREY	Silty clay w/ ABUNDANT VEG. MAT. SATURATED
Method: Plastic Core or Shovel SS scoop to ~~homo~~gnize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) ~~No~~ (TR)
Sediment odors? No

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tony Royal

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 119 -0001
Sample Location: 2W-SD 119
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1040	0-4 "	BRN	SILT W/ ABUNDANT ORG. MAT
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			WET - SAT.
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? (Yes) ~~No~~
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
✓	—

Signature(s):

Ty Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

I

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD 120 -0001
Sample Location: 2W-SD 120
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1100	0-4 "	BRN - to D. Grey	Silty Clay W/ ABUNDANT ORG. MAT (WET - SAT)
Method: Plastic Core or Shovel SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No (TR)
Sediment odors? N/A

Other Notes:

MAP:

Circle If Applicable:

MS/MSD

Duplicate ID No.: —

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

I

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD 121 -0001
Sample Location: 2W-SD 121
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silty, Clay, Moisture, etc.)
Time: 1150	0-4 "	BRN - Dark Grey	Silty clay W/ ABUNDANT org. mat. (WET - SAT)
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? N/A

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Ty Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

I

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD 122 -0001
Sample Location: 2W-SD 122
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1715	0-4 "	DARK BRN - BLACK	MUCK / SILT some organic mat. VERY moist - WET
Method: Plastic Core or (Shovel) SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	FD040511-02

Signature(s):

Ty Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD123 -0001
Sample Location: 2W-SD 123
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0910	0-4 "	BRN	SILT W/ ABUNDANT ORGANIC MAT (SAT)
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

(MS/MSD) 3 JARS YES

Duplicate ID No.: —

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD124-0001
Sample Location: 2W-SD 124
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0925	0-4 "	Dark Grey - Brn	Silty clay - some org mat VERY moist
Method: Plastic Core or Shovel SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	V	
Select pesticides (DDD, DDE, DDT)		V	
PCBs (Aroclors)	8 ounce glass jar	V	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? Fuel odor possible

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Ty Royal

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Sample ID No.: 2W-SD-SD 125 -0001
Sample Location: 2W-SD 125
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0950	0-4 "	BRN - Dark Grey	Silty clay w/ Abundant org. mat (saturated)
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? No

Other Notes:

MAP:

Circle If Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Sample ID No.: 2W-SD-SD126-0001
Sample Location: 2W-SD 126
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1140	0-4 "	BRN	SILT W/ ABUNDANT ORG MAT
Method: (Plastic Core) or Shovel SS scoop to homognize in disposal aluminum pan.			WET - SAT
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2-3 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? No

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD127-0001
Sample Location: 2W-SD 127
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1710	0-4 "	BRN	Silty SAND FINE - COARSE w/ org. mat WET
Method: Plastic Core or (Shovel) SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

(MS/MSD)

Duplicate ID No.: FD040511-01

Signature(s):

Tej Rojal

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton, CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Sample ID No.: 2W-SD-SD128-0001
Sample Location: 2W-SD 128
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0855	0-4 "	Dark Grey to BLK	Silty Clay - ABUNDANT org. mat + VERY moist
Method: (Plastic Core) or Shovel SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? No

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Ty Nash

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Sample ID No.: 2W-SD-SD 129 -0001
Sample Location: 2W-SD 129
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-01	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0835	0-4 "	Brn - Dark Grey	Silt w/ Abundant org mat Sm. Amount of Dredge mat. Silty clay wet - sat
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? N/O

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

I

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD130 -0001
Sample Location: 2W-SD 130
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1725	0-4 "	BRN	SILT & ABUNDANT ORG. MAT
Method: Plastic Core (or Shovel) SS scoop to homognize in disposal aluminum pan.			WET
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD131 -0001
Sample Location: 2W-SD 131
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11 / Time: 1705 / Method: Plastic Core or (Shovel) SS scoop to homognize in disposal aluminum pan. / Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4 "	BRN	SILT W/ ABUNDANT ORG MAT WET

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Ty Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Sample ID No.: 2W-SD-SD132 -0001
Sample Location: 2W-SD 132
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1030	0-4 "	BRN - DARK GRY	ABUNDANT ORG MAT W SILT AND DREDGE MAT WET - SAT.
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Ty Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

TT

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD133 -0001
Sample Location: 2W-SD 133
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 04-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1700	0-4 "	BRN - REDDISH BRN	SILT W/ ABUNDANT org. mat
Method: Plastic Core or (Shovel) SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD | Duplicate ID No.: —

Signature(s):

Ty Arnold

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Sample ID No.: 2W-SD-SD134-0001
Sample Location: 2W-SD 134
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1250	0-4 "	BRN - DARK GREY	SILT w/ ABUNDANT ORG. MAT. Dredge mat Silty Clay
Method: (Plastic Core) or Shovel SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Sample ID No.: 2W-SD-SD135-0001
Sample Location: 2W-SD 135
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1015	0-4 "	BRN - DARK GREY & BLACK	ABUNDANT ORG MAT W/ SILT DREDGE MAT PRESENT FUEL ODOR POSSIBLE (WET - SAT)
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)		✓	
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? YES POSSIBLE FUEL

Other Notes:

MAP:

Circle If Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD136 -0001
Sample Location: 2W-SD 136
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1235	0-4 "	BRN	Silt w/ ABUNDANT ORG MAT (WET - SAT)
Method (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? YES Possible Fuel

Other Notes:

MAP:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD137-0001
Sample Location: 2W-SD 137
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

TT

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0940	0-4 "	Dark Grey	Silty Clay - some org mat.
Method: (Plastic Core) or Shovel SS scoop to homognize in disposal aluminum pan.			Very moist
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? No

Other Notes:

MAP:

Circle if Applicable:

MS/MSD ✓ Duplicate ID No.: —

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 138 -0001
Sample Location: 2W-SD 138
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0815	0-4 "	DARK GREY	Silty Clay w/some org mat (very moist)
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? Yes - Slight / Possible FUEL

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tey Rojah

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Sample ID No.: 2W-SD-SD 139 -0001
Sample Location: 2W-SD 139
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1100	0-4 "	BRN - Dark Grey	ABUNDANT VEG MAT W/SILT Also Dredge mat WET - SAT
Method: (Plastic Core) or Shovel SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? No

Other Notes:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.: —

Signature(s):

Terry Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Sample ID No.: 2W-SD-SD 140-0001
Sample Location: 2W-SD 140
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1651	0-4 "	BRN	Silt w/some org. mat
Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

(MS/MSD) Duplicate ID No.: —

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD141 -0001
Sample Location: 2W-SD 141
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1216	0-4 "	BRN	Silt & Abundant org. mat (WET-SAT)
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? _____

Other Notes: SHEEN

MAP:

Circle If Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):

Ty Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Sample ID No.: 2W-SD-SD 142-0001
Sample Location: 2W-SD 142
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1050	0-4 "	BRN - ~~Dark Grey~~	ABUNDANT ORG. MAT W/ SILT ~~Some Amount of Dredge Mat~~
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? No

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Ted Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Sample ID No.: 2W-SD-SD 143-0001
Sample Location: 2W-SD 143
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0925	0-4"	BRN	SILT W/ ABUNDANT ORG. MAT. Also some Amount of Dredge mat. (Silty clay)
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Terry Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 144-0001
Sample Location: 2W-SD 144
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1641	0-4"	DARK BRN	SILT W/ ABUNDANT ORG MAT VERY MOIST - WET
Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? No

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Ty Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 145-0001
Sample Location: 2W-SD 145
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-06-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0945	0-4"	BRN - Dark Grey	Silt w/ Abundant Org mat and Dredge mat (wet-sat)
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: _____ inches

Dredge spoils observed? (Yes) No

Organisms observed? Yes (No)

Water present at location? (Yes) No

Sediment odors? No

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD146-0001
Sample Location: 2W-SD 146
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-05-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1635	0-4 "	REDDISH BROWN	Silt VF/ ABUNDANT ORG. MAT WET
Method: Plastic Core or (Shovel) SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar		
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD
Duplicate ID No.: —

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD147-0001
Sample Location: 2W-SD 147
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 04-04-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0952	0-4"	BRN	SANDY silt SOME ORGANIC material (moist)
Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:
FINE to COARSE SAND UNDER SAMPLE MATERIAL Grey to REDdish ORANGE

MAP:

Circle If Applicable:

MS/MSD

Duplicate ID No.: —

Signature(s):

Tom Nyhan

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Sample ID No.: 2W-SD-SD148-0001
Sample Location: 2W-SD 148
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 04-04-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1012	0-4"	LT WH-BRN	FINE to COARSE SAND (Moist) TR. ORGANICS
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:
PROBED two additional holes ~5-10' FROM ORIGINAL location

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 149-0001
Sample Location: 2W-SD 149
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-04-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1030	0-4 "	WH - BRN	FINE - COARSE SAND (DAMP) TR. ORGANICS
Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD150-0001
Sample Location: 2W-SD 150
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-5-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1630	0-4 "	BRN - YELLOW BRN	FINE - COARSE SAND SOME ORG. MAT. (VERY MOIST)
Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? No

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tony Bernhardt

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Sample ID No.: 2W-SD-SD 151-0001
Sample Location: 2W-SD 151
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-04-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1120	0-4"	Dark grey to BRN	Silt w/ ABUNDANT org. mat & Silty Clay (saturated)
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			SHEEN PRESENT
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: <1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? Slight

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

I

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD152 -0001
Sample Location: 2W-SD 152
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-04-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1050	0-4 "	BRN	Silt w/ABUNDANT org. mat. (SATURATED)
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD153 -0001
Sample Location: 2W-SD 153
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 04-04-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1145	0-4 "	DARK GREY +- BROWN	MUCKY W/ ABUNDANT ORGANIC MAT. SATURATED
Method: Plastic Core or Shovel SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? YES possible FUEL

Other Notes:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tony Royal

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Sample ID No.: 2W-SD-SD 154-0001
Sample Location: 2W-SD 154
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 04-04-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1205	0-4 "	BLACK - BRN	MUCKY - ABUNDANT ORGANIC MAT SATURATED
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD155-0001
Sample Location: 2W-SD 155
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

TT

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-4-11 / Time: 1515 / Method: ~~Plastic Core~~ or Shovel SS scoop to homogenize in disposal aluminum pan. / Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4 "	BRN - Grey	Silt w/ ABUNDANT org. mat. some Silty Clay (saturated)

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Ted Bart

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 156 -0001
Sample Location: 2W-SD 156
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-4-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1500	0-4 "	BRN	SILT W/ ABUNDANT ORG. MAT.
Method: Plastic Core or Shovel SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar		
Select pesticides (DDD, DDE, DDT)			
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Ted Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 157-0001
Sample Location: 2W-SD 157
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
II
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 04-04-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1525	0-4"	BRN	Silt w/ ABUNDANT organic mat. Moist-Wet
Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? NO

Other Notes:

MAP:

Circle If Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

I

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 2W-SD-SD 158-0001
Sample Location: 2W-SD 158
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-04-11 / Time: 1450 / Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan. / Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4"	BRN	Silt w/ ABUNDANT org. mat (Saturated)

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? N/O

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Terry Rogalski

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 159-0001
Sample Location: 2W-SD 159
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 04-04-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1430	0-4 "	REDDISH BRN - GREY	MUCK & ABUNDANT ORG MAT
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			SATURATED
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? NO

Other Notes:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.: (FD-040411-01)

Signature(s):

Ty Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Sample ID No.: 2W-SD-SD160-0001
Sample Location: 2W-SD 160
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 04-04-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1540	0-4 "	BRN	Silt w/ Abundant Roots
Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan.			Moist - Wet
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? (Yes) No slight
Sediment odors? No

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Ty Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

Sample ID No.: 2W-SD-SD 161 -0001
Sample Location: 2W-SD 161
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

I

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 04-04-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1415	0-4 "	Reddish BRN - BRN	Muck w/ Abundant organic material (moist - wet)
Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 2 inches

Dredge spoils observed? Yes (No)

Organisms observed? Yes (No)

Water present at location? Yes (No)

Sediment odors? NO

Other Notes:
4" of abundant organic material / roots and 2" of mucky mat.

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.1.2

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

II

Sample ID No.: 2W-SD-SD162-0001
Sample Location: 2W-SD 162
Sampled By: A. Bernhardt/T. Rojahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 4-04-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1555	0-4"	BRN	Silt w/ Abundant ORGANIC MAT WET
Method: Plastic Core or (Shovel) SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)		✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 2 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 2 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? No

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Ty Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample X
Phase 4 sample ___

Sample ID No.: 2W-SD-SD163-0001
Sample Location: 2W-SD-163
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9/8/11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 935	0-4 "	Brown	silt + lots of organic material
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar		
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? None

Other Notes:
used plastic tube only w/o cover

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD164-0001
Sample Location: 2W-SD-164
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample X
Phase 4 sample ___

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9/8/11 Time: 925 Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan. Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4 "	Brown	Silt w/ lots of organic material

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar		
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? None

Other Notes:
Used Nestis tube only w/o cover

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample X
Phase 4 sample ____

Sample ID No.: 2W-SD-SD 165-0001
Sample Location: 2W-SD - 165
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9/2/11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 910	0-4 "	Brown	silt w/ lots of organic material
Method: (Plastic Core) or Shovel SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar		
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? none

Other Notes:
used plastic tube only w/o core

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.: 2W-SD-DUP03

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD 166 -0001
Sample Location: 2W-SD -166
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample _____
Phase 4 sample X

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9/6/11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1012	0-4 "	Brown	silt and lots of organic material
Method: Plastic Core or Shovel SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar		
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? None

Other Notes:
used plastic tube only w/o core

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample _____
Phase 4 sample X

Sample ID No.: 2W-SD-SD167-0001
Sample Location: 2W-SD-167
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9/8/11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1005	0-4 "	Brown	Silt + lots of organic material
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar		
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? _____

Other Notes:
used plastic tube only w/o core

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD -0001
Sample Location: 2W-SD -168
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample ____
Phase 4 sample ✓

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9/8/11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 941	0-4 "	Brown	S, Si/ a/ lots of organic material
Method: (Plastic Core) or Shovel SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar		
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? none

Other Notes:
used plastic tube only a/o core

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample _____
Phase 4 sample X

Sample ID No.: 2W-SD-SD 169-0001
Sample Location: 2W-SD-169
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9/8/11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1030	0-4 "	brown	silt & lots of organic material
Method: (Plastic Core) or Shovel SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar		
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? none

Other Notes:
used Ponar tube only w/o core

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD/70 -0001
Sample Location: 2W-SD - 170
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample _____
Phase 4 sample ✓

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9/8/11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1025	0-4 "	Brown	silt + lots of organic material
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar		
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? none

Other Notes:
U&A plastic tube only a/o core

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample _____
Phase 4 sample X

Sample ID No.: 2W-SD-SD -0001
Sample Location: 2W-SD - 171
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9/2/11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1020	0-4 "	brown	silt + bits of organic material
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar		
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? none

Other Notes:
1 plastic tube only w/o core

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD172-0001
Sample Location: 2W-SD 172
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample X
Phase 4 sample ___

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9-7-11 / Time: 1000 / Method: (Plastic Core) or Shovel SS scoop to homognize in disposal aluminum pan. / Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4 "	Brown	Organic material (wood) debris w/ some silt

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar		
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar	X	
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? Chemical / petroleum

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD 173-0001
Sample Location: 2W-SD-173
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample X
Phase 4 sample

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9-7-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1200	0-4 "	Brown	Organic material / woody debris
Method: (Plastic Core) or Shovel SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar		
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar	X	
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? Chemical / petroleum

Other Notes:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.: ~~1600~~ 1600 Dup 2W-SD-DUP01

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample X
Phase 4 sample ___

Sample ID No.: 2W-SD-SD-174-0001
Sample Location: 2W-SD-174
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9-7-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1135	0-4 "	Brown	Organic material / woody debris
Method: Plastic Core or Shovel SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar		
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar	X	
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? Chemical / petroleum

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample 1
Phase 4 sample ____

Sample ID No.: 2W-SD-SD-175-0001
Sample Location: 2W-SD-115
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9-7-11 / Time: 1120 / Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan. / Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4 "	Brown	organic muck / woody debris

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar		
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar	X	
PCBs (Aroclors)	8 ounce glass jar		
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)			
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? Chemical / petroleum

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD176-0001
Sample Location: 2W-SD-176
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample ____
Phase 4 sample X

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9-7-11 / Time: 1035 / Method: (Plastic Core) or Shovel SS scoop to homegnize in disposal aluminum pan. / Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4 "	Brown	organic material / woody debris

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar	X	
PCBs (Aroclors)	8 ounce glass jar	X	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)		X	
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? Chemical / petroleum

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD-177-0001
Sample Location: 2W-SD-177
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.: ___

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other: ___
[] QA Sample Type: ___

Phase 3 sample ___
Phase 4 sample X

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9-7-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1345	0-4 "	Brown	lots of organic material + woody debris
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar	X	
PCBs (Aroclors)	8 ounce glass jar	X	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)		X	
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? chemical/petroleum

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD-178-0001
Sample Location: 2W-SD-178
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.: ___

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other: ___
[] QA Sample Type: ___

Phase 3 sample ___
Phase 4 sample X

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9-7-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1325	0-4 "	Brown	lots of woody debris + organic material
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar	✓	
PCBs (Aroclors)	8 ounce glass jar	✓	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)		✓	
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? chemical / petroleum

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample _____
Phase 4 sample X

Sample ID No.: 2W-SD-SD-179-0001
Sample Location: 2W-SD 179
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.: _____

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9-7-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1220	0-4 "	Brown	lot of organic material, wood debris
Method: Plastic Core or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar	X	
PCBs (Aroclors)	8 ounce glass jar	X	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)		X	
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? chemical / Petroleum

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample X
Phase 4 sample ___

Sample ID No.: 2W-SD-SD-180-0001
Sample Location: 2W-SD-180
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.: ___

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9-7-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1627	0-4 "	Brown	less organic material than other samples - mostly silt w/ some organic material
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar	X	
PCBs (Aroclors)	8 ounce glass jar	X	X
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)		X	X
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

bkp

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? Yes (No)
Organisms observed? (Yes) No
Water present at location? (Yes) No
Sediment odors? none

Other Notes:
Used core tube only w/o coring device

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.: 1900
2W-SD-DUP02 (PCB/metals)

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample X
Phase 4 sample ___

Sample ID No.: 2W-SD-SD01-0001
Sample Location: 2W-SD 01
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.: ___

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9-7-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1645	0-4 "	Brown	lots of organic material/ woody debris & silt
Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar	X	
PCBs (Aroclors)	8 ounce glass jar	X	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)		X	
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? (Yes) No
Water present at location? (Yes) No
Sediment odors? none

Other Notes:
Use 4 core tube only - w/o cutting device

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD182-0001
Sample Location: 2W-SD 182
Sampled By: A. Bernhardt/B. Rubbo
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 3 sample _____
Phase 4 sample 4

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 9-7-11 / Time: 1710 / Method: (Plastic Core) or Shovel SS scoop to homogenize in disposal aluminum pan. / Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4 "	Brown	lots of organic material + woody debris + silt

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	4	
Select pesticides (DDD, DDE, DDT)	8 ounce glass jar	4	
PCBs (Aroclors)	8 ounce glass jar	4	
Select metals (As, Cd, Cr, Cu, Pb, Ni, Zn)		4	
Phase 4 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			
Phase 4 samples for PCB and metals will be held for analysis and containers will be refrirgerated at the lab.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? None

Other Notes:
Used core tube only. w/o covers
device

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample X
Phase 6 sample ___

Sample ID No.: 2W-SD-SD193 -0001
Sample Location: 2W-SD 193
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-2-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1620	0-4 "	brown	Silt + little organic material. moist but not as dry as others - similar to SD185
Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? Yes (No)
Sediment odors? ___

Other Notes:
On fringe of wetland but still within wetlands - within phragmites + water nearby

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD184-0001
Sample Location: 2W-SD 184
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample X
Phase 6 sample ____

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1025	0-4 "	brown	silt w/ a lot of organic material small roots & sticks
Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2" inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? ____

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample X
Phase 6 sample ___

Sample ID No.: 2W-SD-SD185-0001
Sample Location: 2W-SD 185
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.: ___

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-2-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1610	0-4 "	dark brown	moist - silt and as dry as other samples - less organic material
Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes No
Organisms observed? Yes (No)
Water present at location? (Yes) (No)
Sediment odors? ___

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
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Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample X
Phase 6 sample ___

Sample ID No.: 2W-SD-SD 106-0001
Sample Location: 2W-SD 106
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-2-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1605	0-4 "	dark brown	moist silt w/ a lot of organic material
Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? (Yes) No
Water present at location? (Yes) No
Sediment odors? none

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample X
Phase 6 sample _____

Sample ID No.: 2W-SD-SD187-0001
Sample Location: 2W-SD 187
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.: _____

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-2-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1540	0-4 "	dark brown	wet silt w/ a lot of organic material
Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? (Yes) No
Water present at location? (Yes) No
Sediment odors? None

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample ✓
Phase 6 sample _____

Sample ID No.: 2W-SD-SD 100 -0001
Sample Location: 2W-SD 100
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11 Time: 1045 Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan. Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4"	brown	silt w/ lot of organic material - Dredge spoils @ 2 4"

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? _____

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD189-0001
Sample Location: 2W-SD 189
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample X
Phase 6 sample ___

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1015	0-4 "	brown	silt w/a lot of small roots- tried to remove but difficult because they fall apart
Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? Yes (No)
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? ___

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
X	

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample X

Phase 6 sample _____

Sample ID No.: 2W-SD-SD190-0001
Sample Location: 2W-SD 190
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11	**Depth Interval**	**Color**	**Description (Sand, Silt, Clay, Moisture, etc.)**
Time: 1000	0-4 "	brown	Silt - some organic material - dredge spoils at 5-6"
Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	**Container Requirements**	**Collected**	**Other**
PAHs	8 ounce glass jar	X	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed:_____ inches

Dredge spoils observed? Yes No

Organisms observed? Yes (No)

Water present at location? (Yes) No

Sediment odors? none

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	**Duplicate ID No.:**
	Dup 01

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample X
Phase 6 sample ___

Sample ID No.: 2W-SD-SD 19 /-0001
Sample Location: 2W-SD 19 /
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0950	0-4 "	brown	silt w/ a lot of roots - tried to remove as many roots as possible from sample
Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2" inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? ___

Other Notes:
Dredge spoils @ 5" down

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample _____
Phase 6 sample X

Sample ID No.: 2W-SD-SD-192-0001
Sample Location: 2W-SD 192
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.: _____

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1035	0-4 "	brown	Silty w/ little clay, little organic material
Method: Plastic Core and SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? _____

Other Notes:
on fringe of wetland but still in wetland - under water

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD 193 -0001
Sample Location: 2W-SD 193
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample ____
Phase 6 sample ✓

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1055	0-4 "	brown	silt w/ a lot of organic material small roots
Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? none

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD194-0001
Sample Location: 2W-SD 194
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample _____
Phase 6 sample X

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1105	0-4 "	brown	silt w/ lot of organic material - dredge spoils at 5-6"
Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? none

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD 195-0001
Sample Location: 2W-SD 195
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample ____
Phase 6 sample ✓

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11 Time: 1120 Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan. Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4 "	brown	silt w/ a lot of organic material - small roots - dredge spoil at 2-4"

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? none

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample _____
Phase 6 sample ✓

Sample ID No.: 2W-SD-SD196-0001
Sample Location: 2W-SD 196
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11 Time: 1130 Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan. Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4 "	brown	silt w/ lot of organic material- small rocks

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? _____

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD 197-0001
Sample Location: 2W-SD 197
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample ____
Phase 6 sample X

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1145	0-4 "	brown	silt w/ lot of organic material - debris & roots @ 3.5-4"
Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? none

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

Sample ID No.: 2W-SD-SD 198-0001
Sample Location: 2W-SD 198
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample ____
Phase 6 sample X

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11 / Time: 1155 / Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan. / Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4 "	brown	silt w/ a lot of organic material - small rocks Part of small log

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	/	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? ____

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample ______
Phase 6 sample X

Sample ID No.: 2W-SD-SD 199-0001
Sample Location: 2W-SD 199
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11-3-11 Time: 1300 Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan. Monitor Reading (ppm): N/A	0-4 "	Brown	silt w/ little less organic material & more dredge spoils than other samples

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	

Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? ______

Other Notes:
whole area matted down b/ because of marsh master cutting and spraying

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample ____
Phase 6 sample X

Sample ID No.: 2W-SD-SD200-0001
Sample Location: 2W-SD 200
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1250	0-4 "	Brown	silt w/a lot of organic material - Debris small at 4-5 "
Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? mud

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample _____
Phase 6 sample X

Sample ID No.: 2W-SD-SD201-0001
Sample Location: 2W-SD 201
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11 / Time: 1240 / Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan. / Monitor Reading (ppm): N/A	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-4 "	brown	Silt w/ a lot of organic material. small roots

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	X	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? none

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample _____
Phase 6 sample X

Sample ID No.: 2W-SD-SD202-0001
Sample Location: 2W-SD 202
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1220	0-4 "	brown	Silt w/ some organic material - dredge spoils @ 2 4"
Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	
Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.			

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? _____

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample _____
Phase 6 sample X

Sample ID No.: 2W-SD-SD 203-0001
Sample Location: 2W-SD 203
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-3-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1210	0-4 "	brown	Silt w/ some clay - lot of organic material + trace sand w/ a grit
Method: Plastic Core and SS scoop to homogenize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	

Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2 inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? _____

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Area A Wetland NSB-NLON, Groton CT
Project No.: 112G02625 fi.sd.3

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Phase 5 sample ____
Phase 6 sample X

Sample ID No.: 2W-SD-SD-204-0001
Sample Location: 2W-SD-204
Sampled By: A. Bernhardt/M. Lackett
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 11-2-11	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1635	0-4 "	brown	dark brown organic material silt at surface - 0-3 to 4" grey dredge spoils below
Method: Plastic Core and SS scoop to homognize in disposal aluminum pan.			
Monitor Reading (ppm): N/A			

COMPOSITE SAMPLE DATA: Not Applicable

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PAHs	8 ounce glass jar	✓	

Phase 6 samples for PAH and pesticides will be held for analysis and containers will be frozen at the laboratory.

OBSERVATIONS / NOTES:

Amount of herbaceous debris removed: 1-2' inches
Dredge spoils observed? (Yes) No
Organisms observed? Yes (No)
Water present at location? (Yes) No
Sediment odors? none except dredge spoils

Other Notes:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

FIELD LOG BOOKS

CREW: A BERNHARDT & T ROJAHN

4-03-11 SUN 112602625

11:30 HRS - ARRIVE PIT AIRPORT

14:50 HRS - ARRIVE HARTFORD CT

15:05 HRS - PICK UP CARGO VAN @ ENTERPRISE

15:25 HRS - GAS UP CARGO VAN

16:50 HRS - ARRIVE / CHECK IN @ HOTEL

19:49 HRS - PURCHASE SUPPLIES & EQ @ HOME DEPOT

20:33 HRS - PURCHASE SUPPLIES @ WALMART

END

WEATHER - PERIODS OF RAIN & OVERCAST TEMP 40'S

4-04-11 MON 112602625

0715 HRS - ARRIVE @ NSB NEW LONDON BADGE OFFICE

0740 HRS - PURCHASE ICE ON BASE

0800 HRS - MEET W / RICHARD CONANT

0830 HRS - MEET W / SURVEYORS (CME); CME WILL START @ AREAS 4 & 5 THEN MOVE TO AREA 3

- PREP TO COLLECT SEDIMENT SAMPLES
- COLLECTED 7 OF 8 SAMPLES @ AREA FOUR.
- CLEAN UP @ AREA 4

1230 HRS - LUNCH

1330 HRS - ARRIVE BACK @ LANDFILL

- SET UP @ AREA 5
- COMPLETE 8 OF 8 SAMPLE LOCATIONS @ AREA 5

1630 HRS. - CLEAN UP AND PROCESS / LABEL SAMPLES

1840 HRS - EXIST LANDFILL

SUMMARY: COMPLETED 15 OF 78 SAMPLE LOCATIONS

END

4-05-11 TUES. 112G02625

WEATHER: PERIODS OF LT. RAIN, WINDY TEMP 40's

0720 HRS - PURCHASE ICE

0735 HRS - ARRIVE @ AREA 3
PREP TO SAMPLE SEDIMENT
COLLECT SAMPLES @ 13 LOCATIONS

1250 HRS - FINISH COLLECTING SED1 SAMPLES

1325 HRS - FINISH CLEAN UP @ AREA 3

1340 HRS - LUNCH

1430 HRS - PROCESS SAMPLES ON COCs 4186-4188 FOR SHIPMENT TO KATAHDIN VIA FED EX AB# 8631 2526 3713

1600 HRS - DROP OFF SAMPLES @ FEDEX (MAIL ROOM)

1630 HRS - RETURN TO AREA 3 & 4 (1 SAMPLE) COMPLETE AREA 4 AND SAMPLED AN ADDITIONAL 8 SEDIMENT LOCATIONS @ AREA 3

1730 HRS - FINISH SAMPLING - PICK UP SAND BAGS WETLANDS CLEAN UP; PROCESS / LABEL / BAG SAMPLE CONTAINERS

19:50 HRS - PURCHASE ADDITIONAL SUPPLIES @ WALMART

SAMPLE SUMMARY: COMPLETED 37 OF 78 SAMPLE TO DATE; COLLECT 22 SAMPLES THIS DATE.

Tony Royal

4-06-11 WED. 112G02625

WEATHER: PARTLY CLOUDY TEMP 50's

0730 HRS - ARRIVE @ ~~HAS~~ NSB NEW LONDON
DROP OFF TRASH IN DUMPSTER NEXT TO R. CONANT'S BLDG

0745 HRS - ARRIVE @ WETLANDS AREA 3
- PREP TO SAMPLE SEDIMENT
- CUT MORE SAMPLING TUBES

0835 HRS - START SAMPLING @ AREA 3
COLLECT 12 SAMPLES

1240 HRS - COMPLETE SAMPLING @ AREA 3, CLEAN UP

1300 HRS - LUNCH

1335 HRS - PURCHASE ICE

1350 HRS - ARRIVE @ WETLAND AREA 2
PREP TO SAME SEDIMENT

1425 HRS - BEGIN SAMPLING @ AREA 2
COLLECT SAMPLES FROM ALL 13 LOCATIONS

1630 HRS - FINISH COLLECTING SAMPLES @ LOCATIONS WITHIN AREA 2
- PROCESS / LABEL / BAG SAMPLES COLLECTED THIS DATE. CLEAN UP.

1845 HRS - LEAVE NSB NEW LONDON

SAMPLE SUMMARY: COLLECT 25 SAMPLES THIS DATE COMPLETED 62 OF 78 LOCATIONS. SURVEYORS STAKED OUT AREAS 1 & 2 THIS DATE.

Tony Royal

WEATHER: PARTLY CLOUDY & TEMP 50's

4-07-11 THURS 112G02625

0730 Hrs - ARRIVE @ NSB NEW LONDON
CHECK IN W/ RICHARD CONANT

0745 Hrs - ARRIVE @ WETLAND AREA 1

0830 Hr - START SAMPLING @ AREA 1
COLLECT SAMPLES @ ALL 16 LOCATIONS

1130 Hrs - FINISH COLLECTING SAMPLES @ AREA 1
- CLEAN UP SITE & VAN; DUMP TRASH
- PROCESS/LABEL & BAG SAMPLE CONTAINERS
- CHECK OUT W/ R. CONANT

1400 Hrs - LUNCH

1500 Hrs - PURCHASE ICE
- PAPER WORK
- PACKAGE SAMPLES ON COCs 4189-4190 & 4092-4094 FOR SHIPMENT TO KATAHDIN ON FED EX AB# 8747 4934 2822
- PACKAGE VENDOR EQ ON FEDEX AB# 8631 2526 5440
- PACKABE TT EQ. FOR RETURN ON FED EX AB# 8631 2526 5440

1750 Hrs - DROP OFF PACKAGES @ FEDEX STATION in NORWICH CT

1900 Hrs - RETURN to HOTEL

SAMPLE SUMMARY: Collect 16 SAMPLES this date. COMPLETED 78 OF 78 LOCATION.

Ted Rozak

4-08-11 112G02625

0830 Hrs - LEFT HOTEL FOR HARTFORD AIRPORT

1120 Hrs - Got EARLIER FLIGHT OUT OF HARTFORD

1400 HRS - A. BERNHARDT dropped off T. RUHMN @ RESIDENCE

END

Ted Rozak

9-6-11 - 9-7-11

9-6-11 - Arrived in Hartford & drove down to New London to go to wal-mart & Lowes for supplies - got van loaded & ready for sampling

9-7-11 - Met w/ Mike Brown @ 8:00 in the morning to get out pass & pick up supplies in his office (ice, buckets, coolers)

952 - at Area 2b getting ready to start collecting samples - got everything set up - cut core tubes & mobilized to site Heavy Rain

1025 At first location in Excavation Area No 3 - & began to collect samples

1035 collect first sample at SD176

1345 collected last sample at Exc Area # 3 - &

packed up van - drove from area & went to lunch - still raining

1600 Back at site - getting set up to sample Excavation Area No 5 still raining heavy

1627 collect SD180 - first sample at this Area

1710 collect SD182 - last sample at this Area -

- spend rest of time packing up samples - labeling jars, etc ect. piling down samples overnight

1920 - left site -

went to wal-mart for additional supplies

9-8-11

~845 met w/ [redacted] mike at Pass HD to get gate pass -

[redacted]

- 9:00 - At site + getting ready to sample. raining a little

0910 collected first soil sample at Excavation Area # 1

1000 Base police came to check on what we were doing - no one had called them - they just took our names + contact info. I gave them mike Bowers # - they tried to call him but no answer

9-9-11

1030 collected last sediment sample from the site - rain just started

- spent rest of day packing up samples, packing up equipment + getting things ready for shipment with fedex.

- went to meet navy but they was busy + not there - went to lunch + came back to drop off extra supplies, (ice, water, paper towels, bubble) + meet navy but was not there -

- Drove to fedex in norfolk to ship all samples / supplies -

11-2-11

-1415 - Arrived at Subbase after going to wal-mart and Home Depot to pick up supplies.

met Tracy Mitkevich at the pass/ID office to get all day pass

-1500 At Area A worked - unloaded van + got equipment organized. laid down plastic in van to keep it clean while working - walked to Area No 1 to

Did not have core w/ us because there was a mixup w/ Todd - it will be here tomorrow morning - can still collect samples at locations w/ little water by pushing core tube into sediment.

1550 collected first sediment sample at SD187

11-2-11

collected last sample at SD204.

- packed up samples in bubble wrap - ziplocs + put on wet ice for overnight storage

1700 - packed up van and left site

1730 - Arrived at Home Depot to pick up supplies for Decon per. bought 4 - 4"x10', 2 - 4"x 8', - 6ml put of poly - 6mil - 20'x 100' in accordance w/ instructions from Scott Mesbit

11-3-11

~745 met w/ Victor to get day pass - went back to hotel to wait for Fedex shipment of samples -

845 samples arriving + boarded back to NLOK.

0925 at Area A wetland - unload truck to get equipment ready

0945 At Excavation Area No 1

0950 collect first sample at SD191

1300 collected last sample at SD199

1315 Back at van - put all samples in cooler w/ ice - wait to leave

11-3-11

1345 Back at site - packed belongings + all equipment - packed samples in cooler for shipment

1700 left site for fedex - stopped to pick up more ice for samples at a gas station

11-4-11

745 met Tracy at Fort gate for day pass

810 at site - waiting for Steve to show up

0930 Steve did not arrive so Tracy said to just build pad along landfill boundary - Tracy left site

1000 completed pad - took photos - sent to Corey

1030 Dropped off extra supplies (plastic) to troops after - she was on the phone -

Waiting to augment.

CHAIN OF CUSTODIES

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4186 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Tony Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB# 8631 2526 3713		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)		PRESERVATIVE USED		TYPE OF ANALYSIS: PAHs w. SELECT PESTICIDES	TYPE OF ANALYSIS: PCBs & SELECT METALS					COMMENTS
									G	G	4°C	4°C							
4/04	0952	2W-SD-SD147-0001	SD 147	0	0.33	SD	G	2	1	1									PHASE I ANALIZE
4/04	1012	2W-SD-SD148-0001	SD 148	0	0.33	SD	G	2	*1	**1									SEE COMMENT
4/04	1030	2W-SD-SD149-0001	SD 149	0	0.33	SD	G	2	1	1									PHASE I ANALIZE
4/04	1050	2W-SD-SD152-0001	SD 152	0	0.33	SD	G	2	*1	**1	TR								PHASE I ANALIZE
4/04	1120	2W-SD-SD151-0001	SD 151	0	0.33	SD	G	2	*1	**1									SEE COMMENT
4/04	1145	2W-SD-SD153-0001	SD 153	0	0.33	SD	G	2	*1	**1									↓
4/04	1205	2W-SD-SD154-0001	SD 154	0	0.33	SD	G	2	1	1									PHASE I ANALIZE
4/04	1415	2W-SD-SD161-0001	SD 161	0	0.33	SD	G	2	1	1									
4/04	1430	2W-SD-SD159-0001	SD 159	0	0.33	SD	G	2	1	1									
4/04	1450	2W-SD-SD158-0001	SD 158	0	0.33	SD	G	2	1	1									
4/04	1500	2W-SD-SD156-0001	SD 156	0	0.33	SD	G	2	*1	**1									SEE COMMENT
4/04	1515	2W-SD-SD155-0001	SD 155	0	0.33	SD	G	2	*1	**1									
4/04	1525	2W-SD-SD157-0001	SD 157	0	0.33	SD	G	2	*1	**1									

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Tony Rojahn	4-05-11	1600	1. RECEIVED BY FED EX	4-05-11	1600
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD " " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4187 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Tony Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB # 8631 2526 3713		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS: PAHs & SELECT PESTICIDES	PCBs & SELECT METALS	PAHs	COMMENTS
									G	4°C				
4/04	1540	2W-SD-SD160-0001	SD 160	0	0.33	SD	G	2			* 1	** 1		SEE COMMENT
4/04	1555	2W-SD-SD162-0001	SD 162	0	0.33	SD	G	2			* 1	** 1		↓
4/04	0000	FD-040411-01	QC	0	0.33	SD	G	2			1	1		FROM PHASE I ANALIZE
4/05	0815	2W-SD-SD138-0001	SD 138	0	0.33	SD	G	2			1	1		↓
4/05	0840	2W-SD-SD137-0001	SD 137	0	0.33	SD	G	2			* 1	** 1		SEE COMMENT
4/05	0855	2W-SD-SD128-0001	SD 128	0	0.33	SD	G	2			* 1	** 1		
4/05	0925	2W-SD-SD124-0001	SD 124	0	0.33	SD	G	2			* 1	** 1		
4/05	0950	2W-SD-SD125-0001	SD 125	0	0.33	SD	G	2			* 1	** 1		↓
4/05	1015	2W-SD-SD118-0001	SD 118	0	0.33	SD	G	2			1	1		PHASE I ANALIZE
4/05	1040	2W-SD-SD119-0001	SD 119	0	0.33	SD	G	2			1	1		↓
4/05	1100	2W-SD-SD120-0001	SD 120	0	0.33	SD	G	2			1	1		
4/05	1140	2W-SD-SD126-0001	SD 126	0	0.33	SD	G (TB)	2 1			~~+~~ (FD) 1		1	
4/05	1150	2W-SD-SD121-0001	SD 121	0	0.33	SD	G	2			1	1		

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Tony Rojahn	4-05-11	1600	1. RECEIVED BY FED EX	4-05-11	1600
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD " " " .

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4188 | PAGE 1 OF 1

PROJECT NO: 112602625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB # 8631 2526 3713		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)									COMMENTS
									G	G								
									4°C	4°C								
									PRESERVATIVE USED									
									TYPE OF ANALYSIS									
									PAHs & SELECT	PESTICIDES PCBs & SELECT METALS								
4/05	1216	2W-SD-SD141-0001	SD 141	0	0.33	SD	G	2	* 1	** 1								SEE COMMENT
4/05	1235	2W-SD-SD136-0001	SD	0	0.33	SD	G	2	1	1								PHASE I ANALYZE
4/05	1250	2W-SD-SD134-0001	SD	0	0.33	SD	G	2	1	1								↓

1. RELINQUISHED BY Terry Rojahn	DATE 4-05-11	TIME 1600	1. RECEIVED BY FED EX	DATE 4-05-11	TIME 1600
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER to 4°C & HOLD " " " .

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4189 | PAGE 1 OF 1

PROJECT NO: 112602625	FACILITY: NSB NEW LONDON	PROJECT MANAGER: A. BERNHARDT	PHONE NUMBER: 412 921 8433
SAMPLERS (SIGNATURE): Terry Rojahn		FIELD OPERATIONS LEADER: T. ROJAHN	PHONE NUMBER: 412 921 8857
		CARRIER/WAYBILL NUMBER: FED EX AB# 8747 4934 2822	

LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
ADDRESS: 600 TECHNOLOGY WAY
CITY, STATE: SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☒ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS: PAHs & SELECT PESTICIDES & PCBs & SELECT METALS							COMMENTS
									G	4°C								
4/05	1630	2W-SD-SD150-0001	SD 150	0	4"	SD	G	2			*1	**1						
4/05	1635	2W-SD-SD146-0001	SD 146	0	4	SD	G	2			1	1						
4/05	1641	2W-SD-SD144-0001	SD 144	0	4	SD	G	2			1	1						
4/06	1651	2W-SD-SD140-0001	SD 140	0	4	SD	G	3			2	1						RUN MS/MSD
4/05	1700	2W-SD-SD133-0001	SD 133	0	4	SD	G	2			*1	**1						
4/05	1705	2W-SD-SD131-0001	SD 131	0	4	SD	G	2			*1	**1						
4/05	1710	2W-SD-SD127-0001	SD 127	0	4	SD	G	3			2	1						RUN MS/MSD
4/05	1715	2W-SD-SD122-0001	SD 122	0	4	SD	G	2			1	1						
4/05	1725	2W-SD-SD130-0001	SD 130	0	4	SD	G	2			1	1						
4/05	0000	FD-040511-01	QC	0	4	SD	G	2			1	1						FROM 127
4/05	0000	FD-040511-02	QC	0	4	SD	G	2			1	1						FROM 122
4/06	0835	2W-SD-SD129-0001	SD 129	0	4	SD	G	2			*1	**1						
4/06	0910	2W-SD-SD123-0001	SD 123	0	4	SD	G	3			2	1						RUN MS/MSD

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY: Terry Rojahn	4-07-11	1700	1. RECEIVED BY: FED EX	4-07-11	1700
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER to 4°C & HOLD " " " .

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4190 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Ty Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB# 8747 4934 2822		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS: PAHs	Select Pesticides & PCBs	Select Metals						COMMENTS
									G	G									
									4°C	4°C									
4/06	0925	2W-SD-SD143-0001	SD 143	0	4"	SD	G	2			*1	**1							
4/06	0945	2W-SD-SD145-0001	SD 145	0	4	SD	G	2			*1	**1							
4/06	1015	2W-SD-SD135-0001	SD 135	0	4	SD	G	2			1	1							
4/06	1030	2W-SD-SD132-0001	SD 132	0	4	SD	G	2			*1	**1							
4/06	1050	2W-SD-SD142-0001	SD 142	0	4	SD	G	2			1	1							
4/06	1100	2W-SD-SD139-0001	SD 139	0	4	SD	G	2			*1	**1							
4/06	1155	2W-SD-SD116-0001	SD 116	0	4	SD	G	2			1	1							
4/06	1215	2W-SD-SD114-0001	SD 114	0	4	SD	G	2			*1	**1							
4/06	1230	2W-SD-SD117-0001	SD 117	0	4	SD	G	2			1	1							
4/06	1240	2W-SD-SD115-0001	SD 115	0	4	SD	G	2			*1	**1							

1. RELINQUISHED BY Ty Rojahn	DATE 4-07-11	TIME 1700	1. RECEIVED BY FED EX	DATE 4-07-11	TIME 1700
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD " " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4092 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER: A. BERNHARDT	PHONE NUMBER: 412 921 8433
SAMPLERS (SIGNATURE): Terry Rojahn		FIELD OPERATIONS LEADER: T. ROJAHN	PHONE NUMBER: 412 921 8857
		CARRIER/WAYBILL NUMBER: FED EX AB # 8747 4934 2822	

LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
ADDRESS: 600 TECHNOLOGY WAY
CITY, STATE: SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G): G	PRESERVATIVE USED: 4°C	TYPE OF ANALYSIS: PAHs	COMMENTS
4/06	1425	2W-SD-SD104-0001	SD104	0	4"	SD	G	1			*1	
4/06	1440	2W-SD-SD102-0001	SD102	0	4	SD	G	1			*1	
4/06	1455	2W-SD-SD103-0001	SD103	0	4	SD	G	1			1	
4/06	1510	2W-SD-SD105-0001	SD105	0	4	SD	G	1			1	
4/06	1520	2W-SD-SD109-0001	SD109	0	4	SD	G	1			*1	
4/06	1530	2W-SD-SD110-0001	SD110	0	4	SD	G	1			1	
4/06	1540	2W-SD-SD106-0001	SD106	0	4	SD	G	1			*1	
4/06	1550	2W-SD-SD108-0001	SD108	0	4	SD	G	1			1	
4/06	1605	2W-SD-SD101-0001	SD101	0	4	SD	G	1			*1	
4/06	1610	2W-SD-SD107-0001	SD107	0	4	SD	G	1			1	
4/06	1615	2W-SD-SD111-0001	SD111	0	4	SD	G	1			*1	
4/06	1620	2W-SD-SD113-0001	SD113	0	4	SD	G	1			*1	
4/06	1630	2W-SD-SD112-0001	SD112	0	4	SD	G	2			2	RUN MS/MSD

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY: Terry Rojahn	4-07-11	1700	1. RECEIVED BY: FED EX	4-07-11	1700
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS: * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4093 | PAGE 1 OF 1

PROJECT NO: 112602625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Tony Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB# 8747 4934 2822		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT), INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G): G	PRESERVATIVE USED: 4°C	TYPE OF ANALYSIS: PAHs	COMMENTS
4/06	0000	FD 040611-01	QC	0	4"	SD	G	1	1			FROM 112
4/07	0830	2W-SD-SD99-0001	SD_{99}	0	4	SD	G	1	1			
4/07	0835	2W-SD-SD92-0001	SD_{92}	0	4	SD	G	1	*1			
4/07	0840	2W-SD-SD90-0001	SD_{90}	0	4	SD	G	1	1			
4/07	0845	2W-SD-SD94-0001	SD_{94}	0	4	SD	G	1	1			
4/07	0850	2W-SD-SD93-0001	SD_{93}	0	4	SD	G	1	*1			
4/07	0855	2W-SD-SD96-0001	SD_{96}	0	4	SD	G	1	1			
4/07	1043	2W-SD-SD97-0001	SD_{97}	0	4	SD	G	1	1			
4/07	1050	2W-SD-SD98-0001	SD_{98}	0	4	SD	G	1	1			
4/07	1055	2W-SD-SD95-0001	SD_{95}	0	4	SD	G	1	1			
4/07	1100	2W-SD-SD85-0001	SD_{85}	0	4	SD	G	1	*1			
4/07	1105	2W-SD-SD88-0001	SD_{88}	0	4	SD	G	1	1			
4/07	1110	2W-SD-SD86-0001	SD_{86}	0	4	SD	G	1	*1			

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Tony Rojahn	4-07-11	1700	1. RECEIVED BY FED EX	4-07-11	1700
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4094 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Terry Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB # 8747 4934 2822		CITY, STATE SCARBOROUGH, ME 04074 (TR)

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE / YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (~~FT~~ INCHES)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS PAHs								COMMENTS
									G	4°C									
4/07	1115	2W-SD-SD87-0001	SD_{87}	0	4"	SD	G	1	1										
4/07	1120	2W-SD-SD89-0001	SD_{89}	0	4	SD	G	1	1										
4/07	1125	2W-SD-SD91-0001	SD_{91}	0	4	SD	G	1	*1										
4/07	1130	2W-SD-SD100-0001	SD_{100}	0	4	SD	G	1	1										
4/07	0000	FD040711-01	QC	0	4	SD	G	1	1										FROM 96

1. RELINQUISHED BY Terry Rojahn	DATE 4-07-11	TIME 1700	1. RECEIVED BY FED EX	DATE 4-07-11	TIME 1700
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 27441 | PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112G02625	NSB NEW LONDON	A. BERNHARDT	412 921 8433(w)	KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER: A. Bernhardt	PHONE NUMBER: 412-523-0634(c)	ADDRESS: 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER: FEDEX AB# 8676441113229		CITY, STATE: SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT) IN CM	BOTTOM DEPTH (FT) IN CM	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS PAHs	COMMENTS
9/8	935	2W-SD-SD163-0001		0	4	SD	G	1			X	
	925	2W-SD-SD164-0001						1			X	
	910	2W-SD-SD165-0001						1			X	
	1012	2W-SD-SD166-0001						1			X*	Hold for Analysis
	1005	2W-SD-SD167-0001						1			X*	
	941	2W-SD-SD168-0001						1			X*	
	1030	2W-SD-SD169-0001						1			X*	
	1025	2W-SD-SD170-0001						1			X*	
	1020	2W-SD-SD171-0001						1			X*	
	1200	2W-SD-DUP03						1			X	

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	9-8-11	1300	1. RECEIVED BY: FED EX		
2. RELINQUISHED BY			2. RECEIVED BY		
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS
** REFRIGERATE CONTAINER to 4°C & HOLD " " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 27440 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433 (c)	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER A. Bernhardt	PHONE NUMBER 412-523-0634 (c)	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FEDEX AB# 8764-4111-3226		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (ft) / inch	BOTTOM DEPTH (ft) / inch	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS: Select Pesticides	PAHs	PCBs (Aroclors)	Metals (select)	COMMENTS
9/7	1000	2W-SD-SD172-0001		0	4	SD	G	1			X				
	1200	2W-SD-SD173-0001						1			X				
	1135	2W-SD-SD174-0001						1			X				
	1120	2W-SD-SD175-0001						1			X				
	1035	2W-SD-SD176-0001						3			X*	X*	X**	X**	Hold For analysis
	1345	2W-SD-SD177-0001						3			X*	X*	X**	X**	" " "
	1325	2W-SD-SD178-0001						3			X*	X*	X**	X**	" " "
	1220	2W-SD-SD179-0001						3			X*	X*	X**	X**	" " "
	1627	2W-SD-SD180-0001						3			X	X	X	X	
	1645	2W-SD-SD181-0001						3			X	X	X	X	
	1710	2W-SD-SD182-0001						3			X*	X*	X**	X**	Hold For analysis
	1600	2W-SD-DUP01						1			X				
	1800	2W-SD-DUP02						1					X	X	

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	9-9-11	1500	1. RECEIVED BY FED EX		
2. RELINQUISHED BY			2. RECEIVED BY		
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS
** REFRIGERATE CONTAINER to 4°C & HOLD " " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 27442 | PAGE 1 OF 2

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER: A. BERNHARDT	PHONE NUMBER: 412 921 8433
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER
		CARRIER/WAYBILL NUMBER: FEDEX AB# 8770 6393-5100	

LABORATORY NAME AND CONTACT: KATAHDIN / ~~Kelly Perkins~~ Jennifer Obrin
ADDRESS: 600 TECHNOLOGY WAY
CITY, STATE: SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☒ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G
PRESERVATIVE USED: 01
TYPE OF ANALYSIS: PAHs

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT) in/cs	BOTTOM DEPTH (FT) in/cs	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	PAHs	COMMENTS
11-2	1620	2W-SD-SD183-0001		0	4	SD	G	1	X	
11-2	1610	2W-SD-SD185-0001							X	
11-2	1605	2W-SD-SD186-0001							X	
11-2	1550	2W-SD-SD187-0001							X	
11-2	1635	2W-SD-SD204-0001							X	* Hold
1025 11-3	~~1025~~	2W-SD-SD184-0001							X	
1045	~~1045~~	2W-SD-SD188-0001							X	
	1015	2W-SD-SD189-0001							X	MS/MSD
	1000	2W-SD-SD190-0001							X	
	950	2W-SD-SD191-0001							X	
	1035	2W-SD-SD192-0001							X	* Hold
	1055	2W-SD-SD193-0001							X	* Hold
	1105	2W-SD-SD194-0001							X	* Hold

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	11-3-11	1700	1. RECEIVED BY: FED EX		
2. RELINQUISHED BY			2. RECEIVED BY		
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS: * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS
~~** REFRIGERATE CONTAINER to 4°C & HOLD~~ " " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 27443 | PAGE 2 OF 2

PROJECT NO: 112602625	FACILITY: USB New London	PROJECT MANAGER A. Bernhardt	PHONE NUMBER 412-921-8433	LABORATORY NAME AND CONTACT: Katahdin / Jennifer Obrin
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS 600 Technology Way
		CARRIER/WAYBILL NUMBER Fed Ex AB# 8770-6393-5100		CITY, STATE Scarborough, ME 04074

STANDARD TAT ☐
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☒ 7 day ☐ 14 day

DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT) Inch	BOTTOM DEPTH (FT) Inch	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G): G; PRESERVATIVE USED; TYPE OF ANALYSIS: PAHs	COMMENTS
11-3	1120	2W-SD-SD195-0001		0	4	SD	G		X	* Hold
	1130	2W-SD-SD196							X	
	1145	2W-SD-SD197							X	
	1155	2W-SD-SD198							X	
	1300	2W-SD-SD199							X	
	1250	2W-SD-SD200							X	
	1240	2W-SD-SD201							X	
	1220	2W-SD-SD202							X	
	1210	2W-SD-SD203							X	
		[redacted]								
11-3	1800	2W-SD-DUP01		0	4	SD	G		X	* Hold

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	11-3-11	1700	1. RECEIVED BY Fed Ex		
2. RELINQUISHED BY			2. RECEIVED BY		
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS * Freeze to -20°C + Hold for Further Instruction

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

APPENDIX D

DATA VALIDATION REPORTS

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **A. BERNHARDT** **DATE: JULY 18, 2011**

FROM: **JOSEPH KALINYAK** **COPIES: DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION: PCB/PEST**
NSB NEW LONDON, CTO WE55
SDG WE55-1

SAMPLES: 16 / Sediment / PAH

2W-SD-SD118-0001	2W-SD-SD119-0001	2W-SD-SD120-0001
2W-SD-SD121-0001	2W-SD-SD126-0001	2W-SD-SD134-0001
2W-SD-SD136-0001	2W-SD-SD138-0001	2W-SD-SD147-0001
2W-SD-SD149-0001	2W-SD-SD152-0001	2W-SD-SD154-0001
2W-SD-SD158-0001	2W-SD-SD159-0001	2W-SD-SD161-0001
FD-040411-1		

15 / Sediment / PEST / PCB

2W-SD-SD118-0001	2W-SD-SD119-0001	2W-SD-SD120-0001
2W-SD-SD121-0001	2W-SD-SD134-0001	2W-SD-SD136-0001
2W-SD-SD138-0001	2W-SD-SD147-0001	2W-SD-SD149-0001
2W-SD-SD152-0001	2W-SD-SD154-0001	2W-SD-SD158-0001
2W-SD-SD159-0001	2W-SD-SD161-0001	FD-040411-1

Overview

The sample set for SDG WE55-1 CTO WE55-1, NSB New London, consisted of sixteen (16) environmental sediment samples. Sixteen (16) environmental sediment samples were analyzed for polynuclear aromatic hydrocarbons (PAH) and fifteen (15) of the environmental sediment samples were analyzed for pesticides (PEST) and polychlorinated biphenyls (PCB). One field duplicate sample pair was associated with this SDG; FD-040411-1 / 2W-SD-SD159-0001.

The samples were collected by Tetra Tech NUS, Inc. April 4 and 5, 2011 and analyzed by Katahdin Analytical Services Inc. All analyses were conducted in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria using USEPA SW-846 Method 8270D, 8081B, and 8082A analytical and reporting protocols. A USEPA Region I Tier 3 data validation was performed on the referenced samples.

The data was evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • GC/MS Instrument Tuning and System Performance
• Initial and Continuing Calibration
* • Blank Results
• Blank Spike/Blank Spike Duplicate Results

- Surrogate Spike Recoveries
- Internal Standard Recoveries
- Field Duplicate Precision
- Compound Identification and Quantification
- * Detection Limits

The asterisk (*) indicates that all quality control criteria were met for this parameter. Qualified (if applicable) analytical results are summarized in Appendix A. Results as reported by the laboratory are presented in Appendix B. Appendix C contains Region I worksheets, and Appendix D contains the documentation to support the findings as discussed in this data validation report. The attached Table summarizes the validation qualifications which are based on the following information:

INITIAL AND CONTINUING CALIBRATIONS

The PAH initial calibration relative percent standard deviation (RSD) was greater than the 20% quality control limit for indeno(1,2,3-cd)pyrene on instrument GCMS-N on 04/21/11 affecting sample 2W-SD-SD149-0001. The positive indeno(1,2,3-cd)pyrene result for the sample was qualified estimated, (J).

The PAH continuing calibration verification (CCV) percent difference (%D) was greater than the 20% quality control limit for indeno(1,2,3-cd)pyrene on instrument GCMS-N on 04/22/11 @ 08:34 affecting samples 2W-SD-SD119-0001, 2W-SD-SD136-0001, 2W-SD-SD152-0001, 2W-SD-SD161-0001, 2W-SD-SD118-0001, 2W-SD-SD158-0001, 2W-SD-SD120-0001, 2W-SD-SD126-0001, 2W-SD-SD147-0001, and 2W-SD-SD134-0001. The positive indeno(1,2,3-cd)pyrene results for all samples except 2W-SD-SD147-0001 were qualified estimated, (J). The positive result for sample 2W-SD-SD147-0001 was reported from the sample dilution re-analysis and was not qualified.

The PEST continuing calibration verification (CCV) percent differences (%D) were greater than the 20% quality control limit for instrument GC01 on 04/19/11 @ 19:27 for analytical columns as listed below.

Analyte	ZB-MULTIRESIDUE-1	ZB-MULTIRESIDUE-2
4,4'-DDE	28.80	29.20
4,4'-DDD	22.40	------
4,4'-DDT	45.60	23.6

Affecting samples: 2W-SD-SD147-0001, 2W-SD-SD149-0001, 2W-SD-SD152-0001, 2W-SD-SD154-0001, 2W-SD-SD161-0001, 2W-SD-SD159-0001.

Action: Positive and non-detected results for 4,4'-DDE and 4,4'-DDT were qualified estimated, (J) and (UJ), respectively. The 4,4'-DDD result for sample 2W-SD-SD149-0001 was qualified estimated, (J), because it was reported from the ZB-MULTIRESIDUE-1 column.

The PEST CCV %D were greater than the 20% quality control limit for instrument GC01 on 04/20/11 @ 16:42 for analytical columns as listed below.

Analyte	ZB-MULTIRESIDUE-1	ZB-MULTIRESIDUE-2
4,4'-DDE	28.80	26.80
4,4'-DDT	48.80	56.40

Affecting samples: 2W-SD-SD158-0001, FD-040411-1, 2W-SD-SD138-0001, 2W-SD-SD118-0001, 2W-SD-SD119-0001, 2W-SD-SD120-0001, 2W-SD-SD121-0001, 2W-SD-SD136-0001, 2W-SD-SD134-0001.

Action: Positive sample results for the above analytes were qualified estimated, (J).

The PEST CCV %D were greater than the 20% quality control limit for instrument GC01 on 04/20/11 @ 18:44 for analytical columns as listed below.

Analyte	ZB-MULTIRESIDUE-1	ZB-MULTIRESIDUE-2
4,4'-DDT	52.40	58.00

Affecting samples: 2W-SD-SD121-0001, 2W-SD-SD136-0001, 2W-SD-SD134-0001.
Action: Positive sample results for 4,4,'-DDT were qualified estimated, (J).

The PEST CCV %D were greater than the 20% quality control limit for instrument GC01 on 04/27/11 @ 16:42 for analytical columns as listed below.

Analyte	ZB-MULTIRESIDUE-1	ZB-MULTIRESIDUE-2
4,4'-DDE	------	22.00
4,4'-DDT	------	20.40

Affecting samples: 2W-SD-SD154-0001 dilution, 2W-SD-SD159-0001 dilution.
Action: The positive 4,4'-DDE result for sample 2W-SD-SD154-0001 was qualified estimated as it was reported from the ZB-MULITIRESIDUE-2 column.

The Aroclor-1260 CCV average %D was greater than the 20% quality control limit for instrument GC07 on 04/20/11 @ 17:30 for analytical columns as listed below.

Analyte	ZB-MULTIRESIDUE-2	ZB-MULTIRESIDUE-1
Aroclor-1260	23.7	------

Affecting samples: 2W-SD-SD161-0001, 2W-SD-SD159-0001. 2W-SD-SD158-0001, FD-040411-1, 2W-SD-SD138-0001, 2W-SD-SD118-0001, 2W-SD-SD119-0001, 2W-SD-SD120-0001, 2W-SD-SD121-0001, 2W-SD-SD136-0001, 2W-SD-SD134-0001.
Action: Non-detected Aroclor results for the above samples were not qualified as the alternate column, ZB-MULTIRESIDUE-1, had a %D within the quality control limits. Positive Aroclor-1260 sample results reported from the affected column ZB-MULTIRESIDUE-2 were qualified estimated, (J).
Qualified Samples: 2W-SD-SD158-0001, FD-040411-1, 2W-SD-SD120-0001, 2W-SD-SD136-0001, and 2W-SD-SD134-0001.

BLANKS

No issues.

SURROGATE SPIKE RECOVERIES

The PAH percent recoveries (%R) were greater than the quality control limit for the surrogates 2-methylnaphthalene-d10 and fluorene-d10 for sample 2W-SD-SD159-0001. The positive PAH results for sample 2W-SD-SD159-0001 were qualified estimated, (J), and the non-detected results were not qualified.

The PEST %R was greater than the quality control limit for the surrogate decachlorobiphenyl (DCB) on the ZB-MULTIRESIDUE-1 column for samples 2W-SD-SD118-0001 and 2W-SD-SD136-0001. No action was necessary for the non-detected sample results and the positive PEST results were reported from the dilution analyses for these samples.

The PEST %R was greater than the quality control limit for the surrogate tetrachloro-m-xylene (TCX) on the ZB-MULTIRESIDUE-2 column for sample 2W-SD-SD121-0001. The positive 4,4'-DDE result for sample 2W-SD-SD121-0001 was qualified estimated, (J). The remainder of the positive PEST sample results were reported from the alternate column or the dilution sample analysis.

The Aroclor surrogate %Rs were outside the quality control limits for analytical columns as listed below. No samples were re-analyzed by the laboratory.

Tetrachloro-m-xylene (56-115)	ZB-MULTIRESIDUE-1	ZB-MULTIRESIDUE-2
2W-SD-SD149-0001	40	44
2W-SD-SD152-0001	43	50
2W-SD-SD154-0001	716	39
2W-SD-SD161-0001	32	35
2W-SD-SD159-0001	0	14
FD-040411-1	49	------
2W-SD-SD136-0001	45	------
Decachlorobiphenyl (59-124)	ZB-MULTIRESIDUE-1	ZB-MULTIRESIDUE-2
2W-SD-SD134-0001	------	128

Actions:

1. Positive and non-detected Aroclor results for the samples 2W-SD-SD149-0001, 2W-SD-SD152-0001, 2W-SD-SD161-0001 were qualified estimated, (J) and (UJ), respectively.
2. The positive Aroclor-1260 sample result for the sample 2W-SD-SD159-0001 was qualified estimated, (J), as it was reported from the column ZB-MULTIRESIDUE-1. The non-detected Aroclors were qualified estimated, (UJ), as the ZB-MULTIRESIDUE2 column had a surrogate %R >10%.
3. The sample 2W-SD-SD154-0001 non-detected Aroclor results were not qualified as the ZB-MULTIRESIDUE-1 column surrogate %R was greater than the quality control limits.
4. The sample FD-040411-1 and 2W-SD-SD136-0001 non-detected Aroclor results were not qualified as the ZB-MULTIRESIDUE-2 column surrogate %Rs were within the quality control limits.
5. The sample 2W-SD-SD134-0001 positive Aroclor-1260 result was qualified estimated, (J), as it was reported from the ZB-MULTIRESIDUE-2 column, and the non-detected Aroclor results were not qualified as the ZB-MULTIRESIDUE-1 column surrogate %R was within the quality control limits.

INTERNAL STANDARD RECOVERY

The internal standard recovery for PAH chrysene-d12 was less than the quality control limit for the sample 2W-SD-SD154-0001 undiluted analysis affecting the PAH analytes chrysene and benzo(a)anthracene. The positive results for the aforementioned analytes were reported from the undiluted sample analysis and were qualified estimated, (J).

LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE

The PAH percent recoveries (%R) were less than the quality control limit for 2-methylnaphthalene and 1-methylnaphthalene for the laboratory control sample (LCS) associated with batch WG90041. No validation action was taken as the LCS duplicate (LCSD) %Rs were greater than the quality control limit and the relative percent difference (RPD) was within the quality control limits.

The PAH %R was greater than the quality control limit for indeno(1,2,3-cd)pyrene for the LCS associated with batch WG90041. No validation action was taken as the LCSD %R wase greater than the quality control limit and the relative percent difference (RPD) was within the quality control limits.

The PAH LCS/LCSD RPD for benzo(a)anthracene was greater than the 20% quality control limit for batch WT90177. No validation action was taken as both the LCS and the LCSD %Rs were within the quality control limits for the PAH analyte.

The PCB %R was less than the quality control limit for the LCSD for Aroclor-1016 for batch WG90032. No validation action was taken as the LCS %R was within the quality control limits.

FIELD DUPLICATE PRECISION

The relative percent difference (RPD) was greater than the 50% quality control limit for 4,4'-DDT for the field duplicate samples FD-040411-1 and 2W-SD-SD159-0001. The positive and non-detected 4,4 DDT results were qualified estimated, (J) and (UJ), respectively, for the field duplicate samples.

The RPD was greater than the 50% quality control limit for PAHs acenaphthene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, chrysene, fluoranthene, fluorene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, naphthalene and pyrene for the field duplicate samples FD-040411-1 and 2W-SD-SD159-0001. The positive aforementioned PAH results were qualified estimated, (J), for the field duplicate samples.

COMPOUND QUANTITATION

The RPD was greater than 40% between the ZB-MULTIRESIDUE-1 and ZB-MULTIRESIDUE-2 analytical columns for the PEST and PCB analyses for a number of samples. The samples with RPDs greater than 40% were qualified estimated, (J). The samples and the %RPDs are listed as follows.

Sample	Compound	RPD	Qualifier
2W-SD-SD136-0001	Aroclor-1260	51.5	J
2W-SD-SD119-0001	4,4'-DDT	60.6	J
2W-SD-SD120-0001	4,4'-DDT	141.7	J
2W-SD-SD121-0001	4,4'-DDT	87.7	J
2W-SD-SD152-0001	4,4'-DDT	81.2	J
2W-SD-SD158-0001	4,4'-DDT	112.5	J
FD-040411-1	4,4'-DDT	118.8	J

ADDITIONAL COMMENTS

Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

The higher of the two column PEST and Aroclor results was reported by the laboratory when choosing between the two analytical column results.

Sample positive and non-detected PAH, PEST, and PCB analyte results were qualified for moisture content greater than 70% as listed below.

Sample	% Moisture
2W-SD-SD118-0001	75.1
2W-SD-SD119-0001	90.4
2W-SD-SD120-0001	88.1
2W-SD-SD121-0001	74.5
2W-SD-SD134-0001	80.7
2W-SD-SD136-0001	90.5
2W-SD-SD152-0001	82.6
2W-SD-SD154-0001	73.3
2W-SD-SD159-0001	74.6

For the above samples, the laboratory used a larger aliquot for sample preparation to compensate for the high moisture content.

The laboratory performed dilution re-analyses on some of the samples for PAH analysis as indicated below due to PAH analytes that exceeded the highest calibration level in the undiluted sample analysis. Only those analytes which exceeded the calibration range in the 1X analysis were reported from the dilution re-analyses.

Sample	Dilution
2W-SD-SD138-0001	1X, 2X
2W-SD-SD147-0001	1X, 3X
2W-SD-SD154-0001	1X, 2X

Sample 2W-SD-SD159-0001 was analyzed only at a 3X dilution resulting in elevated detection limits for the non-detected PAH analytes anthracene and acenaphthylene.

The laboratory performed dilution re-analyses on some of the samples for PEST analysis as indicated below due to PEST analytes that exceeded the highest calibration level in the undiluted analysis. Only those analytes which exceeded the calibration range in the 1X analysis were reported from the dilution re-analyses.

Sample	Dilution
2W-SD-SD118-0001	1X, 100X
2W-SD-SD119-0001	1X, 50X
2W-SD-SD120-0001	1X, 10X
2W-SD-SD121-0001	1X, 10X
2W-SD-SD134-0001	1X, 100X
2W-SD-SD136-0001	1X, 100X
2W-SD-SD138-0001	1X, 100X
2W-SD-SD154-0001	1X, 50X
2W-SD-SD159-0001	1X, 5X

EXECUTIVE SUMMARY

Laboratory Performance: PAH results were qualified due to both initial and continuing calibration quality control limit non-compliances. PEST and Aroclor results were qualified due to continuing calibration quality control limit non-compliances. PAH, PEST, and Aroclor results were qualified for surrogate recovery quality control limit non-compliances. The sample 2W-SD-SD154-0001 PAH analytes chrysene and benzo(a)anthracene were qualified due to an internal standard quality control limit non-compliance. PEST and Aroclor sample results were qualified for analytical column result RPD quality control limit non-compliances. Sample PAH and PEST analyte results for field duplicate samples FD-040411-1 and 2W-SD-SD159-0001 were qualified for field duplicate imprecision. Sample PAH, PEST, and PCB analyte results were qualified for moisture content greater than 70%.

Other Factors Affecting Data Quality: Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

The data for these analyses were reviewed with reference to the Region I EPA "Data Validation Functional Guidelines - Part II" (12/96), National Functional Guidelines for Low Concentration Organic Data Review, and the DoD Quality Systems (QSM) (April 2009).

TetraTech NUS
Joseph Kalinyak
Chemist/Data Validator

TetraTech NUS
Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Regional Worksheets
4. Appendix D - Support Documentation

APPENDIX A

QUALIFIED LABORATORY RESULTS

Value Qualifier Key (Val Qual)

J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The result is an estimated non-detected quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U - Value is a non-detect as reported by the laboratory.

UR – Non-detected result is considered rejected, (UR), as a result of technical non-compliances.

DATA QUALIFICATION CODE (QUAL CODE)

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$ / ICP PDS Recovery Noncompliance
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 02625	NSAMPLE	2W-SD-SD118-0001			2W-SD-SD119-0001			2W-SD-SD120-0001			2W-SD-SD121-0001		
SDG: WE55-1	LAB_ID	SE1685-22			SE1685-23			SE1685-24			SE1685-26		
FRACTION: PAH	SAMP_DATE	4/5/2011			4/5/2011			4/5/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	24.9			9.6			11.9			25.5		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		13	J	PY	9	J	PY	9.8	J	PY	5.6	J	PY
2-METHYLNAPHTHALENE		16	J	PY	52	UJ	Y	43	UJ	Y	4.7	J	PY
ACENAPHTHENE		20	UJ	Y	52	UJ	Y	9.4	J	PY	6.6	J	PY
ACENAPHTHYLENE		13	J	PY	30	J	PY	8.7	J	PY	14	J	PY
ANTHRACENE		21	J	PY	52	UJ	Y	15	J	PY	14	J	PY
BENZO(A)ANTHRACENE		120	J	Y	57	J	PY	200	J	Y	150	J	Y
BENZO(A)PYRENE		130	J	Y	73	J	PY	210	J	Y	190	J	Y
BENZO(B)FLUORANTHENE		180	J	Y	78	J	PY	290	J	Y	330	J	Y
BENZO(G,H,I)PERYLENE		120	J	Y	40	J	PY	170	J	Y	160	J	Y
BENZO(K)FLUORANTHENE		46	J	Y	19	J	PY	78	J	PY	83	J	Y
CHRYSENE		120	J	Y	36	J	PY	180	J	Y	200	J	Y
DIBENZO(A,H)ANTHRACENE		40	J	Y	52	UJ	Y	72	J	PY	47	J	Y
FLUORANTHENE		180	J	Y	60	J	PY	250	J	Y	230	J	Y
FLUORENE		22	J	PY	52	UJ	Y	16	J	PY	9.1	J	PY
INDENO(1,2,3-CD)PYRENE		180	J	CY	64	J	CPY	280	J	CY	180	J	Y
NAPHTHALENE		30	J	PY	52	UJ	Y	43	UJ	Y	6.4	J	PY
PHENANTHRENE		120	J	Y	32	J	PY	130	J	Y	100	J	Y
PYRENE		210	J	Y	89	J	PY	460	J	Y	300	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD126-0001			2W-SD-SD134-0001			2W-SD-SD136-0001			2W-SD-SD138-0001		
SDG: WE55-1	LAB_ID	SE1685-25			SE1685-29			SE1685-28			SE1685-17		
FRACTION: PAH	SAMP_DATE	4/5/2011			4/5/2011			4/5/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	11.8			19.3			9.5			38.6		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		15	J	PY	17	J	PY	35	J	PY	14	J	P
2-METHYLNAPHTHALENE		43	UJ	Y	8	J	PY	15	J	PY	16	J	P
ACENAPHTHENE		26	J	PY	25	J	PY	61	J	PY	13	J	P
ACENAPHTHYLENE		15	J	PY	12	J	PY	10	J	PY	24	J	P
ANTHRACENE		25	J	PY	20	J	PY	57	UJ	Y	45	J	P
BENZO(A)ANTHRACENE		400	J	Y	220	J	Y	160	J	Y	250		
BENZO(A)PYRENE		480	J	Y	240	J	Y	200	J	Y	290		
BENZO(B)FLUORANTHENE		740	J	Y	360	J	Y	270	J	Y	450		
BENZO(G,H,I)PERYLENE		340	J	Y	150	J	Y	160	J	Y	190		
BENZO(K)FLUORANTHENE		170	J	Y	99	J	Y	69	J	PY	110		
CHRYSENE		430	J	Y	210	J	Y	150	J	Y	340		
DIBENZO(A,H)ANTHRACENE		150	J	Y	63	J	Y	57	UJ	Y	55		
FLUORANTHENE		600	J	Y	310	J	Y	240	J	Y	350		
FLUORENE		21	J	PY	26	J	PY	41	J	PY	30	J	P
INDENO(1,2,3-CD)PYRENE		560	J	CY	240	J	CY	260	J	CY	210		
NAPHTHALENE		43	UJ	Y	11	J	PY	23	J	PY	29	J	P
PHENANTHRENE		260	J	Y	130	J	Y	110	J	PY	190		
PYRENE		790	J	Y	540	J	Y	330	J	Y			

PROJ_NO: 02625	NSAMPLE	2W-SD-SD138-0001DL			2W-SD-SD147-0001			2W-SD-SD147-0001DL			2W-SD-SD149-0001		
SDG: WE55-1	LAB_ID	SE1685-17DL			SE1685-1			SE1685-1DL			SE1685-3		
FRACTION: PAH	SAMP_DATE	4/5/2011			4/4/2011			4/4/2011			4/4/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	38.6			56.1			56.1			94.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE					5	J	P				9.6	U	
2-METHYLNAPHTHALENE					16	U					9.6	U	
ACENAPHTHENE					11	J	P				9.6	U	
ACENAPHTHYLENE					19	J	P				9.6	U	
ANTHRACENE					45						9.6	U	
BENZO(A)ANTHRACENE								440			13	J	P
BENZO(A)PYRENE								510			17	J	P
BENZO(B)FLUORANTHENE								740			17	J	P
BENZO(G,H,I)PERYLENE					400						8.4	J	P
BENZO(K)FLUORANTHENE					200						8.1	J	P
CHRYSENE								540			11	J	P
DIBENZO(A,H)ANTHRACENE					150						7.7	J	P
FLUORANTHENE								820			24		
FLUORENE					16	J	P				9.6	U	
INDENO(1,2,3-CD)PYRENE								410			14	J	CP
NAPHTHALENE					7.2	J	P				9.6	U	
PHENANTHRENE					310						8.4	J	P
PYRENE		650						960			30		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD152-0001			2W-SD-SD154-0001			2W-SD-SD154-0001DL			2W-SD-SD158-0001		
SDG: WE55-1	LAB_ID	SE1685-4			SE1685-7			SE1685-7DL			SE1685-10		
FRACTION: PAH	SAMP_DATE	4/4/2011			4/4/2011			4/4/2011			4/4/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	17.4			26.7			26.7			45.8		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		6.9	J	PY	20	J	PY				15	J	P
2-METHYLNAPHTHALENE		27	UJ	Y	21	J	PY				6.2	J	P
ACENAPHTHENE		34	J	PY	120	J	Y				30	J	P
ACENAPHTHYLENE		27	UJ	Y	20	UJ	Y				6.8	J	P
ANTHRACENE		10	J	PY	45	J	Y				22	J	P
BENZO(A)ANTHRACENE		140	J	Y	190	J	NY				210		
BENZO(A)PYRENE		160	J	Y	180	J	Y				200		
BENZO(B)FLUORANTHENE		220	J	Y	240	J	Y				260		
BENZO(G,H,I)PERYLENE		150	J	Y	140	J	Y				170		
BENZO(K)FLUORANTHENE		60	J	Y	77	J	Y				63		
CHRYSENE		120	J	Y	270	J	NY				170		
DIBENZO(A,H)ANTHRACENE		42	J	PY	30	J	PY				30	J	P
FLUORANTHENE		210	J	Y	130	J	Y				260		
FLUORENE		26	J	PY	98	J	Y				24	J	P
INDENO(1,2,3-CD)PYRENE		240	J	CY	140	J	Y				280	J	C
NAPHTHALENE		27	UJ	Y	40	J	PY				12	J	P
PHENANTHRENE		75	J	Y	140	J	Y				120		
PYRENE		260	J	Y				450	J	Y	330		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD159-0001			2W-SD-SD161-0001			FD-040411-1		
SDG: WE55-1	LAB_ID	SE1685-9DL			SE1685-8			SE1685-16		
FRACTION: PAH	SAMP_DATE	4/4/2011			4/4/2011			4/4/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	25.4			37.7			36.5		
	DUP_OF							2W-SD-SD159-0001		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		570	J	RY	11	J	P	390		
2-METHYLNAPHTHALENE		100	J	PRY	26	U		57		
ACENAPHTHENE		390	J	GRY	72			120	J	G
ACENAPHTHYLENE		60	UJ	Y	26	U		26	U	
ANTHRACENE		60	UJ	Y	50	J	P	52	J	P
BENZO(A)ANTHRACENE		170	J	GRY	280			80	J	G
BENZO(A)PYRENE		170	J	GRY	240			72	J	G
BENZO(B)FLUORANTHENE		230	J	GRY	320			110	J	G
BENZO(G,H,I)PERYLENE		190	J	GRY	180			62	J	G
BENZO(K)FLUORANTHENE		63	J	PRY	83			27	J	P
CHRYSENE		140	J	GRY	240			73	J	G
DIBENZO(A,H)ANTHRACENE		74	J	PRY	79			26	U	
FLUORANTHENE		340	J	GRY	420			140	J	G
FLUORENE		490	J	GRY	97			260	J	G
INDENO(1,2,3-CD)PYRENE		260	J	GRY	290	J	C	98	J	G
NAPHTHALENE		170	J	GRY	10	J	P	70	J	G
PHENANTHRENE		740	J	RY	180			580		
PYRENE		450	J	GRY	530			180	J	G

PROJ_NO: 02625	NSAMPLE	2W-SD-SD118-0001DL			2W-SD-SD119-0001			2W-SD-SD119-0001DL			2W-SD-SD120-0001		
SDG: WE55-1	LAB_ID	SE1685-22DL			SE1685-23			SE1685-23DL			SE1685-24		
FRACTION: PEST	SAMP_DATE	4/5/2011			4/5/2011			4/5/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	24.9			9.6			9.6			11.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD		3200	J	Y				1800	J	Y			
4,4'-DDE		320	J	Y	54	J	CY				23	J	CY
4,4'-DDT		94	J	Y	20	J	CUY				11	J	CUY

PROJ_NO: 02625	NSAMPLE	2W-SD-SD120-0001DL			2W-SD-SD121-0001			2W-SD-SD121-0001DL			2W-SD-SD134-0001DL		
SDG: WE55-1	LAB_ID	SE1685-24DL			SE1685-26			SE1685-26DL			SE1685-29DL		
FRACTION: PEST	SAMP_DATE	4/5/2011			4/5/2011			4/5/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	11.9			25.5			25.5			19.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD		460	J	Y				150	J	Y	2000	J	Y
4,4'-DDE					33	J	CRY				280	J	Y
4,4'-DDT					45	J	CY				830	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD136-0001			2W-SD-SD136-0001DL			2W-SD-SD138-0001DL			2W-SD-SD147-0001		
SDG: WE55-1	LAB_ID	SE1685-28			SE1685-28DL			SE1685-17DL			SE1685-1		
FRACTION: PEST	SAMP_DATE	4/5/2011			4/5/2011			4/5/2011			4/4/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	9.5			9.5			38.6			56.1		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD					12000	J	Y	7100			120	J	C
4,4'-DDE					1700	J	Y	930			35	J	C
4,4'-DDT		2.6	UJ	CY				360	J	P	48	J	C

PROJ_NO: 02625	NSAMPLE	2W-SD-SD149-0001			2W-SD-SD152-0001			2W-SD-SD154-0001			2W-SD-SD154-0001DL		
SDG: WE55-1	LAB_ID	SE1685-3			SE1685-4			SE1685-7			SE1685-7DL		
FRACTION: PEST	SAMP_DATE	4/4/2011			4/4/2011			4/4/2011			4/4/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	94.3			17.4			26.7			26.7		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD		0.82	J	CP	51	J	Y				730	J	Y
4,4'-DDE		1.7	U		6.5	J	CY				390	J	CUY
4,4'-DDT		1.7	UJ	C	11	J	CUY	0.86	UJ	CY			

PROJ_NO: 02625	NSAMPLE	2W-SD-SD158-0001			2W-SD-SD159-0001			2W-SD-SD159-0001DL			2W-SD-SD161-0001		
SDG: WE55-1	LAB_ID	SE1685-10			SE1685-9			SE1685-9DL			SE1685-8		
FRACTION: PEST	SAMP_DATE	4/4/2011			4/4/2011			4/4/2011			4/4/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	45.8			25.4			25.4			37.7		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD		82						56	J	Y	4.2	U	
4,4'-DDE		16	J	C	11	J	CY				4.2	UJ	C
4,4'-DDT		20	J	CU	0.93	UJ	CGY				4.2	UJ	C

PROJ_NO: 02625	NSAMPLE	FD-040411-1		
SDG: WE55-1	LAB_ID	SE1685-16		
FRACTION: PEST	SAMP_DATE	4/4/2011		
MEDIA: SOIL	QC_TYPE	NM		
	UNITS	UG/KG		
	PCT_SOLIDS	36.5		
	DUP_OF	2W-SD-SD159-0001		
PARAMETER		RESULT	VQL	QLCD
4,4'-DDD		62		
4,4'-DDE		6.6	J	CP
4,4'-DDT		9.9	J	CGU

PROJ_NO: 02625	NSAMPLE	2W-SD-SD118-0001			2W-SD-SD119-0001			2W-SD-SD120-0001			2W-SD-SD121-0001		
SDG: WE55-1	LAB_ID	SE1685-22			SE1685-23			SE1685-24			SE1685-26		
FRACTION: PCB	SAMP_DATE	4/5/2011			4/5/2011			4/5/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	24.9			9.6			11.9			25.5		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		5	UJ	Y	13	UJ	Y	10	UJ	Y	4.7	UJ	Y
AROCLOR-1221		5	UJ	Y	13	UJ	Y	10	UJ	Y	4.7	UJ	Y
AROCLOR-1232		5.8	UJ	Y	15	UJ	Y	12	UJ	Y	5.6	UJ	Y
AROCLOR-1242		5	UJ	Y	13	UJ	Y	10	UJ	Y	4.7	UJ	Y
AROCLOR-1248		5	UJ	Y	13	UJ	Y	10	UJ	Y	4.7	UJ	Y
AROCLOR-1254		5	UJ	Y	13	UJ	Y	10	UJ	Y	4.7	UJ	Y
AROCLOR-1260		5	UJ	Y	13	UJ	Y	220	J	CY	640	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD134-0001			2W-SD-SD136-0001			2W-SD-SD138-0001			2W-SD-SD147-0001		
SDG: WE55-1	LAB_ID	SE1685-29			SE1685-28			SE1685-17			SE1685-1		
FRACTION: PCB	SAMP_DATE	4/5/2011			4/5/2011			4/5/2011			4/4/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	19.3			9.5			38.6			56.1		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		6.5	UJ	Y	13	UJ	Y	21	U		15	U	
AROCLOR-1221		6.5	UJ	Y	13	UJ	Y	21	U		15	U	
AROCLOR-1232		7.6	UJ	Y	16	UJ	Y	25	U		18	U	
AROCLOR-1242		6.5	UJ	Y	13	UJ	Y	21	U		15	U	
AROCLOR-1248		6.5	UJ	Y	13	UJ	Y	21	U		15	U	
AROCLOR-1254		6.5	UJ	Y	13	UJ	Y	21	U		15	U	
AROCLOR-1260		250	J	CRY	290	J	CUY	21	U		15	U	

PROJ_NO: 02625	NSAMPLE	2W-SD-SD149-0001			2W-SD-SD152-0001			2W-SD-SD154-0001			2W-SD-SD158-0001		
SDG: WE55-1	LAB_ID	SE1685-3			SE1685-4			SE1685-7			SE1685-10		
FRACTION: PCB	SAMP_DATE	4/4/2011			4/4/2011			4/4/2011			4/4/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	94.3			17.4			26.7			45.8		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		8.9	UJ	R	7.2	UJ	RY	4.4	UJ	Y	17	U	
AROCLOR-1221		8.9	UJ	R	7.2	UJ	RY	4.4	UJ	Y	17	U	
AROCLOR-1232		10	UJ	R	8.5	UJ	RY	5.2	UJ	Y	20	U	
AROCLOR-1242		8.9	UJ	R	7.2	UJ	RY	4.4	UJ	Y	17	U	
AROCLOR-1248		8.9	UJ	R	7.2	UJ	RY	4.4	UJ	Y	17	U	
AROCLOR-1254		8.9	UJ	R	7.2	UJ	RY	4.4	UJ	Y	17	U	
AROCLOR-1260		8.9	UJ	R	170	J	RY	4.4	UJ	Y	280	J	C

PROJ_NO: 02625	NSAMPLE	2W-SD-SD159-0001			2W-SD-SD161-0001			FD-040411-1		
SDG: WE55-1	LAB_ID	SE1685-9			SE1685-8			SE1685-16		
FRACTION: PCB	SAMP_DATE	4/4/2011			4/4/2011			4/4/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	25.4			37.7			36.5		
	DUP_OF							2W-SD-SD159-0001		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		4.8	UJ	RY	22	UJ	R	23	U	
AROCLOR-1221		4.8	UJ	RY	22	UJ	R	23	U	
AROCLOR-1232		5.6	UJ	RY	25	UJ	R	27	U	
AROCLOR-1242		4.8	UJ	RY	22	UJ	R	23	U	
AROCLOR-1248		4.8	UJ	RY	22	UJ	R	23	U	
AROCLOR-1254		4.8	UJ	RY	22	UJ	R	23	U	
AROCLOR-1260		150	J	RY	47	J	R	130	J	C

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-22
Client ID: 2W-SD-SD118-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 22-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 25.
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	30.	ug/Kgdrywt	1	20	39.	5.1	20.
2-Methylnaphthalene	J	16.	ug/Kgdrywt	1	20	39.	4.3	20.
1-Methylnaphthalene	J	13.	ug/Kgdrywt	1	20	39.	3.3	20.
Acenaphthylene	J	13.	ug/Kgdrywt	1	20	39.	2.4	20.
Acenaphthene	U	20.	ug/Kgdrywt	1	20	39.	2.9	20.
Fluorene	J	22.	ug/Kgdrywt	1	20	39.	6.3	20.
Phenanthrene		120	ug/Kgdrywt	1	20	39.	3.5	20.
Anthracene	J	21.	ug/Kgdrywt	1	20	39.	2.4	20.
Fluoranthene		180	ug/Kgdrywt	1	20	39.	3.5	20.
Pyrene		210	ug/Kgdrywt	1	20	39.	4.1	20.
Benzo (a) anthracene		120	ug/Kgdrywt	1	20	39.	3.7	20.
Chrysene		120	ug/Kgdrywt	1	20	39.	3.3	20.
Benzo (b) Fluoranthene		180	ug/Kgdrywt	1	20	39.	4.7	20.
Benzo(k)fluoranthene		46.	ug/Kgdrywt	1	20	39.	6.1	20.
Benzo(a)pyrene		130	ug/Kgdrywt	1	20	39.	6.5	20.
Indeno (1,2,3-cd) pyrene		180	ug/Kgdrywt	1	20	39.	3.7	20.
Dibenzo (a,h) anthracene		40.	ug/Kgdrywt	1	20	39.	3.5	20.
Benzo(g,h,i)perylene		120	ug/Kgdrywt	1	20	39.	3.9	20.
2-Methylnaphthalene-D10		54.0	%					
Fluorene-D10		49.5	%					
Pyrene-D10		62.7	%					

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ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-23
Client ID: 2W-SD-SD119-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 22-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 9.6
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	52.	ug/Kgdrywt	1	20	100	13.	52.
2-Methylnaphthalene	U	52.	ug/Kgdrywt	1	20	100	11.	52.
1-Methylnaphthalene	J	9.0	ug/Kgdrywt	1	20	100	8.8	52.
Acenaphthylene	J	30.	ug/Kgdrywt	1	20	100	6.2	52.
Acenaphthene	U	52.	ug/Kgdrywt	1	20	100	7.7	52.
Fluorene	U	52.	ug/Kgdrywt	1	20	100	16.	52.
Phenanthrene	J	32.	ug/Kgdrywt	1	20	100	9.3	52.
Anthracene	U	52.	ug/Kgdrywt	1	20	100	6.2	52.
Fluoranthene	J	60.	ug/Kgdrywt	1	20	100	9.3	52.
Pyrene	J	89.	ug/Kgdrywt	1	20	100	11.	52.
Benzo (a) anthracene	J	57.	ug/Kgdrywt	1	20	100	9.8	52.
Chrysene	J	36.	ug/Kgdrywt	1	20	100	8.8	52.
Benzo (b) Fluoranthene	J	78.	ug/Kgdrywt	1	20	100	12.	52.
Benzo(k)fluoranthene	J	19.	ug/Kgdrywt	1	20	100	16.	52.
Benzo(a)pyrene	J	73.	ug/Kgdrywt	1	20	100	17.	52.
Indeno (1,2,3-cd) pyrene	J	64.	ug/Kgdrywt	1	20	100	9.8	52.
Dibenzo (a,h) anthracene	U	52.	ug/Kgdrywt	1	20	100	9.3	52.
Benzo(g,h,i)perylene	J	40.	ug/Kgdrywt	1	20	100	10.	52.
2-Methylnaphthalene-D10		55.5	%					
Fluorene-D10		46.2	%					
Pyrene-D10		72.4	%					

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Katahdin
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Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-24
Client ID: 2W-SD-SD120-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 22-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 12.
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	43.	ug/Kgdrywt	1	20	86.	11.	43.
2-Methylnaphthalene	U	43.	ug/Kgdrywt	1	20	86.	9.4	43.
1-Methylnaphthalene	J	9.8	ug/Kgdrywt	1	20	86.	7.3	43.
Acenaphthylene	J	8.7	ug/Kgdrywt	1	20	86.	5.1	43.
Acenaphthene	J	9.4	ug/Kgdrywt	1	20	86.	6.4	43.
Fluorene	J	16.	ug/Kgdrywt	1	20	86.	14.	43.
Phenanthrene		130	ug/Kgdrywt	1	20	86.	7.7	43.
Anthracene	J	15.	ug/Kgdrywt	1	20	86.	5.1	43.
Fluoranthene		250	ug/Kgdrywt	1	20	86.	7.7	43.
Pyrene		460	ug/Kgdrywt	1	20	86.	9.0	43.
Benzo (a) anthracene		200	ug/Kgdrywt	1	20	86.	8.1	43.
Chrysene		180	ug/Kgdrywt	1	20	86.	7.3	43.
Benzo (b) Fluoranthene		290	ug/Kgdrywt	1	20	86.	10.	43.
Benzo(k)fluoranthene	J	78.	ug/Kgdrywt	1	20	86.	13.	43.
Benzo(a)pyrene		210	ug/Kgdrywt	1	20	86.	14.	43.
Indeno (1,2,3-cd) pyrene		280	ug/Kgdrywt	1	20	86.	8.1	43.
Dibenzo (a,h) anthracene	J	72.	ug/Kgdrywt	1	20	86.	7.7	43.
Benzo(g,h,i)perylene		170	ug/Kgdrywt	1	20	86.	8.6	43.
2-Methylnaphthalene-D10		32.6	%					
Fluorene-D10		33.6	%					
Pyrene-D10		67.4	%					

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ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-26
Client ID: 2W-SD-SD121-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 25-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 25.
Report Date: 26-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	6.4	ug/Kgdrywt	1	20	39.	5.1	20.
2-Methylnaphthalene	J	4.7	ug/Kgdrywt	1	20	39.	4.3	20.
1-Methylnaphthalene	J	5.6	ug/Kgdrywt	1	20	39.	3.4	20.
Acenaphthylene	J	14.	ug/Kgdrywt	1	20	39.	2.4	20.
Acenaphthene	J	6.6	ug/Kgdrywt	1	20	39.	3.0	20.
Fluorene	J	9.1	ug/Kgdrywt	1	20	39.	6.3	20.
Phenanthrene		100	ug/Kgdrywt	1	20	39.	3.6	20.
Anthracene	J	14.	ug/Kgdrywt	1	20	39.	2.4	20.
Fluoranthene		230	ug/Kgdrywt	1	20	39.	3.6	20.
Pyrene		300	ug/Kgdrywt	1	20	39.	4.1	20.
Benzo (a) anthracene		150	ug/Kgdrywt	1	20	39.	3.8	20.
Chrysene		200	ug/Kgdrywt	1	20	39.	3.4	20.
Benzo (b) Fluoranthene		330	ug/Kgdrywt	1	20	39.	4.7	20.
Benzo(k)fluoranthene		83.	ug/Kgdrywt	1	20	39.	6.1	20.
Benzo(a)pyrene		190	ug/Kgdrywt	1	20	39.	6.5	20.
Indeno (1,2,3-cd) pyrene		180	ug/Kgdrywt	1	20	39.	3.8	20.
Dibenzo (a,h) anthracene		47.	ug/Kgdrywt	1	20	39.	3.6	20.
Benzo(g,h,i)perylene		160	ug/Kgdrywt	1	20	39.	3.9	20.
2-Methylnaphthalene-D10		24.4	%					
Fluorene-D10		26.6	%					
Pyrene-D10		34.1	%					

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Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-25
Client ID: 2W-SD-SD126-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 22-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 12.
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	43.	ug/Kgdrywt	1	20	86.	11.	43.
2-Methylnaphthalene	U	43.	ug/Kgdrywt	1	20	86.	9.5	43.
1-Methylnaphthalene	J	15.	ug/Kgdrywt	1	20	86.	7.3	43.
Acenaphthylene	J	15.	ug/Kgdrywt	1	20	86.	5.2	43.
Acenaphthene	J	26.	ug/Kgdrywt	1	20	86.	6.4	43.
Fluorene	J	21.	ug/Kgdrywt	1	20	86.	14.	43.
Phenanthrene		260	ug/Kgdrywt	1	20	86.	7.7	43.
Anthracene	J	25.	ug/Kgdrywt	1	20	86.	5.2	43.
Fluoranthene		600	ug/Kgdrywt	1	20	86.	7.7	43.
Pyrene		790	ug/Kgdrywt	1	20	86.	9.0	43.
Benzo (a) anthracene		400	ug/Kgdrywt	1	20	86.	8.2	43.
Chrysene		430	ug/Kgdrywt	1	20	86.	7.3	43.
Benzo (b) Fluoranthene		740	ug/Kgdrywt	1	20	86.	10.	43.
Benzo(k)fluoranthene		170	ug/Kgdrywt	1	20	86.	13.	43.
Benzo(a)pyrene		480	ug/Kgdrywt	1	20	86.	14.	43.
Indeno (1,2,3-cd) pyrene		560	ug/Kgdrywt	1	20	86.	8.2	43.
Dibenzo (a,h) anthracene		150	ug/Kgdrywt	1	20	86.	7.7	43.
Benzo(g,h,i)perylene		340	ug/Kgdrywt	1	20	86.	8.6	43.
2-Methylnaphthalene-D10		35.2	%					
Fluorene-D10		33.8	%					
Pyrene-D10		46.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-29
Client ID: 2W-SD-SD134-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 22-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 19.
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	11.	ug/Kgdrywt	1	20	54.	7.0	27.
2-Methylnaphthalene	J	8.0	ug/Kgdrywt	1	20	54.	5.9	27.
1-Methylnaphthalene	J	17.	ug/Kgdrywt	1	20	54.	4.6	27.
Acenaphthylene	J	12.	ug/Kgdrywt	1	20	54.	3.2	27.
Acenaphthene	J	25.	ug/Kgdrywt	1	20	54.	4.0	27.
Fluorene	J	26.	ug/Kgdrywt	1	20	54.	8.6	27.
Phenanthrene		130	ug/Kgdrywt	1	20	54.	4.8	27.
Anthracene	J	20.	ug/Kgdrywt	1	20	54.	3.2	27.
Fluoranthene		310	ug/Kgdrywt	1	20	54.	4.8	27.
Pyrene		540	ug/Kgdrywt	1	20	54.	5.6	27.
Benzo (a) anthracene		220	ug/Kgdrywt	1	20	54.	5.1	27.
Chrysene		210	ug/Kgdrywt	1	20	54.	4.6	27.
Benzo (b) Fluoranthene		360	ug/Kgdrywt	1	20	54.	6.5	27.
Benzo(k)fluoranthene		99.	ug/Kgdrywt	1	20	54.	8.4	27.
Benzo(a)pyrene		240	ug/Kgdrywt	1	20	54.	8.9	27.
Indeno (1,2,3-cd) pyrene		240	ug/Kgdrywt	1	20	54.	5.1	27.
Dibenzo (a,h) anthracene		63.	ug/Kgdrywt	1	20	54.	4.8	27.
Benzo(g,h,i)perylene		150	ug/Kgdrywt	1	20	54.	5.4	27.
2-Methylnaphthalene-D10		34.2	%					
Fluorene-D10		38.4	%					
Pyrene-D10		65.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-28
Client ID: 2W-SD-SD136-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 22-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 9.5
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	23.	ug/Kgdrywt	1	20	110	15.	57.
2-Methylnaphthalene	J	15.	ug/Kgdrywt	1	20	110	12.	57.
1-Methylnaphthalene	J	35.	ug/Kgdrywt	1	20	110	9.6	57.
Acenaphthylene	J	10.	ug/Kgdrywt	1	20	110	6.8	57.
Acenaphthene	J	61.	ug/Kgdrywt	1	20	110	8.5	57.
Fluorene	J	41.	ug/Kgdrywt	1	20	110	18.	57.
Phenanthrene	J	110	ug/Kgdrywt	1	20	110	10.	57.
Anthracene	U	57.	ug/Kgdrywt	1	20	110	6.8	57.
Fluoranthene		240	ug/Kgdrywt	1	20	110	10.	57.
Pyrene		330	ug/Kgdrywt	1	20	110	12.	57.
Benzo (a) anthracene		160	ug/Kgdrywt	1	20	110	11.	57.
Chrysene		150	ug/Kgdrywt	1	20	110	9.6	57.
Benzo (b) Fluoranthene		270	ug/Kgdrywt	1	20	110	14.	57.
Benzo(k)fluoranthene	J	69.	ug/Kgdrywt	1	20	110	18.	57.
Benzo(a)pyrene		200	ug/Kgdrywt	1	20	110	19.	57.
Indeno (1,2,3-cd) pyrene		260	ug/Kgdrywt	1	20	110	11.	57.
Dibenzo (a,h) anthracene	U	57.	ug/Kgdrywt	1	20	110	10.	57.
Benzo(g,h,i)perylene		160	ug/Kgdrywt	1	20	110	11.	57.
2-Methylnaphthalene-D10		63.9	%					
Fluorene-D10		57.3	%					
Pyrene-D10		86.7	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-17
Client ID: 2W-SD-SD138-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 23-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 39.
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	29.	ug/Kgdrywt	1	20	50.	6.5	25.
2-Methylnaphthalene	J	16.	ug/Kgdrywt	1	20	50.	5.5	25.
1-Methylnaphthalene	J	14.	ug/Kgdrywt	1	20	50.	4.2	25.
Acenaphthylene	J	24.	ug/Kgdrywt	1	20	50.	3.0	25.
Acenaphthene	J	13.	ug/Kgdrywt	1	20	50.	3.8	25.
Fluorene	J	30.	ug/Kgdrywt	1	20	50.	8.0	25.
Phenanthrene		190	ug/Kgdrywt	1	20	50.	4.5	25.
Anthracene	J	45.	ug/Kgdrywt	1	20	50.	3.0	25.
Fluoranthene		350	ug/Kgdrywt	1	20	50.	4.5	25.
Pyrene	E	790	ug/Kgdrywt	1	20	50.	5.3	25.
Benzo (a) anthracene		250	ug/Kgdrywt	1	20	50.	4.8	25.
Chrysene		340	ug/Kgdrywt	1	20	50.	4.2	25.
Benzo (b) Fluoranthene		450	ug/Kgdrywt	1	20	50.	6.0	25.
Benzo(k)fluoranthene		110	ug/Kgdrywt	1	20	50.	7.8	25.
Benzo(a)pyrene		290	ug/Kgdrywt	1	20	50.	8.3	25.
Indeno (1,2,3-cd) pyrene		210	ug/Kgdrywt	1	20	50.	4.8	25.
Dibenzo (a,h) anthracene		55.	ug/Kgdrywt	1	20	50.	4.5	25.
Benzo(g,h,i)perylene		190	ug/Kgdrywt	1	20	50.	5.0	25.
2-Methylnaphthalene-D10		31.2	%					
Fluorene-D10		37.1	%					
Pyrene-D10		85.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-17DL
Client ID: 2W-SD-SD138-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 25-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 39.
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	28.	ug/Kgdrywt	2	20	100	13.	50.
2-Methylnaphthalene	J	14.	ug/Kgdrywt	2	20	100	11.	50.
1-Methylnaphthalene	J	11.	ug/Kgdrywt	2	20	100	8.5	50.
Acenaphthylene	J	23.	ug/Kgdrywt	2	20	100	6.0	50.
Acenaphthene	J	15.	ug/Kgdrywt	2	20	100	7.5	50.
Fluorene	J	31.	ug/Kgdrywt	2	20	100	16.	50.
Phenanthrene		200	ug/Kgdrywt	2	20	100	9.0	50.
Anthracene	J	44.	ug/Kgdrywt	2	20	100	6.0	50.
Fluoranthene		390	ug/Kgdrywt	2	20	100	9.0	50.
Pyrene		650	ug/Kgdrywt	2	20	100	10.	50.
Benzo (a) anthracene		260	ug/Kgdrywt	2	20	100	9.5	50.
Chrysene		340	ug/Kgdrywt	2	20	100	8.5	50.
Benzo (b) Fluoranthene		380	ug/Kgdrywt	2	20	100	12.	50.
Benzo(k)fluoranthene		130	ug/Kgdrywt	2	20	100	16.	50.
Benzo(a)pyrene		280	ug/Kgdrywt	2	20	100	16.	50.
Indeno (1,2,3-cd) pyrene		200	ug/Kgdrywt	2	20	100	9.5	50.
Dibenzo (a,h) anthracene	J	58.	ug/Kgdrywt	2	20	100	9.0	50.
Benzo(g,h,i)perylene		160	ug/Kgdrywt	2	20	100	10.	50.
2-Methylnaphthalene-D10		36.6	%					
Fluorene-D10		40.2	%					
Pyrene-D10		66.5	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-1
Client ID: 2W-SD-SD147-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 22-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 56.
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	7.2	ug/Kgdrywt	1	20	33.	4.3	16.
2-Methylnaphthalene	U	16.	ug/Kgdrywt	1	20	33.	3.6	16.
1-Methylnaphthalene	J	5.0	ug/Kgdrywt	1	20	33.	2.8	16.
Acenaphthylene	J	19.	ug/Kgdrywt	1	20	33.	2.0	16.
Acenaphthene	J	11.	ug/Kgdrywt	1	20	33.	2.5	16.
Fluorene	J	16.	ug/Kgdrywt	1	20	33.	5.3	16.
Phenanthrene		310	ug/Kgdrywt	1	20	33.	3.0	16.
Anthracene		45.	ug/Kgdrywt	1	20	33.	2.0	16.
Fluoranthene	E	700	ug/Kgdrywt	1	20	33.	3.0	16.
Pyrene	E	690	ug/Kgdrywt	1	20	33.	3.5	16.
Benzo (a) anthracene	E	450	ug/Kgdrywt	1	20	33.	3.1	16.
Chrysene	E	580	ug/Kgdrywt	1	20	33.	2.8	16.
Benzo (b) Fluoranthene	E	640	ug/Kgdrywt	1	20	33.	4.0	16.
Benzo(k)fluoranthene		200	ug/Kgdrywt	1	20	33.	5.1	16.
Benzo(a)pyrene	E	470	ug/Kgdrywt	1	20	33.	5.4	16.
Indeno (1,2,3-cd) pyrene	E	630	ug/Kgdrywt	1	20	33.	3.1	16.
Dibenzo (a,h) anthracene		150	ug/Kgdrywt	1	20	33.	3.0	16.
Benzo(g,h,i)perylene		400	ug/Kgdrywt	1	20	33.	3.3	16.
2-Methylnaphthalene-D10		30.9	%					
Fluorene-D10		36.7	%					
Pyrene-D10		57.9	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-1DL
Client ID: 2W-SD-SD147-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 23-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 56.
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	50.	ug/Kgdrywt	3	20	99.	13.	50.
2-Methylnaphthalene	U	50.	ug/Kgdrywt	3	20	99.	11.	50.
1-Methylnaphthalene	U	50.	ug/Kgdrywt	3	20	99.	8.4	50.
Acenaphthylene	J	16.	ug/Kgdrywt	3	20	99.	5.9	50.
Acenaphthene	J	10.	ug/Kgdrywt	3	20	99.	7.4	50.
Fluorene	J	18.	ug/Kgdrywt	3	20	99.	16.	50.
Phenanthrene		330	ug/Kgdrywt	3	20	99.	8.9	50.
Anthracene	J	42.	ug/Kgdrywt	3	20	99.	5.9	50.
Fluoranthene		820	ug/Kgdrywt	3	20	99.	8.9	50.
Pyrene		960	ug/Kgdrywt	3	20	99.	10.	50.
Benzo (a) anthracene		440	ug/Kgdrywt	3	20	99.	9.4	50.
Chrysene		540	ug/Kgdrywt	3	20	99.	8.4	50.
Benzo (b) Fluoranthene		740	ug/Kgdrywt	3	20	99.	12.	50.
Benzo(k)fluoranthene		230	ug/Kgdrywt	3	20	99.	15.	50.
Benzo(a)pyrene		510	ug/Kgdrywt	3	20	99.	16.	50.
Indeno (1,2,3-cd) pyrene		410	ug/Kgdrywt	3	20	99.	9.4	50.
Dibenzo (a,h) anthracene	J	94.	ug/Kgdrywt	3	20	99.	8.9	50.
Benzo(g,h,i)perylene		340	ug/Kgdrywt	3	20	99.	9.9	50.
2-Methylnaphthalene-D10		31.0	%					
Fluorene-D10		38.0	%					
Pyrene-D10		66.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-3
Client ID: 2W-SD-SD149-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 21-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 94.
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	9.6	ug/Kgdrywt	1	20	19.	2.5	9.6
2-Methylnaphthalene	U	9.6	ug/Kgdrywt	1	20	19.	2.1	9.6
1-Methylnaphthalene	U	9.6	ug/Kgdrywt	1	20	19.	1.6	9.6
Acenaphthylene	U	9.6	ug/Kgdrywt	1	20	19.	1.2	9.6
Acenaphthene	U	9.6	ug/Kgdrywt	1	20	19.	1.4	9.6
Fluorene	U	9.6	ug/Kgdrywt	1	20	19.	3.1	9.6
Phenanthrene	J	8.4	ug/Kgdrywt	1	20	19.	1.7	9.6
Anthracene	U	9.6	ug/Kgdrywt	1	20	19.	1.2	9.6
Fluoranthene		24.	ug/Kgdrywt	1	20	19.	1.7	9.6
Pyrene		30.	ug/Kgdrywt	1	20	19.	2.0	9.6
Benzo (a) anthracene	J	13.	ug/Kgdrywt	1	20	19.	1.8	9.6
Chrysene	J	11.	ug/Kgdrywt	1	20	19.	1.6	9.6
Benzo (b) Fluoranthene	J	17.	ug/Kgdrywt	1	20	19.	2.3	9.6
Benzo(k)fluoranthene	J	8.1	ug/Kgdrywt	1	20	19.	3.0	9.6
Benzo(a)pyrene	J	17.	ug/Kgdrywt	1	20	19.	3.2	9.6
Indeno (1,2,3-cd) pyrene	J	14.	ug/Kgdrywt	1	20	19.	1.8	9.6
Dibenzo (a,h) anthracene	J	7.7	ug/Kgdrywt	1	20	19.	1.7	9.6
Benzo(g,h,i)perylene	J	8.4	ug/Kgdrywt	1	20	19.	1.9	9.6
2-Methylnaphthalene-D10		42.8	%					
Fluorene-D10		43.8	%					
Pyrene-D10		105.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-4
Client ID: 2W-SD-SD152-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 22-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 17.
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	27.	ug/Kgdrywt	1	20	54.	7.0	27.
2-Methylnaphthalene	U	27.	ug/Kgdrywt	1	20	54.	5.9	27.
1-Methylnaphthalene	J	6.9	ug/Kgdrywt	1	20	54.	4.6	27.
Acenaphthylene	U	27.	ug/Kgdrywt	1	20	54.	3.2	27.
Acenaphthene	J	34.	ug/Kgdrywt	1	20	54.	4.0	27.
Fluorene	J	26.	ug/Kgdrywt	1	20	54.	8.6	27.
Phenanthrene		75.	ug/Kgdrywt	1	20	54.	4.8	27.
Anthracene	J	10.	ug/Kgdrywt	1	20	54.	3.2	27.
Fluoranthene		210	ug/Kgdrywt	1	20	54.	4.8	27.
Pyrene		260	ug/Kgdrywt	1	20	54.	5.7	27.
Benzo (a) anthracene		140	ug/Kgdrywt	1	20	54.	5.1	27.
Chrysene		120	ug/Kgdrywt	1	20	54.	4.6	27.
Benzo (b) Fluoranthene		220	ug/Kgdrywt	1	20	54.	6.5	27.
Benzo(k)fluoranthene		60.	ug/Kgdrywt	1	20	54.	8.4	27.
Benzo(a)pyrene		160	ug/Kgdrywt	1	20	54.	8.9	27.
Indeno (1,2,3-cd) pyrene		240	ug/Kgdrywt	1	20	54.	5.1	27.
Dibenzo (a,h) anthracene	J	42.	ug/Kgdrywt	1	20	54.	4.8	27.
Benzo(g,h,i)perylene		150	ug/Kgdrywt	1	20	54.	5.4	27.
2-Methylnaphthalene-D10		49.2	%					
Fluorene-D10		45.2	%					
Pyrene-D10		73.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-7
Client ID: 2W-SD-SD154-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 23-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 27.
Report Date: 12-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	40.	ug/Kgdrywt	1	20	40.	5.1	20.
2-Methylnaphthalene	J	21.	ug/Kgdrywt	1	20	40.	4.3	20.
1-Methylnaphthalene	J	20.	ug/Kgdrywt	1	20	40.	3.4	20.
Acenaphthylene	U	20.	ug/Kgdrywt	1	20	40.	2.4	20.
Acenaphthene		120	ug/Kgdrywt	1	20	40.	3.0	20.
Fluorene		98.	ug/Kgdrywt	1	20	40.	6.3	20.
Phenanthrene		140	ug/Kgdrywt	1	20	40.	3.6	20.
Anthracene		45.	ug/Kgdrywt	1	20	40.	2.4	20.
Fluoranthene		130	ug/Kgdrywt	1	20	40.	3.6	20.
Pyrene	E	710	ug/Kgdrywt	1	20	40.	4.1	20.
Benzo (a) anthracene		190	ug/Kgdrywt	1	20	40.	3.8	20.
Chrysene		270	ug/Kgdrywt	1	20	40.	3.4	20.
Benzo (b) Fluoranthene		240	ug/Kgdrywt	1	20	40.	4.7	20.
Benzo(k)fluoranthene		77.	ug/Kgdrywt	1	20	40.	6.1	20.
Benzo(a)pyrene		180	ug/Kgdrywt	1	20	40.	6.5	20.
Indeno (1,2,3-cd) pyrene		140	ug/Kgdrywt	1	20	40.	3.8	20.
Dibenzo (a,h) anthracene	J	30.	ug/Kgdrywt	1	20	40.	3.6	20.
Benzo(g,h,i)perylene		140	ug/Kgdrywt	1	20	40.	4.0	20.
2-Methylnaphthalene-D10		71.7	%					
Fluorene-D10		49.9	%					
Pyrene-D10		115.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-7DL
Client ID: 2W-SD-SD154-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 25-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 27.
Report Date: 12-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	40.	ug/Kgdrywt	2	20	79.	10.	40.
2-Methylnaphthalene	J	15.	ug/Kgdrywt	2	20	79.	8.7	40.
1-Methylnaphthalene	J	20.	ug/Kgdrywt	2	20	79.	6.7	40.
Acenaphthylene	J	18.	ug/Kgdrywt	2	20	79.	4.7	40.
Acenaphthene		110	ug/Kgdrywt	2	20	79.	5.9	40.
Fluorene		130	ug/Kgdrywt	2	20	79.	13.	40.
Phenanthrene		130	ug/Kgdrywt	2	20	79.	7.1	40.
Anthracene	J	52.	ug/Kgdrywt	2	20	79.	4.7	40.
Fluoranthene		180	ug/Kgdrywt	2	20	79.	7.1	40.
Pyrene		450	ug/Kgdrywt	2	20	79.	8.3	40.
Benzo (a) anthracene		200	ug/Kgdrywt	2	20	79.	7.5	40.
Chrysene		170	ug/Kgdrywt	2	20	79.	6.7	40.
Benzo (b) Fluoranthene		210	ug/Kgdrywt	2	20	79.	9.5	40.
Benzo(k)fluoranthene	J	51.	ug/Kgdrywt	2	20	79.	12.	40.
Benzo(a)pyrene		170	ug/Kgdrywt	2	20	79.	13.	40.
Indeno (1,2,3-cd) pyrene		250	ug/Kgdrywt	2	20	79.	7.5	40.
Dibenzo (a,h) anthracene	J	63.	ug/Kgdrywt	2	20	79.	7.1	40.
Benzo(g,h,i)perylene		180	ug/Kgdrywt	2	20	79.	7.9	40.
2-Methylnaphthalene-D10		55.2	%					
Fluorene-D10		49.8	%					
Pyrene-D10		85.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-10
Client ID: 2W-SD-SD158-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 22-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 46.
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	12.	ug/Kgdrywt	1	20	39.	5.1	20.
2-Methylnaphthalene	J	6.2	ug/Kgdrywt	1	20	39.	4.3	20.
1-Methylnaphthalene	J	15.	ug/Kgdrywt	1	20	39.	3.4	20.
Acenaphthylene	J	6.8	ug/Kgdrywt	1	20	39.	2.4	20.
Acenaphthene	J	30.	ug/Kgdrywt	1	20	39.	3.0	20.
Fluorene	J	24.	ug/Kgdrywt	1	20	39.	6.3	20.
Phenanthrene		120	ug/Kgdrywt	1	20	39.	3.6	20.
Anthracene	J	22.	ug/Kgdrywt	1	20	39.	2.4	20.
Fluoranthene		260	ug/Kgdrywt	1	20	39.	3.6	20.
Pyrene		330	ug/Kgdrywt	1	20	39.	4.1	20.
Benzo (a) anthracene		210	ug/Kgdrywt	1	20	39.	3.7	20.
Chrysene		170	ug/Kgdrywt	1	20	39.	3.4	20.
Benzo (b) Fluoranthene		260	ug/Kgdrywt	1	20	39.	4.7	20.
Benzo(k)fluoranthene		63.	ug/Kgdrywt	1	20	39.	6.1	20.
Benzo(a)pyrene		200	ug/Kgdrywt	1	20	39.	6.5	20.
Indeno (1,2,3-cd) pyrene		280	ug/Kgdrywt	1	20	39.	3.7	20.
Dibenzo (a,h) anthracene	J	30.	ug/Kgdrywt	1	20	39.	3.6	20.
Benzo(g,h,i)perylene		170	ug/Kgdrywt	1	20	39.	3.9	20.
2-Methylnaphthalene-D10		41.5	%					
Fluorene-D10		40.5	%					
Pyrene-D10		61.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-9DL
Client ID: 2W-SD-SD159-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 25-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 25.
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		170	ug/Kgdrywt	3	20	120	16.	60.
2-Methylnaphthalene	J	100	ug/Kgdrywt	3	20	120	13.	60.
1-Methylnaphthalene		570	ug/Kgdrywt	3	20	120	10.	60.
Acenaphthylene	U	60.	ug/Kgdrywt	3	20	120	7.2	60.
Acenaphthene		390	ug/Kgdrywt	3	20	120	8.9	60.
Fluorene		490	ug/Kgdrywt	3	20	120	19.	60.
Phenanthrene		740	ug/Kgdrywt	3	20	120	11.	60.
Anthracene	U	60.	ug/Kgdrywt	3	20	120	7.2	60.
Fluoranthene		340	ug/Kgdrywt	3	20	120	11.	60.
Pyrene		450	ug/Kgdrywt	3	20	120	12.	60.
Benzo (a) anthracene		170	ug/Kgdrywt	3	20	120	11.	60.
Chrysene		140	ug/Kgdrywt	3	20	120	10.	60.
Benzo (b) Fluoranthene		230	ug/Kgdrywt	3	20	120	14.	60.
Benzo(k)fluoranthene	J	63.	ug/Kgdrywt	3	20	120	18.	60.
Benzo(a)pyrene		170	ug/Kgdrywt	3	20	120	20.	60.
Indeno (1,2,3-cd) pyrene		260	ug/Kgdrywt	3	20	120	11.	60.
Dibenzo (a,h) anthracene	J	74.	ug/Kgdrywt	3	20	120	11.	60.
Benzo(g,h,i)perylene		190	ug/Kgdrywt	3	20	120	12.	60.
2-Methylnaphthalene-D10	*	139.	%					
Fluorene-D10	*	113.	%					
Pyrene-D10		95.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-8
Client ID: 2W-SD-SD161-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 22-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 38.
Report Date: 12-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	10.	ug/Kgdrywt	1	20	53.	6.8	26.
2-Methylnaphthalene	U	26.	ug/Kgdrywt	1	20	53.	5.8	26.
1-Methylnaphthalene	J	11.	ug/Kgdrywt	1	20	53.	4.5	26.
Acenaphthylene	U	26.	ug/Kgdrywt	1	20	53.	3.2	26.
Acenaphthene		72.	ug/Kgdrywt	1	20	53.	4.0	26.
Fluorene		97.	ug/Kgdrywt	1	20	53.	8.4	26.
Phenanthrene		180	ug/Kgdrywt	1	20	53.	4.7	26.
Anthracene	J	50.	ug/Kgdrywt	1	20	53.	3.2	26.
Fluoranthene		420	ug/Kgdrywt	1	20	53.	4.7	26.
Pyrene		530	ug/Kgdrywt	1	20	53.	5.5	26.
Benzo (a) anthracene		280	ug/Kgdrywt	1	20	53.	5.0	26.
Chrysene		240	ug/Kgdrywt	1	20	53.	4.5	26.
Benzo (b) Fluoranthene		320	ug/Kgdrywt	1	20	53.	6.3	26.
Benzo(k)fluoranthene		83.	ug/Kgdrywt	1	20	53.	8.2	26.
Benzo(a)pyrene		240	ug/Kgdrywt	1	20	53.	8.7	26.
Indeno (1,2,3-cd) pyrene		290	ug/Kgdrywt	1	20	53.	5.0	26.
Dibenzo (a,h) anthracene		79.	ug/Kgdrywt	1	20	53.	4.7	26.
Benzo(g,h,i)perylene		180	ug/Kgdrywt	1	20	53.	5.3	26.
2-Methylnaphthalene-D10		58.0	%					
Fluorene-D10		46.4	%					
Pyrene-D10		66.5	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-16
Client ID: FD-040411-1
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 22-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 36.
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		70.	ug/Kgdrywt	1	20	53.	6.9	26.
2-Methylnaphthalene		57.	ug/Kgdrywt	1	20	53.	5.8	26.
1-Methylnaphthalene		390	ug/Kgdrywt	1	20	53.	4.5	26.
Acenaphthylene	U	26.	ug/Kgdrywt	1	20	53.	3.2	26.
Acenaphthene		120	ug/Kgdrywt	1	20	53.	4.0	26.
Fluorene		260	ug/Kgdrywt	1	20	53.	8.4	26.
Phenanthrene		580	ug/Kgdrywt	1	20	53.	4.8	26.
Anthracene	J	52.	ug/Kgdrywt	1	20	53.	3.2	26.
Fluoranthene		140	ug/Kgdrywt	1	20	53.	4.8	26.
Pyrene		180	ug/Kgdrywt	1	20	53.	5.6	26.
Benzo (a) anthracene		80.	ug/Kgdrywt	1	20	53.	5.0	26.
Chrysene		73.	ug/Kgdrywt	1	20	53.	4.5	26.
Benzo (b) Fluoranthene		110	ug/Kgdrywt	1	20	53.	6.3	26.
Benzo(k)fluoranthene	J	27.	ug/Kgdrywt	1	20	53.	8.2	26.
Benzo(a)pyrene		72.	ug/Kgdrywt	1	20	53.	8.7	26.
Indeno (1,2,3-cd) pyrene		98.	ug/Kgdrywt	1	20	53.	5.0	26.
Dibenzo (a,h) anthracene	U	26.	ug/Kgdrywt	1	20	53.	4.8	26.
Benzo(g,h,i)perylene		62.	ug/Kgdrywt	1	20	53.	5.3	26.
2-Methylnaphthalene-D10		33.1	%					
Fluorene-D10		35.6	%					
Pyrene-D10		60.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-22
Client ID: 2W-SD-SD118-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 20-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 25.
Report Date: 26-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	E	310	ug/Kgdrywt	1	3.3	1.9	0.11	0.96
4,4'-DDD	J	1400	ug/Kgdrywt	1	3.3	1.9	0.12	0.96
4,4'-DDT	E	58.	ug/Kgdrywt	1	3.3	1.9	0.18	0.96
Tetrachloro-M-Xylene		77.3	%					
Decachlorobiphenyl	*	110.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-22DL
Client ID: 2W-SD-SD118-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 25.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		320	ug/Kgdrywt	100	3.3	190	11.	96.
4,4'-DDD		3200	ug/Kgdrywt	100	3.3	190	12.	96.
4,4'-DDT	J	94.	ug/Kgdrywt	100	3.3	190	18.	96.
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-23
Client ID: 2W-SD-SD119-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 20-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 9.6
Report Date: 26-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		54.	ug/Kgdrywt	1	3.3	5.0	0.29	2.5
4,4'-DDD	E	1200	ug/Kgdrywt	1	3.3	5.0	0.30	2.5
4,4'-DDT	J	20.	ug/Kgdrywt	1	3.3	5.0	0.47	2.5
Tetrachloro-M-Xylene		81.6	%					
Decachlorobiphenyl		93.1	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-23DL
Client ID: 2W-SD-SD119-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 9.6
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	86.	ug/Kgdrywt	50	3.3	250	14.	120
4,4'-DDD		1800	ug/Kgdrywt	50	3.3	250	15.	120
4,4'-DDT	J	44.	ug/Kgdrywt	50	3.3	250	24.	120
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-24
Client ID: 2W-SD-SD120-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 20-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 12.
Report Date: 26-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		23.	ug/Kgdrywt	1	3.3	4.1	0.24	2.0
4,4'-DDD	E	360	ug/Kgdrywt	1	3.3	4.1	0.25	2.0
4,4'-DDT	J	11.	ug/Kgdrywt	1	3.3	4.1	0.38	2.0
Tetrachloro-M-Xylene		79.7	%					
Decachlorobiphenyl		83.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-24DL
Client ID: 2W-SD-SD120-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 12.
Report Date: 12-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	30.	ug/Kgdrywt	10	3.3	41.	2.4	20.
4,4'-DDD		460	ug/Kgdrywt	10	3.3	41.	2.5	20.
4,4'-DDT	JJ	16.	ug/Kgdrywt	10	3.3	41.	3.8	20
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-26
Client ID: 2W-SD-SD121-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 20-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 25.
Report Date: 29-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		33.	ug/Kgdrywt	1	3.3	1.8	0.10	0.92
4,4'-DDD	E	130	ug/Kgdrywt	1	3.3	1.8	0.11	0.92
4,4'-DDT	J	45.	ug/Kgdrywt	1	3.3	1.8	0.17	0.92
Tetrachloro-M-Xylene	*	93.0	%					
Decachlorobiphenyl		83.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-26
Client ID: 2W-SD-SD121-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 20-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 25.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		33.	ug/Kgdrywt	1	3.3	1.8	0.10	0.92
4,4'-DDD	E	130	ug/Kgdrywt	1	3.3	1.8	0.11	0.92
4,4'-DDT	J	45.	ug/Kgdrywt	1	3.3	1.8	0.17	0.92
Tetrachloro-M-Xylene	*	93.0	%					
Decachlorobiphenyl		83.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-26DL
Client ID: 2W-SD-SD121-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 25.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		35.	ug/Kgdrywt	10	3.3	18.	1.0	9.2
4,4'-DDD		150	ug/Kgdrywt	10	3.3	18.	1.1	9.2
4,4'-DDT	J	59.	ug/Kgdrywt	10	3.3	18.	1.7	9.2
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-29DL
Client ID: 2W-SD-SD134-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 19.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		280	ug/Kgdrywt	100	3.3	250	14.	130
4,4'-DDD		2000	ug/Kgdrywt	100	3.3	250	15.	130
4,4'-DDT		830	ug/Kgdrywt	100	3.3	250	24.	130
Tetrachloro-M-Xylene	D	162.	%					
Decachlorobiphenyl	D	124.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-28
Client ID: 2W-SD-SD136-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 20-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 9.5
Report Date: 26-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	E	1800	ug/Kgdrywt	1	3.3	5.1	0.30	2.6
4,4'-DDD	J	5300	ug/Kgdrywt	1	3.3	5.1	0.31	2.6
4,4'-DDT	U	2.6	ug/Kgdrywt	1	3.3	5.1	0.48	2.6
Tetrachloro-M-Xylene		66.6	%					
Decachlorobiphenyl	*	130.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-28DL
Client ID: 2W-SD-SD136-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 9.5
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		1700	ug/Kgdrywt	100	3.3	510	30.	260
4,4'-DDD		12000	ug/Kgdrywt	100	3.3	510	31.	260
4,4'-DDT	U	260	ug/Kgdrywt	100	3.3	510	48.	260
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-17
Client ID: 2W-SD-SD138-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 20-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 39.
Report Date: 29-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	E	1000	ug/Kgdrywt	1	3.3	8.3	0.48	4.2
4,4'-DDD	E	4600	ug/Kgdrywt	1	3.3	8.3	0.50	4.2
4,4'-DDT	E	320	ug/Kgdrywt	1	3.3	8.3	0.78	4.2
Tetrachloro-M-Xylene		71.1	%					
Decachlorobiphenyl		75.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-17DL
Client ID: 2W-SD-SD138-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 39.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		930	ug/Kgdrywt	100	3.3	830	48.	420
4,4'-DDD		7100	ug/Kgdrywt	100	3.3	830	50.	420
4,4'-DDT	J	360	ug/Kgdrywt	100	3.3	830	78.	420
Tetrachloro-M-Xylene	D	0	%					
Decachlorobiphenyl	D	0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-1
Client ID: 2W-SD-SD147-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 19-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 56.
Report Date: 26-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		35.	ug/Kgdrywt	1	3.3	5.9	0.34	2.9
4,4'-DDD		120	ug/Kgdrywt	1	3.3	5.9	0.36	2.9
4,4'-DDT		48.	ug/Kgdrywt	1	3.3	5.9	0.55	2.9
Tetrachloro-M-Xylene		62.6	%					
Decachlorobiphenyl		62.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-3
Client ID: 2W-SD-SD149-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 19-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 94.
Report Date: 26-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	U	1.7	ug/Kgdrywt	1	3.3	3.4	0.20	1.7
4,4'-DDD	J	0.82	ug/Kgdrywt	1	3.3	3.4	0.21	1.7
4,4'-DDT	U	1.7	ug/Kgdrywt	1	3.3	3.4	0.32	1.7
Tetrachloro-M-Xylene		47.1	%					
Decachlorobiphenyl		70.7	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-4
Client ID: 2W-SD-SD152-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 19-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 17.
Report Date: 26-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		6.5	ug/Kgdrywt	1	3.3	2.8	0.16	1.4
4,4'-DDD		51.	ug/Kgdrywt	1	3.3	2.8	0.17	1.4
4,4'-DDT	J	11.	ug/Kgdrywt	1	3.3	2.8	0.26	1.4
Tetrachloro-M-Xylene		56.0	%					
Decachlorobiphenyl		68.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-7
Client ID: 2W-SD-SD154-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 19-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 27.
Report Date: 26-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	410	ug/Kgdrywt	1	3.3	1.7	0.099	0.86
4,4'-DDD	E	510	ug/Kgdrywt	1	3.3	1.7	0.10	0.86
4,4'-DDT	U	0.86	ug/Kgdrywt	1	3.3	1.7	0.16	0.86
Tetrachloro-M-Xylene		66.1	%					
Decachlorobiphenyl		67.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-7DL
Client ID: 2W-SD-SD154-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 27-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 27.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	390	ug/Kgdrywt	50	3.3	86.	5.0	43.
4,4'-DDD		730	ug/Kgdrywt	50	3.3	86.	5.2	43.
4,4'-DDT	U	43.	ug/Kgdrywt	50	3.3	86.	8.1	43.
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-10
Client ID: 2W-SD-SD158-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 20-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 46.
Report Date: 26-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		16.	ug/Kgdrywt	1	3.3	6.8	0.39	3.4
4,4'-DDD		82.	ug/Kgdrywt	1	3.3	6.8	0.41	3.4
4,4'-DDT	J	20.	ug/Kgdrywt	1	3.3	6.8	0.64	3.4
Tetrachloro-M-Xylene		79.8	%					
Decachlorobiphenyl		66.5	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-9
Client ID: 2W-SD-SD159-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 19-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 25.
Report Date: 26-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		11.	ug/Kgdrywt	1	3.3	1.8	0.11	0.93
4,4'-DDD	E	54.	ug/Kgdrywt	1	3.3	1.8	0.11	0.93
4,4'-DDT	U	0.93	ug/Kgdrywt	1	3.3	1.8	0.17	0.93
Tetrachloro-M-Xylene		73.8	%					
Decachlorobiphenyl		78.1	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-9DL
Client ID: 2W-SD-SD159-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 27-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 25.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		11.	ug/Kgdrywt	5	3.3	9.3	0.53	4.6
4,4'-DDD		56.	ug/Kgdrywt	5	3.3	9.3	0.56	4.6
4,4'-DDT	U	4.6	ug/Kgdrywt	5	3.3	9.3	0.87	4.6
Tetrachloro-M-Xylene		74.9	%					
Decachlorobiphenyl		82.9	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-8
Client ID: 2W-SD-SD161-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 19-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 38.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	U	4.2	ug/Kgdrywt	1	3.3	8.4	0.48	4.2
4,4'-DDD	U	4.2	ug/Kgdrywt	1	3.3	8.4	0.51	4.2
4,4'-DDT	U	4.2	ug/Kgdrywt	1	3.3	8.4	0.79	4.2
Tetrachloro-M-Xylene		34.8	%					
Decachlorobiphenyl		59.5	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-16
Client ID: FD-040411-1
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 20-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 36.
Report Date: 26-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	6.6	ug/Kgdrywt	1	3.3	8.9	0.51	4.4
4,4'-DDD		62.	ug/Kgdrywt	1	3.3	8.9	0.54	4.4
4,4'-DDT	J	9.9	ug/Kgdrywt	1	3.3	8.9	0.83	4.4
Tetrachloro-M-Xylene		67.3	%					
Decachlorobiphenyl		75.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-22
Client ID: 2W-SD-SD118-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 25.
Report Date: 22-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	5.0	ug/Kgdrywt	1	17	9.9	3.5	5.0
Aroclor-1221	U	5.0	ug/Kgdrywt	1	17	9.9	4.6	5.0
Aroclor-1232	U	5.8	ug/Kgdrywt	1	17	9.9	5.4	5.8
Aroclor-1242	U	5.0	ug/Kgdrywt	1	17	9.9	3.4	5.0
Aroclor-1248	U	5.0	ug/Kgdrywt	1	17	9.9	3.6	5.0
Aroclor-1254	U	5.0	ug/Kgdrywt	1	17	9.9	2.7	5.0
Aroclor-1260	U	5.0	ug/Kgdrywt	1	17	9.9	3.5	5.0
Tetrachloro-M-Xylene		69.6	%					
Decachlorobiphenyl		102.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-23
Client ID: 2W-SD-SD119-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 9.6
Report Date: 22-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	13.	ug/Kgdrywt	1	17	26.	9.1	13.
Aroclor-1221	U	13.	ug/Kgdrywt	1	17	26.	12.	13.
Aroclor-1232	U	15.	ug/Kgdrywt	1	17	26.	14.	15.
Aroclor-1242	U	13.	ug/Kgdrywt	1	17	26.	8.8	13.
Aroclor-1248	U	13.	ug/Kgdrywt	1	17	26.	9.3	13.
Aroclor-1254	U	13.	ug/Kgdrywt	1	17	26.	7.2	13.
Aroclor-1260	U	13.	ug/Kgdrywt	1	17	26.	9.1	13.
Tetrachloro-M-Xylene		69.0	%					
Decachlorobiphenyl		81.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-24
Client ID: 2W-SD-SD120-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 12.
Report Date: 22-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	10.	ug/Kgdrywt	1	17	21.	7.4	10.
Aroclor-1221	U	10.	ug/Kgdrywt	1	17	21.	9.8	10.
Aroclor-1232	U	12.	ug/Kgdrywt	1	17	21.	12.	12.
Aroclor-1242	U	10.	ug/Kgdrywt	1	17	21.	7.2	10.
Aroclor-1248	U	10.	ug/Kgdrywt	1	17	21.	7.6	10.
Aroclor-1254	U	10.	ug/Kgdrywt	1	17	21.	5.8	10.
Aroclor-1260		220	ug/Kgdrywt	1	17	21.	7.4	10.
Tetrachloro-M-Xylene		80.4	%					
Decachlorobiphenyl		92.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-26
Client ID: 2W-SD-SD121-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 25.
Report Date: 22-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	4.7	ug/Kgdrywt	1	17	9.5	3.3	4.7
Aroclor-1221	U	4.7	ug/Kgdrywt	1	17	9.5	4.4	4.7
Aroclor-1232	U	5.6	ug/Kgdrywt	1	17	9.5	5.2	5.6
Aroclor-1242	U	4.7	ug/Kgdrywt	1	17	9.5	3.2	4.7
Aroclor-1248	U	4.7	ug/Kgdrywt	1	17	9.5	3.4	4.7
Aroclor-1254	U	4.7	ug/Kgdrywt	1	17	9.5	2.6	4.7
Aroclor-1260		640	ug/Kgdrywt	1	17	9.5	3.3	4.7
Tetrachloro-M-Xylene		78.9	%					
Decachlorobiphenyl		70.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-29
Client ID: 2W-SD-SD134-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 19.
Report Date: 22-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	6.5	ug/Kgdrywt	1	17	13.	4.6	6.5
Aroclor-1221	U	6.5	ug/Kgdrywt	1	17	13.	6.0	6.5
Aroclor-1232	U	7.6	ug/Kgdrywt	1	17	13.	7.1	7.6
Aroclor-1242	U	6.5	ug/Kgdrywt	1	17	13.	4.4	6.5
Aroclor-1248	U	6.5	ug/Kgdrywt	1	17	13.	4.7	6.5
Aroclor-1254	U	6.5	ug/Kgdrywt	1	17	13.	3.6	6.5
Aroclor-1260		250	ug/Kgdrywt	1	17	13.	4.6	6.5
Tetrachloro-M-Xylene		114.	%					
Decachlorobiphenyl	*	128.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-28
Client ID: 2W-SD-SD136-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 9.5
Report Date: 22-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	13.	ug/Kgdrywt	1	17	26.	9.3	13.
Aroclor-1221	U	13.	ug/Kgdrywt	1	17	26.	12.	13.
Aroclor-1232	U	16.	ug/Kgdrywt	1	17	26.	14.	16.
Aroclor-1242	U	13.	ug/Kgdrywt	1	17	26.	9.0	13.
Aroclor-1248	U	13.	ug/Kgdrywt	1	17	26.	9.5	13.
Aroclor-1254	U	13.	ug/Kgdrywt	1	17	26.	7.3	13.
Aroclor-1260	J	290	ug/Kgdrywt	1	17	26.	9.3	13.
Tetrachloro-M-Xylene		58.3	%					
Decachlorobiphenyl		67.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-17
Client ID: 2W-SD-SD138-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 39.
Report Date: 22-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	21.	ug/Kgdrywt	1	17	43.	15.	21.
Aroclor-1221	U	21.	ug/Kgdrywt	1	17	43.	20.	21.
Aroclor-1232	U	25.	ug/Kgdrywt	1	17	43.	23.	25.
Aroclor-1242	U	21.	ug/Kgdrywt	1	17	43.	15.	21.
Aroclor-1248	U	21.	ug/Kgdrywt	1	17	43.	15.	21.
Aroclor-1254	U	21.	ug/Kgdrywt	1	17	43.	12.	21.
Aroclor-1260	U	21.	ug/Kgdrywt	1	17	43.	15.	21.
Tetrachloro-M-Xylene		67.5	%					
Decachlorobiphenyl		75.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-1
Client ID: 2W-SD-SD147-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 19-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 56.
Report Date: 22-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	15.	ug/Kgdrywt	1	17	30.	11.	15.
Aroclor-1221	U	15.	ug/Kgdrywt	1	17	30.	14.	15.
Aroclor-1232	U	18.	ug/Kgdrywt	1	17	30.	16.	18.
Aroclor-1242	U	15.	ug/Kgdrywt	1	17	30.	10.	15.
Aroclor-1248	U	15.	ug/Kgdrywt	1	17	30.	11.	15.
Aroclor-1254	U	15.	ug/Kgdrywt	1	17	30.	8.4	15.
Aroclor-1260	U	15.	ug/Kgdrywt	1	17	30.	11.	15.
Tetrachloro-M-Xylene		57.7	%					
Decachlorobiphenyl		75.1	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-3
Client ID: 2W-SD-SD149-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 19-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 94.
Report Date: 22-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	8.9	ug/Kgdrywt	1	17	18.	6.3	8.9
Aroclor-1221	U	8.9	ug/Kgdrywt	1	17	18.	8.3	8.9
Aroclor-1232	U	10.	ug/Kgdrywt	1	17	18.	9.7	10.
Aroclor-1242	U	8.9	ug/Kgdrywt	1	17	18.	6.1	8.9
Aroclor-1248	U	8.9	ug/Kgdrywt	1	17	18.	6.4	8.9
Aroclor-1254	U	8.9	ug/Kgdrywt	1	17	18.	4.9	8.9
Aroclor-1260	U	8.9	ug/Kgdrywt	1	17	18.	6.3	8.9
Tetrachloro-M-Xylene	*	43.7	%					
Decachlorobiphenyl		73.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-4
Client ID: 2W-SD-SD152-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 19-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 17.
Report Date: 25-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	7.2	ug/Kgdrywt	1	17	14.	5.1	7.2
Aroclor-1221	U	7.2	ug/Kgdrywt	1	17	14.	6.7	7.2
Aroclor-1232	U	8.5	ug/Kgdrywt	1	17	14.	7.9	8.5
Aroclor-1242	U	7.2	ug/Kgdrywt	1	17	14.	4.9	7.2
Aroclor-1248	U	7.2	ug/Kgdrywt	1	17	14.	5.2	7.2
Aroclor-1254	U	7.2	ug/Kgdrywt	1	17	14.	4.0	7.2
Aroclor-1260		170	ug/Kgdrywt	1	17	14.	5.1	7.2
Tetrachloro-M-Xylene	*	49.3	%					
Decachlorobiphenyl		76.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-7
Client ID: 2W-SD-SD154-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 19-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 27.
Report Date: 22-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	4.4	ug/Kgdrywt	1	17	8.9	3.1	4.4
Aroclor-1221	U	4.4	ug/Kgdrywt	1	17	8.9	4.1	4.4
Aroclor-1232	U	5.2	ug/Kgdrywt	1	17	8.9	4.8	5.2
Aroclor-1242	U	4.4	ug/Kgdrywt	1	17	8.9	3.0	4.4
Aroclor-1248	U	4.4	ug/Kgdrywt	1	17	8.9	3.2	4.4
Aroclor-1254	U	4.4	ug/Kgdrywt	1	17	8.9	2.4	4.4
Aroclor-1260	U	4.4	ug/Kgdrywt	1	17	8.9	3.1	4.4
Tetrachloro-M-Xylene	*	718.	%					
Decachlorobiphenyl		72.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-10
Client ID: 2W-SD-SD158-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 46.
Report Date: 22-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	17.	ug/Kgdrywt	1	17	35.	12.	17.
Aroclor-1221	U	17.	ug/Kgdrywt	1	17	35.	16.	17.
Aroclor-1232	U	20.	ug/Kgdrywt	1	17	35.	19.	20.
Aroclor-1242	U	17.	ug/Kgdrywt	1	17	35.	12.	17.
Aroclor-1248	U	17.	ug/Kgdrywt	1	17	35.	12.	17.
Aroclor-1254	U	17.	ug/Kgdrywt	1	17	35.	9.6	17.
Aroclor-1260		280	ug/Kgdrywt	1	17	35.	12.	17.
Tetrachloro-M-Xylene		69.3	%					
Decachlorobiphenyl		70.9	%					

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Tel:(207) 874-2400 Fax:(207) 775-4029

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-9
Client ID: 2W-SD-SD159-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 25.
Report Date: 22-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	4.8	ug/Kgdrywt	1	17	9.5	3.4	4.8
Aroclor-1221	U	4.8	ug/Kgdrywt	1	17	9.5	4.4	4.8
Aroclor-1232	U	5.6	ug/Kgdrywt	1	17	9.5	5.2	5.6
Aroclor-1242	U	4.8	ug/Kgdrywt	1	17	9.5	3.2	4.8
Aroclor-1248	U	4.8	ug/Kgdrywt	1	17	9.5	3.4	4.8
Aroclor-1254	U	4.8	ug/Kgdrywt	1	17	9.5	2.6	4.8
Aroclor-1260		150	ug/Kgdrywt	1	17	9.5	3.4	4.8
Tetrachloro-M-Xylene	*	14.3	%					
Decachlorobiphenyl		82.9	%					

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Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-8
Client ID: 2W-SD-SD161-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 38.
Report Date: 22-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	22.	ug/Kgdrywt	1	17	43.	15.	22.
Aroclor-1221	U	22.	ug/Kgdrywt	1	17	43.	20.	22.
Aroclor-1232	U	25.	ug/Kgdrywt	1	17	43.	24.	25.
Aroclor-1242	U	22.	ug/Kgdrywt	1	17	43.	15.	22.
Aroclor-1248	U	22.	ug/Kgdrywt	1	17	43.	15.	22.
Aroclor-1254	U	22.	ug/Kgdrywt	1	17	43.	12.	22.
Aroclor-1260		47.	ug/Kgdrywt	1	17	43.	15.	22.
Tetrachloro-M-Xylene	*	35.3	%					
Decachlorobiphenyl		59.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-16
Client ID: FD-040411-1
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 36.
Report Date: 22-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	23.	ug/Kgdrywt	1	17	46.	16.	23.
Aroclor-1221	U	23.	ug/Kgdrywt	1	17	46.	21.	23.
Aroclor-1232	U	27.	ug/Kgdrywt	1	17	46.	25.	27.
Aroclor-1242	U	23.	ug/Kgdrywt	1	17	46.	16.	23.
Aroclor-1248	U	23.	ug/Kgdrywt	1	17	46.	16.	23.
Aroclor-1254	U	23.	ug/Kgdrywt	1	17	46.	13.	23.
Aroclor-1260		130	ug/Kgdrywt	1	17	46.	16.	23.
Tetrachloro-M-Xylene		63.0	%					
Decachlorobiphenyl		76.3	%					

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APPENDIX C

REGIONAL WORKSHEETS

REGION I, EPA-NE ORGANIC REGIONAL DATA ASSESSMENT (ORDA)*

CASE #: 02625 SITE NAME: NSB New London

LAB NAME: Katahdin # OF SAMPLES/MATRIX: _____

SDG #: WE55-1 VALIDATION CONTRACTOR: IT

SOW #/CONTRACT #: CTO WE55 VALIDATOR'S NAME: J. Kalinyak

EPA-NE DV TIER LEVEL: III DATE DP REC'D BY EPA-NE: _____

TPO/PO: **ACTION ____ FYI ____ DV COMPLETION DATE: _____

ANALYTICAL DATA QUALITY SUMMARY

	VOA	SV	Pest/PCB
1. Preservation and Contractual Holding Times	N/A	See DV Report	
2. GC/MS / GC/ECD Instrument Performance Check			
3. Initial Calibration			
4. Continuing Calibration			
5. Blanks			
6. Surrogate Compounds			
7. Internal Standards			
8. Matrix Spike/Matrix Spike Duplicate			
9. Sensitivity Check			
10. PE Samples-Accuracy Check			
11. Target Compound Identification			
12. Compound Quantitation and Reported QLs			
13. Tentatively Identified Compounds			
14. Semivolatile Cleanup/Pesticide/PCB Cleanup			
15. Data Completeness			
16. Overall Evaluation of Data			

o = Data had no problems or were qualified due to minor contractual problems.
m = Data were qualified due to major contractual problems.
z = Data were rejected as unusable due major contractual problems.

ACTION ITEMS: (z items)_____

AREAS OF CONCERN: (m items)_____

COMMENTS: _____

*This form assesses the analytical data quality in terms of contractual compliance only. It does not assess sampling errors and/or non-contractual analytical issues that affect data quality.

**Check "ACTION" only if contractual defects resulted in reduced payment/data rejection recommendations.

Validator: J. Kalinyak Date 05/20/11

INSTRUCTIONS ON REVERSE SIDE

GUIDANCE FOR COMPLETING THE ORDA

The ORDA form provides the laboratory's CLP-TPO and other contract management personnel with an overview of the contractual analysis and reporting deficiencies found in an analytical data package and identifies those contractual deficiencies that resulted in reduced payment/data rejection recommendations/actions. The ORDA form is used to summarize analytical data quality only in terms of contractual compliance. Sampling errors and non-contractual analytical errors that affect data quality are not summarized on this form, but rather are documented in the Tier I Validation Cover Letter and Tier II/III Data Validation Reports. For instance, if the sampler did not ship the samples until after the holding time had expired, a notation would not be made on the ORDA form since the laboratory is not responsible for the sampler's actions.

The ORDA form should be completed as follows:

1. Fill in all of the header information (with the exception of the TPO Action/FYI field): Case Number, Site Name, Laboratory Name, number and matrix of samples in the data package, SDG Number, Validation Contractor, SOW#/Contract#, Data Validator's Name, EPA-NE Data Validation Tier Level (i.e., I, II, III or partial II/III), Date the Data Package was received by EPA-NE, and the Data Validation Completion Date.

2. Summarize the contractual problems discovered during data validation by fraction and by evaluation criteria in the "Analytical Data Summary " table, and in the "Action Items" and "Areas of Concern" sections as described in items 3 through 6 below. Use the Data Validation Memoranda as a guide when completing the ORDA form.

3. The following qualifiers must be utilized to document contractual problems on the ORDA forms.

o	=	Data had no problems or were qualified due to minor contractual problems
m	=	Data were qualified due to major contractual problems
z	=	Data were rejected as unusable due to major contractual problems

4. If the data were acceptable, or were qualified due to minor contractual problems, enter the qualifier "o" into the appropriate column (fraction) and row (evaluation criteria). No further documentation is necessary on the ORDA form. An example of a minor problem would be a semivolatile compound that slightly exceeded the SOW-specified %RSD initial calibration criterion.

5. If the data were qualified due to major contractual problems, enter the qualifier "m" into the appropriate column (fraction) and row (evaluation criteria). Use a different superscript (m^1, m^2, etc.) for each major contractual problem identified and provide a brief description of each major problem in the "Areas of Concern" section. An example of a major contractual problem resulting in data qualification would be a semivolatile internal standard that had extremely low area counts (below the lower limit of the SOW-specified acceptance criterion) and reanalysis was not performed.

6. If the data were rejected as unusable due to major contractual problems, enter the qualifier "z" in the appropriate column (fraction) and row (evaluation criteria). Use a different superscript (z^1, z^2, etc.) for each major contractual problem identified and provide a brief description of each major problem in the "Action Items" section. An example of a major contractual problem resulting in data rejection would be contractual holding time criteria that were exceeded for volatiles.

7. Complete the TPO Action/FYI field using the information contained in the "Action Items" and "Areas of Concern" sections. TPO Action should be indicated with a check mark (√) in the space following "Action" only if the contractual defects resulted in reduced payment or data rejection. If no TPO Actions are indicated, then a check mark (√) should be placed in the space following "FYI".

8. The validator who completed the ORDA form must sign his/her name in the "Validator" field and enter the ORDA completion date in the "Date" field.

EPA-NE
Data Validation Worksheet Cover Page - Page 1

Site Name NSB New London
Reference No. _____

REGION I ORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name Katahdin
Case/Project No. 02625
SDG No. WE55-1
No. of Samples/Matrix _____

SOW/Method No. _____
Sampling Date(s) _____
Shipping Date(s) _____
Date Rec'd by lab _____

Traffic Report Sample Nos. _____

Trip Blank No. _____
Equipment Blank No. _____
Bottle Blank No. _____
Field Duplicate Nos. _____

PES Nos. _____

The Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision _____ was used to evaluate the data and/or approved modifications to the EPA-NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attach modified criteria from EPA approved QAPjP or amendment to QAPjP).

A Tier II or Tier III evaluation was used to validate the data (circle one). If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc. that received partial Tier III validation

_____

The data were evaluated based upon the following parameters:

- Overall Evaluation of Data
- Data Completeness (CSF Audit - Tier I)
- Preservation & Technical Holding Times
- GC/MS & GC/ECD Instrument Performance Check
- Initial & Continuing Calibrations
- Blanks
- Surrogate Compounds
- Internal Standards
- Matrix Spike/Matrix Spike Duplicate
- Field Duplicates
- Sensitivity Check
- PE Samples/Accuracy Check
- Target Compound Identification
- Compound Quantitation and Reported Quantitation Limits
- TICs
- Semivolatile and Pesticide/PCB Cleanup
- System Performance

Region I Definitions and Qualifiers:

A - Acceptable Data
J - Numerical value associated with compound is an estimated quantity.
R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.
U - Compound not detected at that numerical sample quantitation limit.
UJ - The sample quantitation limit is an estimated quantity.
TB, BB, EB - Compound detected in aqueous trip blank, aqueous bottle blank, or aqueous equipment blank associated with soil/sediment samples.

Validator's Name J. Kalnajak Company Name TT Phone Number _____

Date Validation Started _____ Date Validation Completed _____

EPA-NE
Data Validation Worksheet Cover Page - Page 2

Check if all criteria are met and no hard copy worksheet provided. Indicate NA if worksheet is not applicable to analytical method. Note: there is no standard worksheet for System Performance, however, the validator must document all system performance issues in the Data Validation Memorandum.

VOA/SV worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES
VOA/SV-II	GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)
VOA/SV-III	INITIAL CALIBRATION
VOA/SV-IV	CONTINUING CALIBRATION
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS
VOA-VI	VOA SURROGATE SPIKE RECOVERIES
SV-VI	SV SURROGATE SPIKE RECOVERIES
VOA/SV-VII	INTERNAL STANDARD PERFORMANCE
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK
VOA/SV-Pest/PCB-XI	ACCURACY CHECK
VOA/SV-Pest/PCB-XII	TARGET COMPOUND IDENTIFICATION
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION
VOA/SV-XIV	TENTATIVELY IDENTIFIED COMPOUNDS
VOA/SV-XV	SEMIVOLATILE CLEANUP
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA

See DV Report

Pest/PCB worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES
Pest/PCB-IIA	GC/ECD INSTRUMENT PERFORMANCE CHECK-RESOLUTION
Pest/PCB-IIB	GC/ECD INSTRUMENT PERFORMANCE CHECK-RETENTION TIMES
Pest/PCB-IIC	GC/ECD INSTRUMENT PERFORMANCE CHECK-ACCURACY CHECK OF INITIAL CALIBRATION
Pest/PCB-IID	GC/ECD INSTRUMENT PERFORMANCE CHECK-PESTICIDE DEGRADATION
Pest/PCB-III	INITIAL CALIBRATION
Pest/PCB-IV	CONTINUING CALIBRATION
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS
Pest/PCB-VI	SURROGATE COMPOUNDS: SPIKE RECOVERIES AND RETENTION TIME SHIFT
Pest/PCB-VII	PESTICIDE CLEANUP
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK
VOA/SV-Pest/PCB-XI	ACCURACY CHECK
Pest/PCB-XII	COMPOUND IDENTIFICATION
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA

I certify that all criteria were met for the worksheets checked above.

Signature: _____ Name: J. Kobiyak

Date: 05/20/11

The data validator generates a Data Validation Report, applicable to Data Validation Tiers II and III, that consists of the following components in the order specified below: (Refer to Section 11 for a description of each of the Data Validation Report components).

1. Organic Regional Data Assessment/Inorganic Regional Data Assessment (ORDA/IRDA) Form
2. Data Validation Memorandum
   a. Narrative
   b. Table I-Qualifier Recommendation Summary Table
   c. Table II-Overall Evaluation of Data
   d. Table III-Tentatively Identified Compounds
   e. Data Summary Tables
3. Standard Data Validation Worksheets
   a. Manual
   b. Automated Data Review Reports (i.e., CADRE)
4. Support Documentation
   a. Copy of non-CLP analytical method, e.g., DAS methods, modified EPA methods
   b. Copies of PES Score Reports/Vendor PES QC Acceptance Limits
   c. Copies of Telephone Logs/Communication Forms for:
      - RSCC communications
      - Requests for laboratory data resubmissions/clarifications
      - Communications with samplers resolving sampling problems
      - Communications with TPO/Lead Chemist to report contractually-deficient data for rejection/reduced payment
      - Communications with EPA Site Manager concerning possible data rejection
      - EPA Site Manager authorization for alternate DV tier
   d. Copies of data supporting recommendations for reduced payment resulting from CSF Audit and/or PE sample result evaluation
   e. Original data to support recommendations for data rejection/non-payment identified from Tier II or Tier III data validation
   f. Copies of field sampling notes and/or field report supplied by field sampler
   g. Copies of EPA-approved amendments to QAPjP and/or SAP describing modified criteria to be used for validating site data
5. CSF Completeness Evidence Audit
6. DQO Summary Form

The data validator is responsible for implementing all corrective actions required by the contractor Lead Chemist in response to EPA-NE data validation oversight findings.

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

N/A

VOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: _____

Date: 05/20/11

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

See DV Report

SEMIVOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: _____

Date: 05/20/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB

COMPLETE SDG FILE (CSF) AUDIT

Organic Fractions: _____

Missing Information	Date Lab Contacted	Date Received
See DV Report		

Validator: _____ Date: 05/20/11

EPA-NE - Data Validation
VOA/SV - Pest/PCB-I

12/96

Sampler:_____ Company: See DV Report Contacted: Yes No Date:_____

I. PRESERVATION AND HOLDING TIMES - Circle sample numbers with exceeded technical holding times or omitted preservation.
List all required preservation codes and circle omitted preservation codes.
Circle all exceeded technical holding times.
Identify extraction technique after "# of Days"/(*Extraction Code).

Sample No. (TR No.)	Matrix	Pres. Code	Date Sampled	VOA			BNA					PEST/PCB				
				Date Analyzed	# of Days from Samp. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action

Preservation Code:
1. Cool @ 4°C (± 2°)
2. Preserve with HCl to at least pH 2
3. Protect from light
4. Freeze
5. Room Temperature (Avoid excessive heat)

(*Extraction Code:)
L/L - Liquid/Liquid
SON - Sonication
SEP - Separatory Funnel
SOX - Soxhlet
SPE - Solid Phase Extraction

Action Code:
J - Estimate (J) Detected Values
UJ - Estimate (UJ) Non-Detected Values
R - Reject (R) Non-Detected Values

Validator: _____ Date: 05/20/11

II. GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)

List all Instrument Performance Checks that are outside method QC tuning acceptance criteria. See DV Report

Volatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action
Comments:							

Semivolatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action
Comments:							

If tuning compounds and criteria are different from those specified in CLP SOW OLM03.1, then the validator should include a copy of the method-specific tuning criteria with this worksheet.

Validator: _____

Date: 05/20/11

EPA-NE - Data Validation Worksheet
VOA/SV-III

III. INITIAL CALIBRATION - List all analytes that are outside calibration criteria.

See DV Report

Date of ICAL	Instrument	Parameter	Matrix	Compound	% RSD	$\overline{RRF}$	Samples Affected	Action

Comments:

Validator: _____

Date: 05/20/11

EPA-NE - Data Validation Worksheet

VOA/SV-IV

IV. CONTINUING CALIBRATION - List all analytes that are outside calibration criteria. See DV Report

Date of ICAL	Date of CCAL	Instrument	Parameter	Matrix	Compound	%D	RRF	Samples Affected	Action

Comments:

Validator: _____

Date: 05/20/11

EPA-NE - Data Validation Worksheet

VOA/SV - Pest/PCB-V-A

See DV Report

V. BLANK ANALYSIS

List the blank contamination below.

Concentration Level:_____

Sampler: _____ Company: _____

Contacted: Yes No Date:_____

1. Laboratory: Method, Storage and Instrument Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

2. Field: Equipment (Rinsate), Trip and Bottle Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

Validator: _____

Date: 05/20/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-V-B

See DV Report

3. Blank Actions - List the maximum concentrations of blank compounds.

Compound	Type of Blank	Date Blank Sampled/Originated	Max. Conc. (units)	Action Level (units)	Sample QL	Samples Affected	Action

Comments: _____

Validator: _____

Date: 05/20/11

EPA-NE - Data Validation Worksheet
VOA-VI

See DV Report

VI. VOA SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Volatile Method QC Acceptance Criteria				
	Toluene-d_8	BFB	DCE-d_4	Other:	
OLM03.2	Water 88-110 Soil 84-138	Water 86-115 Soil 59-113	Water 76-114 Soil 70-121		
OLC02.1	NA	80-120	NA		
Other:					
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

Validator: _____

Date: 05/20/11

EPA-NE - Data Validation Worksheet
SV-VI

See DV Report

VI. SV SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Base/Neutral Method QC Acceptance Criteria					
	NBZ-d_5	2-FBP	TPH-d_{14}	1,2-DCB-d_4*	Other:	
OLM03.2	Water Soil 35-114 23-120	Water Soil 43-116 30-115	Water Soil 33-141 18-137	Water Soil 16-110 20-130		
OLC02.1	40-110	30-110	20-140	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

Method	Acid Method QC Acceptance Criteria					
	Phenol-d_5	2-FP	2,4,6-TBP	2-CP-d_4*	Other:	
OLM03.2	Water Soil 10-110 24-113	Water Soil 21-110 25-121	Water Soil 10-123 19-122	Water Soil 33-110 20-130		
OLC02.1	15-115	15-110	15-130	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

* Advisory Surrogates - OLM03.2

Validator: _____

Date: 05/20/11

EPA-NE - Data Validation Worksheet
VOA/SV-VII

See DV Report

VII. INTERNAL STANDARD PERFORMANCE

List the internal standards that are outside the area count and retention time method QC acceptance criteria.
IS Area Count method QC acceptance criteria: _____
IS Retention Time method QC acceptance criteria: _____

Sample Number (TR#)	Date and Time Analyzed	Instrument	Parameter	IS Outside Area Count and/or RT Criteria	__IS Area	RT Shift	Acceptable Range (IS area or RT shift)	Action

Validator: JK

Date: 05/20/11

N/A

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-VIII

VIII. MATRIX SPIKE/MATRIX SPIKE DUPLICATE - List all MS/MSD analytes that are outside method QC acceptance criteria.

Use a separate worksheet for each MS/MSD pair.

Sample # _____ Matrix _____ Concentration Level _____

Parameter	Compound	MS %Rec	MSD %Rec	RPD	Method QC Limits		Concentration			% RSD	Action
					% Rec	RPD	Unspiked Sample	MS	MSD		

Validator: _____

Date: 05/20/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-IX

IX. FIELD DUPLICATE PRECISION - List all field duplicate analytes that are outside criteria.

Use a separate worksheet for each field duplicate pair.

See DV Report

Sample Number _____ Duplicate Sample Number _____ Matrix _____

Parameter	Compound	Sample Conc.	Sample QL		Duplicate Conc.	Duplicate QL		RPD	QC Acceptance Criteria RPD or NA*	Action
			SQL	2xSQL		SQL	2xSQL			

* For instances where one duplicate result is ND (or reported less than the sample QL).

Does the MS/MSD data indicate acceptable laboratory precision? Y N

Comments: _____

_____

Sampler Name: _____ Contractor Name: _____ Date Contacted: _____

Reason for Contact and resolution obtained: _____

Validator: _____ Date: 05/20/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-X

X. SENSITIVITY CHECK (Method Detection Limit Study)

See DV Report

List all compounds, surrogates, and internal standards that are outside the MDL criteria.

- Has an appropriate MDL study been submitted with seven replicates for each compound and matrix of interest? Y N
- Date of Preparation/Analysis: _____ Within 1 year? Y N
- Instrument I.D.: _____ Same as samples? Y N
- Column I.D.: _____ Same as samples? Y N

Matrix	Compound	MDL > QL	Method QC Limits < 80% or > 120%	IS Outside Area Count and/or RT Criteria	RSD > 20%	Samples Affected	Action

If an MDL study has not been submitted, use only the LFB results to evaluate data.

(Laboratory Fortified Blank) - List all LFB compounds, surrogates and internal standards that are outside criteria.

- Has an appropriate and complete LFB been submitted at the proper frequency? Y N
- Does it contain all target compounds at the method-required QLs? Y N
- Was the LFB spiked with a standard from a source (vendor) independent of the calibration standard? Y N

Matrix	Compound	Method QC Limits < 60% or > 140% Other:	IS Outside Area Count and/or RT Criteria	Samples Affected	Action

Validator: _____

Date: 05/20/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XI

See DV Report

XI. ACCURACY CHECK (Performance Evaluation Results) - List all analytes that are outside criteria.

SDG No: _____ CASE: _____

Are more than one-half of the PES analytes within criteria for each parameter. **Y N**

PE Sample Number	Ampule Number	Parameter	Type of PES	Matrix	Analyte	Conc.	Region I EPA PES Scores*	Non-EPA PES Scores**	Samples Affected	Action

* For Region I PESs indicate the Region I PES Score Report Result: Action High; Action Low; TCL MISS; TCL CONTAMINANT; TIC HIT; TIC MISS; TIC CONTAMINANT

** For Non-EPA PESs indicate the Non-EPA PES Score: PES COMPOUND MISS; PES COMPOUND CONTAMINANT; PES COMPOUND HIT (% Recovery Limits)

Validator: _____ Date: 05/20/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XII

See DV Report

XII. TARGET COMPOUND IDENTIFICATION - List the analytes that are outside the acceptance criteria.

Sample Number	Compound	___MS Ions	____RRT	Action

Validator: _____

Date: 05/20/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XIII

See DV Report

XIII. SAMPLE QUANTITATION

Recalculate, from the raw data, the concentrations for one positive detect and one reported sample quantitation limit for a non-detect in a diluted sample or soil sample per fraction. (Note: Although Section XIII, C.1.a, requires that one calculation for each fraction in each sample be performed, the validator is only required to reproduce an example, for each fraction, of one positive detect and one sample quantitation limit calculation on this worksheet.)

Do all soil/sediment samples have % solids greater than 30%? Y N
If no, list sample numbers_____

Fraction		Calculation
VOA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
BNA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
Pesticide/PCB		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		

Validator: DK

Date: 05/20/11

EPA-NE - Data Validation Worksheet
VOA/SV-XIV

XIV. TENTATIVELY IDENTIFIED COMPOUNDS (TICs)

See DV Report

List the 5 TICs having the highest concentration for each sample parameter.

Sample Number	Parameter	Compound	RRT	Est. Conc.	Action

Validator: _____

Date: 05/20/11

EPA-NE - Data Validation Worksheet
VOA/SV-XV

See DV Report

XV. SEMIVOLATILE CLEANUP - List all analytes that are outside method cleanup QC criteria.

Cleanup Procedure	Instrument # or Lot #	Date/Time GPC Calibrated or Check Solution Analyzed	Compound	% Rec	QC Limits	Samples Affected	Action

Did the GPC column meet; resolution requirements? Y or N
peak shape requirements? Y or N
retention time shift requirements? Y or N

Was the GPC calibration, Silica Gel cleanup checked at the method required frequency with correct compounds and concentrations? Y or N

Were all compounds less than QL for the GPC/Silica Gel/Acid-Partition blank? Y or N

Did the blank surrogate recoveries and IS area counts and RTs (if added) meet method QC acceptance criteria? Y or N

Comments: _____

Validator: _____ Date: 05/20/11

APPENDIX D

SUPPORT DOCUMENTATION

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TS	%	2W-SD-SD107-0001	SE1779-28	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7
TS	%	2W-SD-SD105-0001	SE1779-22	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7
TS	%	2W-SD-SD103-0001	SE1779-21	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7
TS	%	2W-SD-SD100-0001	SE1779-17	NM	04/07/2011	04/12/2011	04/13/2011	5	1	6
TS	%	2W-SD-SD140-0001	SE1778-4	NM	04/05/2011	04/12/2011	04/13/2011	7	1	8
TS	%	2W-SD-SD142-0001	SE1778-18	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7
TS	%	2W-SD-SD112-0001	SE1779-31	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7
TS	%	2W-SD-SD138-0001	SE1685-17	NM	04/05/2011	04/08/2011	04/11/2011	3	3	6
SIM	%	2W-SD-SD89-0001	SE1779-15	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	%	2W-SD-SD88-0001	SE1779-12	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	%	2W-SD-SD87-0001	SE1779-14	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	%	2W-SD-SD161-0001	SE1685-8	NM	04/04/2011	04/22/2011	04/22/2011	18	0	18
SIM	%	2W-SD-SD159-0001	SE1685-9DL	NM	04/04/2011	04/13/2011	04/25/2011	9	12	21
SIM	%	2W-SD-SD158-0001	SE1685-10	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	%	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	%	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/13/2011	04/21/2011	9	8	17
SIM	%	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	%	2W-SD-SD146-0001	SE1778-2	NM	04/05/2011	04/14/2011	04/23/2011	9	9	18

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	%	2W-SD-SD154-0001	SE1685-7	NM	04/04/2011	04/23/2011	04/23/2011	19	0	19
SIM	%	2W-SD-SD90-0001	SE1779-4	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	%	2W-SD-SD94-0001	SE1779-5	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	%	FD-040411-1	SE1685-16	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	%	2W-SD-SD96-0001	SE1779-7	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	%	2W-SD-SD97-0001	SE1779-8	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	%	2W-SD-SD98-0001	SE1779-9	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	%	2W-SD-SD99-0001	SE1779-2	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	%	2W-SD-SD144-0001	SE1778-3	NM	04/05/2011	04/14/2011	04/23/2011	9	9	18
SIM	%	2W-SD-SD120-0001	SE1685-24	NM	04/05/2011	04/14/2011	04/22/2011	9	8	17
SIM	%	FD-040511-02	SE1778-11	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	%	FD-040511-01	SE1778-10	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	%	2W-SD-SD95-0001	SE1779-10	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	%	2W-SD-SD100-0001	SE1779-17	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	%	2W-SD-SD116-0001	SE1778-20	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	%	FD040611-01	SE1779-1	NM	04/06/2011	04/14/2011	04/27/2011	8	13	21
SIM	%	2W-SD-SD103-0001	SE1779-21	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	%	2W-SD-SD105-0001	SE1779-22	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	%	2W-SD-SD107-0001	SE1779-28	NM	04/06/2011	04/14/2011	05/05/2011	8	21	29
SIM	%	2W-SD-SD108-0001	SE1779-26	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	%	2W-SD-SD112-0001	SE1779-31	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	%	2W-SD-SD117-0001	SE1778-22	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	%	2W-SD-SD118-0001	SE1685-22	NM	04/05/2011	04/13/2011	04/22/2011	8	9	17
SIM	%	2W-SD-SD122-0001	SE1778-8	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	%	2W-SD-SD121-0001	SE1685-26	NM	04/05/2011	04/14/2011	04/25/2011	9	11	20
SIM	%	2W-SD-SD142-0001	SE1778-18	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	%	2W-SD-SD123-0001	SE1778-13	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	%	2W-SD-SD126-0001	SE1685-25	NM	04/05/2011	04/14/2011	04/22/2011	9	8	17
SIM	%	2W-SD-SD127-0001	SE1778-7	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	%	2W-SD-SD130-0001	SE1778-9	NM	04/05/2011	04/14/2011	04/25/2011	9	11	20
SIM	%	2W-SD-SD134-0001	SE1685-29	NM	04/05/2011	04/14/2011	04/22/2011	9	8	17
SIM	%	2W-SD-SD135-0001	SE1778-16	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	%	2W-SD-SD136-0001	SE1685-28	NM	04/05/2011	04/13/2011	04/22/2011	8	9	17
SIM	%	2W-SD-SD138-0001	SE1685-17	NM	04/05/2011	04/13/2011	04/23/2011	8	10	18
SIM	%	2W-SD-SD140-0001	SE1778-4	NM	04/05/2011	04/14/2011	04/25/2011	9	11	20
SIM	%	2W-SD-SD119-0001	SE1685-23	NM	04/05/2011	04/13/2011	04/22/2011	8	9	17

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	%	2W-SD-SD110-0001	SE1779-24	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	%	FD040711-01	SE1779-18	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD158-0001	SE1685-10	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	UG/KG	2W-SD-SD99-0001	SE1779-2DL	NM	04/07/2011	04/14/2011	05/02/2011	7	18	25
SIM	UG/KG	FD-040411-1	SE1685-16	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	UG/KG	FD-040511-01	SE1778-10	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	FD-040511-02	SE1778-11	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	FD040611-01	SE1779-1	NM	04/06/2011	04/14/2011	04/27/2011	8	13	21
SIM	UG/KG	FD040611-01	SE1779-1DL	NM	04/06/2011	04/14/2011	05/02/2011	8	18	26
SIM	UG/KG	FD040711-01	SE1779-18	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD146-0001	SE1778-2DL	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	2W-SD-SD159-0001	SE1685-9DL	NM	04/04/2011	04/13/2011	04/25/2011	9	12	21
SIM	UG/KG	2W-SD-SD98-0001	SE1779-9	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD154-0001	SE1685-7DL	NM	04/04/2011	04/25/2011	04/25/2011	21	0	21
SIM	UG/KG	2W-SD-SD154-0001	SE1685-7	NM	04/04/2011	04/23/2011	04/23/2011	19	0	19
SIM	UG/KG	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	UG/KG	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/13/2011	04/21/2011	9	8	17
SIM	UG/KG	2W-SD-SD147-0001	SE1685-1DL	NM	04/04/2011	04/13/2011	04/23/2011	9	10	19

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/KG	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	UG/KG	FD040711-01	SE1779-18DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD94-0001	SE1779-5DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD161-0001	SE1685-8	NM	04/04/2011	04/22/2011	04/22/2011	18	0	18
SIM	UG/KG	2W-SD-SD87-0001	SE1779-14	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD87-0001	SE1779-14DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD88-0001	SE1779-12	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD88-0001	SE1779-12DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD89-0001	SE1779-15	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD99-0001	SE1779-2	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	UG/KG	2W-SD-SD90-0001	SE1779-4DL	NM	04/07/2011	04/14/2011	05/02/2011	7	18	25
SIM	UG/KG	2W-SD-SD98-0001	SE1779-9DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD95-0001	SE1779-10	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD95-0001	SE1779-10DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD96-0001	SE1779-7	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	UG/KG	2W-SD-SD96-0001	SE1779-7DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD97-0001	SE1779-8	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD97-0001	SE1779-8DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/KG	2W-SD-SD94-0001	SE1779-5	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	UG/KG	2W-SD-SD89-0001	SE1779-15DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD107-0001	SE1779-28	NM	04/06/2011	04/14/2011	05/05/2011	8	21	29
SIM	UG/KG	2W-SD-SD117-0001	SE1778-22	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	UG/KG	2W-SD-SD116-0001	SE1778-20	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	UG/KG	2W-SD-SD112-0001	SE1779-31DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD112-0001	SE1779-31	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	UG/KG	2W-SD-SD110-0001	SE1779-24DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD108-0001	SE1779-26DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD100-0001	SE1779-17	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD118-0001	SE1685-22	NM	04/05/2011	04/13/2011	04/22/2011	8	9	17
SIM	UG/KG	2W-SD-SD107-0001	SE1779-28DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD110-0001	SE1779-24RE	NM	04/06/2011	04/29/2011	05/02/2011	23	3	26
SIM	UG/KG	2W-SD-SD105-0001	SE1779-22DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD105-0001	SE1779-22	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	UG/KG	2W-SD-SD103-0001	SE1779-21DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD103-0001	SE1779-21	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	UG/KG	2W-SD-SD100-0001	SE1779-17DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/KG	2W-SD-SD146-0001	SE1778-2	NM	04/05/2011	04/14/2011	04/23/2011	9	9	18
SIM	UG/KG	2W-SD-SD90-0001	SE1779-4	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	UG/KG	2W-SD-SD108-0001	SE1779-26	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	UG/KG	2W-SD-SD138-0001	SE1685-17DL	NM	04/05/2011	04/13/2011	04/25/2011	8	12	20
SIM	UG/KG	2W-SD-SD144-0001	SE1778-3DL	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	2W-SD-SD144-0001	SE1778-3	NM	04/05/2011	04/14/2011	04/23/2011	9	9	18
SIM	UG/KG	2W-SD-SD142-0001	SE1778-18DL	NM	04/06/2011	04/14/2011	04/27/2011	8	13	21
SIM	UG/KG	2W-SD-SD110-0001	SE1779-24	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	UG/KG	2W-SD-SD140-0001	SE1778-4	NM	04/05/2011	04/14/2011	04/25/2011	9	11	20
SIM	UG/KG	2W-SD-SD119-0001	SE1685-23	NM	04/05/2011	04/13/2011	04/22/2011	8	9	17
SIM	UG/KG	2W-SD-SD138-0001	SE1685-17	NM	04/05/2011	04/13/2011	04/23/2011	8	10	18
SIM	UG/KG	2W-SD-SD136-0001	SE1685-28	NM	04/05/2011	04/13/2011	04/22/2011	8	9	17
SIM	UG/KG	2W-SD-SD135-0001	SE1778-16DL	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	UG/KG	2W-SD-SD135-0001	SE1778-16	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	UG/KG	2W-SD-SD130-0001	SE1778-9	NM	04/05/2011	04/14/2011	04/25/2011	9	11	20
SIM	UG/KG	2W-SD-SD127-0001	SE1778-7	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	2W-SD-SD120-0001	SE1685-24	NM	04/05/2011	04/14/2011	04/22/2011	9	8	17
SIM	UG/KG	2W-SD-SD126-0001	SE1685-25	NM	04/05/2011	04/14/2011	04/22/2011	9	8	17

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/KG	2W-SD-SD123-0001	SE1778-13	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	UG/KG	2W-SD-SD122-0001	SE1778-8	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	2W-SD-SD134-0001	SE1685-29	NM	04/05/2011	04/14/2011	04/22/2011	9	8	17
SIM	UG/KG	2W-SD-SD121-0001	SE1685-26	NM	04/05/2011	04/14/2011	04/25/2011	9	11	20
SIM	UG/KG	2W-SD-SD142-0001	SE1778-18	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
PCB	%	FD-040411-1	SE1685-16	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	%	2W-SD-SD144-0001	SE1778-3	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	%	2W-SD-SD146-0001	SE1778-2	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	%	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	%	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	%	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	%	2W-SD-SD154-0001	SE1685-7	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	%	2W-SD-SD158-0001	SE1685-10	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	%	2W-SD-SD161-0001	SE1685-8	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	%	FD-040511-01	SE1778-10	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	%	2W-SD-SD130-0001	SE1778-9	NM	04/05/2011	04/15/2011	04/20/2011	10	5	15
PCB	%	2W-SD-SD142-0001	SE1778-18	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PCB	%	FD-040511-02	SE1778-11	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	%	2W-SD-SD159-0001	SE1685-9	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	%	2W-SD-SD119-0001	SE1685-23	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	%	2W-SD-SD135-0001	SE1778-16	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PCB	%	2W-SD-SD116-0001	SE1778-20	NM	04/06/2011	04/15/2011	04/20/2011	9	5	14
PCB	%	2W-SD-SD140-0001	SE1778-4	NM	04/05/2011	04/15/2011	04/20/2011	10	5	15
PCB	%	2W-SD-SD118-0001	SE1685-22	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	%	2W-SD-SD120-0001	SE1685-24	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	%	2W-SD-SD121-0001	SE1685-26	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	%	2W-SD-SD122-0001	SE1778-8	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	%	2W-SD-SD123-0001	SE1778-13	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PCB	%	2W-SD-SD127-0001	SE1778-7	NM	04/05/2011	04/15/2011	04/20/2011	10	5	15
PCB	%	2W-SD-SD134-0001	SE1685-29	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	%	2W-SD-SD136-0001	SE1685-28	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	%	2W-SD-SD138-0001	SE1685-17	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	%	2W-SD-SD117-0001	SE1778-22	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PCB	UG/KG	2W-SD-SD144-0001	SE1778-3	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	UG/KG	FD-040511-02	SE1778-11	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	UG/KG	FD-040511-01	SE1778-10	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	FD-040411-1	SE1685-16	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	UG/KG	2W-SD-SD161-0001	SE1685-8	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	UG/KG	2W-SD-SD159-0001	SE1685-9	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	UG/KG	2W-SD-SD158-0001	SE1685-10	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	UG/KG	2W-SD-SD154-0001	SE1685-7	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	UG/KG	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	UG/KG	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	UG/KG	2W-SD-SD140-0001	SE1778-4	NM	04/05/2011	04/15/2011	04/20/2011	10	5	15
PCB	UG/KG	2W-SD-SD146-0001	SE1778-2	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	UG/KG	2W-SD-SD121-0001	SE1685-26	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	UG/KG	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	UG/KG	2W-SD-SD138-0001	SE1685-17	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	UG/KG	2W-SD-SD136-0001	SE1685-28	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	UG/KG	2W-SD-SD135-0001	SE1778-16	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PCB	UG/KG	2W-SD-SD134-0001	SE1685-29	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	UG/KG	2W-SD-SD130-0001	SE1778-9	NM	04/05/2011	04/15/2011	04/20/2011	10	5	15
PCB	UG/KG	2W-SD-SD127-0001	SE1778-7	NM	04/05/2011	04/15/2011	04/20/2011	10	5	15
PCB	UG/KG	2W-SD-SD122-0001	SE1778-8	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	2W-SD-SD120-0001	SE1685-24	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	UG/KG	2W-SD-SD119-0001	SE1685-23	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	UG/KG	2W-SD-SD118-0001	SE1685-22	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	UG/KG	2W-SD-SD117-0001	SE1778-22	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PCB	UG/KG	2W-SD-SD116-0001	SE1778-20	NM	04/06/2011	04/15/2011	04/20/2011	9	5	14
PCB	UG/KG	2W-SD-SD142-0001	SE1778-18	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PCB	UG/KG	2W-SD-SD123-0001	SE1778-13	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PEST	%	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	%	FD-040411-1	SE1685-16	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PEST	%	2W-SD-SD144-0001	SE1778-3	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	2W-SD-SD116-0001	SE1778-20	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	%	FD-040511-01	SE1778-10	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	2W-SD-SD161-0001	SE1685-8	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	%	2W-SD-SD159-0001	SE1685-9DL	NM	04/04/2011	04/14/2011	04/27/2011	10	13	23
PEST	%	2W-SD-SD159-0001	SE1685-9	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	%	2W-SD-SD158-0001	SE1685-10	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PEST	%	2W-SD-SD154-0001	SE1685-7	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	%	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	%	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	%	2W-SD-SD146-0001	SE1778-2	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	2W-SD-SD142-0001	SE1778-18	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	%	2W-SD-SD140-0001	SE1778-4	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	2W-SD-SD122-0001	SE1778-8	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	FD-040511-02	SE1778-11	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	2W-SD-SD118-0001	SE1685-22	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	%	2W-SD-SD117-0001	SE1778-22	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	%	2W-SD-SD138-0001	SE1685-17	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	%	2W-SD-SD121-0001	SE1685-26	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	%	2W-SD-SD119-0001	SE1685-23	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	%	2W-SD-SD123-0001	SE1778-13	NM	04/06/2011	04/15/2011	04/21/2011	9	6	15
PEST	%	2W-SD-SD127-0001	SE1778-7	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	2W-SD-SD130-0001	SE1778-9	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	2W-SD-SD134-0001	SE1685-29	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	%	2W-SD-SD135-0001	SE1778-16	NM	04/06/2011	04/15/2011	04/21/2011	9	6	15
PEST	%	2W-SD-SD136-0001	SE1685-28	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	%	2W-SD-SD120-0001	SE1685-24	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	UG/KG	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	UG/KG	2W-SD-SD146-0001	SE1778-2DL	NM	04/05/2011	04/15/2011	04/26/2011	10	11	21
PEST	UG/KG	2W-SD-SD146-0001	SE1778-2	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	UG/KG	2W-SD-SD144-0001	SE1778-3DL	NM	04/05/2011	04/15/2011	04/26/2011	10	11	21
PEST	UG/KG	2W-SD-SD144-0001	SE1778-3	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	UG/KG	2W-SD-SD142-0001	SE1778-18DL	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	UG/KG	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	UG/KG	2W-SD-SD140-0001	SE1778-4	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	UG/KG	2W-SD-SD159-0001	SE1685-9DL	NM	04/04/2011	04/14/2011	04/27/2011	10	13	23
PEST	UG/KG	2W-SD-SD138-0001	SE1685-17DL	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
PEST	UG/KG	2W-SD-SD142-0001	SE1778-18	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	UG/KG	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	UG/KG	2W-SD-SD154-0001	SE1685-7	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	UG/KG	2W-SD-SD154-0001	SE1685-7DL	NM	04/04/2011	04/14/2011	04/27/2011	10	13	23
PEST	UG/KG	2W-SD-SD159-0001	SE1685-9	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	UG/KG	2W-SD-SD161-0001	SE1685-8	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	UG/KG	FD-040411-1	SE1685-16	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PEST	UG/KG	FD-040511-01	SE1778-10	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	UG/KG	FD-040511-02	SE1778-11	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	UG/KG	2W-SD-SD138-0001	SE1685-17	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	UG/KG	2W-SD-SD120-0001	SE1685-24DL	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
PEST	UG/KG	2W-SD-SD158-0001	SE1685-10	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PEST	UG/KG	2W-SD-SD123-0001	SE1778-13	NM	04/06/2011	04/15/2011	04/21/2011	9	6	15
PEST	UG/KG	2W-SD-SD116-0001	SE1778-20	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	UG/KG	2W-SD-SD116-0001	SE1778-20DL	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	UG/KG	2W-SD-SD117-0001	SE1778-22	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	UG/KG	2W-SD-SD118-0001	SE1685-22	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	UG/KG	2W-SD-SD118-0001	SE1685-22DL	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
PEST	UG/KG	2W-SD-SD119-0001	SE1685-23	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	UG/KG	2W-SD-SD119-0001	SE1685-23DL	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
PEST	UG/KG	2W-SD-SD120-0001	SE1685-24	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	UG/KG	2W-SD-SD121-0001	SE1685-26DL	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
PEST	UG/KG	2W-SD-SD122-0001	SE1778-8	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	UG/KG	2W-SD-SD136-0001	SE1685-28DL	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
PEST	UG/KG	2W-SD-SD123-0001	SE1778-13DL	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	UG/KG	2W-SD-SD127-0001	SE1778-7	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	UG/KG	2W-SD-SD130-0001	SE1778-9	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	UG/KG	2W-SD-SD130-0001	SE1778-9DL	NM	04/05/2011	04/15/2011	05/11/2011	10	26	36
PEST	UG/KG	2W-SD-SD134-0001	SE1685-29	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	UG/KG	2W-SD-SD134-0001	SE1685-29DL	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
PEST	UG/KG	2W-SD-SD135-0001	SE1778-16	NM	04/06/2011	04/15/2011	04/21/2011	9	6	15
PEST	UG/KG	2W-SD-SD135-0001	SE1778-16DL	NM	04/06/2011	04/15/2011	05/12/2011	9	27	36
PEST	UG/KG	2W-SD-SD136-0001	SE1685-28	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	UG/KG	2W-SD-SD121-0001	SE1685-26	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4186 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Tony Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB# 8631 2526 3713		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒ RUSH TAT ☐ [redacted] ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)		PRESERVATIVE USED		TYPE OF ANALYSIS: PAHs w. SELECT PESTICIDES PCB's & SELECT METALS						COMMENTS
		SE 168.45 GW							G	G	4°C	4°C							
4/04	0952	2W-SD-SD147-0001	SD 147	0	0.33	SD	G	2	1	1									PHASE I ANALIZE
4/04	1012	2W-SD-SD148-0001	SD 148	0	0.33	SD	G	2	* 1	** 1									SEE COMMENT
4/04	1030	2W-SD-SD149-0001	SD 149	0	0.33	SD	G	2	1	1									PHASE I ANALIZE
4/04	1050	2W-SD-SD152-0001	SD 152	0	0.33	SD	G	2	* 1	[redacted] 1 (HTR)									PHASE I ANALIZE
4/04	1120	2W-SD-SD151-0001	SD 151	0	0.33	SD	G	2	* 1	** 1									SEE COMMENT
4/04	1145	2W-SD-SD153-0001	SD 153	0	0.33	SD	G	2	* 1	** 1									↓
4/04	1205	2W-SD-SD154-0001	SD 154	0	0.33	SD	G	2	1	1									PHASE I ANALIZE
4/04	1415	2W-SD-SD161-0001	SD 161	0	0.33	SD	G	2	1	1									↓
4/04	1430	2W-SD-SD159-0001	SD 159	0	0.33	SD	G	2	1	1									↓
4/04	1450	2W-SD-SD158-0001	SD 158	0	0.33	SD	G	2	1	1									↓
4/04	1500	2W-SD-SD156-0001	SD 156	0	0.33	SD	G	2	* 1	** 1									SEE COMMENT
4/04	1515	2W-SD-SD155-0001	SD 155	0	0.33	SD	G	2	* 1	** 1									↓
4/04	1525	2W-SD-SD157-0001	SD 157	0	0.33	SD	G	2	* 1	** 1									↓

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Tony Rojahn	4-05-11	1600	1. RECEIVED BY FED EX	4-05-11	1600
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-6-11	TIME 0830
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD " " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4187 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Tony Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB # 8631 2526 3713		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE168XS
CN

CONTAINER TYPE PLASTIC (P) or GLASS (G): G G G
PRESERVATIVE USED: 4°C 4°C 4°C

TYPE OF ANALYSIS: PAHs & SELECT PESTICIDES; PCBs & SELECT METALS; PAHs

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS								COMMENTS
4/04	1540	2W-SD-SD160-0001	SD 160	0	0.33	SD	G	2	* 1	** 1						SEE COMMENT
4/04	1555	2W-SD-SD162-0001	SD 162	0	0.33	SD	G	2	* 1	** 1						↓
4/04	0000	FD-040411-01	QC	0	0.33	SD	G	2	1	1						PHASE I ANALIZE
4/05	0815	2W-SD-SD138-0001	SD 138	0	0.33	SD	G	2	1	1						↓
4/05	0840	2W-SD-SD137-0001	SD 137	0	0.33	SD	G	2	* 1	** 1						SEE COMMENT
4/05	0855	2W-SD-SD128-0001	SD 128	0	0.33	SD	G	2	* 1	** 1						↓
4/05	0925	2W-SD-SD124-0001	SD 124	0	0.33	SD	G	2	* 1	** 1						
4/05	0950	2W-SD-SD125-0001	SD 125	0	0.33	SD	G	2	* 1	** 1						↓
4/05	1015	2W-SD-SD118-0001	SD 118	0	0.33	SD	G	2	1	1						PHASE I ANALIZE
4/05	1040	2W-SD-SD119-0001	SD 119	0	0.33	SD	G	2	1	1						↓
4/05	1100	2W-SD-SD120-0001	SD 120	0	0.33	SD	G	2	1	1						
4/05	1140	2W-SD-SD126-0001	SD 126	0	0.33	SD	G (TR)	2 1	+ (TR)	1						↓
4/05	1150	2W-SD-SD121-0001	SD 121	0	0.33	SD	G	2	1	1						

1. RELINQUISHED BY Tony Rojahn	DATE 4-05-11	TIME 1600	1. RECEIVED BY FED EX	DATE 4-05-11	TIME 1600
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-6-11	TIME 0930
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER to 4°C & HOLD " " " .

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4188 | PAGE 1 OF 1

PROJECT NO: 112602625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Tony Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB# 8631 2526 3713		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE168X5 GN

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)		PRESERVATIVE USED		TYPE OF ANALYSIS: PAHs by SELECT	TYPE OF ANALYSIS: PESTICIDES	TYPE OF ANALYSIS: PCBs	TYPE OF ANALYSIS: SELECT METALS			COMMENTS
									G	G	4°C	4°C							
4/05	1216	2W-SD-SD141-0001	SD 141	0	0.33	SD	G	2	*1	**1									SEE COMMENT
4/05	1235	2W-SD-SD136-0001	SD	0	0.33	SD	G	2	1	1									PHASE I ANALYZE
4/05	1250	2W-SD-SD134-0001	SD	0	0.33	SD	G	2	1	1									↓

1. RELINQUISHED BY Tony Rojahn	DATE 4-05-11	TIME 1600	1. RECEIVED BY FED EX	DATE 4-05-11	TIME 1600
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-6-11	TIME 0930
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER to 4°C & HOLD " " " .

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

00003

Katahdin Analytical Services, Inc.

Sample Receipt Condition Report

Client: Tetra Tech	KAS PM: ~~SMS~~ KAP	Sampled By: Client	
Project:	KIMS Entry By: GN	Delivered By: FedEx	
KAS Work Order#: 5E1684 S	KIMS Review By: DN	Received By: GN	
SDG #:	Cooler: 1 of 2	Date/Time Rec.: 4-6-11/0930	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 1.2
Samples received at <6 °C w/o freezing?	—				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				—	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

0000009

Katahdin Analytical Services, Inc.

Sample Receipt Condition Report

Client: Tetra Tech	KAS PM: SM KAP	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: Fed-Ex
KAS Work Order#: SE1687S	KIMS Review By: GN	Received By: GN
SDG #: GN	Cooler: 2 of 2	Date/Time Rec.: 4-6-11/09:30

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?					
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 2.0
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓			✓	The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

0000010

Katahdin ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Apr. 07, 2011
09:31 AM

Login Number: SE1685

Account: TETRAT001 Web
Tetra Tech NUS, Inc.

Project: TETRATNL-WE55
CTO-WE55 New London, CT

Quote/Incoming: TETRATNL-WE55

Primary Report Address:
Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Foster Plaza 7
Pittsburgh,PA 15220

Primary Invoice Address:
Accounts Payable
Tetra Tech NUS, Inc.
661 Andersen Drive
Foster Plaza 7
Pittsburgh,PA 15220

Report CC Addresses:
Invoice CC Addresses:

Login Information

ANALYSIS INSTRUCTIONS	:	DOD QSM with lab limits. ND to LOD. "J" flag between MDL and LOQ. Metals run MS/lab dup, post-dig spike and serial dilution on field QC sample. Decant before analysis. Run TS first-digest/extract addtl volume to account for TS. metals 6010C, SVOA-8270D, pest-8081B, PCB-8082A
CHECK NO.	:	
CLIENT PO#	:	1045366 34-CTO WE55(01)
CLIENT PROJECT MANAGE	:	
CONTRACT	:	
COOLER TEMPERATURE	:	1.2, 2.0
DELIVERY SERVICES	:	Fedex
EDD FORMAT	:	KAS119QC-CSV
LOGIN INITIALS	:	GN
PM	:	KAP
PROJECT NAME	:	CTO-WE55 New London, CT
QC LEVEL	:	IV
REGULATORY LIST	:	
REPORT INSTRUCTIONS	:	Send hardcopy and pdf (2 copies, 2 CDs) to Tobrena. Summary package needs all forms.
SDG ID	:	WE55-1
SDG STATUS	:	Begin/End

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SE1685-1	2W-SD-SD147-0001	04-APR-11 09:52	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	01-OCT-11			
Solid	S	SW6010-ARSENIC	01-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	01-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	01-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	01-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	01-OCT-11	4oz Glass		
Solid	S	SW8081-S	18-APR-11	100g Glass		
Solid	S	SW8082-S	18-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	18-APR-11	4oz Glass		
Solid	S	TS	04-MAY-11	8oz Glass		

SE1685-2	2W-SD-SD148-0001	04-APR-11 10:12	06-APR-11		22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments

SE1685-3	2W-SD-SD149-0001	04-APR-11 10:30	06-APR-11		22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	01-OCT-11			
Solid	S	SW6010-ARSENIC	01-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	01-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	01-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	01-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	01-OCT-11	4oz Glass		
Solid	S	SW8081-S	18-APR-11	100g Glass		
Solid	S	SW8082-S	18-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	18-APR-11	4oz Glass		
Solid	S	TS	04-MAY-11	8oz Glass		

00000014
VMP 4/7/11

Login Number: SE1685

Quote/Incoming: TETRATNL-WE55

Account: TETRAT001 Web

Tetra Tech NUS, Inc.

Project: TETRATNL-WE55

CTO-WE55 New London, CT

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SE1685-4	2W-SD-SD152-0001	04-APR-11 10:50	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	01-OCT-11			
Solid	S	SW6010-ARSENIC	01-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	01-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	01-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	01-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	01-OCT-11	4oz Glass		
Solid	S	SW8081-S	18-APR-11	100g Glass		
Solid	S	SW8082-S	18-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	18-APR-11	4oz Glass		
Solid	S	TS	04-MAY-11	8oz Glass		

SE1685-5	2W-SD-SD151-0001	04-APR-11 11:20	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments

SE1685-6	2W-SD-SD153-0001	04-APR-11 11:45	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments

SE1685-7	2W-SD-SD154-0001	04-APR-11 12:05	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	01-OCT-11			
Solid	S	SW6010-ARSENIC	01-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	01-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	01-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	01-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	01-OCT-11	4oz Glass		
Solid	S	SW8081-S	18-APR-11	100g Glass		
Solid	S	SW8082-S	18-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	18-APR-11	4oz Glass		
Solid	S	TS	04-MAY-11	8oz Glass		

SE1685-8	2W-SD-SD161-0001	04-APR-11 14:15	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	01-OCT-11			
Solid	S	SW6010-ARSENIC	01-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	01-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	01-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	01-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	01-OCT-11	4oz Glass		
Solid	S	SW8081-S	18-APR-11	100g Glass		
Solid	S	SW8082-S	18-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	18-APR-11	4oz Glass		
Solid	S	TS	04-MAY-11	8oz Glass		

0000015

KAP 4/7/11

Katahdin ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Apr. 07, 2011
09:31 AM

Login Number: SE1685

Quote/Incoming: TETRATNL-WE55

Account: TETRAT001 Web
Tetra Tech NUS, Inc.

Project: TETRATNL-WE55
CTO-WE55 New London, CT

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SE1685-9	2W-SD-SD159-0001	04-APR-11 14:30	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	01-OCT-11			
Solid	S	SW6010-ARSENIC	01-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	01-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	01-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	01-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	01-OCT-11	4oz Glass		
Solid	S	SW8081-S	18-APR-11	100g Glass		
Solid	S	SW8082-S	18-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	18-APR-11	4oz Glass		
Solid	S	TS	04-MAY-11	8oz Glass		

SE1685-10	2W-SD-SD158-0001	04-APR-11 14:50	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	01-OCT-11			
Solid	S	SW6010-ARSENIC	01-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	01-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	01-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	01-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	01-OCT-11	4oz Glass		
Solid	S	SW8081-S	18-APR-11	100g Glass		
Solid	S	SW8082-S	18-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	18-APR-11	4oz Glass		
Solid	S	TS	04-MAY-11	8oz Glass		

SE1685-11	2W-SD-SD156-0001	04-APR-11 15:00	06-APR-11			22-APR-11	

Matrix	Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments

SE1685-12	2W-SD-SD155-0001	04-APR-11 15:15	06-APR-11			22-APR-11	

Matrix	Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments

SE1685-13	2W-SD-SD157-0001	04-APR-11 15:25	06-APR-11			22-APR-11	

Matrix	Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments

SE1685-14	2W-SD-SD160-0001	04-APR-11 15:40	06-APR-11			22-APR-11	

Matrix	Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments

SE1685-15	2W-SD-SD162-0001	04-APR-11 15:55	06-APR-11			22-APR-11	

Matrix	Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments

0000016

KMP 4/7/11

Login Number: SE1685

Quote/Incoming: TETRATNL-WE55

Account: TETRAT001 Web
Tetra Tech NUS, Inc.

Project: TETRATNL-WE55
CTO-WE55 New London, CT

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SE1685-16	FD-040411-1	04-APR-11 00:00	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	01-OCT-11			
Solid	S	SW6010-ARSENIC	01-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	01-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	01-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	01-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	01-OCT-11	4oz Glass		
Solid	S	SW8081-S	18-APR-11	100g Glass		
Solid	S	SW8082-S	18-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	18-APR-11	4oz Glass		
Solid	S	TS	04-MAY-11	8oz Glass		

SE1685-17	2W-SD-SD138-0001	05-APR-11 08:15	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	02-OCT-11			
Solid	S	SW6010-ARSENIC	02-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	02-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	02-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	02-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	02-OCT-11	4oz Glass		
Solid	S	SW8081-S	19-APR-11	100g Glass		
Solid	S	SW8082-S	19-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	19-APR-11	4oz Glass		
Solid	S	TS	05-MAY-11	8oz Glass		

SE1685-18	2W-SD-SD137-0001	05-APR-11 08:40	06-APR-11			22-APR-11	

Matrix	Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments

SE1685-19	2W-SD-SD128-0001	05-APR-11 08:55	06-APR-11			22-APR-11	

Matrix	Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments

SE1685-20	2W-SD-SD124-0001	05-APR-11 09:25	06-APR-11			22-APR-11	

Matrix	Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments

SE1685-21	2W-SD-SD125-0001	05-APR-11 09:50	06-APR-11			22-APR-11	

Matrix	Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments

0000017
KAP 4/7/11

Login Number: SE1685

Quote/Incoming: TETRATNL-WE55

Account: TETRAT001 Web

Tetra Tech NUS, Inc.

Project: TETRATNL-WE55

CTO-WE55 New London, CT

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SE1685-22	2W-SD-SD118-0001	05-APR-11 10:15	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	02-OCT-11			
Solid	S	SW6010-ARSENIC	02-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	02-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	02-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	02-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	02-OCT-11	4oz Glass		
Solid	S	SW8081-S	19-APR-11	100g Glass		
Solid	S	SW8082-S	19-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	19-APR-11	4oz Glass		
Solid	S	TS	05-MAY-11	8oz Glass		

SE1685-23	2W-SD-SD119-0001	05-APR-11 10:40	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	02-OCT-11			
Solid	S	SW6010-ARSENIC	02-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	02-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	02-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	02-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	02-OCT-11	4oz Glass		
Solid	S	SW8081-S	19-APR-11	100g Glass		
Solid	S	SW8082-S	19-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	19-APR-11	4oz Glass		
Solid	S	TS	05-MAY-11	8oz Glass		

SE1685-24	2W-SD-SD120-0001	05-APR-11 11:00	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	02-OCT-11			
Solid	S	SW6010-ARSENIC	02-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	02-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	02-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	02-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	02-OCT-11	4oz Glass		
Solid	S	SW8081-S	19-APR-11	100g Glass		
Solid	S	SW8082-S	19-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	19-APR-11	4oz Glass		
Solid	S	TS	05-MAY-11	8oz Glass		

SE1685-25	2W-SD-SD126-0001	05-APR-11 11:40	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIMPAH-S	19-APR-11	4oz Glass		
Solid	S	TS	05-MAY-11	8oz Glass		

00000018

Trip 4/7/11

Login Number: SE1685

Quote/Incoming: TETRATNL-WE55

Account: TETRAT001 Web

Tetra Tech NUS, Inc.

Project: TETRATNL-WE55

CTO-WE55 New London, CT

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SE1685-26	2W-SD-SD121-0001	05-APR-11 11:50	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	02-OCT-11			
Solid	S	SW6010-ARSENIC	02-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	02-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	02-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	02-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	02-OCT-11	4oz Glass		
Solid	S	SW8081-S	19-APR-11	100g Glass		
Solid	S	SW8082-S	19-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	19-APR-11	4oz Glass		
Solid	S	TS	05-MAY-11	8oz Glass		

SE1685-27	2W-SD-SD141-0001	05-APR-11 12:16	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments

SE1685-28	2W-SD-SD136-0001	05-APR-11 12:35	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	02-OCT-11			
Solid	S	SW6010-ARSENIC	02-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	02-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	02-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	02-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	02-OCT-11	4oz Glass		
Solid	S	SW8081-S	19-APR-11	100g Glass		
Solid	S	SW8082-S	19-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	19-APR-11	4oz Glass		
Solid	S	TS	05-MAY-11	8oz Glass		

SE1685-29	2W-SD-SD134-0001	05-APR-11 12:50	06-APR-11			22-APR-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	02-OCT-11			
Solid	S	SW6010-ARSENIC	02-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	02-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	02-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	02-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	02-OCT-11	4oz Glass		
Solid	S	SW8081-S	19-APR-11	100g Glass		
Solid	S	SW8082-S	19-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	19-APR-11	4oz Glass		
Solid	S	TS	05-MAY-11	8oz Glass		

Total Samples: *16* ***Total Analyses:*** *182*

0000019

4/7/11

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticide/Aroclor analyte when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS
(Refer to BOD Qualifiers Page for BOD footnotes)

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U	Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.
	Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.
E	Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.
J	Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).
I-7	The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.
A-4	Please refer to cover letter or narrative for further information.
MCL	Maximum Contaminant Level
NL	No limit
NFL	No Free Liquid Present
FLP	Free Liquid Present
NOD	No Odor Detected
TON	Threshold Odor Number
H1	Please note that the regulatory holding time for pH is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. pH for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
H2	Please note that the regulatory holding time for DO is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. DO for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
H3	Please note that the regulatory holding time for sulfite is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. Sulfite for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
H4	Please note that the regulatory holding time for residual chlorine is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. Residual chlorine for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	Spiked sample recovery not within control limits.
*	Duplicate sample analysis not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.
J	The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ) (previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO-WE55 NEW LONDON, CT
SDG: WE55-1
SE1685

Sample Receipt

The following samples were received on April 6, 2011 and were logged in under Katahdin Analytical Services work order number SE1685 for a hardcopy due date of April 22, 2011.

KATAHDIN Sample No.	TTNUS Sample Identification
SE1685-1	2W-SD-SD147-0001
SE1685-2	2W-SD-SD148-0001
SE1685-3	2W-SD-SD149-0001
SE1685-4	2W-SD-SD152-0001
SE1685-5	2W-SD-SD151-0001
SE1685-6	2W-SD-SD153-0001
SE1685-7	2W-SD-SD154-0001
SE1685-8	2W-SD-SD161-0001
SE1685-9	2W-SD-SD159-0001
SE1685-10	2W-SD-SD158-0001
SE1685-11	2W-SD-SD156-0001
SE1685-12	2W-SD-SD155-0001
SE1685-13	2W-SD-SD157-0001
SE1685-14	2W-SD-SD160-0001
SE1685-15	2W-SD-SD162-0001
SE1685-16	FD-040411-1
SE1685-17	2W-SD-SD138-0001
SE1685-18	2W-SD-SD137-0001
SE1685-19	2W-SD-SD128-0001
SE1685-20	2W-SD-SD124-0001
SE1685-21	2W-SD-SD125-0001
SE1685-22	2W-SD-SD118-0001
SE1685-23	2W-SD-SD119-0001
SE1685-24	2W-SD-SD120-0001
SE1685-25	2W-SD-SD126-0001
SE1685-26	2W-SD-SD121-0001
SE1685-27	2W-SD-SD141-0001
SE1685-28	2W-SD-SD136-0001
SE1685-29	2W-SD-SD134-0001

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

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

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

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

Organics Analysis

The samples of SDG WE55-1 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, and III 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, for the specific methods listed below or on the Report of Analysis.

8270C SIM Analysis

All soil samples and associated QC were subjected to the GPC sample clean-up process.

Surrogate recoveries for all samples and QC were evaluated using laboratory established acceptance limits.

Sample SE1685-9 was analyzed at a dilution of 1:3 due to matrix interference, sample viscosity or other matrix-related problem. Consequently, the sample PQL was elevated by a factor of 3. The sample also had high recoveries for two surrogates that were outside of the laboratory established acceptance limits, likely due to matrix interference as evident by the sample chromatogram.

Samples SE1685-1, 1DL, 3, 4, 7, 7DL, 8, 9DL, 10, 16, 17, 17DL, 22, 23, 24, 25, 26, 28 and 29 were manually integrated for the analytes acenaphthylene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, benzo(g,h,i)perylene, the internal standards acenaphthene-s10, chrysene-d12 and/or the surrogate fluorene-d10. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Sample SE1685-7 had a low response for the internal standard chyrsene-d12 that resulted in a %D which was outside the DoD QSM 4.1 acceptance limit of -50% to +100% of the responses of the internal standards of the midpoint initial calibration standard. Since the sample was reanalyzed at a dilution and had acceptable internal standard responses, the sample was not reanalyzed undiluted.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are nominal acceptance limits. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS

that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long the LCS is acceptable. Nominal limits are used for the LCS/LCSD until enough data is collected to generate statistically based acceptance limits.

The initial calibration analyzed on the N instrument on 04/21/11 had %RSD values for several analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The target analyte indeno(1,2,3-cd)pyrene failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. This compound was calibrated using the average model. The corresponding independent check standard (file N0186) had low concentrations for the target analytes pyrene, benzo(a)anthracene, benzo(b)fluoranthene and indeno(1,2,3-cd)pyrene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The independent check standard (file N0225), associated with the initial calibration on the N instrument on 04/23/11 had low concentrations for the target analytes benzo(k)fluoranthene and indeno(1,2,3-cd)pyrene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The Form 7 for the CV (file N0192) had a low response for the target analyte indeno(1,2,3-cd)pyrene. This response resulted in a %D that was greater than the acceptance limit of 20% from DoD QSM Version 4.1.

8081 Analysis

All soil samples and associated QC were subjected to the GPC sample clean-up process.

Surrogate recoveries for all samples and QC, as well as spike recoveries for the laboratory control sample and laboratory control sample duplicate (LCS/LCSD) were evaluated using laboratory established acceptance limits.

Samples SE1685-22 and 28 had high recoveries for DCB on channel A, which were outside the laboratory established acceptance limits. Since the recoveries were acceptable on channel B, the samples were not reextracted.

Sample SE1685-26 had high recoveries for TCX on channel B, which was outside the laboratory established acceptance limits. Since the recoveries were acceptable on channel A, the sample was not reextracted.

Samples SE1685-1, 3, 4, 7, 7DL, 9, 9DL, 10, 16, 22, 22DL, 23, 23DL, 24, 24DL, 26, 26DL, and 29 were manually integrated for 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Note: The Form VII has a column for %D that is set to 15%. The DoD QSM criterion for a CV is 20%D. All of the compounds in the CV's were evaluated to 20% criteria.

The closing CV (file 1ED000353) had a low response for 4,4'-DDE on channel A, which resulted in a %D that was outside of the DoD QSM acceptance limits of 20%. Since the response was acceptable on channel B, the associated samples were not reanalyzed.

The opening/closing CV's (files 1ED00211, 1ED00242, and 1ED00249) had low responses for 4,4'-DDE, 4,4'-DDD, 4,4'-DDT, and the surrogate DCB on one or both channels which resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. The low responses are likely due to interference from samples that were analyzed preceding these CV's. All of the affected samples were put through the GPC, but the sample matrices still caused interference on the instrument. After the failing CV, maintenance was performed on the instrument and the subsequent CV was acceptable. For these reasons, the samples were not reanalyzed.

8082 Analysis

All soil samples and associated QC were subjected to the GPC sample clean-up process.

Surrogate recoveries for all samples and QC, as well as spike recoveries for the laboratory control sample and laboratory control sample duplicate (LCS/LCSD) were evaluated using laboratory established acceptance limits.

Samples SE1685-7, 8, 10, and 16 were manually integrated for the surrogate TCX and/or Aroclor 1260. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Samples SE1685-3, 4, 7, 8, 9, the method blank, WG90032-1, the LCS/LCSD, WG90032-2 and 3, had no, low and/or high recoveries for the surrogate TCX on both channels that were outside laboratory established acceptance limits. Since the recoveries of the surrogate DCB were acceptable, no further action was taken.

Sample SE1685-28 had low recoveries for the surrogates DCB and TCX on channel A, sample SE1685-16, had a low recovery for TCX on channel A, and sample SE1685-29 had a high recovery for DCB on channel B which were outside of the laboratory established acceptance limits. Since the recoveries were acceptable on the confirmation columns, no further action was taken.

Sample SE1685-28 had a RPD for Aroclor 1260 that was outside of the method acceptance limits of 40%. This analyte is flagged with a "J" qualifier on the report of analysis (ROA).

Sample SE1685-7 had a retention time for the surrogate TCX on channel A that is flagged with the qualifier "*" on the form 8 because it was outside of the retention time window. The retention time on channel B was acceptable. The retention times of the opening and closing CV, as well as all of the samples within the analytical sequence, were all acceptable. The sample had a high recovery for the surrogate indicating matrix interference.

The LCSD, WG90032-3, had a low recovery for Aroclor 1016, that was outside laboratory established acceptance limits. Since the recovery for the LCS was acceptable, no further action was taken.

The closing calibration verification standard (CV) (file 7ED573) had a low response for the surrogate DCB on channel A, which resulted in a %D that was outside of the DoD QSM acceptance limits of 20%. Since the response was acceptable on channel B, the associated samples were not reanalyzed.

The opening/closing CV (file 7ED593) had low responses for DCB on channel A and Aroclor 1260 on channel B, which resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since the responses were acceptable on the confirmation channel, the samples were not reanalyzed.

The closing CV (file 7ED608) had a high response for TCX on channel A, which resulted in a %D that was outside of the DoD QSM acceptance limits of 20%. Since the response was acceptable on channel B, the associated samples were not reanalyzed.

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

Metals Analysis

The samples of Katahdin SDG WE55-1 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Solid-matrix Katahdin Sample Numbers SE1685-(1, 3, 8, 10, 16 and -17) were digested for ICP analysis on 04/13/11 (QC Batch BD13ICS0) in accordance with USEPA Method 3050B.

Solid-matrix Katahdin Sample Numbers SE1685-(4, 7, 9, 22, 24, 26, 28 and 29) were digested for ICP analysis on 04/14/11 (QC Batch BD14ICS0) in accordance with USEPA Method 3050B. These samples are redigested portions using additional sample volume due to high percent moisture in the samples. The samples are listed throughout the data package with the suffix "R" (eg. SE1685-004R).

ICP analyses of Katahdin SDG WE55-1 sample digestates were performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010. All samples were analyzed within holding times and all analytical run QC criteria were met. Some samples were diluted to reduce spectral interferences cause by high iron concentrations in the samples.

Reporting of Metals Results

Per client request, analytical results for client samples on Form I and preparation blanks on Form IIIP have been reported using the laboratory's limits of detection (LOD). All results were evaluated down to the laboratory's method detection limits (MDLs). Results that fall between the

MDL and the PQL are flagged with "J" in the C-qualifier column, and the measured concentration appears in the concentration column. Results that are less than the MDL are flagged with "U" in the C-qualifier column, and the LOD is listed in the concentration column. These PQLs, MDLs and LODs have been adjusted for each sample based on the sample amounts used in preparation and analysis.

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

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

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

Wet Chemistry Analysis

The samples of SDG WE55-1 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Annual Book of ASTM Standards", Method D2216-98 "Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass".

All analyses were performed within analytical holding times. All quality control criteria were met.

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

Leslie Dimond
05/2/11

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Lab File ID: ND017 DFTPP Injection Date: 04/21/11

Instrument ID: GCMS-N DFTPP Injection Time: 1448

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	43.3
68	Less than 2.0% of mass 69	0.6 (1.3)1
69	Less than 100.0% of mass 198	45.9
70	Less than 2.0% of mass 69	0.3 (0.6)1
127	40.0 - 60.0% of mass 198	58.6
197	Less than 1.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.5
275	10.0 - 30.0% of mass 198	21.0
365	1.0 - 100.0% of mass 198	2.4
441	0.0 - 100.0% of mass 443	10.7 (74.3)2
442	40.0 - 100.0% of mass 198	72.6
443	17.0 - 23.0% of mass 442	14.4 (19.9)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00N0421	N0180	04/21/11	1520
02		SSTD8.00N0421	N0181	04/21/11	1601
03		SSTD5.00N0421	N0182	04/21/11	1642
04		SSTD2.00N0421	N0183	04/21/11	1724
05		SSTD0.50N0421	N0184	04/21/11	1805
06		SSTD0.20N0421	N0185	04/21/11	1847
07		SIM IND CHECK	N0186	04/21/11	1928
08	WG90041-BLANK	WG90041-1	N0187	04/21/11	2009
09	WG90041-LCS	WG90041-2	N0188	04/21/11	2051
10	WG90041-LCSD	WG90041-3	N0189	04/21/11	2132
11	2W-SD-SD149-0001	SE1685-3	N0190	04/21/11	2213
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FORM V SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GCMS-N Calibration Date(s): 04/21/11 04/21/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 1520 1847

LAB FILE ID: RF0.2: N0185 RF0.5: N0184 RF1: N0180
RF2: N0183 RF5: N0182 RF8: N0181

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2	
1-Methylnaphthalene	18943	35573	71243	139840	328380	608100	2ORDR	2.524e-002	1.27235210	0.10804703	0.99954	0.99000	
Naphthalene	1.069	1.052	1.045	1.028	0.928	0.780	AVRG		0.98366623		11.350	15.000	
2-Methylnaphthalene	23674	51790	105550	169560	367340	655180	2ORDR	-1.22e-002	0.89939852	0.14336591	0.99975	0.99000	
Acenaphthylene	1.745	1.931	2.037	2.045	1.988	1.744	AVRG		1.91504127		7.210	15.000	
Acenaphthene	1.200	1.261	1.279	1.274	1.260	1.134	AVRG		1.23456548		4.603	15.000	
Fluorene	1.264	1.448	1.398	1.525	1.455	1.316	AVRG		1.40099885		6.895	15.000	
Phenanthrene	1.122	1.200	1.276	1.273	1.237	1.109	AVRG		1.20281122		6.073	15.000	
Anthracene	1.071	1.158	1.211	1.249	1.258	1.145	AVRG		1.18191175		6.012	15.000	
Fluoranthene	0.924	1.037	1.081	1.103	1.150	1.028	AVRG		1.05385083		7.379	15.000	
Pyrene	2.016	2.095	1.833	2.008	1.884	1.690	AVRG		1.92106472		7.697	15.000	
Benzo(a)anthracene	1651	7445	35245	71887	227880	462810	LINR	0.20882235	0.98099461		0.99789	0.99000	
Chrysene	15855	33162	60028	139170	302810	551820	2ORDR	-5.82e-003	0.52732831	2.665e-002	0.99984	0.99000	
Benzo(b)fluoranthene	2608	9370	24961	46979	151000	327570	LINR	0.15017419	0.73068867		0.99822	0.99000	
Benzo(k)fluoranthene	2.329	2.216	2.321	2.282	1.976	1.753	AVRG		2.14618865		10.849	15.000	
Benzo(a)pyrene	2029	5867	21411	40420	123830	287110	LINR	0.20526903	0.84330090		0.99864	0.99000	
Indeno(1,2,3-cd)pyrene	0.514	0.501	0.653	0.247	0.398	0.492	AVRG		0.46747386		28.989	15.000	<-
Dibenzo(a,h)anthracene	1784	3910	8864	14507	53747	140900	2ORDR	5.862e-002	2.45201898	-0.1268043	0.99782	0.99000	
Benzo(g,h,i)perylene	4003	7289	16035	28183	79352	177750	LINR	-2.08e-002	1.38364523		0.99962	0.99000	
2-Methylnaphthalene-D10	1.174	1.248	1.374	1.291	1.281	1.133	AVRG		1.25010952		6.949	15.000	
Fluorene-D10	1.452	1.416	1.301	1.315	1.190	1.103	AVRG		1.29597194		10.216	15.000	
Pyrene-D10	1.220	1.214	1.096	1.225	1.143	1.067	AVRG		1.16075221		5.942	15.000	

FORM VI SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Lab File ID: ND018 DFTPP Injection Date: 04/22/11

Instrument ID: GCMS-N DFTPP Injection Time: 0834

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	41.2
68	Less than 2.0% of mass 69	0.6 (1.3)1
69	Less than 100.0% of mass 198	44.6
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	40.0 - 60.0% of mass 198	58.6
197	Less than 1.0% of mass 198	0.5
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.7
275	10.0 - 30.0% of mass 198	22.5
365	1.0 - 100.0% of mass 198	2.5
441	0.0 - 100.0% of mass 443	11.3 (69.1)2
442	40.0 - 100.0% of mass 198	77.7
443	17.0 - 23.0% of mass 442	16.4 (21.1)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00N0422	N0192	04/22/11	0851
02	FD-040411-1	SE1685-16	N0193	04/22/11	0942
03	2W-SD-SD119-0001	SE1685-23	N0194	04/22/11	1023
04	2W-SD-SD136-0001	SE1685-28	N0195	04/22/11	1105
05	2W-SD-SD152-0001	SE1685-4	N0196	04/22/11	1146
06	2W-SD-SD161-0001	SE1685-8	N0197	04/22/11	1227
07	2W-SD-SD118-0001	SE1685-22	N0198	04/22/11	1308
08	2W-SD-SD158-0001	SE1685-10	N0199	04/22/11	1350
09	2W-SD-SD120-0001	SE1685-24	N0200	04/22/11	1431
10	2W-SD-SD126-0001	SE1685-25	N0201	04/22/11	1513
11	2W-SD-SD147-0001	SE1685-1	N0203	04/22/11	1635
12	2W-SD-SD134-0001	SE1685-29	N0204	04/22/11	1717
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FORM V SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GCMS-N Calibration Date: 04/22/11 Time: 0851

Lab File ID: N0192 Init. Calib. Date(s): ~~04/21/11~~ ~~04/21/11~~

Init. Calib. Times: 1520 1847

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
1-Methylnaphthalene	0.9652800	1.0000000	0.6919600	0.01	-3.47	20.00	2RDR	
Naphthalene	0.9840000	1.0218000	1.0218000	0.01	3.84	20.00	AVRG	
2-Methylnaphthalene	1.0178000	1.0000000	0.9592300	0.01	1.78	20.00	2RDR	
Acenaphthylene	1.9150000	2.0221000	2.0221000	0.01	5.59	20.00	AVRG	
Acenaphthene	1.2350000	1.2526000	1.2526000	0.01	1.42	20.01	AVRG	
Fluorene	1.4010000	1.4657000	1.4657000	0.01	4.62	20.00	AVRG	
Phenanthrene	1.2030000	1.2899000	1.2899000	0.01	7.22	20.00	AVRG	
Anthracene	1.1820000	1.2538000	1.2538000	0.01	6.07	20.00	AVRG	
Fluoranthene	1.0540000	1.1353000	1.1353000	0.01	7.71	20.01	AVRG	
Pyrene	1.9210000	1.8461000	1.8461000	0.01	-3.90	20.00	AVRG	
Benzo(a)anthracene	0.8989000	1.0000000	0.7460200	0.01	-10.11	20.00	LINR	
Chrysene	0.9535700	1.0000000	1.6460000	0.01	-4.64	20.00	2RDR	
Benzo(b)fluoranthene	0.9702800	1.0000000	1.1635000	0.01	-2.97	20.00	LINR	
Benzo(k)fluoranthene	2.1460000	1.9840000	1.9840000	0.01	-7.55	20.00	AVRG	
Benzo(a)pyrene	1.0038000	1.0000000	0.9955600	0.01	-0.38	20.01	LINR	
Indeno(1,2,3-cd)pyrene	0.4680000	0.3273300	0.3273300	0.01	-30.06	20.00	AVRG	<-
Dibenzo(a,h)anthracene	1.1186000	1.0000000	0.4501800	0.01	11.86	20.00	2RDR	
Benzo(g,h,i)perylene	1.0412000	1.0000000	0.7645400	0.01	4.12	20.00	LINR	
2-Methylnaphthalene-D10	1.2500000	1.2923000	1.2923000	0.01	3.38	20.00	AVRG	
Fluorene-D10	1.2960000	1.3566000	1.3566000	0.01	4.68	20.00	AVRG	
Pyrene-D10	1.1610000	1.0331000	1.0331000	0.01	-11.02	20.00	AVRG	

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Lab File ID: ND019 DFTPP Injection Date: 04/23/11

Instrument ID: GCMS-N DFTPP Injection Time: 0813

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	41.7
68	Less than 2.0% of mass 69	0.6 (1.5)1
69	Less than 100.0% of mass 198	41.9
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	40.0 - 60.0% of mass 198	55.4
197	Less than 1.0% of mass 198	0.4
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.6
275	10.0 - 30.0% of mass 198	21.3
365	1.0 - 100.0% of mass 198	2.5
441	0.0 - 100.0% of mass 443	10.3 (68.6)2
442	40.0 - 100.0% of mass 198	70.6
443	17.0 - 23.0% of mass 442	15.0 (21.3)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00N0423	N0206	04/23/11	0920
02		SSTD8.00N0423	N0207	04/23/11	1006
03		SSTD5.00N0423	N0208	04/23/11	1047
04		SSTD2.00N0423	N0209	04/23/11	1129
05		SSTD0.50N0423	N0210	04/23/11	1210
06		SSTD0.20N0423	N0211	04/23/11	1251
07	WG90177-BLANK	WG90177-1	N0213	04/23/11	1413
08	WG90177-LCS	WG90177-2	N0214	04/23/11	1455
09	WG90177-LCSD	WG90177-3	N0215	04/23/11	1536
10	2W-SD-SD147-0001	SE1685-1DL	N0216	04/23/11	1617
11	2W-SD-SD154-0001	SE1685-7	N0217	04/23/11	1659
12	2W-SD-SD138-0001	SE1685-17	N0219	04/23/11	1821
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FORM V SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GCMS-N Calibration Date(s): 04/23/11 04/23/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 0920 1251

LAB FILE ID: RF0.2: N0211 RF0.5: N0210 RF1: N0206
RF2: N0209 RF5: N0208 RF8: N0207

								COEFFICENTS			%RSD	MAX %RSD
COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	A0	A1	A2	OR R^2	OR R^2
1-Methylnaphthalene	0.718	0.706	0.645	0.593	0.570	0.498	AVRG		0.62183269		13.578	15.000
Naphthalene	0.919	1.012	1.030	0.948	0.886	0.778	AVRG		0.92879948		9.902	15.000
2-Methylnaphthalene	21153	45821	83698	142160	315110	470760	2ORDR	9.843e-003	1.01400021	0.17180786	0.99775	0.99000
Acenaphthylene	1.769	1.929	2.050	1.861	1.873	1.758	AVRG		1.87311374		5.785	15.000
Acenaphthene	1.182	1.214	1.257	1.155	1.189	1.127	AVRG		1.18748112		3.835	15.000
Fluorene	1.345	1.360	1.408	1.316	1.361	1.246	AVRG		1.33938633		4.062	15.000
Phenanthrene	1.063	1.150	1.252	1.169	1.192	1.105	AVRG		1.15520084		5.724	15.000
Anthracene	1.156	1.180	1.256	1.197	1.223	1.144	AVRG		1.19273217		3.508	15.000
Fluoranthene	0.940	1.026	1.091	1.024	1.143	0.994	AVRG		1.03634267		6.918	15.000
Pyrene	14747	36229	70748	137770	383130	499060	LINR	-0.1203594	0.62063841		0.99902	0.99000
Benzo(a)anthracene	3588	14130	37708	77060	253700	305840	LINR	6.118e-002	0.97384518		0.99901	0.99000
Chrysene	11869	31146	58272	105950	296490	337680	LINR	-0.3180268	0.89853612		0.99529	0.99000
Benzo(b)fluoranthene	0.922	1.061	1.150	1.139	1.238	1.188	AVRG		1.11627767		10.000	15.000
Benzo(k)fluoranthene	1.751	1.728	1.629	1.469	1.510	1.395	AVRG		1.58031907		9.172	15.000
Benzo(a)pyrene	0.783	0.953	1.104	1.046	1.156	1.104	AVRG		1.02439701		13.375	15.000
Indeno(1,2,3-cd)pyrene	0.812	0.903	0.682	0.672	0.758	0.810	AVRG		0.77285831		11.357	15.000
Dibenzo(a,h)anthracene	2186	6987	20659	43533	134670	168030	LINR	0.11724949	1.20006162		0.99924	0.99000
Benzo(g,h,i)perylene	0.870	0.916	0.964	0.941	0.922	0.953	AVRG		0.92776171		3.627	15.000
2-Methylnaphthalene-D10	1.185	1.312	1.328	1.207	1.204	1.145	AVRG		1.23002853		5.962	15.000
Fluorene-D10	1.297	1.334	1.306	1.157	1.118	1.023	AVRG		1.20603860		10.381	15.000
Pyrene-D10	1.175	1.171	1.163	1.107	0.977	1.030	AVRG		1.10395782		7.515	15.000

FORM VI SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Lab File ID: ND020 DFTPP Injection Date: 04/25/11

Instrument ID: GCMS-N DFTPP Injection Time: 0918

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	37.7
68	Less than 2.0% of mass 69	0.5 (1.3)1
69	Less than 100.0% of mass 198	41.3
70	Less than 2.0% of mass 69	0.1 (0.3)1
127	40.0 - 60.0% of mass 198	54.5
197	Less than 1.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	22.0
365	1.0 - 100.0% of mass 198	2.5
441	0.0 - 100.0% of mass 443	11.7 (72.0)2
442	40.0 - 100.0% of mass 198	80.2
443	17.0 - 23.0% of mass 442	16.3 (20.3)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00N0425	N0224	04/25/11	0940
02		SIM IND CHECK	N0225	04/25/11	1026
03	2W-SD-SD159-0001	SE1685-9DL	N0226	04/25/11	1107
04	2W-SD-SD154-0001	SE1685-7DL	N0227	04/25/11	1148
05	2W-SD-SD138-0001	SE1685-17DL	N0228	04/25/11	1229
06	2W-SD-SD121-0001	SE1685-26	N0230	04/25/11	1435
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Katahdin Analytical Services A0000034

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No : WE55-1

Instrument ID: GCMS-N Calibration Date: 04/25/11 Time: 0940

Lab File ID: N0224 Init. Calib. Date(s): 04/23/11 04/23/11

Init. Calib. Times: 0920 1251

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1-Methylnaphthalene	0.6220000	0.6036300	0.6036300	0.01	-2.95	20.00	AVRG
Naphthalene	0.9290000	0.9499400	0.9499400	0.01	2.25	20.00	AVRG
2-Methylnaphthalene	0.8860700	1.0000000	0.7476700	0.01	-11.39	20.00	2RDR
Acenaphthylene	1.8730000	1.8927000	1.8927000	0.01	1.05	20.00	AVRG
Acenaphthene	1.1870000	1.1396000	1.1396000	0.01	-3.99	20.01	AVRG
Fluorene	1.3390000	1.3134000	1.3134000	0.01	-1.91	20.00	AVRG
Phenanthrene	1.1550000	1.1703000	1.1703000	0.01	1.32	20.00	AVRG
Anthracene	1.1930000	1.1864000	1.1864000	0.01	-0.55	20.00	AVRG
Fluoranthene	1.0360000	1.0494000	1.0494000	0.01	1.29	20.01	AVRG
Pyrene	1.0014000	1.0000000	1.7687000	0.01	0.14	20.00	LINR
Benzo(a)anthracene	1.0779000	1.0000000	1.0566000	0.01	7.79	20.00	LINR
Chrysene	0.9486300	1.0000000	1.3389000	0.01	-5.14	20.00	LINR
Benzo(b)fluoranthene	1.1160000	1.1940000	1.1940000	0.01	6.99	20.00	AVRG
Benzo(k)fluoranthene	1.5800000	1.3448000	1.3448000	0.01	-14.89	20.00	AVRG
Benzo(a)pyrene	1.0240000	1.0515000	1.0515000	0.01	2.68	20.01	AVRG
Indeno(1,2,3-cd)pyrene	0.7730000	0.6871800	0.6871800	0.01	-11.10	20.00	AVRG
Dibenzo(a,h)anthracene	0.9909200	1.0000000	0.7475600	0.01	-0.91	20.00	LINR
Benzo(g,h,i)perylene	0.9280000	0.8591100	0.8591100	0.01	-7.42	20.00	AVRG
2-Methylnaphthalene-D10	1.2300000	1.1268000	1.1268000	0.01	-8.39	20.00	AVRG
Fluorene-D10	1.2060000	1.2198000	1.2198000	0.01	1.14	20.00	AVRG
Pyrene-D10	1.1040000	1.0198000	1.0198000	0.01	-7.63	20.00	AVRG

FORM 4

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG90041-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Lab File ID: N0187 Lab Sample ID: WG90041-1

Instrument ID: GCMS-N Date Extracted: 04/13/11

Matrix: (soil/water) SOIL Date Analyzed: 04/21/11

Level: (low/med) LOW Time Analyzed: 2009

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG90041-LCS	WG90041-2	N0188	04/21/11	2051
02	WG90041-LCSD	WG90041-3	N0189	04/21/11	2132
03	2W-SD-SD149-0001	SE1685-3	N0190	04/21/11	2213
04	FD-040411-1	SE1685-16	N0193	04/22/11	0942
05	2W-SD-SD119-0001	SE1685-23	N0194	04/22/11	1023
06	2W-SD-SD136-0001	SE1685-28	N0195	04/22/11	1105
07	2W-SD-SD152-0001	SE1685-4	N0196	04/22/11	1146
08	2W-SD-SD161-0001	SE1685-8	N0197	04/22/11	1227
09	2W-SD-SD118-0001	SE1685-22	N0198	04/22/11	1308
10	2W-SD-SD158-0001	SE1685-10	N0199	04/22/11	1350
11	2W-SD-SD147-0001	SE1685-1	N0203	04/22/11	1635
12	2W-SD-SD147-0001	SE1685-1DL	N0216	04/23/11	1617
13	2W-SD-SD154-0001	SE1685-7	N0217	04/23/11	1659
14	2W-SD-SD138-0001	SE1685-17	N0219	04/23/11	1821
15	2W-SD-SD159-0001	SE1685-9DL	N0226	04/25/11	1107
16	2W-SD-SD154-0001	SE1685-7DL	N0227	04/25/11	1148
17	2W-SD-SD138-0001	SE1685-17DL	N0228	04/25/11	1229
18					
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30					

COMMENTS:

FORM IVSV

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG90041-1
Client ID: Method Blank Sample
Project:
SDG: WE55-1

Sample Date:
Received Date: 11-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 21-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 25-apr-2011 13:07

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.6	10.
2-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.2	10.
1-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Acenaphthylene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10.	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10.	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	U	10.	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo (a) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo (b) Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	U	10.	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno (1,2,3-cd) pyrene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo (a,h) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	U	10.	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene-D10		37.7	%					
Fluorene-D10		39.4	%					
Pyrene-D10		77.7	%					

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Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG90041-2
LCSD ID: WG90041-3
Project:
SDG: WE55-1
Report Date: 25-apr-2011 13:07

Received Date: 11-APR-11
Extract Date: 13-APR-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG90041

Analysis Date: 21-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Naphthalene	66.7	32.8	49.2	34.3	51.4	ug/Kgdrywt	4	50	40-100
2-Methylnaphthalene	66.7	26.5	39.7*	29.5	44.2	ug/Kgdrywt	11	50	40-100
1-Methylnaphthalene	66.7	26.6	39.9*	31.0	46.5	ug/Kgdrywt	15	50	40-100
Acenaphthylene	66.7	28.9	43.3	31.0	46.5	ug/Kgdrywt	7	50	40-100
Acenaphthene	66.7	31.5	47.2	32.4	48.6	ug/Kgdrywt	3	50	40-100
Fluorene	66.7	33.1	49.6	31.7	47.5	ug/Kgdrywt	4	50	40-100
Phenanthrene	66.7	44.2	66.3	42.4	63.6	ug/Kgdrywt	4	50	40-100
Anthracene	66.7	40.3	60.4	41.1	61.6	ug/Kgdrywt	2	50	40-100
Fluoranthene	66.7	52.8	79.2	47.8	71.7	ug/Kgdrywt	10	50	40-100
Pyrene	66.7	52.4	78.6	43.5	65.2	ug/Kgdrywt	18	50	40-100
Benzo (a) anthracene	66.7	43.2	64.8	38.5	57.7	ug/Kgdrywt	12	50	40-100
Chrysene	66.7	45.7	68.5	43.0	64.5	ug/Kgdrywt	6	50	40-100
Benzo (b) Fluoranthene	66.7	46.4	69.6	39.7	59.5	ug/Kgdrywt	16	50	40-100
Benzo(k)fluoranthene	66.7	46.8	70.2	44.1	66.1	ug/Kgdrywt	6	50	40-100
Benzo(a)pyrene	66.7	54.6	81.8	51.7	77.5	ug/Kgdrywt	5	50	40-100
Indeno (1,2,3-cd) pyrene	66.7	70.8	106.*	65.8	98.6	ug/Kgdrywt	7	50	40-100
Dibenzo (a,h) anthracene	66.7	53.3	79.9	50.0	75.0	ug/Kgdrywt	6	50	40-100
Benzo(g,h,i)perylene	66.7	53.4	80.0	53.9	80.8	ug/Kgdrywt	1	50	40-100
2-Methylnaphthalene-D10			48.1		47.8				19-94
Fluorene-D10			43.2		40.3				20-96
Pyrene-D10			78.2		63.0				31-128

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FORM 4

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG90177-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Lab File ID: N0213 Lab Sample ID: WG90177-1

Instrument ID: GCMS-N Date Extracted: 04/14/11

Matrix: (soil/water) SOIL Date Analyzed: 04/23/11

Level:(low/med) LOW Time Analyzed: 1413

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	2W-SD-SD120-0001	SE1685-24	N0200	04/22/11	1431
02	2W-SD-SD126-0001	SE1685-25	N0201	04/22/11	1513
03	2W-SD-SD134-0001	SE1685-29	N0204	04/22/11	1717
04	WG90177-LCS	WG90177-2	N0214	04/23/11	1455
05	WG90177-LCSD	WG90177-3	N0215	04/23/11	1536
06	2W-SD-SD121-0001	SE1685-26	N0230	04/25/11	1435
07					
08					
09					
10					
11					
12					
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COMMENTS:

FORM IVSV

Katahdin Analytical Services A0000030

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG90177-1
Client ID: Method Blank Sample
Project:
SDG: WE55-1

Sample Date:
Received Date: 14-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 23-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 25-apr-2011 13:17

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.6	10.
2-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.2	10.
1-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Acenaphthylene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10.	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10.	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	U	10.	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo (a) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo (b) Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	U	10.	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno (1,2,3-cd) pyrene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo (a,h) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	U	10.	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene-D10		47.0	%					
Fluorene-D10		40.0	%					
Pyrene-D10		76.6	%					

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ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG90177-2
LCSD ID: WG90177-3
Project:
SDG: WE55-1
Report Date: 25-apr-2011 13:17

Received Date: 14-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 23-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Naphthalene	66.7	33.7	50.5	33.3	49.9	ug/Kgdrywt	1	50	40-100
2-Methylnaphthalene	66.7	30.8	46.2	29.4	44.1	ug/Kgdrywt	5	50	40-100
1-Methylnaphthalene	66.7	31.1	46.6	31.4	47.1	ug/Kgdrywt	1	50	40-100
Acenaphthylene	66.7	30.8	46.2	29.3	43.9	ug/Kgdrywt	5	50	40-100
Acenaphthene	66.7	32.4	48.6	30.5	45.7	ug/Kgdrywt	6	50	40-100
Fluorene	66.7	34.8	52.2	31.6	47.4	ug/Kgdrywt	10	50	40-100
Phenanthrene	66.7	41.9	62.8	38.6	57.9	ug/Kgdrywt	8	50	40-100
Anthracene	66.7	41.0	61.5	37.5	56.2	ug/Kgdrywt	9	50	40-100
Fluoranthene	66.7	51.9	77.8	44.6	66.9	ug/Kgdrywt	15	50	40-100
Pyrene	66.7	46.1	69.1	39.2	58.8	ug/Kgdrywt	16	50	40-100
Benzo (a) anthracene	66.7	43.4	65.1	34.3	51.4	ug/Kgdrywt	23	50	40-100
Chrysene	66.7	45.1	67.6	41.1	61.6	ug/Kgdrywt	9	50	40-100
Benzo (b) Fluoranthene	66.7	48.8	73.2	41.5	62.2	ug/Kgdrywt	16	50	40-100
Benzo(k)fluoranthene	66.7	46.3	69.4	45.5	68.2	ug/Kgdrywt	2	50	40-100
Benzo(a)pyrene	66.7	51.5	77.2	46.2	69.3	ug/Kgdrywt	11	50	40-100
Indeno (1,2,3-cd) pyrene	66.7	57.6	86.4	48.7	73.0	ug/Kgdrywt	17	50	40-100
Dibenzo (a,h) anthracene	66.7	45.2	67.8	38.2	57.3	ug/Kgdrywt	17	50	40-100
Benzo(g,h,i)perylene	66.7	46.8	70.2	40.6	60.9	ug/Kgdrywt	14	50	40-100
2-Methylnaphthalene-D10			42.3		41.4				19-94
Fluorene-D10			45.8		41.4				20-96
Pyrene-D10			62.4		55.0				31-128

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FORM 2

SOIL SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Level:(low/med) LOW

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	WG90041-BLANK	WG90041-1	38	39	78						0
02	WG90041-LCS	WG90041-2	48	43	78						0
03	WG90041-LCSD	WG90041-3	48	40	63						0
04	2W-SD-SD149-0001	SE1685-3	43	44	105						0
05	FD-040411-1	SE1685-16	33	36	60						0
06	2W-SD-SD119-0001	SE1685-23	55	46	72						0
07	2W-SD-SD136-0001	SE1685-28	64	57	86						0
08	2W-SD-SD152-0001	SE1685-4	49	45	73						0
09	2W-SD-SD161-0001	SE1685-8	58	46	67						0
10	2W-SD-SD118-0001	SE1685-22	54	50	63						0
11	2W-SD-SD158-0001	SE1685-10	41	40	62						0
12	2W-SD-SD120-0001	SE1685-24	33	34	67						0
13	2W-SD-SD126-0001	SE1685-25	35	34	46						0
14	2W-SD-SD147-0001	SE1685-1	31	37	58						0
15	2W-SD-SD134-0001	SE1685-29	34	38	66						0
16	WG90177-BLANK	WG90177-1	47	40	77						0
17	WG90177-LCS	WG90177-2	42	46	62						0
18	WG90177-LCSD	WG90177-3	41	41	55						0
19	2W-SD-SD147-0001	SE1685-1DL	31	38	66						0
20	2W-SD-SD154-0001	SE1685-7	72	50	116						0
21	2W-SD-SD138-0001	SE1685-17	31	37	85						0
22	2W-SD-SD159-0001	SE1685-9DL	138*	112*	95						2
23	2W-SD-SD154-0001	SE1685-7DL	55	50	86						0
24	2W-SD-SD138-0001	SE1685-17DL	37	40	67						0
25	2W-SD-SD121-0001	SE1685-26	24	27	34						0
26											
27											
28											

		QC LIMITS
S1	= 2-Methylnaphthalene-D1	(19- 94)
S2	= Fluorene-D10	(20- 96)
S3	= Pyrene-D10	(31-128)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

Katahdin Analytical Services A0000026

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Lab File ID (Standard): N0180 Date Analyzed: 04/21/11

Instrument ID: GCMS-N Time Analyzed: 1520

		IS1(DCB) AREA #	IS1(DCB) RT #	IS2(NPT) AREA #	IS2(NPT) RT #	IS3(ANT) AREA #	IS3(ANT) RT #
12 HOUR STD		24968	7.40	88857	10.14	37496	14.24
UPPER LIMIT		49936	7.94	177714	10.68	74992	14.78
LOWER LIMIT		12484	6.86	44429	9.60	18748	13.70
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01	WG90041-BLANK	WG90041-1	19106	7.44	70403	10.20	33824	14.28
02	WG90041-LCS	WG90041-2	26108	7.40	96035	10.15	41812	14.24
03	WG90041-LCSD	WG90041-3	26920	7.40	96523	10.14	41099	14.24
04	2W-SD-SD149-0001	SE1685-3	20053	7.43	76350	10.18	37520	14.26
05		SSTD1.00N0422	23618	7.40	84862	10.14	38694	14.24
06	FD-040411-1	SE1685-16	17418	7.40	67358	10.14	29930	14.25
07	2W-SD-SD119-0001	SE1685-23	21961	7.40	78892	10.14	44492	14.24
08	2W-SD-SD136-0001	SE1685-28	23885	7.40	82665	10.14	43364	14.24
09	2W-SD-SD152-0001	SE1685-4	21816	7.40	76183	10.15	38465	14.24
10	2W-SD-SD161-0001	SE1685-8	23135	7.40	80497	10.14	34210	14.24
11	2W-SD-SD118-0001	SE1685-22	23670	7.40	89247	10.14	49028	14.24
12	2W-SD-SD158-0001	SE1685-10	21643	7.40	74764	10.14	40982	14.24
13	2W-SD-SD120-0001	SE1685-24	24043	7.40	76024	10.15	40137	14.24
14	2W-SD-SD126-0001	SE1685-25	22819	7.40	79094	10.15	39892	14.24
15	2W-SD-SD147-0001	SE1685-1	21487	7.41	80985	10.15	41656	14.24
16	2W-SD-SD134-0001	SE1685-29	23517	7.40	89678	10.14	48754	14.24
17								
18								
19								
20								

IS1 (DCB) = 1,4-Dichlorobenzene-D4
IS2 (NPT) = Naphthalene-D8
IS3 (ANT) = Acenaphthene-D10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Lab File ID (Standard): N0180 Date Analyzed: 04/21/11

Instrument ID: GCMS-N Time Analyzed: 1520

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD		47142	17.76	30083	24.07	16815	27.23
UPPER LIMIT		94284	18.30	60166	24.61	33630	27.77
LOWER LIMIT		23571	17.22	15042	23.53	8408	26.69
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01	WG90041-BLANK	WG90041-1	49905	17.79	30027	24.12	15283	27.30
02	WG90041-LCS	WG90041-2	56789	17.76	33420	24.07	17815	27.24
03	WG90041-LCSD	WG90041-3	48504	17.76	32016	24.07	18218	27.24
04	2W-SD-SD149-0001	SE1685-3	54975	17.77	22989	24.08	11702	27.23
05		SSTD1.00N0422	53682	17.76	38416	24.07	18748	27.23
06	FD-040411-1	SE1685-16	47180	17.76	27335	24.04	18388	27.20
07	2W-SD-SD119-0001	SE1685-23	54705	17.75	26994	24.05	16991	27.20
08	2W-SD-SD136-0001	SE1685-28	53726	17.75	28788	24.04	15897	27.20
09	2W-SD-SD152-0001	SE1685-4	48090	17.75	21029	24.04	15471	27.19
10	2W-SD-SD161-0001	SE1685-8	40763	17.75	17852	24.04	13512	27.19
11	2W-SD-SD118-0001	SE1685-22	58360	17.75	35365	24.04	24508	27.19
12	2W-SD-SD158-0001	SE1685-10	45069	17.75	19643	24.04	14605	27.19
13	2W-SD-SD120-0001	SE1685-24	46963	17.75	15405	24.04	10326	27.19
14	2W-SD-SD126-0001	SE1685-25	48252	17.75	21240	24.04	12052	27.19
15	2W-SD-SD147-0001	SE1685-1	50094	17.75	26868	24.03	17011	27.19
16	2W-SD-SD134-0001	SE1685-29	63904	17.75	26080	24.04	11472	27.19
17								
18								
19								
20								

IS4 (PHN) = Phenanthrene-D10
IS5 (CRY) = Chrysene-D12
IS6 (PRY) = Perylene-D12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Lab File ID (Standard): N0206 Date Analyzed: 04/23/11

Instrument ID: GCMS-N Time Analyzed: 0920

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
12 HOUR STD		23189		7.40		81163		10.14		36627		14.23	
UPPER LIMIT		46378		7.94		162326		10.68		73254		14.77	
LOWER LIMIT		11595		6.86		40582		9.60		18314		13.69	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	WG90177-BLANK	WG90177-1		27773		7.40		99818		10.15		45741		14.24	
02	WG90177-LCS	WG90177-2		22318		7.40		78573		10.14		37989		14.23	
03	WG90177-LCSD	WG90177-3		23059		7.40		79588		10.14		37704		14.23	
04	2W-SD-SD147-0001	SE1685-1DL		19890		7.41		73736		10.15		40165		14.24	
05	2W-SD-SD154-0001	SE1685-7		35014		7.40		148504		10.14		64275		14.26	
06	2W-SD-SD138-0001	SE1685-17		19603		7.40		78767		10.14		52869		14.24	
07		SSTD1.00N0425		19154		7.39		67221		10.13		31890		14.23	
08	2W-SD-SD159-0001	SE1685-9DL		17573		7.39		71541		10.14		27414		14.25	
09	2W-SD-SD154-0001	SE1685-7DL		17698		7.39		70652		10.13		37080		14.23	
10	2W-SD-SD138-0001	SE1685-17DL		14443		7.39		51975		10.14		28283		14.23	
11	2W-SD-SD121-0001	SE1685-26		19292		7.40		67543		10.14		35336		14.23	
12															
13															
14															
15															
16															
17															
18															
19															
20															

IS1 (DCB) = 1,4-Dichlorobenzene-D4
IS2 (NPT) = Naphthalene-D8
IS3 (ANT) = Acenaphthene-D10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Lab File ID (Standard): N0206 Date Analyzed: 04/23/11

Instrument ID: GCMS-N Time Analyzed: 0920

		IS4(PHN) AREA #	IS4(PHN) RT #	IS5(CRY) AREA #	IS5(CRY) RT #	IS6(PRY) AREA #	IS6(PRY) RT #
12 HOUR STD		48008	17.75	29725	24.04	21276	27.19
UPPER LIMIT		96016	18.29	59450	24.58	42552	27.73
LOWER LIMIT		24004	17.21	14863	23.50	10638	26.65
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01	WG90177-BLANK	WG90177-1	65456	17.76	34619	24.07	20784	27.21
02	WG90177-LCS	WG90177-2	58211	17.75	43607	24.04	28991	27.19
03	WG90177-LCSD	WG90177-3	50989	17.75	37371	24.04	21927	27.20
04	2W-SD-SD147-0001	SE1685-1DL	56704	17.73	28966	24.03	21763	27.17
05	2W-SD-SD154-0001	SE1685-7	60935	17.77	12901*	24.05	10949	27.20
06	2W-SD-SD138-0001	SE1685-17	58037	17.75	24970	24.04	15898	27.20
07		SSTD1.00ND425	43985	17.73	29451	24.03	22549	27.19
08	2W-SD-SD159-0001	SE1685-9DL	35330	17.76	19367	24.03	14707	27.17
09	2W-SD-SD154-0001	SE1685-7DL	48264	17.75	19694	24.04	16426	27.19
10	2W-SD-SD138-0001	SE1685-17DL	33499	17.73	17822	24.03	14429	27.17
11	2W-SD-SD121-0001	SE1685-26	53008	17.73	29214	24.04	21222	27.19
12								
13								
14								
15								
16								
17								
18								
19								
20								

IS4 (PHN) = Phenanthrene-D10
IS5 (CRY) = Chrysene-D12
IS6 (PRY) = Perylene-D12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/14/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.22 DCB: 12.54

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		EVAL	03/14/11	1636		
02		INDAB 0.05	03/14/11	1653	4.22	12.54
03		INDAB 0.005	03/14/11	1711	4.22	12.54
04		INDAB 0.01	03/14/11	1728	4.22	12.54
05		INDAB 0.025	03/14/11	1746	4.22	12.54
06		INDAB 0.1	03/14/11	1803	4.22	12.54
07		INDAB 0.25	03/14/11	1821	4.22	12.54
08		IND 0.05	03/14/11	1838		
09		EVAL	04/19/11	1259		
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000138

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/14/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :03/14/11
Time Analyzed :1636

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EC00321.D	3.74	3.48

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 03/14/11 Time: 1838

Lab File ID: 1EC00328 Init. Calib. Date(s): 03/14/11 03/14/11

Init. Calib. Times: 1653 2208

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
alpha-BHC	4.92e-002	5.e-002	14226000	0.001	-1.60	15.00	2RDR
Endosulfan sulfate	4.81e-002	5.e-002	5722400.0	0.001	-3.80	15.00	2RDR
beta-BHC	5.37e-002	5.e-002	5936900.0	0.001	7.40	15.00	2RDR
delta-BHC	5.04e-002	5.e-002	9102500.0	0.001	0.80	15.00	2RDR
Heptachlor	5.03e-002	5.e-002	12388000	0.001	0.60	15.00	2RDR
Aldrin	4.84e-002	5.e-002	10973000	0.001	-3.20	15.00	2RDR
Heptachlor Epoxide	4.94e-002	5.e-002	10299000	0.001	-1.20	15.00	2RDR
gamma-Chlordane	5.e-002	5.e-002	10327000	0.001	0.00	15.00	2RDR
alpha-Chlordane	4.92e-002	5.e-002	9678400.0	0.001	-1.60	15.00	2RDR
4,4'-DDE	4.97e-002	5.e-002	10791000	0.001	-0.60	15.00	2RDR
Endosulfan I	4.95e-002	5.e-002	9229100.0	0.001	-1.00	15.00	2RDR
Dieldrin	4.88e-002	5.e-002	10099000	0.001	-2.40	15.00	2RDR
Endrin	4.87e-002	5.e-002	7945600.0	0.001	-2.60	15.00	2RDR
4,4'-DDD	4.94e-002	5.e-002	8264900.0	0.001	-1.20	15.00	2RDR
Endosulfan II	4.78e-002	5.e-002	8327700.0	0.001	-4.40	15.00	2RDR
4,4'-DDT	4.85e-002	5.e-002	8465600.0	0.001	-3.00	15.00	2RDR
Endrin Aldehyde	4.48e-002	5.e-002	6338200.0	0.001	-10.40	15.00	2RDR
Methoxychlor	5.08e-002	5.e-002	4272000.0	0.001	1.60	15.00	2RDR
Endrin Ketone	4.7e-002	5.e-002	7255400.0	0.001	-6.00	15.00	2RDR
gamma-BHC	4.8e-002	5.e-002	12729000	0.001	-4.00	15.00	2RDR

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date(s): 03/14/11 03/14/11

Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Calibration Time(s): 1653 2208

LAB FILE ID: RF0.005: 1EC00336 RF0.01: 1EC00337 RF0.025: 1EC00338
RF0.05: 1EC00335 RF0.1: 1EC00339 RF0.25: 1EC00340

								COEFFICENTS			%RSD	MAX %RSD
COMPOUND	RF0.005	RF0.01	RF0.025	RF0.05	RF0.1	RF0.25	CURVE	A0	A1	A2	OR R^2	OR R^2
alpha-BHC	55114	126210	336710	725340	1458800	3571100	2ORDR	1.201e-003	6.686e-008	7.809e-016	0.99993	0.99000
gamma-BHC	53474	121630	312920	674850	1330400	3326500	2ORDR	7.753e-004	7.411e-008	2.449e-016	0.99995	0.99000
Heptachlor	50731	113970	293940	621690	1225200	2969600	2ORDR	7.777e-004	7.895e-008	1.674e-015	0.99996	0.99000
Aldrin	44448	100500	265360	565430	1138600	2747400	2ORDR	1.156e-003	8.499e-008	2.02e-015	0.99994	0.99000
beta-BHC	24639	53079	130640	280260	555560	1404800	2ORDR	4.905e-004	1.797e-007	-1.51e-015	0.99996	0.99000
delta-BHC	33348	75574	200660	441740	936790	2392000	2ORDR	1.652e-003	1.079e-007	-1.74e-015	0.99982	0.99000
Heptachlor Epoxide	42917	96258	247430	531960	1036000	2528900	2ORDR	7.432e-004	9.344e-008	2.027e-015	0.99994	0.99000
Endosulfan I	38638	87005	220400	464510	931760	2242300	2ORDR	8.937e-004	1.039e-007	3.183e-015	0.99995	0.99000
gamma-Chlordane	42374	94905	241090	520480	1036800	2549500	2ORDR	9.034e-004	9.445e-008	1.271e-015	0.99994	0.99000
alpha-Chlordane	42256	91830	231060	487060	987470	2382300	2ORDR	9.142e-004	9.864e-008	2.469e-015	0.99994	0.99000
4,4'-DDE	44195	99066	253800	547360	1077500	2573000	2ORDR	9.814e-004	8.869e-008	3.137e-015	0.99994	0.99000
Dieldrin	42061	94650	246930	517440	1036900	2532800	2ORDR	8.618e-004	9.42e-008	1.636e-015	0.99997	0.99000
Endrin	33113	72859	191800	410720	820900	2032800	2ORDR	9.416e-004	1.198e-007	1.335e-015	0.99995	0.99000
4,4'-DDD	33690	75552	196270	418650	846890	2106100	2ORDR	9.799e-004	1.168e-007	6.482e-016	0.99995	0.99000
Endosulfan II	35203	80441	206810	438710	872880	2148700	2ORDR	8.147e-004	1.122e-007	1.736e-015	0.99996	0.99000
4,4'-DDT	36361	80918	205940	435170	877030	2138000	2ORDR	8.897e-004	1.115e-007	2.322e-015	0.99996	0.99000
Endrin Aldehyde	27250	66865	167240	353520	712520	1744600	2ORDR	9.23e-004	1.375e-007	2.999e-015	0.99996	0.99000
Endosulfan sulfate	22824	52506	138740	297690	608420	1561900	2ORDR	1.068e-003	1.657e-007	-4.06e-015	0.99995	0.99000
Methoxychlor	19580	41548	101370	212260	419360	1030800	2ORDR	3.474e-004	2.344e-007	7.514e-015	0.99998	0.99000
Endrin Ketone	32229	71471	175770	396970	765450	1855300	2ORDR	9.11e-004	1.254e-007	4.78e-015	0.99986	0.99000
Toxaphene	11082	28433	63029	140130	364930	1528300	2ORDR	3.56e-002	6.868e-006	-2.28e-013	0.99996	0.99000
(2)	9728	25841	56293	121220	316190	1344900	2ORDR	2.946e-002	7.98e-006	-4.22e-013	0.99998	0.99000
(3)	17555	45438	99275	214400	563510	2276100	2ORDR	3.464e-002	4.413e-006	-1.53e-014	0.99996	0.99000
(4)	18495	44996	94424	206280	508800	2048300	2ORDR	1.538e-002	4.878e-006	-1.46e-015	0.99998	0.99000
(5)	24709	66403	142890	310480	780760	3167800	2ORDR	2.337e-002	3.182e-006	-1.05e-014	0.99998	0.99000
(6)	17713	48926	107120	228030	572500	2333600	2ORDR	2.109e-002	4.347e-006	-3.05e-014	0.99999	0.99000
(7)	12029	31513	71093	153780	403800	1697400	2ORDR	3.481e-002	6.22e-006	-2.06e-013	0.99997	0.99000
(8)	29223	76663	168960	366330	952240	3795000	2ORDR	3.414e-002	2.597e-006	7.708e-015	0.99997	0.99000
(9)	19487	52219	114750	244940	633410	2562900	2ORDR	2.946e-002	3.926e-006	-1.4e-014	0.99998	0.99000
(10)	11262	30747	69098	141700	360760	1545200	2ORDR	1.728e-002	7.011e-006	-3.57e-013	0.99999	0.99000
Tetrachloro-m-Xylene	41421	91676	230050	486410	967460	2386800	2ORDR	6.416e-004	1.017e-007	1.174e-015	0.99997	0.99000
Decachlorobiphenyl	22211	48904	119080	245400	478580	1180700	2ORDR	1.094e-004	2.053e-007	5.435e-015	0.99998	0.99000

FORM VI PESTICIDE

Report Date: 19-Apr-2011 09:06

Calibration History

Method : \\target_server\gg\chem\gc01.i\GC01ED18.b\PEST061B.m\PEST061B.m
Start Cal Date: 14-MAR-2011 16:53
End Cal Date : 30-MAR-2011 13:37
Last Cal Level: 1
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.00500		
30-MAR-2011 13:37	hex	1EC00632.D
17-MAR-2011 11:30	ar1660	1EC00434.D
14-MAR-2011 20:58	TC	1EC00336.D
14-MAR-2011 19:13	Tox	1EC00330.D
14-MAR-2011 17:11	ICAL	1EC00323.D
Cal Level: 2 , Cal Amount: 0.01000		
30-MAR-2011 13:19	hex	1EC00631.D
17-MAR-2011 11:48	ar1660	1EC00435.D
14-MAR-2011 21:15	TC	1EC00337.D
14-MAR-2011 19:30	Tox	1EC00331.D
14-MAR-2011 17:28	ICAL	1EC00324.D
Cal Level: 3 , Cal Amount: 0.02500		
30-MAR-2011 13:02	hex	1EC00630.D
17-MAR-2011 12:05	ar1660	1EC00436.D
14-MAR-2011 21:33	TC	1EC00338.D
14-MAR-2011 19:48	Tox	1EC00332.D
14-MAR-2011 17:46	ICAL	1EC00325.D
Cal Level: 4 , Cal Amount: 0.05000		
30-MAR-2011 12:09	hex	1EC00627.D
17-MAR-2011 14:43	AR1232	1EC00445.D
17-MAR-2011 14:25	AR1221	1EC00444.D
17-MAR-2011 14:08	AR1254	1EC00443.D
17-MAR-2011 13:50	AR1248	1EC00442.D
17-MAR-2011 13:33	AR1242	1EC00441.D
17-MAR-2011 11:13	ar1660	1EC00433.D
14-MAR-2011 20:40	TC	1EC00335.D
14-MAR-2011 18:56	Tox	1EC00329.D
14-MAR-2011 16:53	ICAL	1EC00322.D
Cal Level: 5 , Cal Amount: 0.10000		
30-MAR-2011 12:44	hex	1EC00629.D
17-MAR-2011 12:23	ar1660	1EC00437.D
14-MAR-2011 21:50	TC	1EC00339.D

14-MAR-2011 20:05	Tox	1EC00333.D
14-MAR-2011 18:03	ICAL	1EC00326.D

Cal Level: 6 , Cal Amount: 0.25000		
30-MAR-2011 12:27	hex	1EC00628.D
17-MAR-2011 12:40	ar1660	1EC00438.D
14-MAR-2011 22:08	TC	1EC00340.D
14-MAR-2011 20:23	Tox	1EC00334.D
14-MAR-2011 18:21	ICAL	1EC00327.D

Continuing Calibration
Ccal Level Mode: BY SAMPLE

18-APR-2011 12:19	cv	1ED00195.D
18-APR-2011 12:36	Tox	1ED00196.D
18-APR-2011 09:33	Tox	1ED00188.D
18-APR-2011 09:16	cv	1ED00187.D

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 ~~NEW LONDON~~, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :04/19/11
Time Analyzed :1259

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1ED00198.D	2.57	4.00

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.16 DCB: 12.45

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	04/19/11	1316	4.16	12.45
02	WG90031-BLAN	WG90031-1	04/19/11	1633	4.16	12.45
03	WG90031-LCS	WG90031-2	04/19/11	1650	4.16	12.45
04	WG90031-LCSD	WG90031-3	04/19/11	1708	4.16	12.45
05	2W-SD-SD147-	SE1685-1	04/19/11	1743	4.16	12.45
06	2W-SD-SD149-	SE1685-3	04/19/11	1800	4.16	12.45
07	2W-SD-SD152-	SE1685-4	04/19/11	1818	4.17	12.45
08	2W-SD-SD154-	SE1685-7	04/19/11	1835	4.17	12.46
09	2W-SD-SD161-	SE1685-8	04/19/11	1853	4.16	12.45
10	2W-SD-SD159-	SE1685-9	04/19/11	1910	4.18	12.46
11		INDAB 0.025	04/19/11	1927	4.16	12.45
12		EVAL	04/20/11	1047		
13						
14						
15						
16						
17						
18						
19						
20						

delta-BHC

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/19/11 Time: 1316

Lab File ID: 1ED00199 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.64e-002	5.e-002	16342000	0.001	12.80	15.00	2RDR	
gamma-BHC	5.57e-002	5.e-002	14774000	0.001	11.40	15.00	2RDR	
Heptachlor	4.75e-002	5.e-002	11697000	0.001	-5.00	15.00	2RDR	
beta-BHC	5.31e-002	5.e-002	5873300.0	0.001	6.20	15.00	2RDR	
Aldrin	5.06e-002	5.e-002	11475000	0.001	1.20	15.00	2RDR	
delta-BHC	6.76e-002	5.e-002	12353000	0.001	35.20	15.00	2RDR	<-
Heptachlor Epoxide	4.93e-002	5.e-002	10282000	0.001	-1.40	15.00	2RDR	
Endosulfan I	4.76e-002	5.e-002	8860700.0	0.001	-4.80	15.00	2RDR	
4,4'-DDE	4.57e-002	5.e-002	9905500.0	0.001	-8.60	15.00	2RDR	
Dieldrin	4.69e-002	5.e-002	9698700.0	0.001	-6.20	15.00	2RDR	
Endrin	4.76e-002	5.e-002	7764600.0	0.001	-4.80	15.00	2RDR	
4,4'-DDD	4.54e-002	5.e-002	7579200.0	0.001	-9.20	15.00	2RDR	
Endosulfan II	4.52e-002	5.e-002	7853400.0	0.001	-9.60	15.00	2RDR	
4,4'-DDT	4.41e-002	5.e-002	7695000.0	0.001	-11.80	15.00	2RDR	
Endrin Aldehyde	4.32e-002	5.e-002	6113800.0	0.001	-13.60	15.00	2RDR	
Endosulfan sulfate	4.95e-002	5.e-002	5883900.0	0.001	-1.00	15.00	2RDR	
Methoxychlor	4.09e-002	5.e-002	3438700.0	0.001	-18.20	15.00	2RDR	<-
alpha-Chlordane	4.76e-002	5.e-002	9364500.0	0.001	-4.80	15.00	2RDR	
gamma-Chlordane	4.76e-002	5.e-002	9817200.0	0.001	-4.80	15.00	2RDR	
Endrin Ketone	4.48e-002	5.e-002	6910100.0	0.001	-10.40	15.00	2RDR	
Tetrachloro-m-Xylene	5.61e-002	5.e-002	10836000	0.001	12.20	15.00	2RDR	
Decachlorobiphenyl	4.3e-002	5.e-002	4160900.0	0.001	-14.00	15.00	2RDR	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/19/11 Time: 1927

Lab File ID: 1ED00211 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.3e-002	2.5e-002	12996000	0.001	-8.00	15.00	2RDR	
gamma-BHC	2.3e-002	2.5e-002	12002000	0.001	-8.00	15.00	2RDR	
Heptachlor	1.96e-002	2.5e-002	9486200.0	0.001	-21.60	15.00	2RDR	<-
beta-BHC	2.18e-002	2.5e-002	4753400.0	0.001	-12.80	15.00	2RDR	
Aldrin	1.94e-002	2.5e-002	8526500.0	0.001	-22.40	15.00	2RDR	<-
delta-BHC	2.83e-002	2.5e-002	9934500.0	0.001	13.20	15.00	2RDR	
Heptachlor Epoxide	1.9e-002	2.5e-002	7802800.0	0.001	-24.00	15.00	2RDR	<-
Endosulfan I	1.88e-002	2.5e-002	6861200.0	0.001	-24.80	15.00	2RDR	<-
4,4'-DDE	1.78e-002	2.5e-002	7518600.0	0.001	-28.80	15.00	2RDR	<-
Dieldrin	2.04e-002	2.5e-002	8263400.0	0.001	-18.40	15.00	2RDR	<-
Endrin	2.13e-002	2.5e-002	6799600.0	0.001	-14.80	15.00	2RDR	
4,4'-DDD	1.94e-002	2.5e-002	6316700.0	0.001	-22.40	15.00	2RDR	<-
Endosulfan II	2.e-002	2.5e-002	6833200.0	0.001	-20.00	15.00	2RDR	<-
4,4'-DDT	1.36e-002	2.5e-002	4539400.0	0.001	-45.60	15.00	2RDR	<-
Endrin Aldehyde	1.89e-002	2.5e-002	5222200.0	0.001	-24.40	15.00	2RDR	<-
Endosulfan sulfate	1.95e-002	2.5e-002	4461800.0	0.001	-22.00	15.00	2RDR	<-
Methoxychlor	1.4e-002	2.5e-002	2324000.0	0.001	-44.00	15.00	2RDR	<-
alpha-Chlordane	1.83e-002	2.5e-002	7014600.0	0.001	-26.80	15.00	2RDR	<-
gamma-Chlordane	1.9e-002	2.5e-002	7633500.0	0.001	-24.00	15.00	2RDR	<-
Endrin Ketone	2.18e-002	2.5e-002	6614500.0	0.001	-12.80	15.00	2RDR	
Tetrachloro-m-Xylene	2.45e-002	2.5e-002	9373800.0	0.001	-2.00	15.00	2RDR	
Decachlorobiphenyl	1.94e-002	2.5e-002	3740800.0	0.001	-22.40	15.00	2RDR	<-

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :04/20/11
Time Analyzed :1047

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1ED00228.D	1.33	0.83

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.14 DCB: 12.39

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	04/20/11	1305	4.13	12.39
02	2W-SD-SD158-	SE1685-10	04/20/11	1457	4.14	12.39
03	FD-040411-1	SE1685-16	04/20/11	1514	4.14	12.39
04	2W-SD-SD138-	SE1685-17	04/20/11	1532	4.14	12.39
05	2W-SD-SD118-	SE1685-22	04/20/11	1549	4.15	12.40
06	2W-SD-SD119-	SE1685-23	04/20/11	1607	4.15	12.39
07	2W-SD-SD120-	SE1685-24	04/20/11	1624	4.15	12.39
08		INDAB 0.025	04/20/11	1642	4.14	12.39
09	2W-SD-SD121-	SE1685-26	04/20/11	1659	4.15	12.40
10	2W-SD-SD136-	SE1685-28	04/20/11	1717	4.15	12.40
11	2W-SD-SD134-	SE1685-29	04/20/11	1734	4.15	12.40
12		INDAB 0.05	04/20/11	1844	4.14	12.39
13		EVAL	04/21/11	1215		
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000142

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/20/11 Time: 1305

Lab File ID: 1ED00231 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.55e-002	5.e-002	16089000	0.001	11.00	15.00	2RDR	
gamma-BHC	5.58e-002	5.e-002	14815000	0.001	11.60	15.00	2RDR	
Heptachlor	4.92e-002	5.e-002	12117000	0.001	-1.60	15.00	2RDR	
beta-BHC	5.38e-002	5.e-002	5948400.0	0.001	7.60	15.00	2RDR	
Aldrin	5.06e-002	5.e-002	11471000	0.001	1.20	15.00	2RDR	
delta-BHC	6.76e-002	5.e-002	12342000	0.001	35.20	15.00	2RDR	<-
Heptachlor Epoxide	4.9e-002	5.e-002	10223000	0.001	-2.00	15.00	2RDR	
Endosulfan I	4.71e-002	5.e-002	8768600.0	0.001	-5.80	15.00	2RDR	
4,4'-DDE	4.49e-002	5.e-002	9740500.0	0.001	-10.20	15.00	2RDR	
Dieldrin	4.59e-002	5.e-002	9482800.0	0.001	-8.20	15.00	2RDR	
Endrin	4.89e-002	5.e-002	7975500.0	0.001	-2.20	15.00	2RDR	
4,4'-DDD	4.33e-002	5.e-002	7227400.0	0.001	-13.40	15.00	2RDR	
Endosulfan II	4.34e-002	5.e-002	7544700.0	0.001	-13.20	15.00	2RDR	
4,4'-DDT	4.3e-002	5.e-002	7494000.0	0.001	-14.00	15.00	2RDR	
Endrin Aldehyde	4.12e-002	5.e-002	5819300.0	0.001	-17.60	15.00	2RDR	<-
Endosulfan sulfate	4.92e-002	5.e-002	5851800.0	0.001	-1.60	15.00	2RDR	
Methoxychlor	4.1e-002	5.e-002	3451000.0	0.001	-18.00	15.00	2RDR	<-
alpha-Chlordane	4.73e-002	5.e-002	9304500.0	0.001	-5.40	15.00	2RDR	
gamma-Chlordane	4.68e-002	5.e-002	9647300.0	0.001	-6.40	15.00	2RDR	
Endrin Ketone	4.5e-002	5.e-002	6939000.0	0.001	-10.00	15.00	2RDR	
Tetrachloro-m-Xylene	5.44e-002	5.e-002	10517000	0.001	8.80	15.00	2RDR	
Decachlorobiphenyl	4.07e-002	5.e-002	3931800.0	0.001	-18.60	15.00	2RDR	<-

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/20/11 Time: 1642

Lab File ID: 1ED00242 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	25% MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.21e-002	2.5e-002	12479000	0.001	-11.60	15.00	2RDR	
gamma-BHC	2.24e-002	2.5e-002	11677000	0.001	-10.40	15.00	2RDR	
Heptachlor	2.e-002	2.5e-002	9698400.0	0.001	-20.00	15.00	2RDR	<-
beta-BHC	2.24e-002	2.5e-002	4872400.0	0.001	-10.40	15.00	2RDR	
Aldrin	2.02e-002	2.5e-002	8935200.0	0.001	-19.20	15.00	2RDR	<-
delta-BHC	2.89e-002	2.5e-002	10150000	0.001	15.60	15.00	2RDR	<-
Heptachlor Epoxide	2.02e-002	2.5e-002	8277800.0	0.001	-19.20	15.00	2RDR	<-
Endosulfan I	1.88e-002	2.5e-002	6850500.0	0.001	-24.80	15.00	2RDR	<-
4,4'-DDE	1.79e-002	2.5e-002	7599200.0	0.001	-28.40	15.00	2RDR	<-
Dieldrin	1.91e-002	2.5e-002	7731100.0	0.001	-23.60	15.00	2RDR	<-
Endrin	2.06e-002	2.5e-002	6564700.0	0.001	-17.60	15.00	2RDR	<-
4,4'-DDD	2.2e-002	2.5e-002	7204500.0	0.001	-12.00	15.00	2RDR	
Endosulfan II	1.89e-002	2.5e-002	6427200.0	0.001	-24.40	15.00	2RDR	<-
4,4'-DDT	1.28e-002	2.5e-002	4272200.0	0.001	-48.80	15.00	2RDR	<-
Endrin Aldehyde	1.8e-002	2.5e-002	4966600.0	0.001	-28.00	15.00	2RDR	<-
Endosulfan sulfate	1.72e-002	2.5e-002	3905400.0	0.001	-31.20	15.00	2RDR	<-
Methoxychlor	1.21e-002	2.5e-002	1994200.0	0.001	-51.60	15.00	2RDR	<-
alpha-Chlordane	1.87e-002	2.5e-002	7190800.0	0.001	-25.20	15.00	2RDR	<-
gamma-Chlordane	1.91e-002	2.5e-002	7696500.0	0.001	-23.60	15.00	2RDR	<-
Endrin Ketone	0.0000000	2.5e-002	6443900.0	0.001	0.00	15.00	2RDR	<-
Tetrachloro-m-Xylene	2.47e-002	2.5e-002	9431100.0	0.001	-1.20	15.00	2RDR	
Decachlorobiphenyl	2.19e-002	2.5e-002	4243100.0	0.001	-12.40	15.00	2RDR	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No. : WE55-1

Instrument ID: GC01 Calibration Date: 04/20/11 Time: 1844

Lab File ID: 1ED00249 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.23e-002	5.e-002	15160000	0.001	4.60	15.00	2RDR	
gamma-BHC	5.05e-002	5.e-002	13393000	0.001	1.00	15.00	2RDR	
Heptachlor	4.38e-002	5.e-002	10782000	0.001	-12.40	15.00	2RDR	
beta-BHC	4.87e-002	5.e-002	5377100.0	0.001	-2.60	15.00	2RDR	
Aldrin	4.61e-002	5.e-002	10434000	0.001	-7.80	15.00	2RDR	
delta-BHC	6.22e-002	5.e-002	11326000	0.001	24.40	15.00	2RDR	<-
Heptachlor Epoxide	4.43e-002	5.e-002	9235700.0	0.001	-11.40	15.00	2RDR	
Endosulfan I	4.14e-002	5.e-002	7704200.0	0.001	-17.20	15.00	2RDR	<-
4,4'-DDE	4.02e-002	5.e-002	8715300.0	0.001	-19.60	15.00	2RDR	<-
Dieldrin	4.24e-002	5.e-002	8753100.0	0.001	-15.20	15.00	2RDR	<-
Endrin	4.52e-002	5.e-002	7367100.0	0.001	-9.60	15.00	2RDR	
4,4'-DDD	4.85e-002	5.e-002	8120300.0	0.001	-3.00	15.00	2RDR	
Endosulfan II	3.93e-002	5.e-002	6820800.0	0.001	-21.40	15.00	2RDR	<-
4,4'-DDT	2.38e-002	5.e-002	4091600.0	0.001	-52.40	15.00	2RDR	<-
Endrin Aldehyde	3.74e-002	5.e-002	5272500.0	0.001	-25.20	15.00	2RDR	<-
Endosulfan sulfate	3.15e-002	5.e-002	3693400.0	0.001	-37.00	15.00	2RDR	<-
Methoxychlor	2.48e-002	5.e-002	2076600.0	0.001	-50.40	15.00	2RDR	<-
alpha-Chlordane	4.17e-002	5.e-002	8184700.0	0.001	-16.60	15.00	2RDR	<-
gamma-Chlordane	4.22e-002	5.e-002	8696000.0	0.001	-15.60	15.00	2RDR	<-
Endrin Ketone	4.18e-002	5.e-002	6443900.0	0.001	-16.40	15.00	2RDR	<-
Tetrachloro-m-Xylene	5.36e-002	5.e-002	10364000	0.001	7.20	15.00	2RDR	
Decachlorobiphenyl	3.96e-002	5.e-002	3827800.0	0.001	-20.80	15.00	2RDR	<-

FORM VII PEST

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :04/21/11
Time Analyzed :1215

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1ED00251.D	0.05	0.14

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.13 DCB: 12.36

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	04/21/11	1233	4.12	12.36
02	2W-SD-SD138-	SE1685-17DL	04/21/11	1344	4.11	12.36
03	2W-SD-SD118-	SE1685-22DL	04/21/11	1401	4.12	12.37
04	2W-SD-SD119-	SE1685-23DL	04/21/11	1419	4.12	12.36
05	2W-SD-SD120-	SE1685-24DL	04/21/11	1436	4.12	12.37
06	2W-SD-SD121-	SE1685-26DL	04/21/11	1454	4.12	12.37
07	2W-SD-SD136-	SE1685-28DL	04/21/11	1511	4.12	12.36
08	2W-SD-SD134-	SE1685-29DL	04/21/11	1529	4.12	12.37
09		INDAB 0.025	04/21/11	1621	4.12	12.36
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS

TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 ~~NEW LONDON~~, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: ~~GC01~~

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.13 DCB: 12.36

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	04/21/11	1233	4.12	12.36
02	2W-SD-SD138-	SE1685-17DL	04/21/11	1344		
03	2W-SD-SD118-	SE1685-22DL	04/21/11	1401		
04	2W-SD-SD119-	SE1685-23DL	04/21/11	1419		
05	2W-SD-SD120-	SE1685-24DL	04/21/11	1436		
06	2W-SD-SD121-	SE1685-26DL	04/21/11	1454		
07	2W-SD-SD136-	SE1685-28DL	04/21/11	1511		
08	2W-SD-SD134-	SE1685-29DL	04/21/11	1529	4.12	12.37
09		INDAB 0.025	04/21/11	1621	4.12	12.36
10		EVAL	04/27/11	0819		
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/21/11 Time: 1233

Lab File ID: 1ED00252 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.45e-002	5.e-002	15785000	0.001	9.00	15.00	2RDR	
gamma-BHC	5.42e-002	5.e-002	14392000	0.001	8.40	15.00	2RDR	
Heptachlor	4.8e-002	5.e-002	11804000	0.001	-4.00	15.00	2RDR	
beta-BHC	5.2e-002	5.e-002	5748700.0	0.001	4.00	15.00	2RDR	
Aldrin	4.96e-002	5.e-002	11242000	0.001	-0.80	15.00	2RDR	
delta-BHC	6.17e-002	5.e-002	11235000	0.001	23.40	15.00	2RDR	<-
Heptachlor Epoxide	4.75e-002	5.e-002	9911100.0	0.001	-5.00	15.00	2RDR	
Endosulfan I	4.61e-002	5.e-002	8594600.0	0.001	-7.80	15.00	2RDR	
4,4'-DDE	4.47e-002	5.e-002	9687800.0	0.001	-10.60	15.00	2RDR	
Dieldrin	4.55e-002	5.e-002	9394600.0	0.001	-9.00	15.00	2RDR	
Endrin	5.01e-002	5.e-002	8166000.0	0.001	0.20	15.00	2RDR	
4,4'-DDD	4.25e-002	5.e-002	7097100.0	0.001	-15.00	15.00	2RDR	
Endosulfan II	4.29e-002	5.e-002	7448100.0	0.001	-14.20	15.00	2RDR	
4,4'-DDT	4.27e-002	5.e-002	7436200.0	0.001	-14.60	15.00	2RDR	
Endrin Aldehyde	4.09e-002	5.e-002	5778900.0	0.001	-18.20	15.00	2RDR	<-
Endosulfan sulfate	4.7e-002	5.e-002	5587100.0	0.001	-6.00	15.00	2RDR	
Methoxychlor	4.29e-002	5.e-002	3611600.0	0.001	-14.20	15.00	2RDR	
alpha-Chlordane	4.62e-002	5.e-002	9080000.0	0.001	-7.60	15.00	2RDR	
gamma-Chlordane	4.61e-002	5.e-002	9508300.0	0.001	-7.80	15.00	2RDR	
Endrin Ketone	4.23e-002	5.e-002	6528100.0	0.001	-15.40	15.00	2RDR	<-
Tetrachloro-m-Xylene	5.5e-002	5.e-002	10622000	0.001	10.00	15.00	2RDR	
Decachlorobiphenyl	4.11e-002	5.e-002	3972400.0	0.001	-17.80	15.00	2RDR	<-

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/21/11 Time: 1621

Lab File ID: 1ED00262 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.77e-002	2.5e-002	15808000	0.001	10.80	15.00	2RDR	
gamma-BHC	2.78e-002	2.5e-002	14558000	0.001	11.20	15.00	2RDR	
Heptachlor	2.38e-002	2.5e-002	11610000	0.001	-4.80	15.00	2RDR	
beta-BHC	2.7e-002	2.5e-002	5898600.0	0.001	8.00	15.00	2RDR	
Aldrin	2.55e-002	2.5e-002	11356000	0.001	2.00	15.00	2RDR	
delta-BHC	3.42e-002	2.5e-002	12120000	0.001	36.80	15.00	2RDR	<-
Heptachlor Epoxide	2.49e-002	2.5e-002	10297000	0.001	-0.40	15.00	2RDR	
Endosulfan I	2.38e-002	2.5e-002	8754000.0	0.001	-4.80	15.00	2RDR	
4,4'-DDE	2.27e-002	2.5e-002	9705600.0	0.001	-9.20	15.00	2RDR	
Dieldrin	2.33e-002	2.5e-002	9495400.0	0.001	-6.80	15.00	2RDR	
Endrin	2.57e-002	2.5e-002	8241100.0	0.001	2.80	15.00	2RDR	
4,4'-DDD	2.27e-002	2.5e-002	7420000.0	0.001	-9.20	15.00	2RDR	
Endosulfan II	2.29e-002	2.5e-002	7856700.0	0.001	-8.40	15.00	2RDR	
4,4'-DDT	2.29e-002	2.5e-002	7846300.0	0.001	-8.40	15.00	2RDR	
Endrin Aldehyde	2.17e-002	2.5e-002	6017800.0	0.001	-13.20	15.00	2RDR	
Endosulfan sulfate	2.6e-002	2.5e-002	6045100.0	0.001	4.00	15.00	2RDR	
Methoxychlor	2.2e-002	2.5e-002	3676600.0	0.001	-12.00	15.00	2RDR	
alpha-Chlordane	2.41e-002	2.5e-002	9342400.0	0.001	-3.60	15.00	2RDR	
gamma-Chlordane	2.4e-002	2.5e-002	9737500.0	0.001	-4.00	15.00	2RDR	
Endrin Ketone	2.36e-002	2.5e-002	7202200.0	0.001	-5.60	15.00	2RDR	
Tetrachloro-m-Xylene	2.8e-002	2.5e-002	10740000	0.001	12.00	15.00	2RDR	
Decachlorobiphenyl	2.18e-002	2.5e-002	4212900.0	0.001	-12.80	15.00	2RDR	

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :04/27/11
Time Analyzed :0819

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1ED00339.D	0.18	0.02

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.09 DCB: 12.30

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	04/27/11	0836	4.09	12.30
02	2W-SD-SD154-	SE1685-7DL	04/27/11	0959	4.08	12.30
03	2W-SD-SD159-	SE1685-9DL	04/27/11	1017	4.09	12.31
04		INDAB 0.025	04/27/11	1642	4.08	12.30
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QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/27/11 Time: 0836

Lab File ID: 1ED00340 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.83e-002	5.e-002	16916000	0.001	16.60	15.00	2RDR	<-
gamma-BHC	5.8e-002	5.e-002	15409000	0.001	16.00	15.00	2RDR	<-
Heptachlor	5.11e-002	5.e-002	12579000	0.001	2.20	15.00	2RDR	
beta-BHC	5.52e-002	5.e-002	6099900.0	0.001	10.40	15.00	2RDR	
Aldrin	5.38e-002	5.e-002	12221000	0.001	7.60	15.00	2RDR	
delta-BHC	7.83e-002	5.e-002	14366000	0.001	56.60	15.00	2RDR	<-
Heptachlor Epoxide	5.14e-002	5.e-002	10713000	0.001	2.80	15.00	2RDR	
Endosulfan I	5.05e-002	5.e-002	9411700.0	0.001	1.00	15.00	2RDR	
4,4'-DDE	4.8e-002	5.e-002	10400000	0.001	-4.00	15.00	2RDR	
Dieldrin	4.96e-002	5.e-002	10246000	0.001	-0.80	15.00	2RDR	
Endrin	5.39e-002	5.e-002	8791300.0	0.001	7.80	15.00	2RDR	
4,4'-DDD	4.76e-002	5.e-002	7970800.0	0.001	-4.80	15.00	2RDR	
Endosulfan II	4.84e-002	5.e-002	8430900.0	0.001	-3.20	15.00	2RDR	
4,4'-DDT	4.72e-002	5.e-002	8229700.0	0.001	-5.60	15.00	2RDR	
Endrin Aldehyde	4.57e-002	5.e-002	6468400.0	0.001	-8.60	15.00	2RDR	
Endosulfan sulfate	6.05e-002	5.e-002	7238000.0	0.001	21.00	15.00	2RDR	<-
Methoxychlor	4.64e-002	5.e-002	3903700.0	0.001	-7.20	15.00	2RDR	
alpha-Chlordane	5.06e-002	5.e-002	9944300.0	0.001	1.20	15.00	2RDR	
gamma-Chlordane	4.94e-002	5.e-002	10194000	0.001	-1.20	15.00	2RDR	
Endrin Ketone	5.47e-002	5.e-002	8443900.0	0.001	9.40	15.00	2RDR	
Tetrachloro-m-Xylene	5.7e-002	5.e-002	11015000	0.001	14.00	15.00	2RDR	
Decachlorobiphenyl	4.46e-002	5.e-002	4310400.0	0.001	-10.80	15.00	2RDR	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/27/11 Time: 1642

Lab File ID: 1ED00353 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.77e-002	2.5e-002	15764000	0.001	10.80	15.00	2RDR	
gamma-BHC	2.71e-002	2.5e-002	14198000	0.001	8.40	15.00	2RDR	
Heptachlor	2.36e-002	2.5e-002	11481000	0.001	-5.60	15.00	2RDR	
beta-BHC	2.59e-002	2.5e-002	5659300.0	0.001	3.60	15.00	2RDR	
Aldrin	2.38e-002	2.5e-002	10607000	0.001	-4.80	15.00	2RDR	
delta-BHC	3.71e-002	2.5e-002	13200000	0.001	48.40	15.00	2RDR	<-
Heptachlor Epoxide	2.28e-002	2.5e-002	9375500.0	0.001	-8.80	15.00	2RDR	
Endosulfan I	2.2e-002	2.5e-002	8056800.0	0.001	-12.00	15.00	2RDR	
4,4'-DDE	2.14e-002	2.5e-002	9148400.0	0.001	-14.40	15.00	2RDR	
Dieldrin	2.16e-002	2.5e-002	8762700.0	0.001	-13.60	15.00	2RDR	
Endrin	2.42e-002	2.5e-002	7744600.0	0.001	-3.20	15.00	2RDR	
4,4'-DDD	2.21e-002	2.5e-002	7220200.0	0.001	-11.60	15.00	2RDR	
Endosulfan II	2.18e-002	2.5e-002	7450700.0	0.001	-12.80	15.00	2RDR	
4,4'-DDT	2.19e-002	2.5e-002	7490000.0	0.001	-12.40	15.00	2RDR	
Endrin Aldehyde	2.01e-002	2.5e-002	5558200.0	0.001	-19.60	15.00	2RDR	<-
Endosulfan sulfate	2.72e-002	2.5e-002	6335400.0	0.001	8.80	15.00	2RDR	
Methoxychlor	2.12e-002	2.5e-002	3554000.0	0.001	-15.20	15.00	2RDR	<-
alpha-Chlordane	2.23e-002	2.5e-002	8622800.0	0.001	-10.80	15.00	2RDR	
gamma-Chlordane	2.26e-002	2.5e-002	9175500.0	0.001	-9.60	15.00	2RDR	
Endrin Ketone	2.52e-002	2.5e-002	7685100.0	0.001	0.80	15.00	2RDR	
Tetrachloro-m-Xylene	2.72e-002	2.5e-002	10410000	0.001	8.80	15.00	2RDR	
Decachlorobiphenyl	2.33e-002	2.5e-002	4501700.0	0.001	-6.80	15.00	2RDR	

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/14/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 3.99 DCB: 12.45

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		EVAL	03/14/11	1636		
02		INDAB 0.05	03/14/11	1653	3.99	12.46
03		INDAB 0.005	03/14/11	1711	3.99	12.46
04		INDAB 0.01	03/14/11	1728	3.99	12.46
05		INDAB 0.025	03/14/11	1746	3.99	12.46
06		INDAB 0.1	03/14/11	1803	3.99	12.45
07		INDAB 0.25	03/14/11	1821	3.99	12.45
08		IND 0.05	03/14/11	1838		
09		EVAL	04/19/11	1259		
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QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/14/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :03/14/11
Time Analyzed :1636

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EC00321.D	3.68	3.96

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG ~~No.: WE55-1~~

Instrument ID: GC01 Calibration Date: 03/14/11 Time: 1838

Lab File ID: 1EC00328 Init. Calib. Date(s): 03/14/11 03/14/11

Init. Calib. Times: 1653 2208

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
alpha-BHC	4.76e-002	5.e-002	10967000	0.001	-4.80	15.00	2RDR
Endosulfan sulfate	4.65e-002	5.e-002	4056200.0	0.001	-7.00	15.00	2RDR
beta-BHC	5.24e-002	5.e-002	4583400.0	0.001	4.80	15.00	2RDR
delta-BHC	4.83e-002	5.e-002	6914500.0	0.001	-3.40	15.00	2RDR
Heptachlor	4.75e-002	5.e-002	8373100.0	0.001	-5.00	15.00	2RDR
Aldrin	4.75e-002	5.e-002	8545600.0	0.001	-5.00	15.00	2RDR
Heptachlor Epoxide	4.76e-002	5.e-002	7812300.0	0.001	-4.80	15.00	2RDR
gamma-Chlordane	4.88e-002	5.e-002	7774800.0	0.001	-2.40	15.00	2RDR
alpha-Chlordane	4.88e-002	5.e-002	7514500.0	0.001	-2.40	15.00	2RDR
4,4'-DDE	4.89e-002	5.e-002	8175700.0	0.001	-2.20	15.00	2RDR
Endosulfan I	4.76e-002	5.e-002	6907600.0	0.001	-4.80	15.00	2RDR
Dieldrin	4.89e-002	5.e-002	7675000.0	0.001	-2.20	15.00	2RDR
Endrin	4.56e-002	5.e-002	5221100.0	0.001	-8.80	15.00	2RDR
4,4'-DDD	4.78e-002	5.e-002	6178400.0	0.001	-4.40	15.00	2RDR
Endosulfan II	4.59e-002	5.e-002	6115500.0	0.001	-8.20	15.00	2RDR
4,4'-DDT	4.92e-002	5.e-002	6480700.0	0.001	-1.60	15.00	2RDR
Endrin Aldehyde	4.42e-002	5.e-002	4660200.0	0.001	-11.60	15.00	2RDR
Methoxychlor	5.07e-002	5.e-002	3210500.0	0.001	1.40	15.00	2RDR
Endrin Ketone	4.6e-002	5.e-002	5010700.0	0.001	-8.00	15.00	2RDR
gamma-BHC	4.7e-002	5.e-002	10100000	0.001	-6.00	15.00	2RDR

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date(s): 03/14/11 03/14/11

Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Calibration Time(s): 1653 2208

LAB FILE ID: RF0.005: 1EC00336 RF0.01: 1EC00337 RF0.025: 1EC00338
RF0.05: 1EC00335 RF0.1: 1EC00339 RF0.25: 1EC00340

								COEFFICENTS			%RSD	MAX %RSD
COMPOUND	RF0.005	RF0.01	RF0.025	RF0.05	RF0.1	RF0.25	CURVE	A0	A1	A2	OR R^2	OR R^2
alpha-BHC	42286	98975	263600	575490	1159800	2785300	2ORDR	1.445e-003	8.292e-008	2.257e-015	0.99990	0.99000
gamma-BHC	41023	94679	248190	541340	1077400	2599400	2ORDR	1.227e-003	8.938e-008	2.423e-015	0.99992	0.99000
Heptachlor	33913	77145	199690	431790	898560	2168400	2ORDR	1.522e-003	1.086e-007	2.74e-015	0.99983	0.99000
Aldrin	34053	78690	207280	449080	901280	2144800	2ORDR	1.349e-003	1.06e-007	4.596e-015	0.99991	0.99000
beta-BHC	18943	41916	103350	219580	440280	1093100	2ORDR	6.587e-004	2.249e-007	2.885e-015	0.99996	0.99000
delta-BHC	22802	56298	154390	352190	744020	1870800	2ORDR	2.124e-003	1.338e-007	-7.51e-016	0.99975	0.99000
Heptachlor Epoxide	33300	73660	194170	410930	818780	1967200	2ORDR	9.962e-004	1.176e-007	4.533e-015	0.99995	0.99000
Endosulfan I	29940	67129	171790	372790	717530	1746300	2ORDR	7.115e-004	1.341e-007	4.96e-015	0.99992	0.99000
gamma-Chlordane	33764	74001	194310	409970	792700	1999800	2ORDR	4.019e-004	1.245e-007	1.549e-016	0.99993	0.99000
alpha-Chlordane	32234	71601	182100	391440	765810	1870500	2ORDR	7.29e-004	1.267e-007	3.488e-015	0.99995	0.99000
4,4'-DDE	33174	76349	193750	432540	832280	2053000	2ORDR	8.631e-004	1.164e-007	2.408e-015	0.99987	0.99000
Dieldrin	31476	70727	187960	405640	780650	1942500	2ORDR	6.886e-004	1.248e-007	1.814e-015	0.99990	0.99000
Endrin	22887	50965	130680	286740	584670	1460500	2ORDR	1.202e-003	1.698e-007	3.202e-016	0.99991	0.99000
4,4'-DDD	25710	57934	153270	334650	646910	1645400	2ORDR	7.003e-004	1.528e-007	-7.47e-016	0.99989	0.99000
Endosulfan II	26905	62119	160910	337890	667650	1654000	2ORDR	6.749e-004	1.471e-007	2.228e-015	0.99997	0.99000
4,4'-DDT	26654	60105	155870	332670	666860	1688100	2ORDR	8.1e-004	1.496e-007	-1.2e-015	0.99996	0.99000
Endrin Aldehyde	20958	50290	125870	266980	531270	1330200	2ORDR	6.868e-004	1.865e-007	6.934e-016	0.99997	0.99000
Endosulfan sulfate	16143	39987	98255	217180	447320	1129400	2ORDR	1.279e-003	2.238e-007	-3.23e-015	0.99989	0.99000
Methoxychlor	14777	31569	77669	158640	317350	793600	2ORDR	2.118e-004	3.145e-007	3.248e-016	1.00000	0.99000
Endrin Ketone	21773	50358	127580	277020	545050	1336900	2ORDR	8.753e-004	1.786e-007	5.792e-015	0.99994	0.99000
Toxaphene	6233	15827	32398	69336	178740	753150	2ORDR	1.995e-002	1.413e-005	-1.17e-012	0.99998	0.99000
(2)	5739	15913	35114	76647	204540	863920	2ORDR	3.983e-002	1.23e-005	-8.89e-013	0.99995	0.99000
(3)	11543	31229	66573	146320	392970	1670600	2ORDR	3.939e-002	6.42e-006	-2.74e-013	0.99995	0.99000
(4)	7977	21669	46822	102430	265400	1133400	2ORDR	2.996e-002	9.505e-006	-6.25e-013	0.99998	0.99000
(5)	7260	18809	41093	92516	251890	1077000	2ORDR	4.726e-002	1.001e-005	-7.17e-013	0.99992	0.99000
(6)	17955	48087	105080	234150	604660	2444600	2ORDR	3.572e-002	4.1e-006	-9.81e-015	0.99996	0.99000
(7)	6296	16764	37544	85000	229830	1026800	2ORDR	4.648e-002	1.107e-005	-1.34e-012	0.99993	0.99000
(8)	8165	21995	48084	112210	300100	1274700	2ORDR	4.923e-002	8.361e-006	-4.35e-013	0.99992	0.99000
(9)	10262	27418	58964	134400	358090	1532300	2ORDR	4.305e-002	7.037e-006	-3.52e-013	0.99994	0.99000
(10)	8481	20537	42276	95642	246630	1078700	2ORDR	2.689e-002	1.03e-005	-9.78e-013	0.99996	0.99000
Tetrachloro-m-Xylene	30689	67167	177620	367610	735800	1795000	2ORDR	7.751e-004	1.327e-007	3.426e-015	0.99998	0.99000
Decachlorobiphenyl	18549	39608	94521	190170	375940	941370	2ORDR	-1.76e-004	2.658e-007	3.643e-017	0.99999	0.99000

FORM VI PESTICIDE

Report Date: 19-Apr-2011 09:06

Calibration History

Method : \\target_server\gg\chem\gc01.i\GC01ED18.b\PEST061B.m
Start Cal Date: 14-MAR-2011 16:53
End Cal Date : 30-MAR-2011 13:37
Last Cal Level: 1
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.00500		
30-MAR-2011 13:37	hex	1EC00632.D
17-MAR-2011 11:30	ar1660	1EC00434.D
14-MAR-2011 20:58	TC	1EC00336.D
14-MAR-2011 19:13	Tox	1EC00330.D
14-MAR-2011 17:11	ICAL	1EC00323.D
Cal Level: 2 , Cal Amount: 0.01000		
30-MAR-2011 13:19	hex	1EC00631.D
17-MAR-2011 11:48	ar1660	1EC00435.D
14-MAR-2011 21:15	TC	1EC00337.D
14-MAR-2011 19:30	Tox	1EC00331.D
14-MAR-2011 17:28	ICAL	1EC00324.D
Cal Level: 3 , Cal Amount: 0.02500		
30-MAR-2011 13:02	hex	1EC00630.D
17-MAR-2011 12:05	ar1660	1EC00436.D
14-MAR-2011 21:33	TC	1EC00338.D
14-MAR-2011 19:48	Tox	1EC00332.D
14-MAR-2011 17:46	ICAL	1EC00325.D
Cal Level: 4 , Cal Amount: 0.05000		
30-MAR-2011 12:09	hex	1EC00627.D
17-MAR-2011 14:43	AR1232	1EC00445.D
17-MAR-2011 14:25	AR1221	1EC00444.D
17-MAR-2011 14:08	AR1254	1EC00443.D
17-MAR-2011 13:50	AR1248	1EC00442.D
17-MAR-2011 13:33	AR1242	1EC00441.D
17-MAR-2011 11:13	ar1660	1EC00433.D
14-MAR-2011 20:40	TC	1EC00335.D
14-MAR-2011 18:56	Tox	1EC00329.D
14-MAR-2011 16:53	ICAL	1EC00322.D
Cal Level: 5 , Cal Amount: 0.10000		
30-MAR-2011 12:44	hex	1EC00629.D
17-MAR-2011 12:23	ar1660	1EC00437.D
14-MAR-2011 21:50	TC	1EC00339.D

14-MAR-2011 20:05	Tox	1EC00333.D
14-MAR-2011 18:03	ICAL	1EC00326.D

Cal Level: 6 , Cal Amount: 0.25000		
30-MAR-2011 12:27	hex	1EC00628.D
17-MAR-2011 12:40	ar1660	1EC00438.D
14-MAR-2011 22:08	TC	1EC00340.D
14-MAR-2011 20:23	Tox	1EC00334.D
14-MAR-2011 18:21	ICAL	1EC00327.D

Continuing Calibration
Ccal Level Mode: BY SAMPLE

18-APR-2011 12:19	cv	1ED00195.D
18-APR-2011 12:36	Tox	1ED00196.D
18-APR-2011 09:33	Tox	1ED00188.D
18-APR-2011 09:16	cv	1ED00187.D

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :04/19/11
Time Analyzed :1259

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1ED00198.D	0.07	0.12

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 3.92 DCB: 12.27

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	04/19/11	1316	3.91	12.27
02	WG90031-BLAN	WG90031-1	04/19/11	1633	3.93	12.29
03	WG90031-LCS	WG90031-2	04/19/11	1650	3.92	12.28
04	WG90031-LCSD	WG90031-3	04/19/11	1708	3.91	12.28
05	2W-SD-SD147-	SE1685-1	04/19/11	1743	3.91	12.27
06	2W-SD-SD149-	SE1685-3	04/19/11	1800	3.91	12.27
07	2W-SD-SD152-	SE1685-4	04/19/11	1818	3.92	12.27
08	2W-SD-SD154-	SE1685-7	04/19/11	1835	3.92	12.28
09	2W-SD-SD161-	SE1685-8	04/19/11	1853	3.92	12.27
10	2W-SD-SD159-	SE1685-9	04/19/11	1910	3.93	12.28
11		INDAB 0.025	04/19/11	1927	3.92	12.28 *
12		EVAL	04/20/11	1047		
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/19/11 Time: 1316

Lab File ID: 1ED00199 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.12e-002	5.e-002	11814000	0.001	2.40	15.00	2RDR	
gamma-BHC	5.06e-002	5.e-002	10878000	0.001	1.20	15.00	2RDR	
Heptachlor	4.79e-002	5.e-002	8444100.0	0.001	-4.20	15.00	2RDR	
beta-BHC	4.85e-002	5.e-002	4245000.0	0.001	-3.00	15.00	2RDR	
Aldrin	4.74e-002	5.e-002	8523800.0	0.001	-5.20	15.00	2RDR	
delta-BHC	5.96e-002	5.e-002	8612400.0	0.001	19.20	15.00	2RDR	<-
Heptachlor Epoxide	4.61e-002	5.e-002	7556300.0	0.001	-7.80	15.00	2RDR	
Endosulfan I	4.59e-002	5.e-002	6662900.0	0.001	-8.20	15.00	2RDR	
4,4'-DDE	4.4e-002	5.e-002	7352000.0	0.001	-12.00	15.00	2RDR	
Dieldrin	4.66e-002	5.e-002	7319400.0	0.001	-6.80	15.00	2RDR	
Endrin	4.98e-002	5.e-002	5725600.0	0.001	-0.40	15.00	2RDR	
4,4'-DDD	4.25e-002	5.e-002	5476000.0	0.001	-15.00	15.00	2RDR	
Endosulfan II	4.34e-002	5.e-002	5786200.0	0.001	-13.20	15.00	2RDR	
4,4'-DDT	4.43e-002	5.e-002	5832100.0	0.001	-11.40	15.00	2RDR	
Endrin Aldehyde	4.13e-002	5.e-002	4355000.0	0.001	-17.40	15.00	2RDR	<-
Endosulfan sulfate	4.8e-002	5.e-002	4186300.0	0.001	-4.00	15.00	2RDR	
Methoxychlor	4.05e-002	5.e-002	2560700.0	0.001	-19.00	15.00	2RDR	<-
alpha-Chlordane	4.47e-002	5.e-002	6872300.0	0.001	-10.60	15.00	2RDR	
gamma-Chlordane	4.59e-002	5.e-002	7310600.0	0.001	-8.20	15.00	2RDR	
Endrin Ketone	4.52e-002	5.e-002	4920500.0	0.001	-9.60	15.00	2RDR	
Tetrachloro-m-Xylene	5.3e-002	5.e-002	7797700.0	0.001	6.00	15.00	2RDR	
Decachlorobiphenyl	4.14e-002	5.e-002	3130900.0	0.001	-17.20	15.00	2RDR	<-

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/19/11 Time: 1927

Lab File ID: 1ED00211 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.28e-002	2.5e-002	10238000	0.001	-8.80	15.00	2RDR	
gamma-BHC	2.15e-002	2.5e-002	9033600.0	0.001	-14.00	15.00	2RDR	
Heptachlor	2.19e-002	2.5e-002	7467700.0	0.001	-12.40	15.00	2RDR	
beta-BHC	2.06e-002	2.5e-002	3544600.0	0.001	-17.60	15.00	2RDR	<-
Aldrin	1.98e-002	2.5e-002	6906000.0	0.001	-20.80	15.00	2RDR	<-
delta-BHC	2.85e-002	2.5e-002	7887700.0	0.001	14.00	15.00	2RDR	
Heptachlor Epoxide	1.89e-002	2.5e-002	6055000.0	0.001	-24.40	15.00	2RDR	<-
Endosulfan I	1.87e-002	2.5e-002	5353700.0	0.001	-25.20	15.00	2RDR	<-
4,4'-DDE	1.77e-002	2.5e-002	5779200.0	0.001	-29.20	15.00	2RDR	<-
Dieldrin	1.91e-002	2.5e-002	5882300.0	0.001	-23.60	15.00	2RDR	<-
Endrin	2.34e-002	2.5e-002	5227500.0	0.001	-6.40	15.00	2RDR	
4,4'-DDD	2.02e-002	2.5e-002	5112000.0	0.001	-19.20	15.00	2RDR	<-
Endosulfan II	1.87e-002	2.5e-002	4893300.0	0.001	-25.20	15.00	2RDR	<-
4,4'-DDT	1.91e-002	2.5e-002	4893300.0	0.001	-23.60	15.00	2RDR	<-
Endrin Aldehyde	1.82e-002	2.5e-002	3760700.0	0.001	-27.20	15.00	2RDR	<-
Endosulfan sulfate	2.07e-002	2.5e-002	3483100.0	0.001	-17.20	15.00	2RDR	<-
Methoxychlor	1.5e-002	2.5e-002	1885800.0	0.001	-40.00	15.00	2RDR	<-
alpha-Chlordane	1.84e-002	2.5e-002	5568100.0	0.001	-26.40	15.00	2RDR	<-
gamma-Chlordane	1.84e-002	2.5e-002	5794900.0	0.001	-26.40	15.00	2RDR	<-
Endrin Ketone	2.28e-002	2.5e-002	4889200.0	0.001	-8.80	15.00	2RDR	
Tetrachloro-m-Xylene	2.38e-002	2.5e-002	6908900.0	0.001	-4.80	15.00	2RDR	
Decachlorobiphenyl	3.12e-002	2.5e-002	4729300.0	0.001	24.80	15.00	2RDR	<-

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :04/20/11
Time Analyzed :1047

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1ED00228.D	0.06	0.31

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 3.90 DCB: 12.25

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	04/20/11	1305	3.91	12.26
02	2W-SD-SD158-	SE1685-10	04/20/11	1457	3.90	12.25
03	FD-040411-1	SE1685-16	04/20/11	1514	3.90	12.25
04	2W-SD-SD138-	SE1685-17	04/20/11	1532	3.90	12.25
05	2W-SD-SD118-	SE1685-22	04/20/11	1549	3.91	12.25
06	2W-SD-SD119-	SE1685-23	04/20/11	1607	3.90	12.25
07	2W-SD-SD120-	SE1685-24	04/20/11	1624	3.91	12.25
08		INDAB 0.025	04/20/11	1642	3.90	12.25
09	2W-SD-SD121-	SE1685-26	04/20/11	1659	3.91	12.25
10	2W-SD-SD136-	SE1685-28	04/20/11	1717	3.90	12.26
11	2W-SD-SD134-	SE1685-29	04/20/11	1734	3.91	12.25
12		INDAB 0.05	04/20/11	1844	3.90	12.25
13		EVAL	04/21/11	1215		
14						
15						
16						
17						
18						
19						
20						

QC LIMITS

TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/20/11 Time: 1305

Lab File ID: 1ED00231 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.38e-002	5.e-002	12413000	0.001	7.60	15.00	2RDR	
gamma-BHC	5.33e-002	5.e-002	11478000	0.001	6.60	15.00	2RDR	
Heptachlor	5.18e-002	5.e-002	9155200.0	0.001	3.60	15.00	2RDR	
beta-BHC	5.04e-002	5.e-002	4412000.0	0.001	0.80	15.00	2RDR	
Aldrin	4.87e-002	5.e-002	8761700.0	0.001	-2.60	15.00	2RDR	
delta-BHC	6.44e-002	5.e-002	9332200.0	0.001	28.80	15.00	2RDR	<-
Heptachlor Epoxide	4.75e-002	5.e-002	7797500.0	0.001	-5.00	15.00	2RDR	
Endosulfan I	4.55e-002	5.e-002	6593600.0	0.001	-9.00	15.00	2RDR	
4,4'-DDE	4.51e-002	5.e-002	7546400.0	0.001	-9.80	15.00	2RDR	
Dieldrin	4.6e-002	5.e-002	7216900.0	0.001	-8.00	15.00	2RDR	
Endrin	5.2e-002	5.e-002	5984200.0	0.001	4.00	15.00	2RDR	
4,4'-DDD	4.38e-002	5.e-002	5649200.0	0.001	-12.40	15.00	2RDR	
Endosulfan II	4.37e-002	5.e-002	5829700.0	0.001	-12.60	15.00	2RDR	
4,4'-DDT	4.43e-002	5.e-002	5826800.0	0.001	-11.40	15.00	2RDR	
Endrin Aldehyde	4.1e-002	5.e-002	4323100.0	0.001	-18.00	15.00	2RDR	<-
Endosulfan sulfate	4.79e-002	5.e-002	4176000.0	0.001	-4.20	15.00	2RDR	
Methoxychlor	4.32e-002	5.e-002	2735700.0	0.001	-13.60	15.00	2RDR	
alpha-Chlordane	4.58e-002	5.e-002	7037700.0	0.001	-8.40	15.00	2RDR	
gamma-Chlordane	4.79e-002	5.e-002	7630100.0	0.001	-4.20	15.00	2RDR	
Endrin Ketone	4.62e-002	5.e-002	5033500.0	0.001	-7.60	15.00	2RDR	
Tetrachloro-m-Xylene	5.24e-002	5.e-002	7698500.0	0.001	4.80	15.00	2RDR	
Decachlorobiphenyl	4.1e-002	5.e-002	3097100.0	0.001	-18.00	15.00	2RDR	<-

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/20/11 Time: 1642

Lab File ID: 1ED00242 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	20% %D or %DRIFT	20% MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.24e-002	2.5e-002	10019000	0.001	-10.40	15.00	2RDR	
gamma-BHC	2.1e-002	2.5e-002	8778400.0	0.001	-16.00	15.00	2RDR	<-
Heptachlor	2.08e-002	2.5e-002	7061000.0	0.001	-16.80	15.00	2RDR	<-
beta-BHC	2.03e-002	2.5e-002	3487500.0	0.001	-18.80	15.00	2RDR	<-
Aldrin	1.97e-002	2.5e-002	6888700.0	0.001	-21.20	15.00	2RDR	<-
delta-BHC	2.62e-002	2.5e-002	7204500.0	0.001	4.80	15.00	2RDR	
Heptachlor Epoxide	1.93e-002	2.5e-002	6179800.0	0.001	-22.80	15.00	2RDR	<-
Endosulfan I	1.94e-002	2.5e-002	5554500.0	0.001	-22.40	15.00	2RDR	<-
4,4'-DDE	1.83e-002	2.5e-002	5965700.0	0.001	-26.80	15.00	2RDR	<-
Dieldrin	1.83e-002	2.5e-002	5628200.0	0.001	-26.80	15.00	2RDR	<-
Endrin	2.26e-002	2.5e-002	5039700.0	0.001	-9.60	15.00	2RDR	
4,4'-DDD	2.05e-002	2.5e-002	5181700.0	0.001	-18.00	15.00	2RDR	<-
Endosulfan II	1.84e-002	2.5e-002	4804900.0	0.001	-26.40	15.00	2RDR	<-
4,4'-DDT	1.09e-002	2.5e-002	2693700.0	0.001	-56.40	15.00	2RDR	<-
Endrin Aldehyde	1.74e-002	2.5e-002	3575000.0	0.001	-30.40	15.00	2RDR	<-
Endosulfan sulfate	1.77e-002	2.5e-002	2936600.0	0.001	-29.20	15.00	2RDR	<-
Methoxychlor	1.29e-002	2.5e-002	1607400.0	0.001	-48.40	15.00	2RDR	<-
alpha-Chlordane	1.84e-002	2.5e-002	5554500.0	0.001	-26.40	15.00	2RDR	<-
gamma-Chlordane	1.84e-002	2.5e-002	5778700.0	0.001	-26.40	15.00	2RDR	<-
Endrin Ketone	2.05e-002	2.5e-002	4374600.0	0.001	-18.00	15.00	2RDR	<-
Tetrachloro-m-Xylene	2.3e-002	2.5e-002	6671100.0	0.001	-8.00	15.00	2RDR	
Decachlorobiphenyl	3.22e-002	2.5e-002	4877200.0	0.001	28.80	15.00	2RDR	<-

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/20/11 Time: 1844

Lab File ID: 1ED00249 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	4.95e-002	5.e-002	11418000	0.001	-1.00	15.00	2RDR	
gamma-BHC	4.55e-002	5.e-002	9767700.0	0.001	-9.00	15.00	2RDR	
Heptachlor	4.37e-002	5.e-002	7700900.0	0.001	-12.60	15.00	2RDR	
beta-BHC	4.42e-002	5.e-002	3865900.0	0.001	-11.60	15.00	2RDR	
Aldrin	4.29e-002	5.e-002	7709600.0	0.001	-14.20	15.00	2RDR	
delta-BHC	5.63e-002	5.e-002	8119300.0	0.001	12.60	15.00	2RDR	
Heptachlor Epoxide	4.07e-002	5.e-002	6670200.0	0.001	-18.60	15.00	2RDR	<-
Endosulfan I	4.08e-002	5.e-002	5911700.0	0.001	-18.40	15.00	2RDR	<-
4,4'-DDE	4.02e-002	5.e-002	6719000.0	0.001	-19.60	15.00	2RDR	<-
Dieldrin	4.1e-002	5.e-002	6434100.0	0.001	-18.00	15.00	2RDR	<-
Endrin	4.37e-002	5.e-002	5008100.0	0.001	-12.60	15.00	2RDR	
4,4'-DDD	4.83e-002	5.e-002	6242100.0	0.001	-3.40	15.00	2RDR	
Endosulfan II	3.59e-002	5.e-002	4767300.0	0.001	-28.20	15.00	2RDR	<-
4,4'-DDT	2.1e-002	5.e-002	2695300.0	0.001	-58.00	15.00	2RDR	<-
Endrin Aldehyde	3.85e-002	5.e-002	4056300.0	0.001	-23.00	15.00	2RDR	<-
Endosulfan sulfate	3.23e-002	5.e-002	2781100.0	0.001	-35.40	15.00	2RDR	<-
Methoxychlor	2.3e-002	5.e-002	1448300.0	0.001	-54.00	15.00	2RDR	<-
alpha-Chlordane	4.12e-002	5.e-002	6333900.0	0.001	-17.60	15.00	2RDR	<-
gamma-Chlordane	4.12e-002	5.e-002	6547600.0	0.001	-17.60	15.00	2RDR	<-
Endrin Ketone	4.22e-002	5.e-002	4593000.0	0.001	-15.60	15.00	2RDR	<-
Tetrachloro-m-Xylene	5.02e-002	5.e-002	7386300.0	0.001	0.40	15.00	2RDR	
Decachlorobiphenyl	4.21e-002	5.e-002	3179500.0	0.001	-15.80	15.00	2RDR	<-

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :04/21/11
Time Analyzed :1215

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1ED00251.D	0.05	0.13

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 3.88 DCB: 12.21

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	04/21/11	1233	3.88	12.22
02	2W-SD-SD138-	SE1685-17DL	04/21/11	1344	3.89	12.23
03	2W-SD-SD118-	SE1685-22DL	04/21/11	1401	3.88	12.22
04	2W-SD-SD119-	SE1685-23DL	04/21/11	1419	3.88	12.22
05	2W-SD-SD120-	SE1685-24DL	04/21/11	1436	3.88	12.22
06	2W-SD-SD121-	SE1685-26DL	04/21/11	1454	3.88	12.21
07	2W-SD-SD136-	SE1685-28DL	04/21/11	1511	3.88	12.19
08	2W-SD-SD134-	SE1685-29DL	04/21/11	1529	3.88	12.21
09		INDAB 0.025	04/21/11	1621	3.88	12.22
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 3.88 DCB: 12.21

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	04/21/11	1233	3.88	12.22
02	2W-SD-SD138-	SE1685-17DL	04/21/11	1344	3.89	12.23
03	2W-SD-SD118-	SE1685-22DL	04/21/11	1401		
04	2W-SD-SD119-	SE1685-23DL	04/21/11	1419		
05	2W-SD-SD120-	SE1685-24DL	04/21/11	1436		
06	2W-SD-SD121-	SE1685-26DL	04/21/11	1454		
07	2W-SD-SD136-	SE1685-28DL	04/21/11	1511		
08	2W-SD-SD134-	SE1685-29DL	04/21/11	1529	3.88	12.21
09		INDAB 0.025	04/21/11	1621	3.88	12.22
10		EVAL	04/27/11	0819		
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000143

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/21/11 Time: 1233

Lab File ID: 1ED00252 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.21e-002	5.e-002	12011000	0.001	4.20	15.00	2RDR	
gamma-BHC	5.12e-002	5.e-002	11020000	0.001	2.40	15.00	2RDR	
Heptachlor	4.72e-002	5.e-002	8320100.0	0.001	-5.60	15.00	2RDR	
beta-BHC	4.86e-002	5.e-002	4251400.0	0.001	-2.80	15.00	2RDR	
Aldrin	4.83e-002	5.e-002	8700200.0	0.001	-3.40	15.00	2RDR	
delta-BHC	5.91e-002	5.e-002	8534300.0	0.001	18.20	15.00	2RDR	<-
Heptachlor Epoxide	4.63e-002	5.e-002	7591600.0	0.001	-7.40	15.00	2RDR	
Endosulfan I	4.55e-002	5.e-002	6599000.0	0.001	-9.00	15.00	2RDR	
4,4'-DDE	4.4e-002	5.e-002	7347500.0	0.001	-12.00	15.00	2RDR	
Dieldrin	4.57e-002	5.e-002	7170300.0	0.001	-8.60	15.00	2RDR	
Endrin	5.25e-002	5.e-002	6037500.0	0.001	5.00	15.00	2RDR	
4,4'-DDD	4.31e-002	5.e-002	5552200.0	0.001	-13.80	15.00	2RDR	
Endosulfan II	4.32e-002	5.e-002	5753800.0	0.001	-13.60	15.00	2RDR	
4,4'-DDT	4.34e-002	5.e-002	5707900.0	0.001	-13.20	15.00	2RDR	
Endrin Aldehyde	3.99e-002	5.e-002	4204800.0	0.001	-20.20	15.00	2RDR	<-
Endosulfan sulfate	4.56e-002	5.e-002	3973900.0	0.001	-8.80	15.00	2RDR	
Methoxychlor	4.25e-002	5.e-002	2687200.0	0.001	-15.00	15.00	2RDR	
alpha-Chlordane	4.5e-002	5.e-002	6913500.0	0.001	-10.00	15.00	2RDR	
gamma-Chlordane	4.62e-002	5.e-002	7353900.0	0.001	-7.60	15.00	2RDR	
Endrin Ketone	4.45e-002	5.e-002	4844800.0	0.001	-11.00	15.00	2RDR	
Tetrachloro-m-Xylene	5.34e-002	5.e-002	7860600.0	0.001	6.80	15.00	2RDR	
Decachlorobiphenyl	4.12e-002	5.e-002	3110700.0	0.001	-17.60	15.00	2RDR	<-

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/21/11 Time: 1621

Lab File ID: 1ED00262 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.63e-002	2.5e-002	11894000	0.001	5.20	15.00	2RDR	
gamma-BHC	2.57e-002	2.5e-002	10889000	0.001	2.80	15.00	2RDR	
Heptachlor	2.39e-002	2.5e-002	8213900.0	0.001	-4.40	15.00	2RDR	
beta-BHC	2.57e-002	2.5e-002	4455600.0	0.001	2.80	15.00	2RDR	
Aldrin	2.41e-002	2.5e-002	8494200.0	0.001	-3.60	15.00	2RDR	
delta-BHC	3.19e-002	2.5e-002	8904400.0	0.001	27.60	15.00	2RDR	<-
Heptachlor Epoxide	2.33e-002	2.5e-002	7529200.0	0.001	-6.80	15.00	2RDR	
Endosulfan I	2.3e-002	2.5e-002	6616300.0	0.001	-8.00	15.00	2RDR	
4,4'-DDE	2.23e-002	2.5e-002	7342600.0	0.001	-10.80	15.00	2RDR	
Dieldrin	2.3e-002	2.5e-002	7129900.0	0.001	-8.00	15.00	2RDR	
Endrin	2.64e-002	2.5e-002	5941600.0	0.001	5.60	15.00	2RDR	
4,4'-DDD	2.13e-002	2.5e-002	5398400.0	0.001	-14.80	15.00	2RDR	
Endosulfan II	2.17e-002	2.5e-002	5715900.0	0.001	-13.20	15.00	2RDR	
4,4'-DDT	2.18e-002	2.5e-002	5610100.0	0.001	-12.80	15.00	2RDR	
Endrin Aldehyde	2.05e-002	2.5e-002	4243800.0	0.001	-18.00	15.00	2RDR	<-
Endosulfan sulfate	2.49e-002	2.5e-002	4234800.0	0.001	-0.40	15.00	2RDR	
Methoxychlor	2.13e-002	2.5e-002	2683000.0	0.001	-14.80	15.00	2RDR	
alpha-Chlordane	2.25e-002	2.5e-002	6836800.0	0.001	-10.00	15.00	2RDR	
gamma-Chlordane	2.3e-002	2.5e-002	7247900.0	0.001	-8.00	15.00	2RDR	
Endrin Ketone	2.41e-002	2.5e-002	5174500.0	0.001	-3.60	15.00	2RDR	
Tetrachloro-m-Xylene	2.67e-002	2.5e-002	7792100.0	0.001	6.80	15.00	2RDR	
Decachlorobiphenyl	2.12e-002	2.5e-002	3216800.0	0.001	-15.20	15.00	2RDR	<-

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :04/27/11
Time Analyzed :0819

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1ED00339.D	0.57	2.92

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 3.85 DCB: 12.15

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	04/27/11	0836	3.85	12.16
02	2W-SD-SD154-	SE1685-7DL	04/27/11	0959	3.86	12.17
03	2W-SD-SD159-	SE1685-9DL	04/27/11	1017	3.86	12.16
04		INDAB 0.025	04/27/11	1642	3.86	12.17
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06						
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17						
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19						
20						

QC LIMITS

TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/27/11 Time: 0836

Lab File ID: 1ED00340 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.39e-002	5.e-002	12430000	0.001	7.80	15.00	2RDR	
gamma-BHC	5.24e-002	5.e-002	11270000	0.001	4.80	15.00	2RDR	
Heptachlor	4.94e-002	5.e-002	8717000.0	0.001	-1.20	15.00	2RDR	
beta-BHC	5.09e-002	5.e-002	4456800.0	0.001	1.80	15.00	2RDR	
Aldrin	4.92e-002	5.e-002	8848000.0	0.001	-1.60	15.00	2RDR	
delta-BHC	7.28e-002	5.e-002	10592000	0.001	45.60	15.00	2RDR	<-
Heptachlor Epoxide	4.84e-002	5.e-002	7938500.0	0.001	-3.20	15.00	2RDR	
Endosulfan I	4.77e-002	5.e-002	6922500.0	0.001	-4.60	15.00	2RDR	
4,4'-DDE	4.45e-002	5.e-002	7436400.0	0.001	-11.00	15.00	2RDR	
Dieldrin	4.8e-002	5.e-002	7540000.0	0.001	-4.00	15.00	2RDR	
Endrin	5.52e-002	5.e-002	6359400.0	0.001	10.40	15.00	2RDR	
4,4'-DDD	4.41e-002	5.e-002	5689800.0	0.001	-11.80	15.00	2RDR	
Endosulfan II	4.65e-002	5.e-002	6207900.0	0.001	-7.00	15.00	2RDR	
4,4'-DDT	4.61e-002	5.e-002	6068200.0	0.001	-7.80	15.00	2RDR	
Endrin Aldehyde	4.39e-002	5.e-002	4625000.0	0.001	-12.20	15.00	2RDR	
Endosulfan sulfate	6.e-002	5.e-002	5265300.0	0.001	20.00	15.00	2RDR	<-
Methoxychlor	4.32e-002	5.e-002	2731000.0	0.001	-13.60	15.00	2RDR	
alpha-Chlordane	4.64e-002	5.e-002	7140000.0	0.001	-7.20	15.00	2RDR	
gamma-Chlordane	4.67e-002	5.e-002	7433900.0	0.001	-6.60	15.00	2RDR	
Endrin Ketone	5.49e-002	5.e-002	5994000.0	0.001	9.80	15.00	2RDR	
Tetrachloro-m-Xylene	5.39e-002	5.e-002	7930000.0	0.001	7.80	15.00	2RDR	
Decachlorobiphenyl	4.17e-002	5.e-002	3148100.0	0.001	-16.60	15.00	2RDR	<-

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GC01 Calibration Date: 04/27/11 Time: 1642

Lab File ID: 1ED00353 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.53e-002	2.5e-002	11420000	0.001	1.20	15.00	2RDR	
gamma-BHC	2.41e-002	2.5e-002	10167000	0.001	-3.60	15.00	2RDR	
Heptachlor	2.37e-002	2.5e-002	8118700.0	0.001	-5.20	15.00	2RDR	
beta-BHC	2.28e-002	2.5e-002	3934600.0	0.001	-8.80	15.00	2RDR	
Aldrin	2.18e-002	2.5e-002	7644400.0	0.001	-12.80	15.00	2RDR	
delta-BHC	3.26e-002	2.5e-002	9119400.0	0.001	30.40	15.00	2RDR	<-
Heptachlor Epoxide	2.12e-002	2.5e-002	6834500.0	0.001	-15.20	15.00	2RDR	<-
Endosulfan I	2.01e-002	2.5e-002	5765900.0	0.001	-19.60	15.00	2RDR	<-
4,4'-DDE	1.95e-002	2.5e-002	6390300.0	0.001	-22.00	15.00	2RDR	<-
Dieldrin	2.03e-002	2.5e-002	6268900.0	0.001	-18.80	15.00	2RDR	<-
Endrin	2.45e-002	2.5e-002	5481600.0	0.001	-2.00	15.00	2RDR	
4,4'-DDD	1.99e-002	2.5e-002	5020600.0	0.001	-20.40	15.00	2RDR	<-
Endosulfan II	2.03e-002	2.5e-002	5321500.0	0.001	-18.80	15.00	2RDR	<-
4,4'-DDT	2.04e-002	2.5e-002	5236200.0	0.001	-18.40	15.00	2RDR	<-
Endrin Aldehyde	1.84e-002	2.5e-002	3795800.0	0.001	-26.40	15.00	2RDR	<-
Endosulfan sulfate	2.81e-002	2.5e-002	4804400.0	0.001	12.40	15.00	2RDR	
Methoxychlor	2.08e-002	2.5e-002	2617800.0	0.001	-16.80	15.00	2RDR	<-
alpha-Chlordane	2.01e-002	2.5e-002	6097900.0	0.001	-19.60	15.00	2RDR	<-
gamma-Chlordane	2.08e-002	2.5e-002	6558800.0	0.001	-16.80	15.00	2RDR	<-
Endrin Ketone	2.53e-002	2.5e-002	5448600.0	0.001	1.20	15.00	2RDR	
Tetrachloro-m-Xylene	2.53e-002	2.5e-002	7369600.0	0.001	1.20	15.00	2RDR	
Decachlorobiphenyl	2.08e-002	2.5e-002	3162800.0	0.001	-16.80	15.00	2RDR	<-

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG90031-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Lab Sample ID: WG90031-1 Lab File ID: 1ED00201

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3540

Sulfur Cleanup: (Y/N) N Date Extracted: 04/14/11

Date Analyzed (1): 04/19/11 Date Analyzed (2): 04/19/11

Time Analyzed (1): 1633 Time Analyzed (2): 1633

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column (1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	WG90031-LCS	WG90031-2	1ED00202	04/19/11	04/19/11
02	WG90031-LCSD	WG90031-3	1ED00203	04/19/11	04/19/11
03	2W-SD-SD147-0001	SE1685-1	1ED00205	04/19/11	04/19/11
04	2W-SD-SD149-0001	SE1685-3	1ED00206	04/19/11	04/19/11
05	2W-SD-SD152-0001	SE1685-4	1ED00207	04/19/11	04/19/11
06	2W-SD-SD154-0001	SE1685-7	1ED00208	04/19/11	04/19/11
07	2W-SD-SD161-0001	SE1685-8	1ED00209	04/19/11	04/19/11
08	2W-SD-SD159-0001	SE1685-9	1ED00210	04/19/11	04/19/11
09	2W-SD-SD158-0001	SE1685-10	1ED00236	04/20/11	04/20/11
10	FD-040411-1	SE1685-16	1ED00237	04/20/11	04/20/11
11	2W-SD-SD138-0001	SE1685-17	1ED00238	04/20/11	04/20/11
12	2W-SD-SD118-0001	SE1685-22	1ED00239	04/20/11	04/20/11
13	2W-SD-SD119-0001	SE1685-23	1ED00240	04/20/11	04/20/11
14	2W-SD-SD120-0001	SE1685-24	1ED00241	04/20/11	04/20/11
15	2W-SD-SD121-0001	SE1685-26	1ED00243	04/20/11	04/20/11
16	2W-SD-SD136-0001	SE1685-28	1ED00244	04/20/11	04/20/11
17	2W-SD-SD134-0001	SE1685-29	1ED00245	04/20/11	04/20/11
18	2W-SD-SD138-0001	SE1685-17DL	1ED00253	04/21/11	04/21/11
19	2W-SD-SD118-0001	SE1685-22DL	1ED00254	04/21/11	04/21/11
20	2W-SD-SD119-0001	SE1685-23DL	1ED00255	04/21/11	04/21/11
21	2W-SD-SD120-0001	SE1685-24DL	1ED00256	04/21/11	04/21/11
22	2W-SD-SD121-0001	SE1685-26DL	1ED00257	04/21/11	04/21/11
23	2W-SD-SD136-0001	SE1685-28DL	1ED00258	04/21/11	04/21/11
24	2W-SD-SD134-0001	SE1685-29DL	1ED00259	04/21/11	04/21/11

COMMENTS: _____

Katahdin Analytical Services A0000099

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG90031-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Lab Sample ID: WG90031-1 Lab File ID: 1ED00201

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3540

Sulfur Cleanup: (Y/N) N Date Extracted: 04/14/11

Date Analyzed (1): 04/19/11 Date Analyzed (2): 04/19/11

Time Analyzed (1): 1633 Time Analyzed (2): 1633

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column (1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	2W-SD-SD154-0001	SE1685-7DL	1ED00341	04/27/11	04/27/11
02	2W-SD-SD159-0001	SE1685-9DL	1ED00342	04/27/11	04/27/11
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

COMMENTS:

Katahdin Analytical Services A0000100

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG90031-1
Client ID: Method Blank Sample
Project:
SDG: WE55-1

Sample Date:
Received Date: 11-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction ~~Method~~: ~~SW846~~ 3540
Lab Prep Batch: WG90031

Analysis Date: 19-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: NA
Report Date: 29-apr-2011 13:39

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	U	0.33	ug/Kgdrywt	1	3.3	0.66	0.038	0.33
4,4'-DDD	U	0.33	ug/Kgdrywt	1	3.3	0.66	0.040	0.33
4,4'-DDT	U	0.33	ug/Kgdrywt	1	3.3	0.66	0.062	0.33
Tetrachloro-M-Xylene		43.2	%					
Decachlorobiphenyl		65.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

LCS/LCSD Recovery Report

LCS ID: WG90031-2
LCSD ID: WG90031-3
Project:
SDG: WE55-1
Report Date: 29-apr-2011 13:40

Received Date: 11-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 19-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
4,4'-DDE	16.7	12.6	75.4	11.5	68.9	ug/Kgdrywt	9	50	52-103
4,4'-DDD	16.7	12.9	77.2	11.5	68.9	ug/Kgdrywt	11	50	48-111
4,4'-DDT	16.7	12.5	74.8	10.8	64.7	ug/Kgdrywt	14	50	39-112
Tetrachloro-M-Xylene			71.2		63.1				32-89
Decachlorobiphenyl			75.1		70.3				44-99

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

FORM 2
SOIL PESTICIDE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

GC Column(1): ZB-MULTIRESIDUE-2ID: 0.53 (mm) GC Column(2): ZB-MULTIRESIDUE-1ID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	DCB1 REC#	DCB2 REC#	OTHR (1)	OTHR (2)	TOT OUT
01	WG90031-BLANK	WG90031-1	43	43	65	65			0
02	WG90031-LCS	WG90031-2	68	71	73	75			0
03	WG90031-LCSD	WG90031-3	60	63	68	70			0
04	2W-SD-SD147-0001	SE1685-1	62	62	63	62			0
05	2W-SD-SD149-0001	SE1685-3	46	47	71	60			0
06	2W-SD-SD152-0001	SE1685-4	51	56	68	64			0
07	2W-SD-SD154-0001	SE1685-7	38	66	61	67			0
08	2W-SD-SD161-0001	SE1685-8	35	34	59	46			0
09	2W-SD-SD159-0001	SE1685-9	74	44	78	71			0
10	2W-SD-SD158-0001	SE1685-10	77	80	66	66			0
11	FD-040411-1	SE1685-16	62	67	76	68			0
12	2W-SD-SD138-0001	SE1685-17	68	71	75	72			0
13	2W-SD-SD118-0001	SE1685-22	64	77	110*	83			1
14	2W-SD-SD119-0001	SE1685-23	75	81	93	72			0
15	2W-SD-SD120-0001	SE1685-24	74	80	83	77			0
16	2W-SD-SD121-0001	SE1685-26	74	93*	84	69			1
17	2W-SD-SD136-0001	SE1685-28	62	67	130*	68			1
18	2W-SD-SD134-0001	SE1685-29	70	75	95	79			0
19	2W-SD-SD138-0001	SE1685-17DL	D	D	D	D			0
20	2W-SD-SD118-0001	SE1685-22DL	D	D	D	D			0
21	2W-SD-SD119-0001	SE1685-23DL	D	D	D	D			0
22	2W-SD-SD120-0001	SE1685-24DL	D	D	D	D			0
23	2W-SD-SD121-0001	SE1685-26DL	D	D	D	D			0
24	2W-SD-SD136-0001	SE1685-28DL	D	D	D	D			0
25	2W-SD-SD134-0001	SE1685-29DL	D	D	D	D			0
26	2W-SD-SD154-0001	SE1685-7DL	D	D	D	D			0
27	2W-SD-SD159-0001	SE1685-9DL	75	52	83	81			0
28									

ADVISORY QC LIMITS

S1 (TCX) = Tetrachloro-m-Xylene (32- 89)
S2 (DCB) = Decachlorobiphenyl (44- 99)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

Katahdin Analytical Services A0000091

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 118-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-22 Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC01 IX Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE E	1	7.66	7.58	7.72	237	
	2	7.85	7.77	7.91	308	26.0
4,4'-DDD E	1	8.51	8.43	8.57	929	
	2	8.60	8.53	8.67	1440	43.1
4,4'-DDT E	1	8.90	8.82	8.96	58.2	
	2	9.06	8.98	9.12	52.9	9.5
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 118-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: 100x dil. SDG No.: WE55-1

Lab Sample ID: SE1685-22DL Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
gamma-Chlordane	1	7.25	7.19	7.33	35.6	
	2	7.41	7.37	7.51	53.4	40.0
4,4'-DDE	1	7.63	7.56	7.70	286	
	2	7.82	7.75	7.89	322	11.8
4,4'-DDD	1	8.49	8.41	8.55	3240	
	2	8.58	8.51	8.65	3220	0.6
4,4'-DDT	1	8.88	8.80	8.94	93.0	
	2	9.03	8.97	9.11	93.6	0.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 119-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-23 1X Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.65	7.58	7.72	39.6	
	2	7.84	7.77	7.91	54.5	31.7
4,4'-DDD	1	8.51	8.43	8.57	1030	
	2	8.60	8.53	8.67	1210	16.1
4,4'-DDT	1	8.89	8.82	8.96	20.0	
	2	9.05	8.98	9.12	10.7	60.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 119-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-23DL Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 50X Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.63	7.56	7.70	64.6	
	2	7.83	7.75	7.89	85.6	28.0
4,4'-DDD	1	8.49	8.41	8.55	1730	
	2	8.58	8.51	8.65	1770	2.3
4,4'-DDT	1	8.88	8.80	8.94	43.7	
	2	9.03	8.97	9.11	37.9	14.2
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 120-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-24 1X Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.65	7.58	7.72	19.0	
	2	7.84	7.77	7.91	23.1	19.5
4,4'-DDD	1	8.50	8.43	8.57	341	
	2	8.60	8.53	8.67	364	6.5
4,4'-DDT	1	8.89	8.82	8.96	10.6	
	2	9.05	8.98	9.12	1.81	141.7
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 120-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-24DL 10X Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
alpha-Chlordane	1	7.36	7.29	7.43	9.89	
	2	7.56	7.48	7.62	18.0	58.2
4,4'-DDE	1	7.63	7.56	7.70	23.1	
	2	7.83	7.75	7.89	30.1	26.3
4,4'-DDD	1	8.49	8.41	8.55	450	
	2	8.58	8.51	8.65	464	3.1
4,4'-DDT	1	8.87	8.80	8.94	16.1	
	2	9.03	8.97	9.11	8.14	89.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 121-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-26 1X Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
gamma-Chlordane	1	7.28	7.21	7.35	10.7	
	2	7.46	7.39	7.53	21.0	65.0
alpha-Chlordane	1	7.38	7.31	7.45	16.1	
	2	7.57	7.50	7.64	21.4	28.3
4,4'-DDE	1	7.65	7.58	7.72	29.9	
	2	7.84	7.77	7.91	32.8	9.2
4,4'-DDD	1	8.51	8.43	8.57	94.6	
	2	8.60	8.53	8.67	129	30.8
4,4'-DDT	1	8.89	8.82	8.96	45.1	
	2	9.05	8.98	9.12	17.6	87.7
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD
121-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.:

SDG No.: WE55-1

Lab Sample ID: SE1685-26DL 10X

Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01

Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
gamma-Chlordane	1	7.26	7.19	7.33	12.3	
	2	7.44	7.37	7.51	24.6	66.7
alpha-Chlordane	1	7.36	7.29	7.43	22.0	
	2	7.55	7.48	7.62	24.6	11.2
4,4'-DDE	1	7.63	7.56	7.70	32.7	
	2	7.82	7.75	7.89	35.0	6.8
4,4'-DDD	1	8.48	8.41	8.55	112	
	2	8.58	8.51	8.65	151	29.6
4,4'-DDT	1	8.87	8.80	8.94	59.3	
	2	9.03	8.97	9.11	23.0	88.2
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 134-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-29 IX Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.65	7.58	7.72	176	
	2	7.85	7.77	7.91	260	38.5
Dieldrin	1	7.91	7.81	7.95	299	
	2	7.99	7.97	8.11	296	1.0
4,4'-DDD	1	8.51	8.43	8.57	875	
	2	8.60	8.53	8.67	1160	28.0
4,4'-DDT	1	8.90	8.82	8.96	302	
	2	9.06	8.98	9.12	354	15.8
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 134-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-29DL 10DX Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.63	7.56	7.70	195	
	2	7.82	7.75	7.89	284	37.2
Dieldrin	1	7.89	7.79	7.93	356	
	2	7.97	7.95	8.09	370	3.8
4,4'-DDD	1	8.48	8.41	8.55	1930	
	2	8.58	8.51	8.65	2050	6.0
4,4'-DDT	1	8.87	8.80	8.94	795	
	2	9.03	8.97	9.11	828	4.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 136-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-28 1X Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.66	7.58	7.72	1220	
	2	7.85	7.77	7.91	1830	40.0
Dieldrin	1	7.91	7.81	7.95	1620	
	2	8.00	7.97	8.11	1730	6.6
4,4'-DDD	1	8.51	8.43	8.57	3020	
	2	8.61	8.53	8.67	5300	54.8
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 136-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-28DL 100X Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.63	7.56	7.70	1360	
	2	7.82	7.75	7.89	1680	21.0
Dieldrin	1	7.89	7.79	7.93	2090	
	2	7.97	7.95	8.09	2040	2.4
4,4'-DDD	1	8.49	8.41	8.55	12200	
	2	8.58	8.51	8.65	12100	0.8
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 138-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-17 Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.65	7.58	7.72	780	
	2	7.84	7.77	7.91	1050	29.5
4,4'-DDD	1	8.51	8.43	8.57	3270	
	2	8.60	8.53	8.67	4580	33.4
4,4'-DDT	1	8.90	8.82	8.96	294	
	2	9.05	8.98	9.12	315	6.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 138-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-17DL 10X Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.64	7.56	7.70	734	
	2	7.82	7.75	7.89	927	23.2
4,4'-DDD	1	8.50	8.41	8.55	7000	
	2	8.57	8.51	8.65	7110	1.6
4,4'-DDT	1	8.89	8.80	8.94	361	
	2	9.03	8.97	9.11	358	0.8
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 147-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-1 1X Date(s) Analyzed: 04/19/11 04/19/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
alpha-Chlordane	1	7.40	7.33	7.47	4.36	
	2	7.60	7.53	7.67	6.64	41.4
4,4'-DDE	1	7.67	7.60	7.74	33.5	
	2	7.87	7.80	7.94	35.2	4.9
4,4'-DDD	1	8.52	8.26	8.40	112	
	2	8.63	8.56	8.70	116	3.5
4,4'-DDT	1	8.91	8.84	8.98	48.0	
	2	9.09	9.02	9.16	37.9	23.5
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 149-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-3 Date(s) Analyzed: 04/19/11 04/19/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDD	1	8.53	8.26	8.40	0.824	
	2	8.63	8.56	8.70	0.608	30.2
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD
152-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-4 Date(s) Analyzed: 04/19/11 04/19/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
gamma-Chlordane	1	7.29	7.22	7.36	4.47	
	2	7.49	7.42	7.56	6.09	30.7
alpha-Chlordane	1	7.40	7.33	7.47	4.10	
	2	7.60	7.53	7.67	5.85	35.2
4,4'-DDE	1	7.67	7.60	7.74	5.89	
	2	7.87	7.80	7.94	6.50	9.8
4,4'-DDD	1	8.52	8.26	8.40	46.6	
	2	8.63	8.56	8.70	50.6	8.2
4,4'-DDT	1	8.90	8.84	8.98	10.7	
	2	9.09	9.02	9.16	4.52	81.2
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 154-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-7 1X Date(s) Analyzed: 04/19/11 04/19/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.67	7.60	7.74	219	
	2	7.88	7.72	7.86	410	60.7
4,4'-DDD	1	8.53	8.26	8.40	430	
	2	8.64	8.48	8.62	508	16.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 154-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-7DL 5DX Date(s) Analyzed: 04/27/11 04/27/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.61	7.53	7.67	228	
	2	7.78	7.72	7.86	392	52.9
4,4'-DDD	1	8.46	8.38	8.52	733	
	2	8.54	8.47	8.61	732	0.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 158-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-10 Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.65	7.58	7.72	13.1	
	2	7.84	7.77	7.91	16.1	20.5
4,4'-DDD	1	8.50	8.43	8.57	68.6	
	2	8.60	8.53	8.67	82.1	17.9
4,4'-DDT	1	8.89	8.82	8.96	20.1	
	2	9.05	8.98	9.12	5.63	112.5
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 159-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-9 Date(s) Analyzed: 04/19/11 04/19/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
alpha-Chlordane	1	7.40	7.33	7.47	7.31	
	2	7.61	7.53	7.67	10.6	36.7
4,4'-DDE	1	7.67	7.60	7.74	8.52	
	2	7.88	7.80	7.94	11.4	28.9
4,4'-DDD	1	8.53	8.26	8.40	54.3	
	2	8.64	8.56	8.70	48.1	12.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 159-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-9DL 5X Date(s) Analyzed: 04/27/11 04/27/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.60	7.53	7.67	8.09	
	2	7.79	7.72	7.86	11.1	31.4
4,4'-DDD	1	8.46	8.38	8.52	56.4	
	2	8.55	8.47	8.61	52.1	7.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: FD-040411-1

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-16 Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
gamma-Chlordane	1	7.28	7.21	7.35	9.44	
	2	7.46	7.39	7.53	12.8	30.2
4,4'-DDE	1	7.65	7.58	7.72	5.43	
	2	7.84	7.77	7.91	6.58	19.2
4,4'-DDD	1	8.50	8.43	8.57	56.5	
	2	8.60	8.53	8.67	62.0	9.3
4,4'-DDT	1	8.89	8.82	8.96	9.90	
	2	9.05	8.98	9.12	2.52	118.8
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-9DL
Client ID: 2W-SD-SD159-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 27-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 25.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		11.	ug/Kgdrywt	5	3.3	9.3	0.53	4.6
4,4'-DDD		56.	ug/Kgdrywt	5	3.3	9.3	0.56	4.6
4,4'-DDT	U	4.6	ug/Kgdrywt	5	3.3	9.3	0.87	4.6
Tetrachloro-M-Xylene		74.9	%					
Decachlorobiphenyl		82.9	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-9
Client ID: 2W-SD-SD159-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 19-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 25.
Report Date: 26-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		11.	ug/Kgdrywt	1	3.3	1.8	0.11	0.93
4,4'-DDD	E	54.	ug/Kgdrywt	1	3.3	1.8	0.11	0.93
4,4'-DDT	U	0.93	ug/Kgdrywt	1	3.3	1.8	0.17	0.93
Tetrachloro-M-Xylene		73.8	%					
Decachlorobiphenyl		78.1	%					

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Tel:(207) 874-2400 Fax:(207) 775-4029

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FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 159-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-9DL Date(s) Analyzed: 04/27/11 04/27/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.60	7.53	7.67	8.09	
	2	7.79	7.72	7.86	11.1	31.4
4,4'-DDD	1	8.46	8.38	8.52	56.4	
	2	8.55	8.47	8.61	52.1	7.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-9DL
Client ID: 2W-SD-SD159-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 27-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 25.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		11.	ug/Kgdrywt	5	3.3	9.3	0.53	4.6
4,4'-DDD		56.	ug/Kgdrywt	5	3.3	9.3	0.56	4.6
4,4'-DDT	J	9.9	ug/Kgdrywt	5	3.3	9.3	0.87	4.6
Tetrachloro-M-Xylene		74.9	%					
Decachlorobiphenyl		82.9	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1685-9DL
Client ID: 2W-SD-SD159-0001
Project: CTO-WE55 New London, CT
SDG: WE55-1

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90031

Analysis Date: 27-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 25.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		11.	ug/Kgdrywt	5	3.3	9.3	0.53	4.6
4,4'-DDD		56.	ug/Kgdrywt	5	3.3	9.3	0.56	4.6
4,4'-DDT	U	4.6	ug/Kgdrywt	5	3.3	9.3	0.87	4.6
Tetrachloro-M-Xylene		74.9	%					
Decachlorobiphenyl		82.9	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 159-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-9DL Date(s) Analyzed: 04/27/11 04/27/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.60	7.53	7.67	8.09	
	2	7.79	7.72	7.86	11.1	31.4
4,4'-DDD	1	8.46	8.38	8.52	56.4	
	2	8.55	8.47	8.61	52.1	7.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

Data File: \\Target_server\GG\chem\gc01.i\GC01ED27.b\1ED00342.D
Report Date: 09-May-2011 13:42

Katahdin Analytical Services

Data file : \\Target_server\GG\chem\gc01.i\GC01ED27.b\1ED00342.D
Lab Smp Id: SE1685-9DL Client Smp ID: 2W-SD-SD159-0001
Inj Date : 27-APR-2011 10:17
Operator : CB Inst ID: gc01.i
Smp Info : SE1685-9DL
Misc Info : WG90564,WG90031,1EC00322
Comment :
Method : \\target_server\gg\chem\gc01.i\GC01ED27.b\PEST061B.m
Meth Date : 07-May-2011 13:04 cbyrne Quant Type: ESTD
Cal Date : 30-MAR-2011 13:37 Cal File: 1EC00632.D
Als bottle: 40
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: tetratnl-we55.sub
Target Version: 4.12
Processing Host: V200T5

Concentration Formula: Amt * DF * 1000*Vt*(1/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	5.000	Dilution Factor
Vt	0.00200	Final Volume (L)
Ws	0.04200	Weight of Sample (Kg)
M	74.553	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kgdrywt)	REVIEW CODE
19 4,4'-DDE	7.601	7.597	0.004	66730	0.00864	8.09(aM)	
24 4,4'-DDD	8.456	8.449	0.007	390867	0.06030	56.4(M)	
$ 4 Tetrachloro-m-Xylene	3.859	3.847	0.012	106889	0.01500	14.0(RMH)	M3
$ 34 Decachlorobiphenyl	12.161	12.154	0.007	63167	0.01661	15.5(RH)	CB 5/16/11

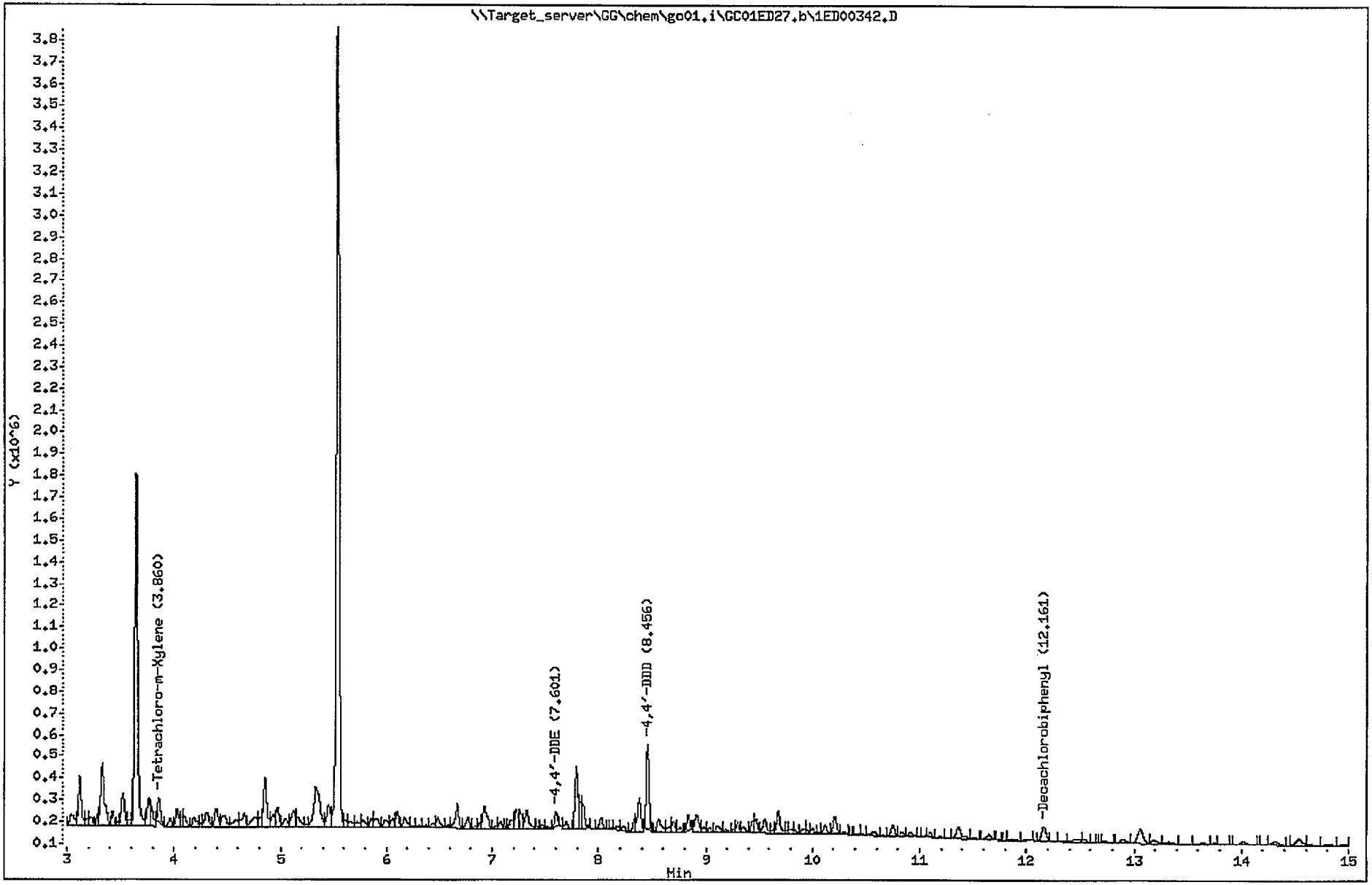
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Target_server\GG\chem\go01.i\GC01ED27.b\1ED00342.D
Date : 27-APR-2011 10:17
Client ID: 2W-SD-SD159-0001
Sample Info: SE1685-9DL

Instrument: go01.i

Operator: CB
Column phase: ZB-Multiresidue-2
Column diameter: 0.53



Katahdin Analytical Services 2000077

Data File: 1ED00342.D
Report Date: 09-May-2011 13:41

Katahdin Analytical Services

Data file : \\Target_server\GG\chem\gc01.i\GC01ED27.b\GC01ED27.b\1ED00342.D
Lab Smp Id: SE1685-9DL Client Smp ID: 2W-SD-SD159-0001
Inj Date : 27-APR-2011 10:17
Operator : CB Inst ID: gc01.i
Smp Info : SE1685-9DL
Misc Info : WG90564,WG90031,1EC00322
Comment :
Method : \\target_server\gg\chem\gc01.i\GC01ED27.b\PEST061B.m\PEST061B.m
Meth Date : 07-May-2011 13:04 cbyrne Quant Type: ESTD
Cal Date : 30-MAR-2011 13:37 Cal File: 1EC00632.D
Als bottle: 40
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: tetratnl-we55.sub
Target Version: 4.12
Processing Host: V200T5

Concentration Formula: Amt * DF * 1000*Vt*(1/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	5.000	Dilution Factor
Vt	0.00200	Final Volume (L)
Ws	0.04200	Weight of Sample (Kg)
M	74.553	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kgdrywt)	REVIEW CODE
19 4,4'-DDE	7.792	7.786	0.006	122608	0.01190	11.1(M)	
24 4,4'-DDD	8.547	8.542	0.005	467232	0.05571	52.1(M)	M3
$ 4 Tetrachloro-m-Xylene	4.094	4.089	0.005	96923	0.01051	9.83(RMH)	
$ 34 Decachlorobiphenyl	12.309	12.297	0.012	77960	0.01614	15.1(RMH)	slkln

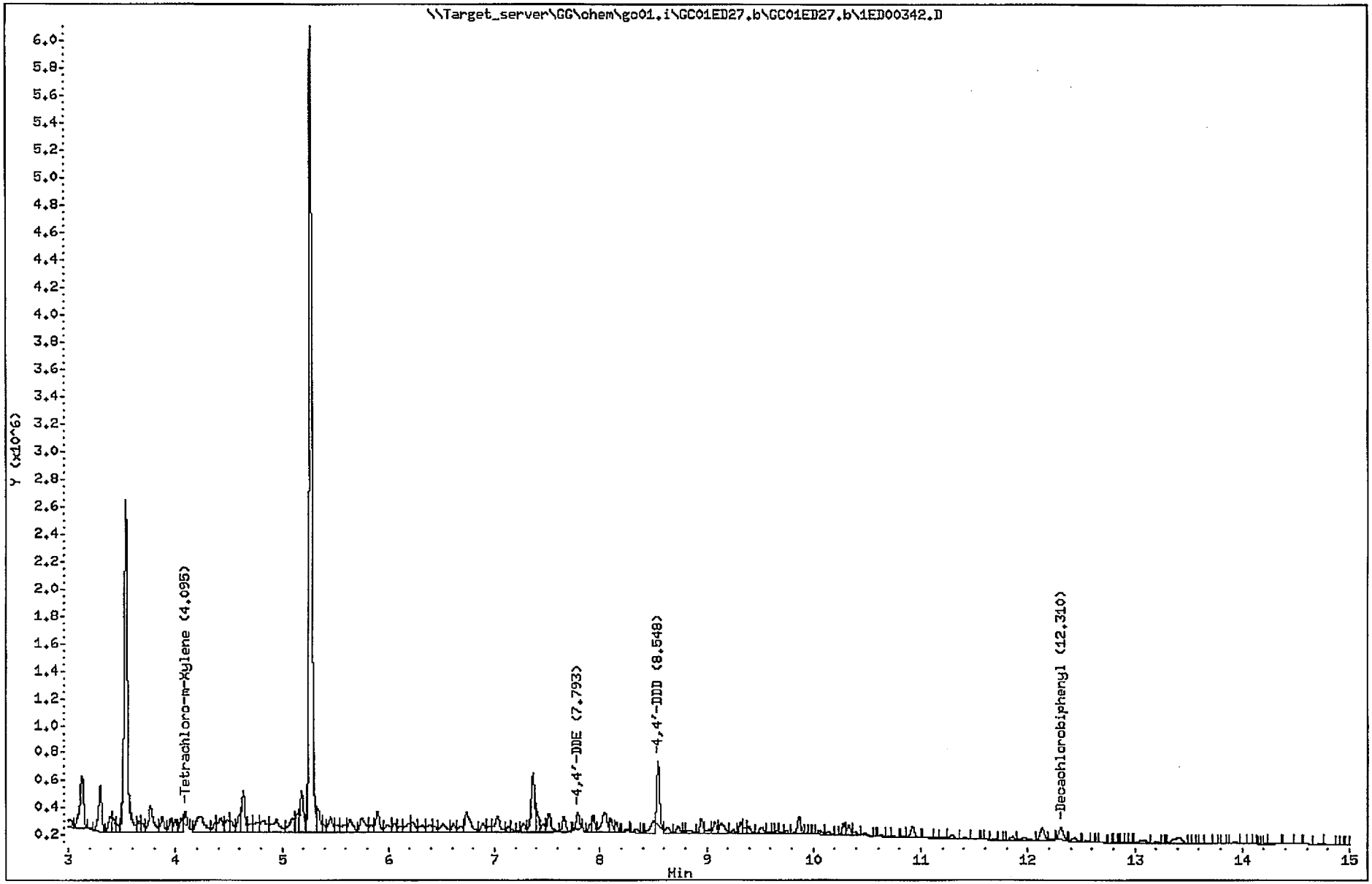
QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Target_server\GG\ohem\go01.i\GC01ED27.b\GC01ED27.b\1ED00342.D
Date : 27-APR-2011 10:17
Client ID: 2W-SD-SD159-0001
Sample Info: SE1685-9DL

Instrument: go01.i

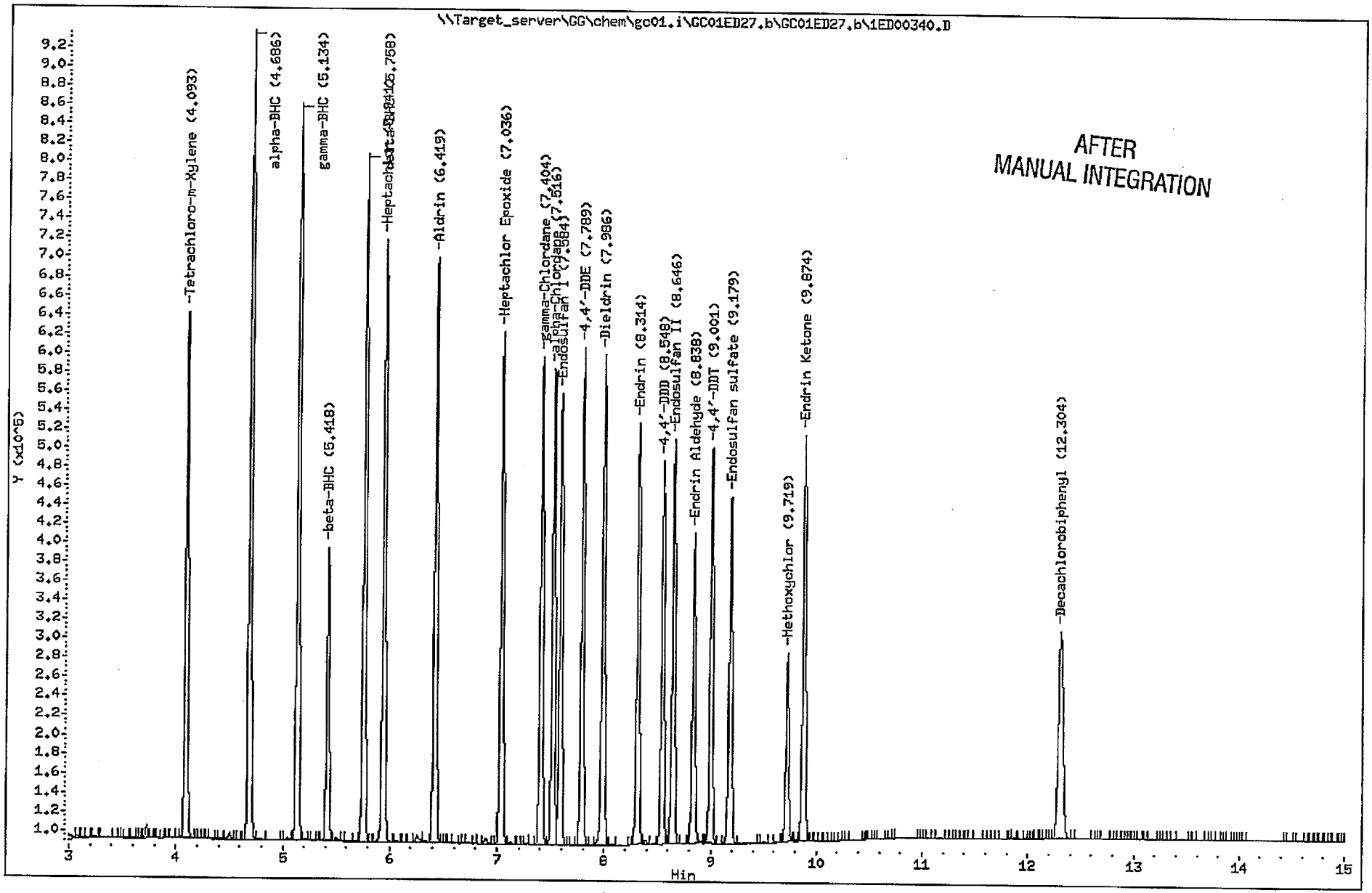
Operator: CB
Column phase: ZB-Multiresidue-1
Column diameter: 0.53



Katahdin Analytical Services 2000079

Data File: \\Target_server\GG\chem\go01.i\GC01ED27.b\GC01ED27.b\1ED00340.D
Date : 27-APR-2011 08:36
Client ID:
Sample Info: INDAB 0.05
Purge Volume: 1.0
Column phase: ZB-Multiresidue-1

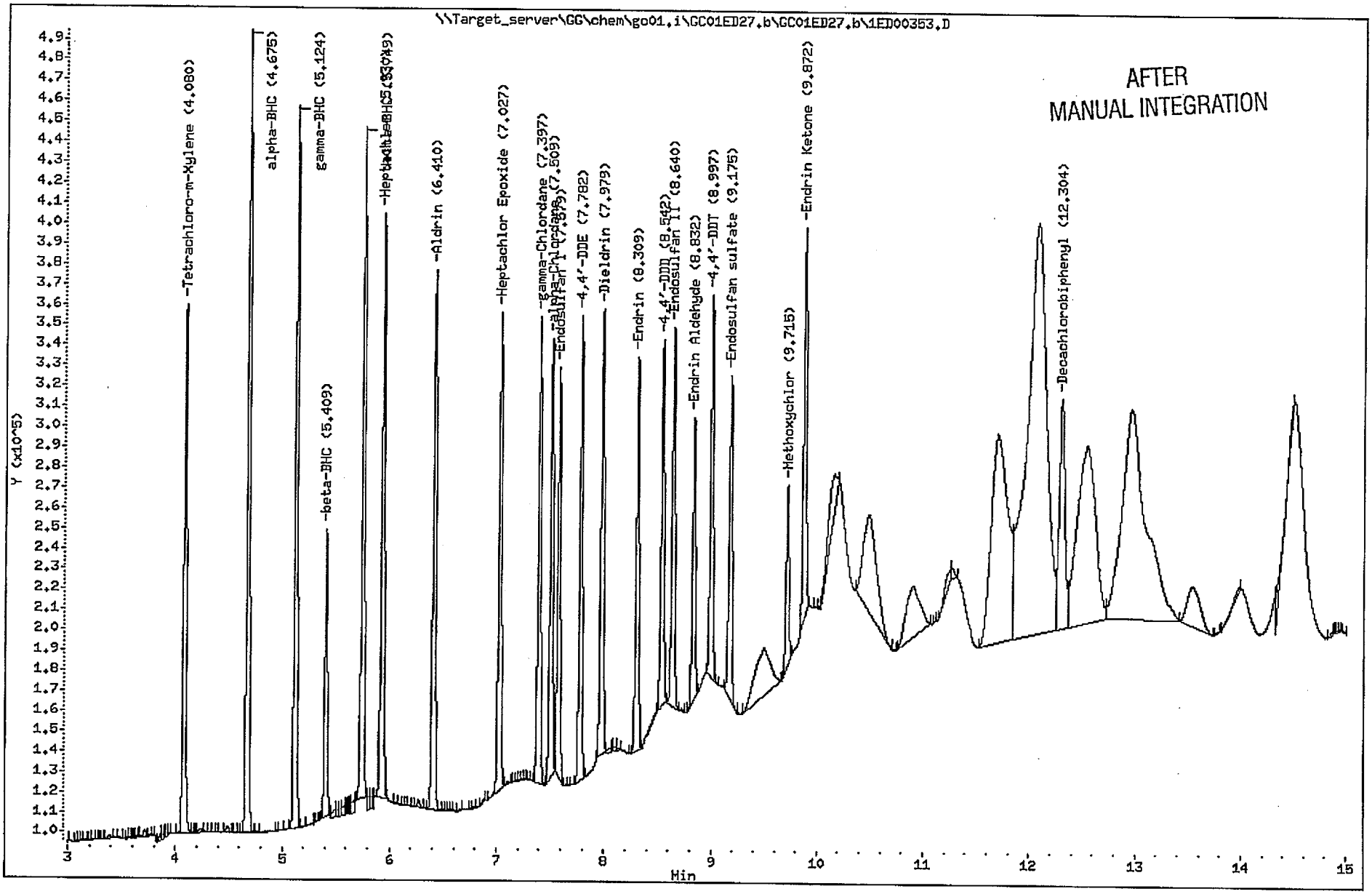
Instrument: go01.i
Operator: CB
Column diameter: 0.53



Katahdin Analytical Services 2000331

Data File: \\Target_server\GC\chem\gc01.i\GC01ED27.b\GC01ED27.b\1ED00353.D
Date : 27-APR-2011 16:42
Client ID:
Sample Info: INDAB 0.025
Purge Volume: 1.0
Column phase: ZB-Multiresidue-1

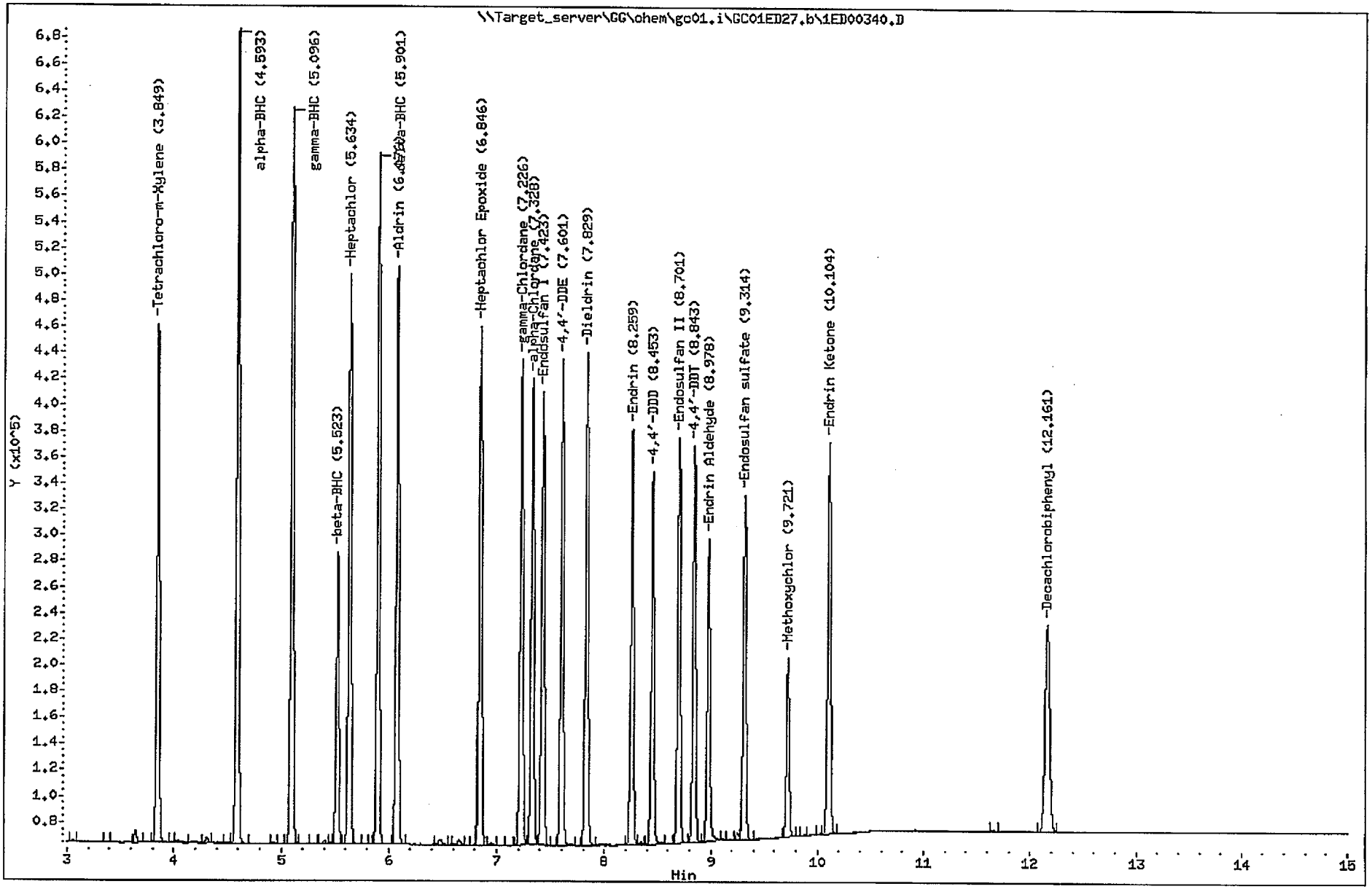
Instrument: gc01.i
Operator: CB
Column diameter: 0.53



Katahdin Analytical Services 2000339

Data File: \\Target_server\GC\ohem\go01.i\GC01ED27.b\1ED00340.D
Date : 27-APR-2011 08:36
Client ID:
Sample Info: INDAB 0.05
Purge Volume: 1.0
Column phase: ZB-Multiresidue-2

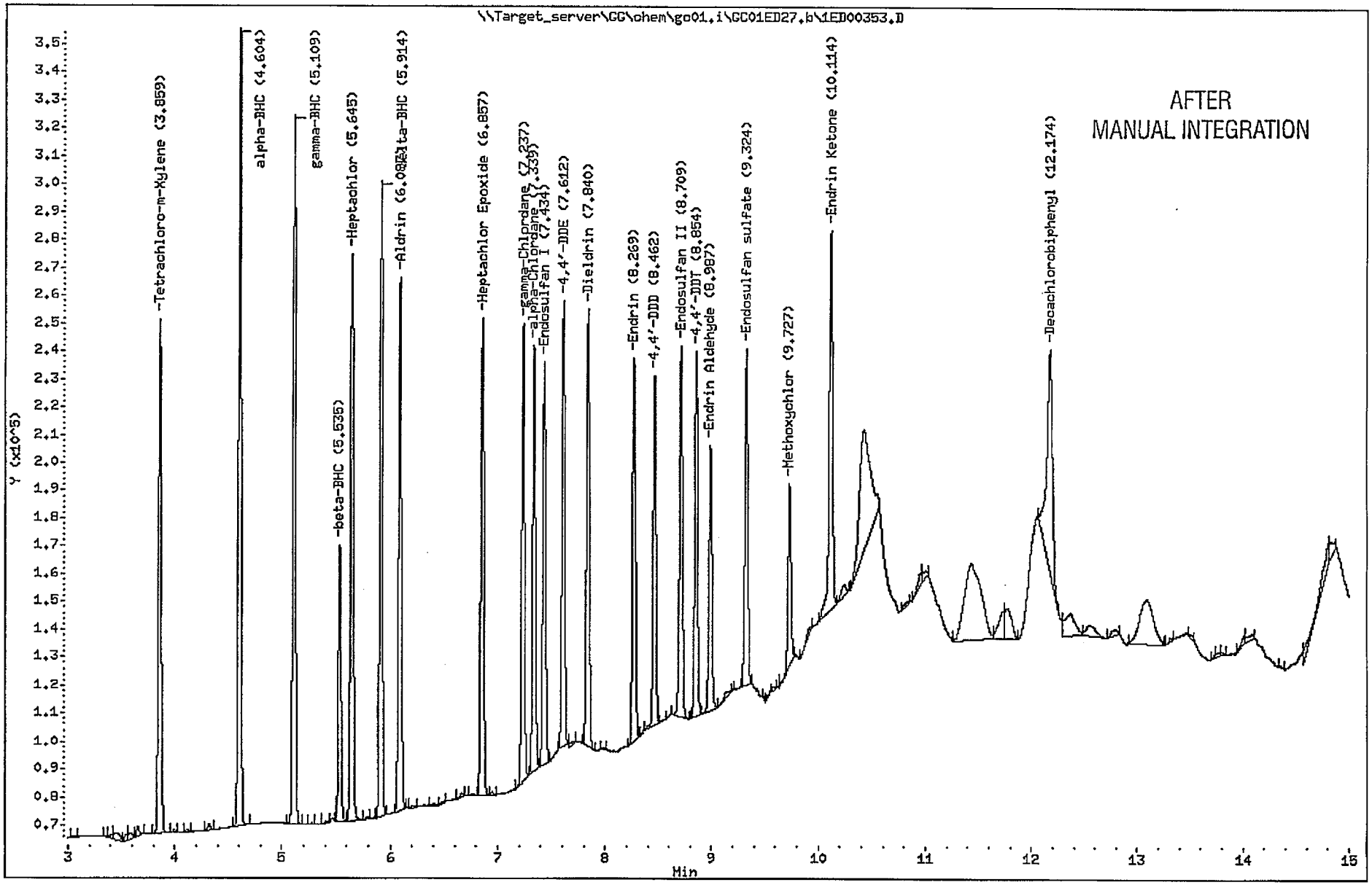
Instrument: go01.i
Operator: CB
Column diameter: 0.53



Katahdin Analytical Services 2000327

Data File: \\Target_server\GC\chem\gc01.i\GC01ED27.b\1ED00353.D
Date : 27-APR-2011 16:42
Client ID:
Sample Info: INDAB 0.025
Purge Volume: 1.0
Column phase: ZB-Multiresidue-2

Instrument: gc01.i
Operator: CB
Column diameter: 0.53



Katahdin Analytical Services 2000335

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 159-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-9 Date(s) Analyzed: 04/19/11 04/19/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
alpha-Chlordane	1	7.40	7.33	7.47	7.31	
	2	7.61	7.53	7.67	10.6	36.7
4,4'-DDE	1	7.67	7.60	7.74	8.52	
	2	7.88	7.80	7.94	11.4	28.9
4,4'-DDD	1	8.53	8.26	8.40	54.3	
	2	8.64	8.56	8.70	48.1	12.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

Data File: \\target_server\gg\chem\gc01.i\GC01ED19.b\1ED00210.D
Report Date: 22-Apr-2011 14:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc01.i\GC01ED19.b\1ED00210.D
Lab Smp Id: SE1685-9 Client Smp ID: 2W-SD-SD159-0001
Inj Date : 19-APR-2011 19:10
Operator : CB Inst ID: gc01.i
Smp Info : SE1685-9
Misc Info : WG90564,WG90031,1EC00322
Comment :
Method : \\target_server\gg\chem\gc01.i\GC01ED19.b\PEST061B.m
Meth Date : 20-Apr-2011 09:14 cbyrne Quant Type: ESTD
Cal Date : 30-MAR-2011 13:37 Cal File: 1EC00632.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8081.sub
Target Version: 4.12
Processing Host: V200T5

Concentration Formula: Amt * DF * 1000*Vt*(1/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00200	Final Volume (L)
Ws	0.04200	Weight of Sample (Kg)
M	74.553	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kgdrywt)	REVIEW CODE
$ 4 Tetrachloro-m-Xylene	3.933	3.916	0.017	541771	0.07366	13.8	
17 alpha-Chlordane	7.403	7.398	0.005	299851	0.03905	7.31(M)	MB
19 4,4'-DDE	7.674	7.666	0.008	380496	0.04551	8.52(M)	
24 4,4'-DDD	8.526	8.329	0.197	1913977	0.29038	54.3(AM)	
$ 34 Decachlorobiphenyl	12.278	12.273	0.005	294790	0.07817	14.6	CB 4/22/11

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

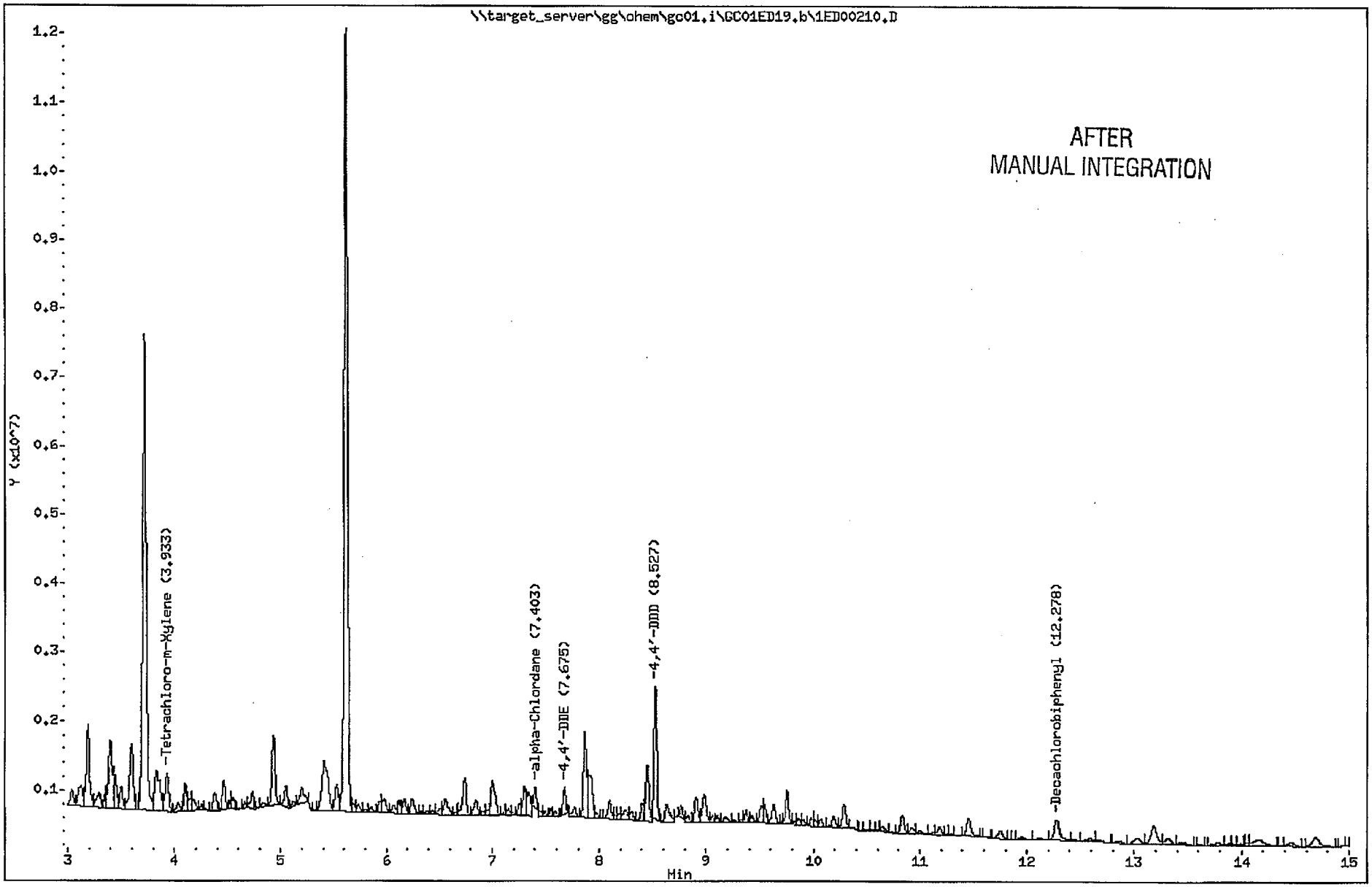
Data File: \\target_server\gg\chem\gc01.i\GC01ED19.b\1ED00210.D
Injection Date: 19-APR-2011 19:10
Instrument: gc01.i
Client Sample ID: 2W-SD-SD159-0001

Katahdin Analytical Services 2000067

Data File: \\target_server\gg\chem\go01.i\GC01ED19.b\1ED00210.D
Date : 19-APR-2011 19:10
Client ID: 2W-SD-SD159-0001
Sample Info: SE1685-9

Instrument: go01.i

Operator: CB
Column phase: ZB-Multiresidue-2
Column diameter: 0.53



Katahdin Analytical Services 2000068

Data File: 1ED00210.D
Report Date: 22-Apr-2011 14:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc01.i\GC01ED19.b\GC01ED19.b\1ED00210.D
Lab Smp Id: SE1685-9 Client Smp ID: 2W-SD-SD159-0001
Inj Date : 19-APR-2011 19:10
Operator : CB Inst ID: gc01.i
Smp Info : SE1685-9
Misc Info : WG90564,WG90031,1EC00322
Comment :
Method : \\target_server\gg\chem\gc01.i\GC01ED19.b\PEST061B.m\PEST061B.m
Meth Date : 20-Apr-2011 09:12 cbyrne Quant Type: ESTD
Cal Date : 30-MAR-2011 13:37 Cal File: 1EC00632.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8081.sub
Target Version: 4.12
Processing Host: V200T5

Concentration Formula: Amt * DF * 1000*Vt*(1/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00200	Final Volume (L)
Ws	0.04200	Weight of Sample (Kg)
M	74.553	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kgdrywt)	REVIEW CODE
$ 4 Tetrachloro-m-Xylene	4.181	4.164	0.017	426417	0.04421	8.27(M)	
17 alpha-Chlordane	7.611	7.601	0.010	557484	0.05667	10.6(M)	
19 4,4'-DDE	7.881	7.873	0.008	658968	0.06079	11.4(M)	
24 4,4'-DDD	8.638	8.633	0.005	2167255	0.25726	48.1(AM)	
$ 34 Decachlorobiphenyl	12.456	12.451	0.005	341245	0.07079	13.2(M)	

MB
CB 4/22/11

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

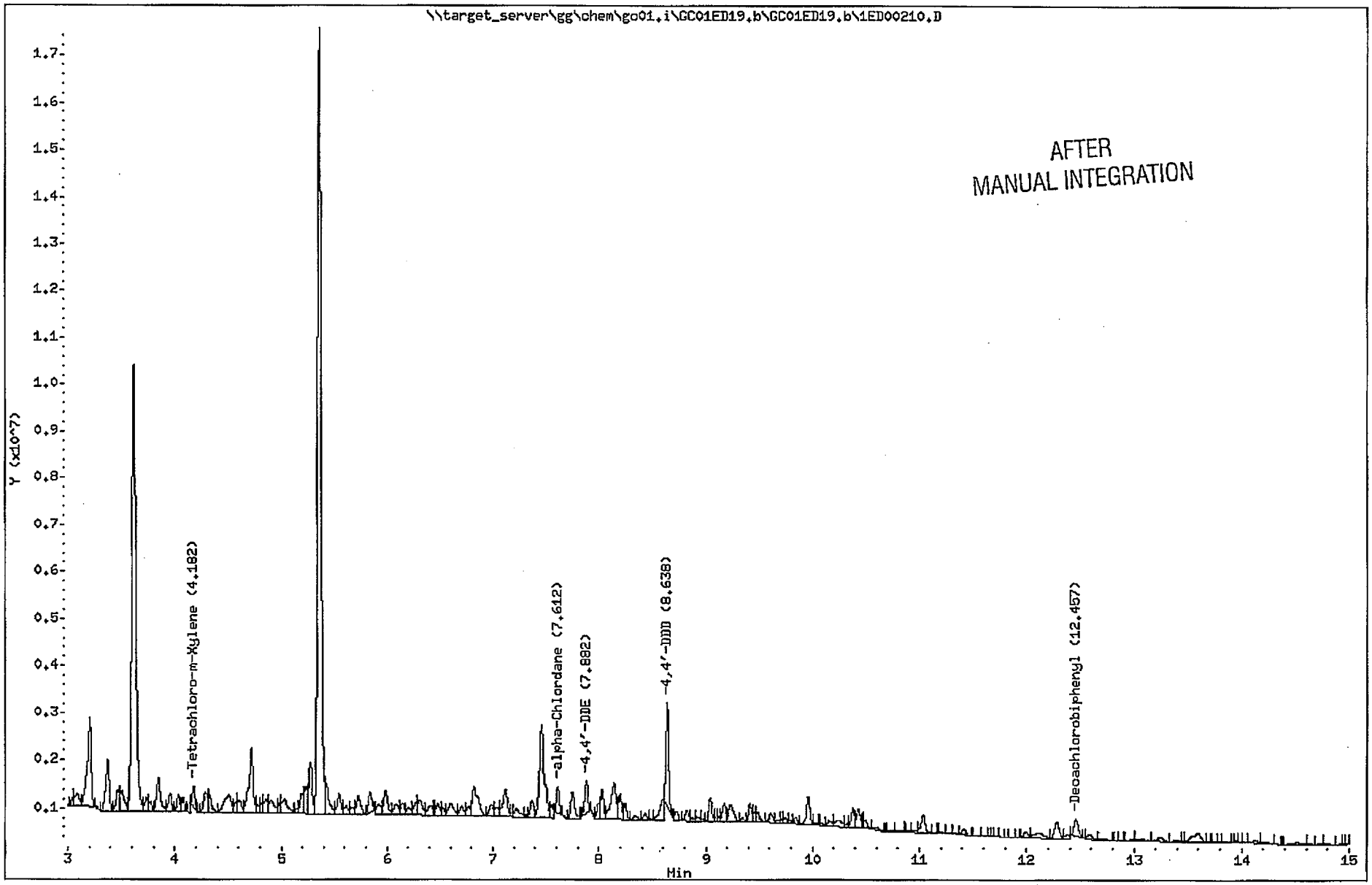
Data File: \\target_server\gg\chem\gc01.i\GC01ED19.b\GC01ED19.b\1ED00210.D
Injection Date: 19-APR-2011 19:10
Instrument: gc01.i
Client Sample ID: 2W-SD-SD159-0001

Katahdin Analytical Services 2000070

Data File: \\target_server\gg\chem\go01.i\GC01ED19.b\GC01ED19.b\1ED00210.D
Date : 19-APR-2011 19:10
Client ID: 2W-SD-SD159-0001
Sample Info: SE1685-9

Instrument: go01.i

Operator: CB
Column phase: ZB-Multiresidue-1
Column diameter: 0.53



Katahdin Analytical Services 2000071

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 14.52 TCX: 4.13

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		AR1660 1.0	02/04/11	1440	14.52	4.13
02		AR1660 0.05	02/04/11	1506	14.53	4.13
03		AR1660 0.1	02/04/11	1532	14.53	4.14
04		AR1660 0.25	02/04/11	1558	14.53	4.14
05		AR1660 2.5	02/04/11	1624	14.53	4.14
06		AR1660 10	02/04/11	1650	14.52	4.14
07		AR1016 1.0	02/04/11	1716		
08		AR1260 1.0	02/04/11	1742		
09		AR1242 1.0	02/04/11	1808		
10		AR1248 1.0	02/04/11	2043		
11		AR1254 1.0	02/04/11	2319		
12		AR1221 1.0	02/05/11	0155		
13		AR1232 1.0	02/05/11	0431		
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

Katahdin Analytical Services A0000207

Katahdin Analytical Services A0000180

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Included
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m
Cal Date : 08-Feb-2011 13:56 rthomas

Calibration File Names:
Level 1: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB079.D
Level 2: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB080.D
Level 3: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB081.D
Level 4: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB078.D
Level 5: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB082.D
Level 6: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB083.D

	Compound	0.0500000 Level 1	0.1000000 Level 2	0.2500000 Level 3	1.0000 Level 4	2.5000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
M	1 Total PCBs	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
	2 Aroclor-1221 (1)	1768818	1630936	2113620	2685863	7757723	26789391	QUAD	-0.26827	3.364e-007	1.756e-015	0.99557
	(2)	410991	814040	2060758	7112842	17734958	61693984	QUAD	-0.00554	1.338e-007	4.604e-016	0.99998
	(3)	1037386	2024274	5054952	17533640	41592811	133362297	QUAD	-0.00768	5.379e-008	1.594e-016	0.99999
	(4)	132354	262735	677197	2482676	6152330	21128077	QUAD	0.00103	3.812e-007	4.356e-015	0.99999
	4 Aroclor-1232 (1)	16442520	16350690	16453472	14721789	14161365	11745815	AVRG		14979275		12.44858
	(2)	11413080	11029790	9991864	9596410	9245446	8112570	AVRG		9898193		12.19877
	(3)	20207620	19385000	18086868	17533478	17641199	16329983	AVRG		18197358		7.65446
	(4)	11874800	11213440	10754756	9934859	9780021	9256234	AVRG		10469352		9.39575
	(5)	9483960	8863200	8587252	7759601	7569308	7487726	AVRG		8291841		9.77801
	5 Aroclor-1242 (1)	21144840	19002170	18664144	17116932	15330835	13574673	AVRG		17472266		15.60120
	(2)	36102220	32893420	32946464	31707537	31025834	27140228	AVRG		31969284		9.19105
	(3)	21251480	18448020	18235976	17305218	17961446	15553242	AVRG		18125897		10.23372
	(4)	17479020	16371330	16226616	15125243	16332256	14581762	AVRG		16019371		6.40359

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Included
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m
Cal Date : 08-Feb-2011 13:56 rthomas

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2500000 Level 3	1.0000 Level 4	2.5000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
(5)	18009640	17959780	17463152	16444265	17578829	16087159	AVRG		17257138		4.66141
6 Aroclor-1016 (1)	22641200	21748160	21734512	20565714	19559621	16671180	AVRG		20486731		10.51764
(2)	39025560	38918290	39323904	37783174	37834588	32826601	AVRG		37618686		6.46932
(3)	21826140	21784430	21635556	20853951	20656593	18572867	AVRG		20888256		5.92440
(4)	15858180	16037730	15687128	15073477	15287110	14482558	AVRG		15404364		3.74048
(5)	18361880	18122800	18680280	17770897	17901135	16972071	AVRG		17968177		3.26575
7 Aroclor-1248 (1)	15593680	16610780	18541224	18461945	18259220	17266519	AVRG		17455595		6.80385
(2)	21336520	20880260	21137520	20595573	20227667	18924050	AVRG		20516932		4.25801
(3)	27092840	27941860	27250924	26637673	26153918	23859397	AVRG		26489435		5.36678
(4)	33527720	32414430	32674260	32314455	32050801	29759157	AVRG		32123471		3.93560
(5)	13927420	14097050	14006124	13545390	13660164	13976127	AVRG		13868713		1.55998
8 Aroclor-1254 (1)	24012660	26296840	25542556	22092489	26158670	23512371	AVRG		24602598		6.80446
(2)	32969400	36483490	35053424	32010620	36330214	32405620	AVRG		34208795		5.84756
(3)	40346700	43506030	43605384	40547085	45080473	39404504	AVRG		42081696		5.40589
(4)	29020840	31276090	31242424	28747945	32752639	30211367	AVRG		30541884		4.97813
(5)	26446540	29411260	28879324	26709549	30260552	28341490	AVRG		28341453		5.32088
9 Aroclor-1260 (1)	28557480	28599970	28786440	27694796	28930343	27120677	AVRG		28281618		2.52278
(2)	38121920	37767040	38050432	36277467	37976220	35031097	AVRG		37204029		3.41103
(3)	32930880	32238670	32577884	31370456	32870018	31677729	AVRG		32277606		1.98482
(4)	51929440	53330380	54307920	54221263	57888255	52231905	AVRG		53984860		3.98348
(5)	23595500	23992290	23897660	23469555	24781539	24600653	AVRG		24056200		2.20604
10 Aroclor-1262 (1)	29822000	30921410	32334820	31875938	30722965	29519160	AVRG		30866049		3.57990

Katahdin Analytical Services A0000181

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Included
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m
Cal Date : 08-Feb-2011 13:56 rthomas

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2500000 Level 3	1.0000 Level 4	2.5000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
(2)	42729620	39409430	41483408	41795309	40820552	38314340	AVRG		40758776		3.99899
(3)	28765620	29968550	30929144	31236470	30844467	29421841	AVRG		30194349		3.22381
(4)	68063400	68497110	72820660	75741301	73771790	64493487	AVRG		70564625		5.99781
(5)	22718040	21077880	21348644	21535977	21775098	22094323	AVRG		21758327		2.69129
11 Aroclor-1268 (1)	89661060	88334500	89754132	89937818	90475663	+++++	AVRG		89632635		0.88281
(2)	76096280	75562070	78295940	78626975	79232937	+++++	AVRG		77562840		2.10007
(3)	63006120	62322430	63806116	64576018	66770074	+++++	AVRG		64096152		2.67949
(4)	165098840	161070530	168221924	169919482	165270052	+++++	AVRG		165916166		2.04187
(5)	23341300	26918480	26037728	25486543	26396744	+++++	AVRG		25636159		5.40251
$ 3 Tetrachloro-m-xylene	685050000	714807500	744615800	763660450	720869860	729100055	AVRG		726350611		3.69534
$ 12 Decachlorobiphenyl	443665000	494424500	403648200	354943500	369755600	385246890	AVRG		408613948		12.74156

Katahdin Analytical Services A0000182

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Included
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m
Cal Date : 08-Feb-2011 13:56 rthomas

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Katahdin Analytical Services A0000183

Report Date: 17-Feb-2011 11:16

Calibration History

Method : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m
Start Cal Date: 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Last Cal Level: 6
Last Cal Type : Initial Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.05000		
05-FEB-2011 10:09	AR1268	7EB079.D
05-FEB-2011 07:33	AR1262	7EB073.D
05-FEB-2011 04:57	AR1232	7EB067.D
05-FEB-2011 02:21	AR1221	7EB061.D
04-FEB-2011 23:45	AR1254	7EB055.D
04-FEB-2011 21:09	AR1248	7EB049.D
04-FEB-2011 18:33	AR1242	7EB043.D
04-FEB-2011 15:06	AR1660	7EB035.D
Cal Level: 2 , Cal Amount: 0.10000		
05-FEB-2011 10:35	AR1268	7EB080.D
05-FEB-2011 07:59	AR1262	7EB074.D
05-FEB-2011 05:23	AR1232	7EB068.D
05-FEB-2011 02:47	AR1221	7EB062.D
05-FEB-2011 00:11	AR1254	7EB056.D
04-FEB-2011 21:35	AR1248	7EB050.D
04-FEB-2011 18:59	AR1242	7EB044.D
04-FEB-2011 15:32	AR1660	7EB036.D
Cal Level: 3 , Cal Amount: 0.25000		
05-FEB-2011 11:01	AR1268	7EB081.D
05-FEB-2011 08:25	AR1262	7EB075.D
05-FEB-2011 05:49	AR1232	7EB069.D
05-FEB-2011 03:13	AR1221	7EB063.D
05-FEB-2011 00:37	AR1254	7EB057.D
04-FEB-2011 22:01	AR1248	7EB051.D
04-FEB-2011 19:25	AR1242	7EB045.D
04-FEB-2011 15:58	AR1660	7EB037.D
Cal Level: 4 , Cal Amount: 1.00000		
05-FEB-2011 09:43	AR1268	7EB078.D
05-FEB-2011 07:07	AR1262	7EB072.D
05-FEB-2011 04:31	AR1232	7EB066.D
05-FEB-2011 01:55	AR1221	7EB060.D
04-FEB-2011 23:19	AR1254	7EB054.D
04-FEB-2011 20:43	AR1248	7EB048.D
04-FEB-2011 18:08	AR1242	7EB042.D
04-FEB-2011 14:40	AR1660	7EB034.D

Cal Level: 5 , Cal Amount: 2.50000		
05-FEB-2011 11:27	AR1268	7EB082.D
05-FEB-2011 08:51	AR1262	7EB076.D
05-FEB-2011 06:15	AR1232	7EB070.D
05-FEB-2011 03:39	AR1221	7EB064.D
05-FEB-2011 01:03	AR1254	7EB058.D
04-FEB-2011 22:27	AR1248	7EB052.D
04-FEB-2011 19:51	AR1242	7EB046.D
04-FEB-2011 16:24	AR1660	7EB038.D

Cal Level: 6 , Cal Amount: 10.00000		
05-FEB-2011 11:52	AR1268	7EB083.D
05-FEB-2011 09:17	AR1262	7EB077.D
05-FEB-2011 06:41	AR1232	7EB071.D
05-FEB-2011 04:05	AR1221	7EB065.D
05-FEB-2011 01:29	AR1254	7EB059.D
04-FEB-2011 22:53	AR1248	7EB053.D
04-FEB-2011 20:17	AR1242	7EB047.D
04-FEB-2011 16:50	AR1660	7EB039.D

Continuing Calibration
Ccal Level Mode: BY SAMPLE

05-FEB-2011 01:55	AR1221	7EB060.D
05-FEB-2011 09:43	AR1268	7EB078.D
05-FEB-2011 07:07	AR1262	7EB072.D
05-FEB-2011 04:31	AR1232	7EB066.D
04-FEB-2011 23:19	AR1254	7EB054.D
04-FEB-2011 20:43	AR1248	7EB048.D
04-FEB-2011 18:08	AR1242	7EB042.D
04-FEB-2011 17:42	AR1260	7EB041.D
04-FEB-2011 17:16	AR1016	7EB040.D
04-FEB-2011 14:40	AR1660	7EB034.D

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Instrument ID: GC07 Calibration Date: 02/04/11 Time: 1716

Lab File ID: 7EB040 Init. Calib. Date(s): 02/04/11 02/05/11

Init. Calib. Times: 1440 1152

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	20487000	21660000	0.001	5.72	20.00	AVRG
(2)	37619000	40473000	0.001	7.59	20.00	AVRG
(3)	20888000	22066000	0.001	5.64	20.00	AVRG
(4)	15404000	16109000	0.001	4.58	20.00	AVRG
(5)	17968000	18342000	0.001	2.08	20.00	AVRG
Average %D: 5.1200						

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Instrument ID: GC07 Calibration Date: 02/04/11 Time: 1742

Lab File ID: 7EB041 Init. Calib. Date(s): 02/04/11 02/05/11

Init. Calib. Times: 1440 1152

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1260	28282000	27910000	0.001	-1.32	20.00	AVRG
(2)	37204000	37381000	0.001	0.48	20.00	AVRG
(3)	32278000	34770000	0.001	7.72	20.00	AVRG
(4)	53985000	48832000	0.001	-9.54	20.00	AVRG
(5)	24056000	23066000	0.001	-4.12	20.00	AVRG
Average %D: -1.360						

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 13.62 TCX: 3.79

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		AR1660 1.0	04/19/11	1117	13.61	3.78
02	WG90032-BLAN	WG90032-1	04/19/11	1531	13.62	3.79
03	WG90032-LCS	WG90032-2	04/19/11	1557	13.62	3.79
04	WG90032-LCSD	WG90032-3	04/19/11	1623	13.62	3.79
05		AR1660 0.25	04/19/11	1741	13.62	3.79
06	2W-SD-SD147-	SE1685-1	04/19/11	2017	13.61	3.79
07	2W-SD-SD149-	SE1685-3	04/19/11	2043	13.61	3.79
08	2W-SD-SD152-	SE1685-4	04/19/11	2109	13.61	3.80
09	2W-SD-SD154-	SE1685-7	04/19/11	2135	13.63	3.88*
10		AR1660 1.0	04/20/11	0012	13.62	3.79
11		AR1660 1.0	04/20/11	1002	13.60	3.79
12	2W-SD-SD161-	SE1685-8	04/20/11	1244	13.62	3.80
13	2W-SD-SD159-	SE1685-9	04/20/11	1310	13.61	
14	2W-SD-SD158-	SE1685-10	04/20/11	1336	13.61	3.80
15	FD-040411-1	SE1685-16	04/20/11	1402	13.61	3.80
16	2W-SD-SD138-	SE1685-17	04/20/11	1428	13.61	3.80
17	2W-SD-SD118-	SE1685-22	04/20/11	1454	13.62	3.81
18	2W-SD-SD119-	SE1685-23	04/20/11	1520	13.62	3.81
19	2W-SD-SD120-	SE1685-24	04/20/11	1546	13.61	3.81
20	2W-SD-SD121-	SE1685-26	04/20/11	1612	13.62	3.81

QC LIMITS

DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000208

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 13.62 TCX: 3.79

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01	2W-SD-SD136-	SE1685-28	04/20/11	1638	13.63	3.81
02		AR1660 0.25	04/20/11	1730	13.62	3.80
03	2W-SD-SD134-	SE1685-29	04/20/11	1915	13.62	3.81
04		AR1660 1.0	04/21/11	0001	13.61	3.80
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000209

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Instrument ID: GC07 Calibration Date: 04/19/11 Time: 1117

Lab File ID: 7ED544 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	20487000	22228000	0.001	8.50	20.00	AVRG
(2)	37619000	39969000	0.001	6.25	20.00	AVRG
(3)	20888000	22105000	0.001	5.83	20.00	AVRG
(4)	15404000	15650000	0.001	1.60	20.00	AVRG
(5)	17968000	18154000	0.001	1.04	20.00	AVRG
Average %D: 4.6400						
Aroclor-1260	28282000	28210000	0.001	-0.25	20.00	AVRG
(2)	37204000	40630000	0.001	9.21	20.00	AVRG
(3)	32278000	32632000	0.001	1.10	20.00	AVRG
(4)	53985000	58025000	0.001	7.48	20.00	AVRG
(5)	24056000	22729000	0.001	-5.52	20.00	AVRG
Average %D: 2.4000						
Decachlorobiphenyl	408610000	394460000	0.001	-3.46	20.00	AVRG
Tetrachloro-m-xylene	726350000	780240000	0.001	7.42	20.00	AVRG

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Instrument ID: GC07 Calibration Date: 04/19/11 Time: 1741

Lab File ID: 7ED558 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	20487000	22894000	0.001	11.75	20.00	AVRG
(2)	37619000	43200000	0.001	14.84	20.00	AVRG
(3)	20888000	24745000	0.001	18.46	20.00	AVRG
(4)	15404000	17903000	0.001	16.22	20.00	AVRG
(5)	17968000	20857000	0.001	16.08	20.00	AVRG
Average %D: 15.480						
Aroclor-1260	28282000	32634000	0.001	15.39	20.00	AVRG
(2)	37204000	44014000	0.001	18.30	20.00	AVRG
(3)	32278000	33820000	0.001	4.78	20.00	AVRG
(4)	53985000	56487000	0.001	4.63	20.00	AVRG
(5)	24056000	22386000	0.001	-6.94	20.00	AVRG
Average %D: 7.2400						
Decachlorobiphenyl	408610000	436460000	0.001	6.82	20.00	AVRG
Tetrachloro-m-xylene	726350000	849370000	0.001	16.94	20.00	AVRG

AVG 15.5%

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Instrument ID: GC07 Calibration Date: 04/20/11 Time: 0012

Lab File ID: 7ED573 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	20487000	21268000	0.001	3.81	20.00	AVRG	
(2)	37619000	36358000	0.001	-3.35	20.00	AVRG	
(3)	20888000	19768000	0.001	-5.36	20.00	AVRG	
(4)	15404000	14084000	0.001	-8.57	20.00	AVRG	
(5)	17968000	15592000	0.001	-13.22	20.00	AVRG	
Average %D: -5.340							
Aroclor-1260	28282000	25501000	0.001	-9.83	20.00	AVRG	AVG 19.3%
(2)	37204000	32211000	0.001	-13.42	20.00	AVRG	
(3)	32278000	18764000	0.001	-41.87	20.00	AVRG	<-
(4)	53985000	46899000	0.001	-13.13	20.00	AVRG	
(5)	24056000	19689000	0.001	-18.15	20.00	AVRG	
Average %D: -19.28							
Decachlorobiphenyl	408610000	313310000	0.001	-23.32	20.00	AVRG	<-
Tetrachloro-m-xylene	726350000	818610000	0.001	12.70	20.00	AVRG	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG ~~No.: WE55-1~~

Instrument ID: GC07 Calibration Date: 04/20/11 Time: 1002

Lab File ID: 7ED578 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	20487000	21946000	0.001	7.12	20.00	AVRG
(2)	37619000	39454000	0.001	4.88	20.00	AVRG
(3)	20888000	21610000	0.001	3.46	20.00	AVRG
(4)	15404000	15356000	0.001	-0.31	20.00	AVRG
(5)	17968000	17733000	0.001	-1.31	20.00	AVRG
Average %D: 2.7700						
Aroclor-1260	28282000	29080000	0.001	2.82	20.00	AVRG
(2)	37204000	41520000	0.001	11.60	20.00	AVRG
(3)	32278000	33088000	0.001	2.51	20.00	AVRG
(4)	53985000	58223000	0.001	7.85	20.00	AVRG
(5)	24056000	23245000	0.001	-3.37	20.00	AVRG
Average %D: 4.2800						
Decachlorobiphenyl	408610000	390620000	0.001	-4.40	20.00	AVRG
Tetrachloro-m-xylene	726350000	753300000	0.001	3.71	20.00	AVRG

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Instrument ID: GC07 Calibration Date: 04/20/11 Time: 1730

Lab File ID: 7ED593 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	20487000	22647000	0.001	10.54	20.00	AVRG	
(2)	37619000	31260000	0.001	-16.90	20.00	AVRG	
(3)	20888000	21000000	0.001	0.54	20.00	AVRG	
(4)	15404000	14853000	0.001	-3.58	20.00	AVRG	
(5)	17968000	16538000	0.001	-7.96	20.00	AVRG	
Average %D: -3.480							
Aroclor-1260	28282000	26402000	0.001	-6.65	20.00	AVRG	
(2)	37204000	35981000	0.001	-3.29	20.00	AVRG	
(3)	32278000	29808000	0.001	-7.65	20.00	AVRG	
(4)	53985000	50485000	0.001	-6.48	20.00	AVRG	
(5)	24056000	21268000	0.001	-11.59	20.00	AVRG	
Average %D: -7.120							
Decachlorobiphenyl	408610000	317190000	0.001	-22.37	20.00	AVRG	<-
Tetrachloro-m-xylene	726350000	819370000	0.001	12.81	20.00	AVRG	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Instrument ID: GC07 Calibration Date: 04/21/11 Time: 0001

Lab File ID: 7ED608 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	20487000	24597000	0.001	20.06	20.00	AVRG	<- AVG 12.3%
(2)	37619000	42951000	0.001	14.17	20.00	AVRG	
(3)	20888000	23566000	0.001	12.82	20.00	AVRG	
(4)	15404000	16642000	0.001	8.04	20.00	AVRG	
(5)	17968000	19141000	0.001	6.53	20.00	AVRG	
Average %D: 12.320							
Aroclor-1260	28282000	31179000	0.001	10.24	20.00	AVRG	
(2)	37204000	42103000	0.001	13.17	20.00	AVRG	
(3)	32278000	33856000	0.001	4.89	20.00	AVRG	
(4)	53985000	61671000	0.001	14.24	20.00	AVRG	
(5)	24056000	24371000	0.001	1.31	20.00	AVRG	
Average %D: 8.7700							
Decachlorobiphenyl	408610000	396340000	0.001	-3.00	20.00	AVRG	
Tetrachloro-m-xylene	726350000	940300000	0.001	29.46	20.00	AVRG	<-

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.70 DCB: 18.53

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		AR1660 1.0	02/04/11	1440	4.70	18.53
02		AR1660 0.05	02/04/11	1506	4.70	18.53
03		AR1660 0.1	02/04/11	1532	4.70	18.53
04		AR1660 0.25	02/04/11	1558	4.71	18.54
05		AR1660 2.5	02/04/11	1624	4.70	18.54
06		AR1660 10	02/04/11	1650	4.71	18.54
07		AR1016 1.0	02/04/11	1716		
08		AR1260 1.0	02/04/11	1742		
09		AR1242 1.0	02/04/11	1808		
10		AR1248 1.0	02/04/11	2043		
11		AR1254 1.0	02/04/11	2319		
12		AR1221 1.0	02/05/11	0155		
13		AR1232 1.0	02/05/11	0431		
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000210

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Disabled
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m\PCB041.
Cal Date : 07-Feb-2011 08:18 rthomas
Curve Type : Average

Calibration File Names:
Level 1: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB079.D
Level 2: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB080.D
Level 3: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB081.D
Level 4: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB078.D
Level 5: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB082.D
Level 6: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB083.D

Compound	0.05000 Level 1	0.10000 Level 2	0.25000 Level 3	1.000 Level 4	2.500 Level 5	10.000 Level 6	___ RRF	% RSD
M 1 Total PCBs	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Aroclor-1221 (1)	1039220	1051920	1052232	899642	885544	840778	961556	10.042
(2)	1814880	1836720	1833548	1645708	1652638	1473101	1709433	8.512
(3)	1220340	1231630	1229704	1085329	1071463	926270	1127456	10.886
(4)	4345480	4177940	4097868	3666449	3546812	3066503	3816842	12.551
4 Aroclor-1232 (1)	3667580	3431480	3467876	3137029	3011206	2643030	3226367	11.511
(2)	2157660	2085810	2178864	1955454	1879735	1697555	1992513	9.303
(3)	3706100	3541220	3754424	3505693	3426626	3215951	3525002	5.548
(4)	2345460	2136000	2239600	1997762	1968196	1829016	2086006	9.124
(5)	1598680	1462260	1585444	1414192	1432111	1366892	1476596	6.415
5 Aroclor-1016 (1)	4080380	4278910	4279120	4016561	3889935	3461632	4001090	7.617
(2)	7759620	7811310	7789756	7382125	7471324	6602600	7469456	6.172
(3)	4658960	4647250	4482424	4152730	4199926	3833965	4329209	7.495
(4)	3256960	3186460	3104152	2948265	3008100	2840072	3057335	5.072
(5)	3709740	3676790	3542812	3341071	3385968	3197893	3475712	5.798
6 Aroclor-1242 (1)	3861380	3638720	3604680	3378206	3331034	2882433	3449409	9.790
(2)	7073700	6449250	6554280	6347310	6434570	5550583	6401616	7.670
(3)	3924000	3787640	3776552	3577381	3602878	3193947	3643733	7.000
(4)	3237680	3072240	3037580	2905355	2988400	2706902	2991360	5.936
(5)	3221940	2996580	2910384	2851125	3000826	2760856	2956952	5.359
7 Aroclor-1248 (1)	4164760	4309480	4135060	3922326	3835512	3611439	3996430	6.381
(2)	5112660	5298440	5145000	4958008	4849256	4467013	4971730	5.875
(3)	4092600	4335690	4257116	4125670	4083074	3858025	4125363	3.997
(4)	5684080	5898000	5826008	5590008	5490469	5096096	5597443	5.134
(5)	5122340	5248990	5207564	5082441	5016364	4721892	5066598	3.722
8 Aroclor-1254 (1)	5055600	5175510	4960656	4947058	4854458	4460252	4908922	4.998
(2)	5623420	5753880	5498636	5456568	5342621	4876124	5425208	5.603
(3)	7271880	7516000	7198208	7078589	7055148	6298623	7069741	5.837

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Disabled
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m\PCB041.
Cal Date : 07-Feb-2011 08:18 rthomas
Curve Type : Average

Compound	0.05000 Level 1	0.10000 Level 2	0.25000 Level 3	1.000 Level 4	2.500 Level 5	10.000 Level 6	___ RRF	% RSD
(4)	4710920	5023460	4873044	4202910	4788026	4348116	4657746	6.807
(5)	4407080	4573260	4479432	3976967	4505894	4182511	4354191	5.250
9 Aroclor-1260 (1)	4598040	4729600	4758512	4450600	4566352	4278276	4563563	3.931
(2)	5626680	5723040	5737636	5368336	5474016	5028498	5493034	4.900
(3)	4343760	4315370	4390640	4073908	4273381	4000315	4232896	3.735
(4)	8710080	8438420	8395948	7844828	8038218	7350403	8129650	6.026
(5)	3570980	3753550	3864872	3617212	3820878	3674466	3716993	3.116
10 Aroclor-1262 (1)	5488240	4787810	4879024	4671957	4479292	4179446	4747628	9.268
(2)	6608580	6165700	6290816	6075326	5854975	5329926	6054221	7.164
(3)	5464700	5209670	5272876	5192256	4961269	4651357	5125355	5.519
(4)	11193360	10107000	10437584	10227262	9899018	8741464	10100948	7.934
(5)	5499260	4565170	5197664	5090975	4919062	4688767	4993483	6.872
11 Aroclor-1268 (1)	12705680	12371630	12526056	12077161	11865761	10252861	11966525	7.458
(2)	10730440	10518950	10550172	10216764	10072694	8842331	10155225	6.756
(3)	8817940	8421000	8471000	8279377	8195481	7491050	8279308	5.335
(4)	24405840	23826440	24342748	23117328	22182297	17901631	22629381	10.881
(5)	4155240	4001960	3968276	3745560	3688117	3557650	3852800	5.836
$ 2 Tetrachloro-m-xylene	164229000	162632000	168882200	169544750	166432940	163481515	165867068	1.743
$ 12 Decachlorobiphenyl	55282000	56253500	56951400	53107350	55703980	54814690	55352153	2.400

Report Date: 17-Feb-2011 11:16

Calibration History

Method : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m\PCB041.m
Start Cal Date: 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Last Cal Level: 1
Last Cal Type : Initial Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.05000		
05-FEB-2011 10:09	AR1268	7EB079.D
05-FEB-2011 07:33	AR1262	7EB073.D
05-FEB-2011 04:57	AR1232	7EB067.D
05-FEB-2011 02:21	AR1221	7EB061.D
04-FEB-2011 23:45	AR1254	7EB055.D
04-FEB-2011 21:09	AR1248	7EB049.D
04-FEB-2011 18:33	AR1242	7EB043.D
04-FEB-2011 15:06	AR1660	7EB035.D
Cal Level: 2 , Cal Amount: 0.10000		
05-FEB-2011 10:35	AR1268	7EB080.D
05-FEB-2011 07:59	AR1262	7EB074.D
05-FEB-2011 05:23	AR1232	7EB068.D
05-FEB-2011 02:47	AR1221	7EB062.D
05-FEB-2011 00:11	AR1254	7EB056.D
04-FEB-2011 21:35	AR1248	7EB050.D
04-FEB-2011 18:59	AR1242	7EB044.D
04-FEB-2011 15:32	AR1660	7EB036.D
Cal Level: 3 , Cal Amount: 0.25000		
05-FEB-2011 11:01	AR1268	7EB081.D
05-FEB-2011 08:25	AR1262	7EB075.D
05-FEB-2011 05:49	AR1232	7EB069.D
05-FEB-2011 03:13	AR1221	7EB063.D
05-FEB-2011 00:37	AR1254	7EB057.D
04-FEB-2011 22:01	AR1248	7EB051.D
04-FEB-2011 19:25	AR1242	7EB045.D
04-FEB-2011 15:58	AR1660	7EB037.D
Cal Level: 4 , Cal Amount: 1.00000		
05-FEB-2011 09:43	AR1268	7EB078.D
05-FEB-2011 07:07	AR1262	7EB072.D
05-FEB-2011 04:31	AR1232	7EB066.D
05-FEB-2011 01:55	AR1221	7EB060.D
04-FEB-2011 23:19	AR1254	7EB054.D
04-FEB-2011 20:43	AR1248	7EB048.D
04-FEB-2011 18:08	AR1242	7EB042.D
04-FEB-2011 14:40	AR1660	7EB034.D

Cal Level: 5 , Cal Amount: 2.50000		
05-FEB-2011 11:27	AR1268	7EB082.D
05-FEB-2011 08:51	AR1262	7EB076.D
05-FEB-2011 06:15	AR1232	7EB070.D
05-FEB-2011 03:39	AR1221	7EB064.D
05-FEB-2011 01:03	AR1254	7EB058.D
04-FEB-2011 22:27	AR1248	7EB052.D
04-FEB-2011 19:51	AR1242	7EB046.D
04-FEB-2011 16:24	AR1660	7EB038.D

Cal Level: 6 , Cal Amount: 10.00000		
05-FEB-2011 11:52	AR1268	7EB083.D
05-FEB-2011 09:17	AR1262	7EB077.D
05-FEB-2011 06:41	AR1232	7EB071.D
05-FEB-2011 04:05	AR1221	7EB065.D
05-FEB-2011 01:29	AR1254	7EB059.D
04-FEB-2011 22:53	AR1248	7EB053.D
04-FEB-2011 20:17	AR1242	7EB047.D
04-FEB-2011 16:50	AR1660	7EB039.D

Continuing Calibration
Ccal Level Mode: BY SAMPLE

05-FEB-2011 09:43	AR1268	7EB078.D
05-FEB-2011 07:07	AR1262	7EB072.D
05-FEB-2011 04:31	AR1232	7EB066.D
05-FEB-2011 01:55	AR1221	7EB060.D
04-FEB-2011 23:19	AR1254	7EB054.D
04-FEB-2011 20:43	AR1248	7EB048.D
04-FEB-2011 18:08	AR1242	7EB042.D
04-FEB-2011 17:42	AR1260	7EB041.D
04-FEB-2011 17:16	AR1016	7EB040.D
04-FEB-2011 14:40	AR1660	7EB034.D

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Instrument ID: GC07 Calibration Date: 02/04/11 Time: 1716

Lab File ID: 7EB040 Init. Calib. Date(s): 02/04/11 02/05/11

Init. Calib. Times: 1440 1152

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	4001100.0	4200200.0	0.001	4.98	20.00	AVRG
(2)	7469400.0	7974600.0	0.001	6.76	20.00	AVRG
(3)	4329200.0	4447000.0	0.001	2.72	20.00	AVRG
(4)	3057400.0	3120300.0	0.001	2.06	20.00	AVRG
(5)	3475700.0	3485200.0	0.001	0.27	20.00	AVRG
Average %D: 3.3600						

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Instrument ID: GC07 Calibration Date: 02/04/11 Time: 1742

Lab File ID: 7EB041 Init. Calib. Date(s): 02/04/11 02/05/11

Init. Calib. Times: 1440 1152

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1260	4563600.0	4516800.0	0.001	-1.02	20.00	AVRG
(2)	5493000.0	5430500.0	0.001	-1.14	20.00	AVRG
(3)	4232900.0	4611800.0	0.001	8.95	20.00	AVRG
(4)	8129600.0	7165100.0	0.001	-11.86	20.00	AVRG
(5)	3717000.0	3493300.0	0.001	-6.02	20.00	AVRG
Average %D: -2.220						

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.36 DCB: 17.66

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		AR1660 1.0	04/19/11	1117	4.36	17.65
02	WG90032-BLAN	WG90032-1	04/19/11	1531	4.37	17.66
03	WG90032-LCS	WG90032-2	04/19/11	1557	4.36	17.66
04	WG90032-LCSD	WG90032-3	04/19/11	1623	4.36	17.66
05		AR1660 0.25	04/19/11	1741	4.36	17.66
06	2W-SD-SD147-	SE1685-1	04/19/11	2017	4.36	17.65
07	2W-SD-SD149-	SE1685-3	04/19/11	2043	4.36	17.65
08	2W-SD-SD152-	SE1685-4	04/19/11	2109	4.37	17.65
09	2W-SD-SD154-	SE1685-7	04/19/11	2135	4.38	17.67
10		AR1660 1.0	04/20/11	0012	4.37	17.65
11		AR1660 1.0	04/20/11	1002	4.36	17.64
12	2W-SD-SD161-	SE1685-8	04/20/11	1244	4.36	17.64
13	2W-SD-SD159-	SE1685-9	04/20/11	1310	4.35	17.65
14	2W-SD-SD158-	SE1685-10	04/20/11	1336	4.37	17.65
15	FD-040411-1	SE1685-16	04/20/11	1402	4.38	17.65
16	2W-SD-SD138-	SE1685-17	04/20/11	1428	4.37	17.64
17	2W-SD-SD118-	SE1685-22	04/20/11	1454	4.38	17.66
18	2W-SD-SD119-	SE1685-23	04/20/11	1520	4.38	17.65
19	2W-SD-SD120-	SE1685-24	04/20/11	1546	4.38	17.65
20	2W-SD-SD121-	SE1685-26	04/20/11	1612	4.38	17.65

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000211

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.36 DCB: 17.66

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	2W-SD-SD136-	SE1685-28	04/20/11	1638	4.38	17.66
02		AR1660 0.25	04/20/11	1730	4.37	17.66
03	2W-SD-SD134-	SE1685-29	04/20/11	1915	4.38	17.65
04		AR1660 1.0	04/21/11	0001	4.37	17.64
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

Katahdin Analytical Services A0000212

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Instrument ID: GC07 Calibration Date: 04/19/11 Time: 1117

Lab File ID: 7ED544 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	4001100.0	3818400.0	0.001	-4.57	20.00	AVRG	
(2)	7469400.0	6874500.0	0.001	-7.96	20.00	AVRG	
(3)	4329200.0	3868000.0	0.001	-10.65	20.00	AVRG	
(4)	3057400.0	2738700.0	0.001	-10.42	20.00	AVRG	
(5)	3475700.0	3076000.0	0.001	-11.50	20.00	AVRG	
Average %D: -9.020							
Aroclor-1260	4563600.0	3949000.0	0.001	-13.47	20.00	AVRG	
(2)	5493000.0	4560700.0	0.001	-16.97	20.00	AVRG	
(3)	4232900.0	3376500.0	0.001	-20.23	20.00	AVRG	<-
(4)	8129600.0	6590000.0	0.001	-18.94	20.00	AVRG	
(5)	3717000.0	3099800.0	0.001	-16.60	20.00	AVRG	
Average %D: -17.24							
Tetrachloro-m-xylene	165860000	162420000	0.001	-2.07	20.00	AVRG	
Decachlorobiphenyl	55352000	54137000	0.001	-2.20	20.00	AVRG	

AVG 17.24

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Instrument ID: GC07 Calibration Date: 04/19/11 Time: 1741

Lab File ID: 7ED558 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	4001100.0	4306700.0	0.001	7.64	20.00	AVRG
(2)	7469400.0	7585800.0	0.001	1.56	20.00	AVRG
(3)	4329200.0	4313700.0	0.001	-0.36	20.00	AVRG
(4)	3057400.0	3012500.0	0.001	-1.47	20.00	AVRG
(5)	3475700.0	3502100.0	0.001	0.76	20.00	AVRG
Average %D: 1.6400						
Aroclor-1260	4563600.0	4420900.0	0.001	-3.13	20.00	AVRG
(2)	5493000.0	4941700.0	0.001	-10.04	20.00	AVRG
(3)	4232900.0	3668600.0	0.001	-13.33	20.00	AVRG
(4)	8129600.0	6882000.0	0.001	-15.35	20.00	AVRG
(5)	3717000.0	3290400.0	0.001	-11.48	20.00	AVRG
Average %D: -10.68						
Tetrachloro-m-xylene	165860000	179630000	0.001	8.30	20.00	AVRG
Decachlorobiphenyl	55352000	62744000	0.001	13.35	20.00	AVRG

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Instrument ID: GC07 Calibration Date: 04/20/11 Time: 0012

Lab File ID: 7ED573 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	___ RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	4001100.0	3753800.0	0.001	-6.18	20.00	AVRG
(2)	7469400.0	6721200.0	0.001	-10.02	20.00	AVRG
(3)	4329200.0	3738900.0	0.001	-13.64	20.00	AVRG
(4)	3057400.0	2624600.0	0.001	-14.16	20.00	AVRG
(5)	3475700.0	3025100.0	0.001	-12.96	20.00	AVRG
Average %D: -11.39						
Aroclor-1260	4563600.0	3865700.0	0.001	-15.29	20.00	AVRG
(2)	5493000.0	4542600.0	0.001	-17.30	20.00	AVRG
(3)	4232900.0	3435500.0	0.001	-18.84	20.00	AVRG
(4)	8129600.0	6832000.0	0.001	-15.96	20.00	AVRG
(5)	3717000.0	3058800.0	0.001	-17.71	20.00	AVRG
Average %D: -17.02						
Tetrachloro-m-xylene	165860000	176810000	0.001	6.60	20.00	AVRG
Decachlorobiphenyl	55352000	50243000	0.001	-9.23	20.00	AVRG

AVG 17.0%

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Instrument ID: GC07 Calibration Date: 04/20/11 Time: 1002

Lab File ID: 7ED578 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	4001100.0	3708900.0	0.001	-7.30	20.00	AVRG	
(2)	7469400.0	6679800.0	0.001	-10.57	20.00	AVRG	
(3)	4329200.0	3771300.0	0.001	-12.89	20.00	AVRG	
(4)	3057400.0	2643000.0	0.001	-13.55	20.00	AVRG	
(5)	3475700.0	2997900.0	0.001	-13.75	20.00	AVRG	
Average %D: -11.61							
Aroclor-1260	4563600.0	3872800.0	0.001	-15.14	20.00	AVRG	
(2)	5493000.0	4422200.0	0.001	-19.49	20.00	AVRG	
(3)	4232900.0	3246800.0	0.001	-23.30	20.00	AVRG	<-
(4)	8129600.0	6497700.0	0.001	-20.07	20.00	AVRG	<-
(5)	3717000.0	3029500.0	0.001	-18.50	20.00	AVRG	
Average %D: -19.30							
Tetrachloro-m-xylene	165860000	154820000	0.001	-6.66	20.00	AVRG	
Decachlorobiphenyl	55352000	52053000	0.001	-5.96	20.00	AVRG	

AVG 19.3%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Instrument ID: GC07 Calibration Date: 04/20/11 Time: 1730

Lab File ID: 7ED593 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	4001100.0	3576400.0	0.001	-10.61	20.00	AVRG	
(2)	7469400.0	6317200.0	0.001	-15.43	20.00	AVRG	
(3)	4329200.0	3562900.0	0.001	-17.70	20.00	AVRG	
(4)	3057400.0	2265500.0	0.001	-25.90	20.00	AVRG	<-
(5)	3475700.0	2797700.0	0.001	-19.51	20.00	AVRG	
Average %D: -17.84							
Aroclor-1260	4563600.0	3647100.0	0.001	-20.08	20.00	AVRG	<-
(2)	5493000.0	4192400.0	0.001	-23.68	20.00	AVRG	<-
(3)	4232900.0	3073000.0	0.001	-27.40	20.00	AVRG	<-
(4)	8129600.0	6140900.0	0.001	-24.46	20.00	AVRG	<-
(5)	3717000.0	2874300.0	0.001	-22.67	20.00	AVRG	<-
Average %D: -23.64							
Tetrachloro-m-xylene	165860000	158310000	0.001	-4.55	20.00	AVRG	
Decachlorobiphenyl	55352000	50061000	0.001	-9.56	20.00	AVRG	

AVG 17.8%

AVG 23.7%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Instrument ID: GC07 Calibration Date: 04/21/11 Time: 0001

Lab File ID: 7ED608 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	___ RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	4001100.0	4078500.0	0.001	1.93	20.00	AVRG
(2)	7469400.0	7156800.0	0.001	-4.18	20.00	AVRG
(3)	4329200.0	3983900.0	0.001	-7.98	20.00	AVRG
(4)	3057400.0	2815500.0	0.001	-7.91	20.00	AVRG
(5)	3475700.0	3203300.0	0.001	-7.84	20.00	AVRG
Average %D: -5.190						
Aroclor-1260	4563600.0	3993200.0	0.001	-12.50	20.00	AVRG
(2)	5493000.0	4611600.0	0.001	-16.05	20.00	AVRG
(3)	4232900.0	3493600.0	0.001	-17.47	20.00	AVRG
(4)	8129600.0	6962600.0	0.001	-14.36	20.00	AVRG
(5)	3717000.0	3197800.0	0.001	-13.97	20.00	AVRG
Average %D: -14.87						
Tetrachloro-m-xylene	165860000	183890000	0.001	10.87	20.00	AVRG
Decachlorobiphenyl	55352000	55248000	0.001	-0.19	20.00	AVRG

AVG 14.9%

FORM VII PEST

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG90032-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

Lab Sample ID: WG90032-1 Lab File ID: 7ED553

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3540

Sulfur Cleanup: (Y/N) N Date Extracted: 04/14/11

Date Analyzed (1): 04/19/11 Date Analyzed (2): 04/19/11

Time Analyzed (1): 1531 Time Analyzed (2): 1531

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column (1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	WG90032-LCS	WG90032-2	7ED554	04/19/11	04/19/11
02	WG90032-LCSD	WG90032-3	7ED555	04/19/11	04/19/11
03	2W-SD-SD147-0001	SE1685-1	7ED564	04/19/11	04/19/11
04	2W-SD-SD149-0001	SE1685-3	7ED565	04/19/11	04/19/11
05	2W-SD-SD152-0001	SE1685-4	7ED566	04/19/11	04/19/11
06	2W-SD-SD154-0001	SE1685-7	7ED567	04/19/11	04/19/11
07	2W-SD-SD161-0001	SE1685-8	7ED582	04/20/11	04/20/11
08	2W-SD-SD159-0001	SE1685-9	7ED583	04/20/11	04/20/11
09	2W-SD-SD158-0001	SE1685-10	7ED584	04/20/11	04/20/11
10	FD-040411-1	SE1685-16	7ED585	04/20/11	04/20/11
11	2W-SD-SD138-0001	SE1685-17	7ED586	04/20/11	04/20/11
12	2W-SD-SD118-0001	SE1685-22	7ED587	04/20/11	04/20/11
13	2W-SD-SD119-0001	SE1685-23	7ED588	04/20/11	04/20/11
14	2W-SD-SD120-0001	SE1685-24	7ED589	04/20/11	04/20/11
15	2W-SD-SD121-0001	SE1685-26	7ED590	04/20/11	04/20/11
16	2W-SD-SD136-0001	SE1685-28	7ED591	04/20/11	04/20/11
17	2W-SD-SD134-0001	SE1685-29	7ED597	04/20/11	04/20/11
18					
19					
20					
21					
22					
23					
24					

COMMENTS: _____

FORM IVPCB

Katahdin Analytical Services A0000178

Report of Analytical Results

Client:
Lab ID: WG90032-1
Client ID: Method Blank Sample
Project:
SDG: WE55-1

Sample Date:
Received Date: 11-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 19-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: NA
Report Date: 22-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	1.7	ug/Kgdrywt	1	17	3.4	1.2	1.7
Aroclor-1221	U	1.7	ug/Kgdrywt	1	17	3.4	1.6	1.7
Aroclor-1232	U	2.0	ug/Kgdrywt	1	17	3.4	1.9	2.0
Aroclor-1242	U	1.7	ug/Kgdrywt	1	17	3.4	1.2	1.7
Aroclor-1248	U	1.7	ug/Kgdrywt	1	17	3.4	1.2	1.7
Aroclor-1254	U	1.7	ug/Kgdrywt	1	17	3.4	0.94	1.7
Aroclor-1260	U	1.7	ug/Kgdrywt	1	17	3.4	1.2	1.7
Tetrachloro-M-Xylene	*	37.7	%					
Decachlorobiphenyl		77.9	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

LCS/LCSD Recovery Report

LCS ID: WG90032-2
LCSD ID: WG90032-3
Project:
SDG: WE55-1
Report Date: 22-APR-11

Received Date: 11-APR-11
Extract Date: 14-APR-11
Extracted By: KF
Extraction Method: SW846 3540
Lab Prep Batch: WG90032

Analysis Date: 19-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Aroclor-1016	167.	111.	66.5	84.5	50.6*	ug/Kgdrywt	27	50	53-123
Aroclor-1260	167.	115.	68.9	105.	62.9	ug/Kgdrywt	9	50	58-120
Tetrachloro-M-Xylene			48.6*		36.9*				56-115
Decachlorobiphenyl			75.7		68.8				59-124

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

FORM 2
SOIL PCB SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON CT SDG No.: WE55-1

GC Column(1): ZB-MULTIRESIDUE1ID: 0.53 (mm)GC Column(2): ZB-MULTIRESIDUE2ID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	DCB1 REC#	DCB2 REC#	OTHR (1)	OTHR (2)	TOT OUT
01	WG90032-BLANK	WG90032-1	38*	37*	78	72			2
02	WG90032-LCS	WG90032-2	48*	48*	76	70			2
03	WG90032-LCSD	WG90032-3	37*	37*	69	65			2
04	2W-SD-SD147-0001	SE1685-1	56	58	75	72			0
05	2W-SD-SD149-0001	SE1685-3	40*	44*	73	68			2
06	2W-SD-SD152-0001	SE1685-4	43*	50*	68	76			2
07	2W-SD-SD154-0001	SE1685-7	716*	39*	59	73			2
08	2W-SD-SD161-0001	SE1685-8	32*	35*	59	59			2
09	2W-SD-SD159-0001	SE1685-9	0*	14*	64	83			2
10	2W-SD-SD158-0001	SE1685-10	67	69	65	71			0
11	FD-040411-1	SE1685-16	49*	63	62	76			1
12	2W-SD-SD138-0001	SE1685-17	59	67	65	76			0
13	2W-SD-SD118-0001	SE1685-22	56	69	82	101			0
14	2W-SD-SD119-0001	SE1685-23	56	69	81	73			0
15	2W-SD-SD120-0001	SE1685-24	74	80	85	92			0
16	2W-SD-SD121-0001	SE1685-26	65	79	64	70			0
17	2W-SD-SD136-0001	SE1685-28	45*	58	45*	68			2
18	2W-SD-SD134-0001	SE1685-29	88	114	95	128*			1
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (56-115)
S2 (DCB) = Decachlorobiphenyl (59-124)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

Katahdin Analytical Services A0000174

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 120-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-24 Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.37	7.30	7.44	221		
Aroclor-1260	2	8.29	8.23	8.37	152		
	3	9.70	9.64	9.78	204		
COLUMN 1	4	10.41	10.35	10.49	242		
	5					205	
	1	9.15	9.07	9.21	184		
	2	9.63	9.55	9.69	151		
	3	10.56	10.49	10.63	251		
COLUMN 2	4	12.40	12.32	12.46	221		
	5	13.55	13.49	13.63	305	222	8.0
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

Katahdin Analytical Services A0000166

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 121-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-26 Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.37	7.30	7.44	583		
Aroclor-1260	2	8.29	8.23	8.37	630		
	3	9.70	9.64	9.78	647		
COLUMN 1	4	10.41	10.35	10.49	713		
	5					643	
	1	9.15	9.07	9.21	525		
	2	9.63	9.55	9.69	515		
	3	10.56	10.49	10.63	753		
COLUMN 2	4	12.40	12.32	12.46	637		
	5	13.57	13.49	13.63	718	630	2.0
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 134-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-29 Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.37	7.30	7.44	146		
Aroclor-1260	2	9.71	9.64	9.78	210		
	3	10.42	10.35	10.49	246		
COLUMN 1	4						
	5					200	
	1	9.15	9.07	9.21	240		
	2	9.63	9.55	9.69	193		
	3	12.40	12.32	12.46	248		
COLUMN 2	4	13.56	13.49	13.63	326		
	5					252	23.0
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 136-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-28 Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.38	7.30	7.44	179		
Aroclor-1260	2	8.30	8.23	8.37	153		
	3	9.71	9.64	9.78	176		
COLUMN 1	4	10.43	10.35	10.49	184		
	5					173	
	1	9.15	9.07	9.21	217		
	2	10.56	10.49	10.63	379		
	3	12.40	12.32	12.46	213		
COLUMN 2	4	13.55	13.49	13.63	365		
	5					293	51.5
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 152-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-4 Date(s) Analyzed: 04/19/11 04/19/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.37	7.30	7.44	160		
Aroclor-1260	2	8.29	8.22	8.36	164		
	3	9.70	9.63	9.77	159		
COLUMN 1	4	10.41	10.36	10.50	192		
	5					169	
	1	9.15	9.08	9.22	151		
	2	9.62	9.56	9.70	133		
	3	10.56	10.50	10.64	209		
COLUMN 2	4	12.39	12.33	12.47	156		
	5	13.56	13.50	13.64	169	164	3.0
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

Katahdin Analytical Services A0000152

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 158-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-10 Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.37	7.30	7.44	317		
Aroclor-1260	2	8.29	8.23	8.37	296		
	3	9.70	9.64	9.78	233		
COLUMN 1	4	10.41	10.35	10.49	254		
	5					275	
	1	9.15	9.07	9.21	281		
	2	9.62	9.55	9.69	242		
	3	10.56	10.49	10.63	395		
COLUMN 2	4	12.39	12.32	12.46	244		
	5	13.56	13.49	13.63	244	281	2.2
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 159-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-9 Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.38	7.30	7.44	174		
Aroclor-1260	2	8.30	8.23	8.37	182		
	3	9.70	9.64	9.78	115		
COLUMN 1	4	10.42	10.35	10.49	131		
	5					151	
	1	9.15	9.07	9.21	157		
	2	9.63	9.55	9.69	116		
	3	10.57	10.49	10.63	176		
COLUMN 2	4	12.39	12.32	12.46	139		
	5	13.56	13.49	13.63	146	147	2.7
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 161-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-8 Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.37	7.30	7.44	52.1		
Aroclor-1260	2	8.29	8.23	8.37	48.0		
	3	9.70	9.64	9.78	43.6		
COLUMN 1	4	10.42	10.35	10.49	46.1		
	5					47.4	
	1	9.14	9.07	9.21	48.6		
	2	9.61	9.55	9.69	39.1		
	3	10.56	10.49	10.63	60.6		
COLUMN 2	4	12.39	12.32	12.46	38.5		
	5	13.55	13.49	13.63	35.7	44.5	6.3
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: FD-040411-1

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-1

Lab Sample ID: SE1685-16 Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.37	7.30	7.44	135		
Aroclor-1260	2	8.29	8.23	8.37	130		
	3	9.70	9.64	9.78	86.9		
COLUMN 1	4	10.41	10.35	10.49	113		
	5					116	
	1	9.15	9.07	9.21	148		
	2	9.62	9.55	9.69	98.5		
	3	10.56	10.49	10.63	201		
COLUMN 2	4	12.39	12.32	12.46	101		
	5	13.56	13.49	13.63	105	131	12.1
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

Katahdin Analytical Services A0000161

NSB NEW LONDON
SOIL DATA
WE55-1

FRACTION	CHEMICAL	FD-040411-1	UNITS	2W-SD-SD159-0001	RPD	D
PAH	1-METHYLNAPHTHALENE	390	UG/KG	570 J	37.50	180.00
PAH	2-METHYLNAPHTHALENE	57	UG/KG	100 J	54.78	43.00 N/A <2x R.L.
PAH	ACENAPHTHENE	120	UG/KG	390 J	105.88	270.00
PAH	ANTHRACENE	52 J	UG/KG	ND	200.00	52.00 N/A <2x R.L.
PAH	BENZO(A)ANTHRACENE	80	UG/KG	170 J	72.00	90.00 N/A <2x R.L.
PAH	BENZO(A)PYRENE	72	UG/KG	170 J	80.99	98.00 N/A <2x R.L.
PAH	BENZO(B)FLUORANTHENE	110	UG/KG	230 J	70.59	120.00
PAH	BENZO(G,H,I)PERYLENE	62	UG/KG	190 J	101.59	128.00
PAH	BENZO(K)FLUORANTHENE	27 J	UG/KG	63 J	80.00	36.00 N/A <2x RL.
PAH	CHRYSENE	73	UG/KG	140 J	62.91	67.00 N/A <2x RL.
PAH	DIBENZO(A,H)ANTHRACENE	ND	UG/KG	74 J	200.00	74.00 N/A <2x RL.
PAH	FLUORANTHENE	140	UG/KG	340 J	83.33	200.00
PAH	FLUORENE	260	UG/KG	490 J	61.33	230.00
PAH	INDENO(1,2,3-CD)PYRENE	98	UG/KG	260 J	90.50	162.00
PAH	NAPHTHALENE	70	UG/KG	170 J	83.33	100.00 N/A <2x R.L.
PAH	PHENANTHRENE	580	UG/KG	740 J	24.24	160.00 ok
PAH	PYRENE	180	UG/KG	450 J	85.71	270.00

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NSB NEW LONDON
SOIL DATA
WE55-1

FRACTION	CHEMICAL	FD-040411-1	UNITS	2W-SD-SD159-0001	RPD	D
PEST	~~4,4'-DDD~~	~~62~~	UG/KG	see ~~ND~~ dilution	~~200.00~~	~~62.00~~
PEST	4,4'-DDE	6.6 J	UG/KG	11 J	50.00	4.40
PEST	4,4'-DDT	9.9 J	UG/KG	ND	200.00	9.90

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NSB NEW LONDON
SOIL DATA
WE55-1

FRACTION	CHEMICAL	FD-040411-1	UNITS	2W-SD-SD159-0001DL	RPD	D
PEST	4,4'-DDD	62	UG/KG	56 J	10.17	6.00
PEST	~~4,4'-DDE~~	~~8.6 J~~	UG/KG	~~ND~~	~~200.00~~	~~6.60~~
PEST	~~4,4'-DDT~~	~~9.9 J~~	UG/KG	~~ND~~	~~200.00~~	~~9.90~~

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NSB NEW LONDON
SOIL DATA
WE55-1

FRACTION	CHEMICAL	FD-040411-1	UNITS	2W-SD-SD159-0001	RPD	D
PCB	AROCLOR-1260	130 J	UG/KG	150 J	14.29	20.00

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

TETRA TECH NUS, INC. **CALCULATION WORKSHEET** PAGE 1 OF 1

CLIENT	NSB New London	JOB NUMBER	02625
SUBJECT	Calculation Check SDG WE55-1		
BASED ON		DRAWING NUMBER	
BY J. Kaliyak	CHECKED BY	APPROVED BY	DATE 05/23/11

PAH - benzo(b)fluoranthene Sample - 240-50-5014-0001

$$\frac{135786 \times 0.8\,\frac{ng}{ml} \times 3\,df \times 0.0001\,ml}{21736 \times 1.1163 \times 0.561 \times 0.0324\,Kg} \approx 738\ ng/Kg$$

Data File: \\target_server\GG\chem\gcms-n.i\N042311.b\N0216.D
Report Date: 25-Apr-2011 11:16

Katahdin Analytical Services

Data file : \\target_server\GG\chem\gcms-n.i\N042311.b\N0216.D
Lab Smp Id: SE1685-1DL Client Smp ID: 2W-SD-SD147-0001
Inj Date : 23-APR-2011 16:17 MS Autotune Date: 20-SEP-2006 13:50
Operator : JCG Inst ID: gcms-n.i
Smp Info : SE1685-1DL
Misc Info : WG90659,WG90041,N0206
Comment :
Method : \\target_server\GG\chem\gcms-n.i\N042311.b\NSPSIM06.m
Meth Date : 25-Apr-2011 10:05 gcms-n.i Quant Type: ISTD
Cal Date : 23-APR-2011 12:51 Cal File: N0211.D
Als bottle: 12
Dil Factor: 3.00000
Integrator: HP RTE Compound Sublist: ttnl-we55.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariabl

Name	Value	Description
DF	3.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03240	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	43.943	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kgdrywt)	REVIEW
*	7 1,4-Dichlorobenzene-D4	152	7.412	7.386	(1.000)	19890	0.80000		
*	20 Naphthalene-D8	136	10.152	10.140	(1.000)	73736	0.80000		
$	26 2-Methylnaphthalene-D10	152	11.770	11.724	(0.827)	12757	0.20657	34.1	
	37 Acenaphthylene	152	13.903	13.881	(0.977)	9337	0.09929	16.4(a)	
*	39 Acenaphthene-D10	164	14.237	14.226	(1.000)	40165	0.80000		
	40 Acenaphthene	153	14.315	14.304	(1.005)	3798	0.06370	10.5(a)	
$	47 Fluorene-D10	176	15.487	15.477	(1.088)	15315	0.25293	41.8(Q)	
	49 Fluorene	166	15.551	15.541	(1.092)	7235	0.10759	17.8(a)	
*	59 Phenanthrene-D10	188	17.734	17.746	(1.000)	56704	0.80000		
	60 Phenanthrene	178	17.794	17.794	(1.003)	165585	2.02227	334	
	61 Anthracene	178	17.926	17.926	(1.011)	21418	0.25334	41.8(a)	
	64 Fluoranthene	202	20.609	20.622	(1.162)	366571	4.99035	824	
$	65 Pyrene-D10	212	21.079	21.080	(0.877)	17641	0.44134	72.9(Q)	
	66 Pyrene	202	21.119	21.119	(0.879)	343404	5.79005	956	
	68 Benzo(a)anthracene	228	24.008	24.019	(0.999)	97499	2.67130	441(H)	
*	69 Chrysene-D12	240	24.030	24.042	(1.000)	28966	0.80000		
	70 Chrysene	228	24.087	24.099	(1.002)	140732	3.23803	535	
	74 Benzo(b)fluoranthene	252	26.400	26.400	(0.972)	135786	4.47151	738	
	75 Benzo(k)fluoranthene	252	26.455	26.469	(0.974)	60805	1.41438	234(M)	M6
	76 Benzo(a)pyrene	252	27.047	27.061	(0.995)	85466	3.06688	506	
*	77 Perylene-D12	264	27.172	27.172	(1.000)	21763	0.80000		

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-1

Instrument ID: GCMS-N Calibration Date(s): 04/23/11 04/23/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 0920 1251

LAB FILE ID: RF0.2: N0211 RF0.5: N0210 RF1: N0206
RF2: N0209 RF5: N0208 RF8: N0207

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
1-Methylnaphthalene	0.718	0.706	0.645	0.593	0.570	0.498	AVRG		0.62183269		13.578	15.000
Naphthalene	0.919	1.012	1.030	0.948	0.886	0.778	AVRG		0.92879948		9.902	15.000
2-Methylnaphthalene	21153	45821	83698	142160	315110	470760	2ORDR	9.843e-003	1.01400021	0.17180786	0.99775	0.99000
Acenaphthylene	1.769	1.929	2.050	1.861	1.873	1.758	AVRG		1.87311374		5.785	15.000
Acenaphthene	1.182	1.214	1.257	1.155	1.189	1.127	AVRG		1.18748112		3.835	15.000
Fluorene	1.345	1.360	1.408	1.316	1.361	1.246	AVRG		1.33938633		4.062	15.000
Phenanthrene	1.063	1.150	1.252	1.169	1.192	1.105	AVRG		1.15520084		5.724	15.000
Anthracene	1.156	1.180	1.256	1.197	1.223	1.144	AVRG		1.19273217		3.508	15.000
Fluoranthene	0.940	1.026	1.091	1.024	1.143	0.994	AVRG		1.03634267		6.918	15.000
Pyrene	14747	36229	70748	137770	383130	499060	LINR	-0.1203594	0.62063841		0.99902	0.99000
Benzo(a)anthracene	3588	14130	37708	77060	253700	305840	LINR	6.118e-002	0.97384518		0.99901	0.99000
Chrysene	11869	31146	58272	105950	296490	337680	LINR	-0.3180268	0.89853612		0.99529	0.99000
Benzo(b)fluoranthene	0.922	1.061	1.150	1.139	1.238	1.188	AVRG		1.11627767		10.000	15.000
Benzo(k)fluoranthene	1.751	1.728	1.629	1.469	1.510	1.395	AVRG		1.58031907		9.172	15.000
Benzo(a)pyrene	0.783	0.953	1.104	1.046	1.156	1.104	AVRG		1.02439701		13.375	15.000
Indeno(1,2,3-cd)pyrene	0.812	0.903	0.682	0.672	0.758	0.810	AVRG		0.77285831		11.357	15.000
Dibenzo(a,h)anthracene	2186	6987	20659	43533	134670	168030	LINR	0.11724949	1.20006162		0.99924	0.99000
Benzo(g,h,i)perylene	0.870	0.916	0.964	0.941	0.922	0.953	AVRG		0.92776171		3.627	15.000
2-Methylnaphthalene-D10	1.185	1.312	1.328	1.207	1.204	1.145	AVRG		1.23002853		5.962	15.000
Fluorene-D10	1.297	1.334	1.306	1.157	1.118	1.023	AVRG		1.20603860		10.381	15.000
Pyrene-D10	1.175	1.171	1.163	1.107	0.977	1.030	AVRG		1.10395782		7.515	15.000

EX-008 - Revision 1 - 12/20/2009

~~SOP~~ KD 4/13
SOX

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - SOIL SEMIVOLATILE

Extraction Method: (check one)	SW846 3550 (SONIC.) KD 4/13	SW846 3540 (SOX) ✓	SW846 3545 (ASE)
	SW846 3580 (OIL / WIPES)	OTHER	
Analytical Method: (check one)	SW846 8270 ✓	OTHER	
Standards	Surrogate ID (1): SV2458	Spike ID (1): SV2455	Spike ID (3):
	Surrogate ID (2):	Spike ID (2): SV2431 SIM LOD	
Solvents / Chemicals / Consumables	Solvent Lot # (Meci2): J44E06	Solvent Lot # (Acetone): J36E13	Sodium Sulfate (granular) Lot #
	Filter Paper Lot # (SON) FL0022560	Filter Paper Lot # (KD) FL001062	Sodium Sulfate (powder) Lot # 27970001
Misc.	Nitrogen Bath Temperature: 37°C	Sonicator Horns Tuned: ~~220~~ 220%	Balance ID: Mettler PJ400

Start: ~~13:30~~ 14:30 End: ~~14:30~~ 15:30

QAEX197 - 0000119

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Sum. Vol. (mL)	Spk. Vol. (mL)	Fraction WDS	Fraction ME	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Post-GPC Tray Loc.	Comments
4/14/11	KD	WG90041-1	30.10	1mL	NR		✓	4/14/11	KD	5mL	4-15-11	WS	1mL	~~SV2~~ BL6	R155335
↓	↓	-2	30.23	↓	1mL		↓	↓	↓	↓				B7	
↓	↓	-3	30.04	↓	↓		↓	↓	↓	↓				B8	
		GPC Blank									↓	↓	↓	D1	
															WS 4-17-11

EX-008 - Revision 1 - 12/20/2009 - QAEX197 - 0000120

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Sum. Vol. (mL)	Spk. Vol. (mL)	Fraction WDS	Fraction ME	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Post-GPC Tray Loc.	Comments
4/14/11	KD	~~LCD~~-Sim		1mL	~~1~~ 0.5mL		/								Not extracted
		~~LCS~~-Sim			0.5mL										Not extracted
		SE16685-1A	32.42		NR			4/14/11	KD	5mL	4-15-11	WS	1mL	SV2~~5~~ B5	
		-3B	33.10											B10	
		-4B	63.72											C1	
		-7A	52.83											C2	
		-8B	30.15											C3	
		-9B	59.27											C4	
		-10B	33.25											C5	
		-16A	31.13											C6	
		-17A	31.00											C7	
		-22A	61.53											C8	
		-23B	60.71								↓	↓	↓	C9	
		-24													Not extracted
		-25													↓
		-26													
		-28B	59.87					↓	↓	↓	4-15-11	WS	1mL	C10	
↓	↓	-29		↓	↓		↓								Not extracted

Reviewed By _____ Date _____ WS 4-15-11

EX-008 - Revision 1 - 12/20/2009

Sim
Soil

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - SOIL SEMIVOLATILE

Extraction Method: (check one)	SW846 3550 (SONIC.) ✓	SW846 3540 (SOX)	SW846 3545 (ASE)
	SW846 3580 (OIL / WIPES)	OTHER	
Analytical Method: (check one)	SW846 8270 ✓	OTHER	
Standards	Surrogate ID (1): SV2458	Spike ID (1): SV245S	Spike ID (3):
	Surrogate ID (2):	Spike ID (2):	
Solvents / Chemicals / Consumables	Solvent Lot # (MeCl2): J44E06	Solvent Lot # (Acetone): J36E13	Sodium Sulfate (granular) Lot # 279610O1
	Filter Paper Lot # (SON) FC0022560	Filter Paper Lot # (KD) FC0X062	Sodium Sulfate (powder) Lot # 279700O1
Misc.	Nitrogen Bath Temperature: 38°C	Sonicator Horns Tuned: ✓ 20°C	Balance ID: Mettler AT400

Start: 8:50 End 11:40

QAEX197

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction ASE	Fraction SE	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc.	Comments
4-14-11	WS	WG-70177-1	30.62	1mL	NA		✓	4/14/11	KD	5mL	4-15-11	WS	1mL	5V622 A2	R155447
		-2	29.95		1mL									B3	
		-3	30.03											B4	
		-4	33.10											B5	MS SE1778-4b
		-5	33.88											B6	MSD -4b
		-6	30.63											B7	MS -7c
		-7	31.01											B8	MSD -7
		-8	32.30											B9	MS -13a
↓	↓	-9	32.03	↓	↓		↓	↓	↓	↓	↓	↓	↓	C1	MSD -13
															KD 4/14/11

0000123

EX-008 - Revision 1 - 12/20/2009

QAEX197

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction ASE	Fraction SE	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc.	Comments
4-14-11	WS	SE1685-24b	58.71	1mL	NA		✓	4/14/11	KD	5mL	4-15-11	WS	1mL	5V622 D10	
		-25a	58.75											E1	
		-26a	59.64											E2	
		-29b	57.78											E3	
		SE1778-2a	54.17								4-19-11	KF	1mL	E4	
		-3a	57.97											E5	
		-4b	51.93											E6	MS/D
		-7c	33.73											E7	MS/D
		-8a	56.71											E8	
		-9b	56.57											E9	
		-10a	38.18											E10	
		-11a	53.96											5V622 A1	
		-13a	54.05											A2	MS/D
		-14a	53.22											A3	
		-18b	34.57											A4	
		-20b	53.62											A5	
↓	↓	-22b	48.06	↓	↓		↓	↓	↓	↓	↓	↓	↓	A6	
															KD 4/14/11
		Gpc Blank	4-18-11											A8	

0000124

Reviewed By _____ Date _____

PESTICIDE DATA

P/P SOX 4/22

EX-010 - Revision 1 - 03/10/2010

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - SOIL PESTICIDE/PCB

Extraction Method: (check one)	SW846 3550 (SONIC.)	SW846 3540 (SOX) ✓	SW846 3545 (ASE)
Analytical Method: (check one)	SW846 8081 ✓	SW846 8082 ✓	SW846 3580 (OILS/WIPES)
Standards	Surrogate ID: GC0869	Spike ID: Pest: GC0965 Tox: GC0963	Spike ID: PCB: GC0974
Solvents	Solvent Lot # (Mecl2): J44E06	Solvent Lot # (Acetone): -	Solvent Lot # (Hexane): J43E18
Consumables	Filter Paper Lot # (SON) -	Filter Paper Lot # (KD) FD001062	Acid Lot # 104819
	Sodium Sulfate (granular) Lot #: 2796001	Sodium Sulfate (powder) Lot #: 2797000	Vial Lot #
Misc.	Nitrogen Bath Temperature:	Sonicator Horns Tuned:	Balance ID: Mettler PJ400

Prep Start Time: 1200 | Prep End Time: 1430 | SOX start: 4/13 4/14 @ 1515 | SOX Stop: 4/15 @ 0915

QAEX196

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spike Vol. (mL)	Fraction Pest	Fraction PCB	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Acid Wash	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc.	Comments
~~4-11~~ 4/11	KF	WG90031-1 / WG90032-1	29.97	0.5mL	NR	✓	✓	4-15-11	WS	10mL		4-19-11	KF	~~2mL~~	A9 B10	Pest-R155441
4-14-11		WG90031-2	30.02	1mL	1mL	✓		4-15-11	WS	10mL				10.5	B11	PCB-R155443
		-3	30.01												B12	
		-4	30.04												C1	Tox LCS
		WG90032-2	30.01				✓	4-15-11	WS	10mL					C2	
		-3	29.99												C3	
		GPC Blank						4-18-11							C4	

KF 4-19-11

0000197

EX-010 - Revision 1 - 03/10/2010

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spike Vol. (mL)	Fraction Pest	Fraction PCB	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Acid Wash	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc.	Comments
4-14-11	KF	SE1685-1A	30.04	1mL	NR	✓	✓	4-15-11	WS	10mL		4-19-11	KF	5mL	C5	
		-3A	30.14												C6	
		-4A	40.41	0.2										~~2mL~~ 1mL	C7	
		-7A	43.04												C8	
		-8A	31.42	1mL										5mL	C9	
		-9A	41.97	0.2										~~2mL~~ 1mL	C10	
		-10A	31.94	1mL										5mL	C11	
		-16A	30.59												C12	
		-17A	30.80												D1	
		-22A	41.31	0.2										~~2mL~~ 1mL	D2	
		-23A	41.13												D3	
		-24B	40.62												D4	
		-26A	42.31												D5	
		-28A	40.71												D6	
		-29A	40.72												D7	
		SE1837-1A	33.92	1mL										5mL	D8	
		-2A	30.16												D9	
		-3A	30.82												D10	

KF 4-19-11

QAEX196

0000198

Reviewed By______________________ Date______________________

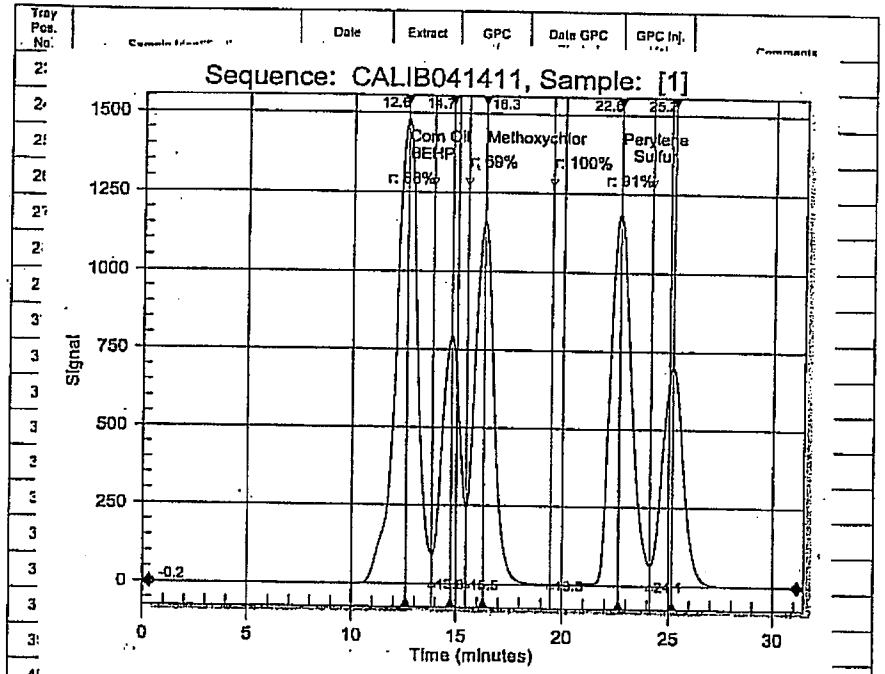
Katahdin Analytical Services
GPC Logbook

Analytical Method: (check one)	SW846 8081	SW846 8082	SW846 8270	OLM04.3
MeCl2 Lot #: J44E06		Flow: 5.0 ml/min, set at 4.7 ml/min.		
GPC Dump Time: 30.0		GPC Collect Time: —		

Tray Pos. No.	Sample Identification	Date Extracted	Extract Vol.	GPC Init.	Date GPC Started	GPC Inj. Vol.	Comments
1	GPC Calib Std	—	—	WJ	4-14-11	5mL	
2							
3	Restek Calib. Std	Std 3644					
4	Lot# A070032						
5							
6	Cat#32011						
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

Katahdin Analytical Services
GPC Logbook

Tray Pos. No.	Sample Identification	Date	Extract	GPC	Date GPC	GPC Inj.	Comments
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							



Reviewed by: SV Dump: 13.8 Collect: 10.3

Review Date: PP Dump: 15.5 Collect: 8.6

Katahdin Analytical Services 2000375

P/P SOX

EX-010 - Revision 1 - 03/10/2010

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - SOIL PESTICIDE/PCB

Extraction Method: (check one)	SW846 3550 (SONIC.)	SW846 3540 (SOX) ✓	SW846 3545 (ASE)
Analytical Method: (check one)	SW846 8081 ✓	SW846 8082 ✓	SW846 3580 (OILS/WIPES)
Standards	Surrogate ID: GC0969	Spike ID: Ast: GC0965 Tox: GC0863	Spike ID: PCB: GC0874
Solvents	Solvent Lot # (MeCl2): J44E06	Solvent Lot # (Acetone): —	Solvent Lot # (Hexane): J43E18
Consumables	Filter Paper Lot # (SON) —	Filter Paper Lot # (KD) FD001062	Acid Lot # 104815
	Sodium Sulfate (granular) Lot #: 2796100	Sodium Sulfate (powder) Lot #: 2797000	Vial Lot #
Misc.	Nitrogen Bath Temperature:	Sonicator Horns Tuned:	Balance ID: Mettler AS400
Prep Start Time: 12.00	Prep End Time: 1430	SOX Start: 4/13 @ 1515 4/14	SOX Stop: 4/15 @ 0915

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spike Vol. (mL)	Fraction Past	Fraction PCB	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Acid Wash	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc.	Comments
4/14/11	KF	WG90031-1	29.97	0.2 mL	NR	✓	✓	4-15-11	WS	10mL		4/19/11	KF	2mL	A9	Past-R155441
4-14-11		WG90031-2	30.02	1mL	1mL	✓		4-15-11	WS	10mL				10mL	B11	PCB-R155443
		-3	30.01												B12	
		-4	30.04												C1	TRY LOG
		WG90032-2	30.01				✓	4-15-11	WS	10mL					C2	
		-3	29.99												C3	
		GPC Blank						4-18-11							C4	

EX-010 - Revision 1 - 03/10/2010

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spike Vol. (mL)	Fraction Past	Fraction PCB	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Acid Wash	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc.	Comments
4-14-11	KF	SE1685-1A	30.04	1mL	NR	✓	✓	4-15-11	WS	10mL		4/19/11	KF	5mL	C5	
		-3A	30.41												C6	
		-4A	40.44	0.2										2mL	C7	
		-7A	43.04												C8	
		-8A	31.42	1mL										5mL	C9	
		-9A	41.97	0.2										2mL	C10	
		-10A	31.94	1mL										5mL	C11	
		-16A	30.59												C12	
		-17A	36.80												D1	
		-22A	41.31	0.2											D2	
		-23A	41.13												D3	
		-24B	40.62												D4	
		-26A	42.31												D5	
		-28A	40.71												D6	
		-29A	40.72												D7	
		SE1837-1A	33.92	1mL										5mL	D8	
		-2A	30.16												D9	
		-3A	30.82												D10	

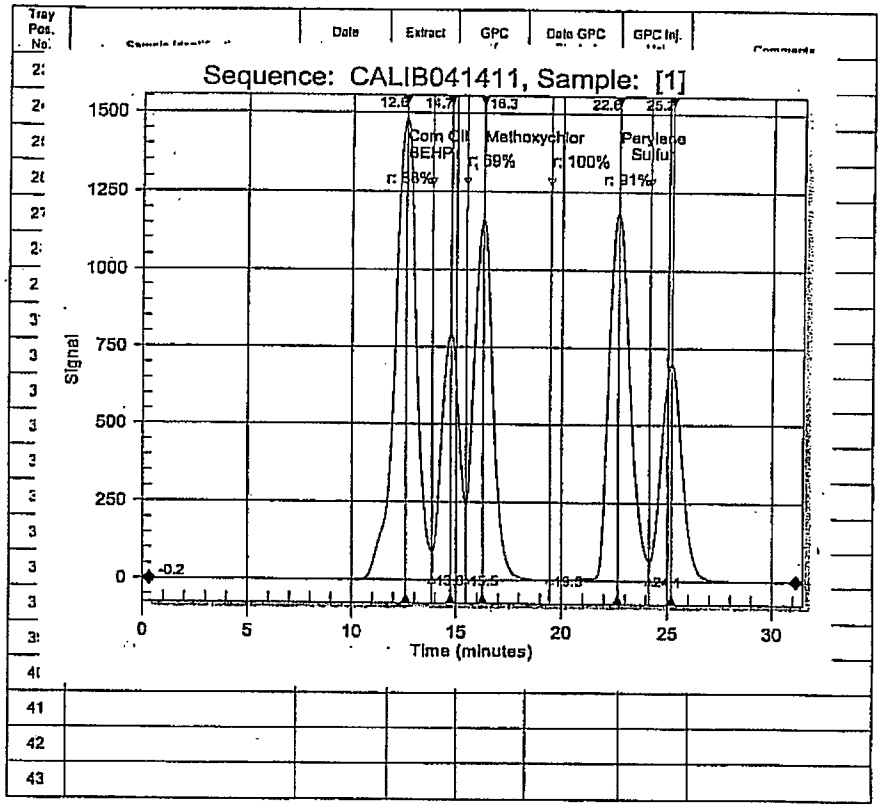
Reviewed By _____ Date _____

Katahdin Analytical Services
GPC Logbook

Analytical Method: (check one)	SW846 8081	SW846 8082	SW846 8270	OLM04.3
MeCl2 Lot #: J44606		Flow: 5.0 ml/min, set at 4.7 ml/min.		
GPC Dump Time: 30.0		GPC Collect Time:		

Tray Pos. No.	Sample Identification	Date Extracted	Extract Vol.	GPC Init.	Date GPC Started	GPC Inj. Vol.	Comments
1	GPC Calib Std	—	—	WS	4-14-11	5mL	
2							
3	Restek Calib. Std	Std	3644				
4	Lot# A070032						
5							
6	Cat#32041						
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

Katahdin Analytical Services
GPC Logbook



Tray Pos. No.	Date	Extract	GPC	Date GPC	GPC Inj.	Comments
41						
42						
43						

Reviewed by: SV Dump: 13.8 Collect: 10.3

Review Date: 4/15 Dump: 15.5 Collect: 8.6

Katahdin Analytical Services 3000242

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **A. BERNHARDT** **DATE:** **July 13, 2011**

FROM: **MEGAN CARSON** **COPIES:** **DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION- SELECT METALS**
CTO WE55, NSB NEW LONDON
SAMPLE DELIVERY GROUP (SDG) WE55-1

SAMPLES: 15/Sediment/

2W-SD-SD118-0001	2W-SD-SD119-0001
2W-SD-SD120-0001	2W-SD-SD121-0001
2W-SD-SD134-0001	2W-SD-SD136-0001
2W-SD-SD138-0001	2W-SD-SD147-0001
2W-SD-SD149-0001	2W-SD-SD152-0001
2W-SD-SD154-0001	2W-SD-SD158-0001
2W-SD-SD159-0001	2W-SD-SD161-0001
FD-040411-1	

OVERVIEW

The sample set for CTO WE55, NSB New London, SDG WE55-1, consists of fifteen (15) sediment environmental samples. This SDG contained one field duplicate pair: FD-040411-1/ 2W-SD-SD159-0001.

All samples were analyzed for arsenic, cadmium, chromium, copper, lead, nickel, and zinc. The samples were collected by Tetra Tech NUS on April 4th and 5th, 2011 and were analyzed by Katahdin Analytical services. The metals analyses were conducted by method 6010B. A Tier 3 data validation was performed on the referenced samples. The data contained in this SDG were validated with regard to the following parameters:

*	• Data Completeness
*	• Holding Times
*	• Initial/Continuing Calibrations
*	• Laboratory Method Blank Results
*	• Laboratory Control Spike/Laboratory Control Spike Duplicate Recoveries
*	• Matrix Spike/Matrix Spike Duplicate Recoveries
*	• Field Duplicate Recoveries
	• Analyte Quantitation
*	• Analyte Identification
*	• Detection Limits

The asterisk (*) indicates that all quality control criteria were met for this parameter. Qualified (if applicable) analytical results are summarized in Appendix A. Results as reported by the laboratory are presented in Appendix B. Appendix C contains Region I worksheets, and Appendix D contains the documentation to support the findings as discussed in this data validation report. The attached Table summarizes the validation qualifications which are based on the following information:

METALS:

Samples 2W-SD-SD118-0001, 2W-SD-SD120-0001, 2W-SD-SD121-0001, 2W-SD-SD134-0001, 2W-SD-SD152-0001, 2W-SD-SD154-0001, and 2W-SD-SD159-0001 had percent solids less than 30%. Positive results were qualified as estimated (J).

Samples 2W-SD-SD119-0001 and 2W-SD-SD136-0001 had percent solids less than 10%. Positive results were qualified as estimated (J). Sample results were not rejected because the lab took corrective action by leaching 5g (5X normal amount) of sample.

Field duplicate pair FD-040411-1/ 2W-SD-SD159-0001 had a relative percent difference > 50% for arsenic, chromium, copper, and lead. Positive results were qualified as estimated (J).

Positive results reported below the limit of quantitation (LOQ) but above the method detection limit (MDL) were qualified as estimated (J).

Notes:

The following analytes were detected in the preparation and calibration blank at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Chromium [1]	0.032 mg/kg	0.16 mg/kg
Chromium [2]	0.034 mg/kg	0.17 mg/kg
Zinc [3]	0.852 ug/L	0.042 mg/kg

[1] Maximum concentration found in a preparation blank affecting samples in preparation batch BD13ICS0.
[2] Maximum concentration found in a preparation blank affecting samples in preparation batch BD14ICS0.
[3] Maximum concentration found in a calibration blank affecting samples analyzed on 4/21/11.

Action levels of 5X the maximum contaminant concentration for were established to evaluate blank contamination. Dilution factors, percent solids, and sample aliquots were taken into consideration during the application of all action levels. All sample results were greater than blank action level.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Percent solid non-compliances resulted in the qualification of sample results.

Other Factors Affecting Data Quality: Field duplicate non-compliances for arsenic, chromium, copper, and lead resulted in the qualification of sample results.

The data for these analyses were reviewed with reference to the Region I USEPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, Part IV (11/08), and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April, 2009). The text of this report has been formulated to address only those problem areas affecting data quality.

TetraTech NUS
Megan Carson
Chemist 1/ Data Validator

TetraTech NUS
Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Regional Worksheets
Appendix D – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	GFAA PDS - GFAA MSA's $r < 0.995$
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (e.g. base-line drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can be any number of issues; e.g. poor chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	% Difference between columns/detectors >25% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient $r < 0.995$
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 02625	NSAMPLE	2W-SD-SD118-0001			2W-SD-SD119-0001			2W-SD-SD120-0001			2W-SD-SD121-0001		
SDG: WE55-1	LAB_ID	SE1685-022			SE1685-023			SE1685-024			SE1685-026		
FRACTION: M	SAMP_DATE	4/5/2011			4/5/2011			4/5/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	24.9			9.6			11.9			25.5		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ARSENIC		14.1	J	GY	10.9	J	GY	14	J	GY	18.2	J	GY
CADMIUM		1.2	J	PY	2.8	J	PY	1.9	J	PY	2.1	J	PY
CHROMIUM		94.2	J	GY	32.2	J	GY	48.8	J	GY	45.8	J	GY
COPPER		68.5	J	GY	82.8	J	GY	102	J	GY	133	J	GY
LEAD		113	J	GY	47	J	GY	91.3	J	GY	91.7	J	GY
NICKEL		41.5	J	Y	50.2	J	Y	29.3	J	PY	39.8	J	Y
ZINC		218	J	Y	366	J	Y	334	J	Y	563	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD134-0001			2W-SD-SD136-0001			2W-SD-SD138-0001			2W-SD-SD147-0001		
SDG: WE55-1	LAB_ID	SE1685-029			SE1685-028			SE1685-017			SE1685-001		
FRACTION: M	SAMP_DATE	4/5/2011			4/5/2011			4/5/2011			4/4/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	19.3			9.5			38.6			56.1		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ARSENIC		12.3	J	GY	10.3	J	GY	12.6	J	G	6.1	J	G
CADMIUM		1.6	J	PY	4.3	J	Y	1.3	J	P	0.34	J	P
CHROMIUM		83.2	J	GY	46	J	GY	79.1	J	G	17.4	J	G
COPPER		85	J	GY	115	J	GY	51.7	J	G	50.5	J	G
LEAD		77.4	J	GY	92.9	J	GY	53.1	J	G	34.3	J	G
NICKEL		31.6	J	Y	37	J	Y	28.2			14.3		
ZINC		220	J	Y	532	J	Y	138			264		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD149-0001			2W-SD-SD152-0001			2W-SD-SD154-0001			2W-SD-SD158-0001		
SDG: WE55-1	LAB_ID	SE1685-003			SE1685-004			SE1685-007			SE1685-010		
FRACTION: M	SAMP_DATE	4/4/2011			4/4/2011			4/4/2011			4/4/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	94.3			17.4			26.7			45.8		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ARSENIC		1.8	J	G	15	J	GY	18.4	J	GY	11.4	J	G
CADMIUM		0.09	J	P	1.6	J	PY	3.5	J	PY	1.1	J	P
CHROMIUM		10	J	G	22.3	J	GY	100	J	GY	30	J	G
COPPER		16.3	J	G	62.6	J	GY	109	J	GY	73.3	J	G
LEAD		4.9	J	G	37.1	J	GY	77.4	J	GY	51	J	G
NICKEL		6.5			17.4	J	PY	47.9	J	Y	22.9		
ZINC		19.8			453	J	Y	400	J	Y	327		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD159-0001			2W-SD-SD161-0001			FD-040411-1		
SDG: WE55-1	LAB_ID	SE1685-009			SE1685-008			SE1685-016		
FRACTION: M	SAMP_DATE	4/4/2011			4/4/2011			4/4/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	25.4			37.7			36.5		
	DUP_OF							2W-SD-SD159-0001		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ARSENIC		12.6	J	GY	5.8	J	G	4.3	J	G
CADMIUM		1.1	J	PY	1.8	J	P	0.54	J	P
CHROMIUM		63.5	J	GY	17.2	J	G	16	J	G
COPPER		106	J	GY	246	J	G	59.8	J	G
LEAD		82.4	J	GY	42.8	J	G	34	J	G
NICKEL		27.1	J	Y	17.8			9.8		
ZINC		352	J	Y	659			256		

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD118-0001

Matrix: SOIL **SDG Name:** WE55-1

Percent Solids: 24.9 **Lab Sample ID:** SE1685-022

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	14.1			P	2	1.4	0.12	0.85
7440-43-9	CADMIUM, TOTAL	1.2	J		P	2	1.7	0.01	0.51
7440-47-3	CHROMIUM, TOTAL	94.2			P	2	2.5	0.04	0.68
7440-50-8	COPPER, TOTAL	68.5			P	2	4.2	0.26	1.7
7439-92-1	LEAD, TOTAL	113			P	2	0.85	0.15	0.68
7440-02-0	NICKEL, TOTAL	41.5			P	2	6.8	0.07	0.68
7440-66-6	ZINC, TOTAL	218			P	2	4.2	0.29	1.7

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD119-0001

Matrix: SOIL **SDG Name:** WE55-1

Percent Solids: 9.58 **Lab Sample ID:** SE1685-023

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	10.9			P	2	3.2	0.27	2.0
7440-43-9	CADMIUM, TOTAL	2.8	J		P	2	4.0	0.03	1.2
7440-47-3	CHROMIUM, TOTAL	32.2			P	2	5.9	0.10	1.6
7440-50-8	COPPER, TOTAL	82.8			P	2	9.9	0.62	4.0
7439-92-1	LEAD, TOTAL	47.0			P	2	2.0	0.34	1.6
7440-02-0	NICKEL, TOTAL	50.2			P	2	16	0.17	1.6
7440-66-6	ZINC, TOTAL	366			P	2	9.9	0.67	4.0

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD120-0001

Matrix: SOIL **SDG Name:** WE55-1

Percent Solids: 11.9 **Lab Sample ID:** SE1685-024

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7440-38-2	ARSENIC, TOTAL	14.0			P	5	6.4	0.54	4.0
7440-43-9	CADMIUM, TOTAL	1.9	J		P	5	8.0	0.06	2.4
7440-47-3	CHROMIUM, TOTAL	48.8			P	5	12	0.21	3.2
7440-50-8	COPPER, TOTAL	102			P	5	20	1.24	8.0
7439-92-1	LEAD, TOTAL	91.3			P	5	4.0	0.69	3.2
7440-02-0	NICKEL, TOTAL	29.3	J		P	5	32	0.35	3.2
7440-66-6	ZINC, TOTAL	334			P	5	20	1.34	8.0

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD121-0001

Matrix: SOIL **SDG Name:** WE55-1

Percent Solids: 25.5 **Lab Sample ID:** SE1685-026

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	18.2			P	10	6.5	0.55	4.0
7440-43-9	CADMIUM, TOTAL	2.1	J		P	10	8.1	0.06	2.4
7440-47-3	CHROMIUM, TOTAL	45.8			P	10	12	0.21	3.2
7440-50-8	COPPER, TOTAL	133			P	10	20	1.26	8.1
7439-92-1	LEAD, TOTAL	91.7			P	10	4.0	0.70	3.2
7440-02-0	NICKEL, TOTAL	39.8			P	10	32	0.36	3.2
7440-66-6	ZINC, TOTAL	563			P	10	20	1.36	8.1

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD134-0001

Matrix: SOIL **SDG Name:** WE55-1

Percent Solids: 19.3 **Lab Sample ID:** SE1685-029

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	12.3			P	2	1.7	0.15	1.1
7440-43-9	CADMIUM, TOTAL	1.6	J		P	2	2.1	0.02	0.64
7440-47-3	CHROMIUM, TOTAL	83.2			P	2	3.2	0.06	0.86
7440-50-8	COPPER, TOTAL	85.0			P	2	5.4	0.34	2.1
7439-92-1	LEAD, TOTAL	77.4			P	2	1.1	0.19	0.86
7440-02-0	NICKEL, TOTAL	31.6			P	2	8.6	0.09	0.86
7440-66-6	ZINC, TOTAL	220			P	2	5.4	0.36	2.1

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD136-0001

Matrix: SOIL **SDG Name:** WE55-1

Percent Solids: 9.48 **Lab Sample ID:** SE1685-028

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	10.3			P	2	3.2	0.27	2.0
7440-43-9	CADMIUM, TOTAL	4.3			P	2	4.0	0.03	1.2
7440-47-3	CHROMIUM, TOTAL	46.0			P	2	6.0	0.10	1.6
7440-50-8	COPPER, TOTAL	115			P	2	10	0.63	4.0
7439-92-1	LEAD, TOTAL	92.9			P	2	2.0	0.35	1.6
7440-02-0	NICKEL, TOTAL	37.0			P	2	16	0.18	1.6
7440-66-6	ZINC, TOTAL	532			P	2	10	0.67	4.0

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD138-0001

Matrix: SOIL **SDG Name:** WE55-1

Percent Solids: 38.6 **Lab Sample ID:** SE1685-017

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	12.6			P	1	1.2	0.11	0.78
7440-43-9	CADMIUM, TOTAL	1.3	J		P	1	1.6	0.01	0.47
7440-47-3	CHROMIUM, TOTAL	79.1			P	1	2.4	0.04	0.63
7440-50-8	COPPER, TOTAL	51.7			P	1	3.9	0.24	1.6
7439-92-1	LEAD, TOTAL	53.1			P	1	0.78	0.14	0.63
7440-02-0	NICKEL, TOTAL	28.2			P	1	6.3	0.07	0.63
7440-66-6	ZINC, TOTAL	138			P	1	3.9	0.26	1.6

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD147-0001

Matrix: SOIL **SDG Name:** WE55-1

Percent Solids: 56.0 **Lab Sample ID:** SE1685-001

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	6.1			P	1	1.0	0.09	0.64
7440-43-9	CADMIUM, TOTAL	0.34	J		P	1	1.3	0.01	0.38
7440-47-3	CHROMIUM, TOTAL	17.4			P	1	1.9	0.03	0.51
7440-50-8	COPPER, TOTAL	50.5			P	1	3.2	0.20	1.3
7439-92-1	LEAD, TOTAL	34.3			P	1	0.64	0.11	0.51
7440-02-0	NICKEL, TOTAL	14.3			P	1	5.1	0.06	0.51
7440-66-6	ZINC, TOTAL	264			P	1	3.2	0.21	1.3

Bottle ID: B

Comments:

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD149-0001

Matrix: SOIL **SDG Name:** WE55-1

Percent Solids: 94.3 **Lab Sample ID:** SE1685-003

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-38-2	ARSENIC, TOTAL	1.8			P	1	0.60	0.05	0.37
7440-43-9	CADMIUM, TOTAL	0.09	J		P	1	0.75	0.006	0.22
7440-47-3	CHROMIUM, TOTAL	10.0			P	1	1.1	0.02	0.30
7440-50-8	COPPER, TOTAL	16.3			P	1	1.9	0.12	0.75
7439-92-1	LEAD, TOTAL	4.9			P	1	0.37	0.06	0.30
7440-02-0	NICKEL, TOTAL	6.5			P	1	3.0	0.03	0.30
7440-66-6	ZINC, TOTAL	19.8			P	1	1.9	0.13	0.75

Bottle ID: B

Comments:

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD152-0001

Matrix: SOIL **SDG Name:** WE55-1

Percent Solids: 17.4 **Lab Sample ID:** SE1685-004

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7440-38-2	ARSENIC, TOTAL	15.0			P	10	9.2	0.78	5.8
7440-43-9	CADMIUM, TOTAL	1.6	J		P	10	12	0.09	3.4
7440-47-3	CHROMIUM, TOTAL	22.3			P	10	17	0.30	4.6
7440-50-8	COPPER, TOTAL	62.6			P	10	29	1.80	12
7439-92-1	LEAD, TOTAL	37.1			P	10	5.8	1.00	4.6
7440-02-0	NICKEL, TOTAL	17.4	J		P	10	46	0.51	4.6
7440-66-6	ZINC, TOTAL	453			P	10	29	1.93	12

Bottle ID: B

Comments:

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD154-0001

Matrix: SOIL **SDG Name:** WE55-1

Percent Solids: 26.7 **Lab Sample ID:** SE1685-007

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	18.4			P	5	3.0	0.26	1.9
7440-43-9	CADMIUM, TOTAL	3.5	J		P	5	3.8	0.03	1.1
7440-47-3	CHROMIUM, TOTAL	100			P	5	5.6	0.10	1.5
7440-50-8	COPPER, TOTAL	109			P	5	9.4	0.59	3.8
7439-92-1	LEAD, TOTAL	77.4			P	5	1.9	0.33	1.5
7440-02-0	NICKEL, TOTAL	47.9			P	5	15	0.17	1.5
7440-66-6	ZINC, TOTAL	400			P	5	9.4	0.63	3.8

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD158-0001

Matrix: SOIL **SDG Name:** WE55-1

Percent Solids: 45.8 **Lab Sample ID:** SE1685-010

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	11.4			P	1	1.0	0.09	0.66
7440-43-9	CADMIUM, TOTAL	1.1	J		P	1	1.3	0.01	0.39
7440-47-3	CHROMIUM, TOTAL	30.0			P	1	2.0	0.03	0.52
7440-50-8	COPPER, TOTAL	73.3			P	1	3.3	0.21	1.3
7439-92-1	LEAD, TOTAL	51.0			P	1	0.66	0.11	0.52
7440-02-0	NICKEL, TOTAL	22.9			P	1	5.2	0.06	0.52
7440-66-6	ZINC, TOTAL	327			P	1	3.3	0.22	1.3

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD159-0001

Matrix: SOIL **SDG Name:** WE55-1

Percent Solids: 25.4 **Lab Sample ID:** SE1685-009

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-38-2	ARSENIC, TOTAL	12.6			P	5	3.1	0.26	1.9
7440-43-9	CADMIUM, TOTAL	1.1	J		P	5	3.8	0.03	1.2
7440-47-3	CHROMIUM, TOTAL	63.5			P	5	5.8	0.10	1.5
7440-50-8	COPPER, TOTAL	106			P	5	9.6	0.60	3.8
7439-92-1	LEAD, TOTAL	82.4			P	5	1.9	0.33	1.5
7440-02-0	NICKEL, TOTAL	27.1			P	5	15	0.17	1.5
7440-66-6	ZINC, TOTAL	352			P	5	9.6	0.64	3.8

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD161-0001

Matrix: SOIL **SDG Name:** WE55-1

Percent Solids: 37.7 **Lab Sample ID:** SE1685-008

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	5.8			P	1	1.5	0.13	0.96
7440-43-9	CADMIUM, TOTAL	1.8	J		P	1	1.9	0.02	0.58
7440-47-3	CHROMIUM, TOTAL	17.2			P	1	2.9	0.05	0.77
7440-50-8	COPPER, TOTAL	246			P	1	4.8	0.30	1.9
7439-92-1	LEAD, TOTAL	42.8			P	1	0.96	0.17	0.77
7440-02-0	NICKEL, TOTAL	17.8			P	1	7.7	0.08	0.77
7440-66-6	ZINC, TOTAL	659			P	1	4.8	0.32	1.9

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** FD-040411-1

Matrix: SOIL **SDG Name:** WE55-1

Percent Solids: 36.5 **Lab Sample ID:** SE1685-016

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	4.3			P	1	1.2	0.10	0.73
7440-43-9	CADMIUM, TOTAL	0.54	J		P	1	1.5	0.01	0.44
7440-47-3	CHROMIUM, TOTAL	16.0			P	1	2.2	0.04	0.59
7440-50-8	COPPER, TOTAL	59.8			P	1	3.7	0.23	1.5
7439-92-1	LEAD, TOTAL	34.0			P	1	0.73	0.13	0.59
7440-02-0	NICKEL, TOTAL	9.8			P	1	5.9	0.06	0.59
7440-66-6	ZINC, TOTAL	256			P	1	3.7	0.25	1.5

Bottle ID: B

Comments:

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1685-22
Report Date: 22-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-1

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD118-0001	SL	05-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	25. %	1	N/A	SM2540G	WG90025	11-APR-11 08:53:00	ASTM D2216	08-APR-11	

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Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1685-23
Report Date: 22-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-1

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD119-0001	SL	05-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	9.6 %	1	N/A	SM2540G	WG90073	12-APR-11 08:04:00	ASTM D2216	11-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1685-24
Report Date: 22-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-1

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD120-0001	SL	05-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	12. %	1	N/A	SM2540G	WG90073	12-APR-11 08:05:00	ASTM D2216	11-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1685-26
Report Date: 22-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-1

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD121-0001	SL	05-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	25. %	1	N/A	SM2540G	WG90073	12-APR-11 08:07:00	ASTM D2216	11-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1685-29
Report Date: 22-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-1

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD134-0001	SL	05-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	19. %	1	N/A	SM2540G	WG90073	12-APR-11 08:09:00	ASTM D2216	11-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1685-28
Report Date: 22-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-1

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD136-0001	SL	05-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	9.5 %	1	N/A	SM2540G	WG90073	12-APR-11 08:08:00	ASTM D2216	11-APR-11	

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Cert No E87604

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1685-17
Report Date: 22-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-1

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD138-0001	SL	05-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	39. %	1	N/A	SM2540G	WG90025	11-APR-11 08:30:00	ASTM D2216	08-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1685-1
Report Date: 22-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-1

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD147-0001	SL	04-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	56. %	1	N/A	SM2540G	WG90025	11-APR-11 08:43:00	ASTM D2216	08-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1685-3
Report Date: 22-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-1

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD149-0001	SL	04-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	94. %	1	N/A	SM2540G	WG90025	11-APR-11 08:44:00	ASTM D2216	08-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1685-4
Report Date: 22-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-1

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD152-0001	SL	04-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	17. %	1	N/A	SM2540G	WG90025	11-APR-11 08:45:00	ASTM D2216	08-APR-11	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1685-7
Report Date: 22-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-1

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD154-0001	SL	04-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	27. %	1	N/A	SM2540G	WG90025	11-APR-11 08:46:00	ASTM D2216	08-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1685-10
Report Date: 22-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-1

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD158-0001	SL	04-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	46. %	1	N/A	SM2540G	WG90025	11-APR-11 08:49:00	ASTM D2216	08-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1685-9
Report Date: 22-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-1

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD159-0001	SL	04-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	25. %	1	N/A	SM2540G	WG90025	11-APR-11 08:48:00	ASTM D2216	08-APR-11	

Katahdin
ANALYTICAL SERVICES

nelac
Cert No E87604

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1685-8
Report Date: 22-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-1

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD161-0001	SL	04-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	38. %	1	N/A	SM2540G	WG90025	11-APR-11 08:47:00	ASTM D2216	08-APR-11	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1685-16
Report Date: 22-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-1

Sample Description	Matrix	Date Sampled	Date Received
FD-040411-1	SL	04-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	36. %	1	N/A	SM2540G	WG90025	11-APR-11 08:50:00	ASTM D2216	08-APR-11	

APPENDIX C

REGIONAL WORKSHEETS

REGION I, EPA-NE INORGANIC REGIONAL DATA ASSESSMENT (IRDA)*

CASE #: _____
LAB NAME: NSB New London
SDG #: WE55-1
SOW #/CONTRACT #: _____
EPA-NE DV TIER LEVEL: _____
PO: **ACTION _____ FYI _____

SITE NAME: _____
OF SAMPLES/MATRIX: 15/Soil
VALIDATION CONTRACTOR: _____
VALIDATOR'S NAME: _____
DATE DP REC'D BY EPA-NE: _____
DV COMPLETION DATE: _____

ANALYTICAL DATA QUALITY SUMMARY See DV Report

		ICP-AES	ICP- MS	HG	CN
I.	Preservation and Technical Holding Times				
II.	ICP-MS Tune				
III.	Calibrations				
IV.	Blanks				
V.	ICP-AES Interference Check Sample (ICS)				
VI.	ICP-MS Interference Check Sample (ICS)				
VII.	ICP-MS Internal Standards				
VIII.	Matrix Spikes				
IX.	Laboratory Duplicate Samples				
X.	Field Duplicates				
XI.	ICP Serial Dilutions				
XII.	Sensitivity Check				
XIII.	Performance Evaluation Samples/Accuracy Check				
XIV.	Analyte Quantitation and Reported Quantitation Limits				
XV.	System Performance				
XVI.	Overall Evaluation of Data				

o = Data had no problems or were qualified due to minor contractual problems.
m = Data were qualified due to major contractual problems.
z = Data were rejected as unusable due to major contractual problems.

ACTION ITEMS: (z items) _____

AREAS OF CONCERN: (m items) _____

COMMENTS: _____

* This form assesses the analytical data quality in terms of contractual compliance only. It does not assess sampling errors and/or non-contractual analytical issues that affect data quality.

** Check "ACTION" only if contractual defects resulted in reduced payment/data rejection recommendations.

Validator: Megan Carson Date: 5/23/11

INSTRUCTIONS ON REVERSE SIDE

DRAFT 11/08

EPA-NE
Data Validation Worksheet Cover Page - Page 1

Site Name _____
Reference No. _____

REGION I INORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name Katahdin
Case/Project No. _____
SDG No. WE55-1
No. of Samples/Matrix 15/Soil

SOW/Method No. _____
Sampling Date(s) _____
Shipping Date(s) _____
Date Rec'd by lab _____

Traffic Report Sample Nos. See DV Report

Equipment Blank No. _____
Bottle Blank No. _____
Field Duplicate Nos. _____
PES Nos. _____

The Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision _____ was used to evaluate the data and/or approved modifications to the EPA-NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attach modified criteria from EPA approved QAPP or amendment to QAPP).

A Tier II or Tier III evaluation was used to validate the data (circle one). If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc., that received partial Tier III validation.

The data were evaluated based upon the following parameters:

- Overall Evaluation of Data
- Data Completeness (CSF Audit - Tier I)
- Preservation and Technical Holding Times
- ICP-MS Tune
- Calibrations
- Blanks
- ICP-AES Interference Check Sample (ICS)
- ICP-MS Interference Check Sample (ICS)
- ICP-MS Internal Standards
- Matrix Spikes
- Laboratory Duplicate Samples
- Field Duplicates
- ICP Serial Dilutions
- Sensitivity Check
- Performance Evaluation Samples/Accuracy Check
- Analyte Quantitation and Reported Quantitation Limits
- System Performance

Region I Definitions and Qualifiers:

A - Acceptable Data
J - Numerical value associated with analyte is an estimated quantity.
R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.
U - Analyte not detected at that numerical sample quantitation limit.
UJ - The sample quantitation limit is an estimated quantity.
BB, EB - Analyte detected in aqueous bottle blank or aqueous equipment blank associated with soil/sediment samples.

Validator's Name Megan Carson Company Name TetraTech Phone Number _____

Date Validation Started _____ Date Validation Completed _____

EPA-NE - Data Validation Worksheet
INORG-I

See DV Report

I. PRESERVATION AND HOLDING TIMES

Circle sample numbers with exceeded technical holding times or omitted preservation.
Circle all exceeded technical holding times.

Sample No.	Matrix	Pres. Code		Date Sampled	Metals		Hg		CN		Action
		Metals	CN		Date Analyzed	# of Days from Samp. to Analysis	Date Analyzed	# of Days from Samp. to Analysis	Date Analyzed	# of Days from Samp. to Analysis	

Preservation Code:

1. Cool (≤ 6°C)
2. pH < 2 with HNO_3
3. pH > 12 with NaOH
4. Room Temperature
5. Freeze
6. Reducing agent (for oxidants)
7. Treated for sulfides
8. Other - _____

Action Code:

J - Estimate (J) Detected Values
UJ - Estimate (UJ) Non-Detected Values
R - Reject (R) Non-Detected Values

Sampler:_____ Company:_____ Contacted: Y N Date:_____

Validator:_____

Date:_____

EPA-NE - Data Validation Worksheet
INORG-II

See DV Report

II. ICP-MS TUNE

List all Tunes that are outside method QC acceptance criteria.

Method:_____

Method QC acceptance criteria for mass calibration:_____

Method QC acceptance criteria for resolution check/peak width:_____ at_____% peak height.

Method QC acceptance criteria for % RSD:_____

Analysis Date and Time	Analyte	Mass Calibration			Mass Resolution		% RSD of Absolute Signals	Analyte/Samples Affected	Action
		True Mass (amu)	Measured Mass (amu)	Absolute Difference of Masses (amu)	Peak Width (amu)	% Peak Height			
Comments:									

Validator:_____

Date:_____

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-III-A/B/C

See DV Report

III. CALIBRATIONS

A. Instrument Calibration - List all calibration correlation coefficients that are outside the method QC acceptance criteria.
Calibration correlation QC acceptance criteria: _____ Calibration Type: _____

Date/Time	Instr.	Analyte	Corr. Coef.	Samples Affected	Action

B. Initial and Continuing Calibration Verifications - List all ICV and CCV analyte recoveries that are outside the method QC acceptance criteria.
ICV method QC acceptance criteria: _____ CCV method QC acceptance criteria: _____

Date	Instr.	Analyte	ICV/CCV #	% R	Samples Affected	Action

C. Quantitation Limit Check Standard - List all QL Check Standard analytes that are outside method QC acceptance criteria.
QL Check Standard method QC acceptance criteria: _____

Date	Instr.	Analyte	QL Check Std. #	% R	Affected Range	Samples Affected	Action

Comments: _____

Validator: _____

Date: _____

EPA-NE - Data Validation Worksheet
INORG-IV-A/B

See DV Report

IV. **BLANKS** - List the blank contamination and negative blank results below.

Sampler: _____ Company: _____ Contacted: Y N Date: _____

A. **Laboratory: Preparation (Method) and Calibration (Instrument) Blanks**

Date Prepared	Date Analyzed	Blank Type (ICB/CCB#/Prep Blank)	Matrix	Instrument	Analyte	Conc. (units)

B. **Field: Equipment (Rinsate) and Bottle Blanks**

Date Sampled	Date Analyzed	Sample No. (Blank Type)	Matrix	Instrument	Analyte	Conc. (units)

Were the proper number of blanks analyzed at the proper frequency? Y N

For ICP MS - Are internal standard responses in all blanks within method QC acceptance criteria? Y N

Comments: _____

_____

Validator: _____

Date: _____

EPA-NE - Data Validation Worksheet
INORG-IV-C.1
IV. BLANKS

See DV Report

C.1 Blank Contamination Worksheet

Circle the highest concentration of each contaminant.

Analyte	Date Analyzed	ICB	CCB							PBW	PBS	EB	BB	Max. Conc.	Action Level
			1	2	3	4	5	6	7						
Aluminum															
Antimony															
Arsenic															
Barium															
Beryllium															
Cadmium															
Calcium															
Chromium															
Cobalt															
Copper															
Iron															
Lead															
Magnesium															
Manganese															
Mercury															
Nickel															
Potassium															
Selenium															
Silver															
Sodium															
Thallium															
Vanadium															
Zinc															
Cyanide															

Validator: _____

Date: _____

EPA-NE - Data Validation Worksheet
INORG-IV-C.2

See DV Report

IV. BLANKS

C.2 **Blank Actions** - List the maximum concentrations of each analyte among all blanks associated with each sample.

Analyte	Type of Blank	Date Blank Originated	Max. Conc. (units)	Blank Action Level (units)	Sample QL	Samples Affected	Action
Comments:							

Validator: _____

Date: _____

DRAFT 11/08

EPA NE - Data Validation Worksheet
INORG-V-A

See DV Report

V. A. ICP-AES INTERFERENCE CHECK SAMPLE - ICSAB

1. List all analytes in the ICSAB that are outside ICSAB percent recovery criteria.

Date	Analyte	%R	Conc. of Interferents Observed in ICSAB (ug/L)				Samples Affected	Action
			Al	Ca	Fe	Mg		
Comments:								

Validator:_____

Date:_____

DRAFT 11/08

EPA NE - Data Validation Worksheet
INORG-V-B.1

See DV Report

V. B.1 ICP-AES INTERFERENCE CHECK SAMPLE - ICSA

1. List all analytes in the ICSA that are outside ICSA criteria.

Date	Analyte	MDL (ug/L)	ICSA Observed Conc. (ug/L)	ICSA True Value (ug/L)	Criteria: 80-120% R or TV±2xMDL	Conc. of Interferents Observed in ICSA (ug/L)				Associated Samples
						Al	Ca	Fe	Mg	
Comments:										

Validator:_____

Date:_____

EPA NE - Data Validation Worksheet
INORG-V-B.2

See DV Report

V. B.2 ICP-AES INTERFERENCE CHECK SAMPLE - ICSA

2. List all affected sample results.

Affected Sample	Interferent	Conc. in Sample (ug/L)	Analyte	Conc. in Sample (ug/L)	Estimated Interference in Sample (ug/L)	Action
Comments:						

Validator:_____

Date:_____

EPA NE - Data Validation Worksheet
INORG-VI-A

See DV Report

VI. A. ICP-MS INTERFERENCE CHECK SAMPLE - ICSAB

List all analytes that are outside ICSAB criteria of 80-120% R.

Date	Analyte	%R	Samples Affected	Action
Comments:				

Validator:_____

Date:_____

DRAFT 11/08

EPA NE - Data Validation Worksheet
INORG-VI-B

See DV Report

VI. B. ICP-MS INTERFERENCE CHECK SAMPLE - ICSA

List all analytes that are outside ICSA criteria.

Date	Analyte	MDL (ug/L)	ICSA Observed Conc. (ug/L)	ICSA True Value (ug/L)	Criteria: 80-120% R or TV ± 2xMDL	Samples Affected	Action
Comments:							

Validator:_____

Date:_____

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-VII

See DV Report

VII. ICP-MS INTERNAL STANDARDS

List all internal standards that are outside method QC acceptance criteria.

IS method QC acceptance criteria: _____

Sample Number	Date and Time Analyzed	IS, amu	% RI	Analytes Affected (amu)	Action
Comments:					

Validator:_____

Date:_____

EPA-NE - Data Validation Worksheet
INORG-VIII

See DV Report

VIII. MATRIX SPIKES - List all matrix spike analytes that are outside method QC acceptance criteria.

Use a separate worksheet for each matrix spike sample.

Sample No.: _____ Matrix: _____

Method	Analyte	Spiked Sample Result	Sample Result	Amount of Spike Added	MS % Recovery	Method QC Limits % Recovery	Post-Digest Spike % Recovery	Action

Comments:

Validator: _____

Date: _____

EPA-NE - Data Validation Worksheet
INORG-IX

See DV Report

IX. LABORATORY DUPLICATE SAMPLES - List all analytes that are outside method QC acceptance criteria for the specific matrix.

Use a separate worksheet for each laboratory duplicate sample.

Sample No.:_____ Duplicate Sample No.:_____ Matrix:_____

Laboratory duplicate sample method QC acceptance criteria:_____

Method	Analyte	Sample Conc.	Sample		Duplicate Conc.	Duplicate		RPD or Abs. Diff.	QC Acceptance Criteria (RPD or Abs. Diff.)	Action
			SQL	5xSQL		SQL	5xSQL			

Do the field duplicate sample data indicate acceptable field precision? Y N

Comments:_____

_____

_____

Validator:_____

Date:_____

EPA-NE - Data Validation Worksheet
INORG-X

See DV Report

X. FIELD DUPLICATES - List all field duplicate analytes that are outside criteria.

Use a separate worksheet for each field duplicate pair.

Sample No.:_____ Duplicate Sample No.:_____ Matrix:_____

Method	Analyte	Sample Conc.	Sample		Duplicate Conc.	Duplicate		RPD or Abs. Diff.	QC Acceptance Criteria (RPD or Abs. Diff.)	Action
			SQL	5xSQL		SQL	5xSQL			

Do the laboratory duplicate sample data indicate acceptable laboratory precision? Y N

Comments: _____

Sampler Name: _____ Contractor Name: _____ Date Contacted: _____

Reason for contact and resolution obtained: _____

Validator: _____

Date: _____

EPA-NE - Data Validation Worksheet
INORG-XI

See DV Report

XI. ICP SERIAL DILUTIONS

Use a separate worksheet for each serial dilution sample.

Sample No.:_____ Matrix:_____ Method:_____

List all serial dilution analytes that are outside method QC acceptance criteria.

% Difference method QC acceptance criteria: _____
Minimum concentration required to apply the % D criteria (e.g., 50x MDL): _____

Analyte	MDL	Min. Conc. Required	Sample Result	Serial Dilution Sample Result (corrected for dilution)	% D	Action
Comments:						

Validator:_____

Date:_____

EPA-NE - Data Validation Worksheet
INORG-XII-A/B

See DV Report

XII. SENSITIVITY CHECK

A. Method Detection Limit Study - List all analytes that are outside the MDL criteria.

- Has an appropriate MDL study been submitted with seven replicates for each analyte and matrix of interest? Y N
- Were samples analyzed within one year of the MDL study and on the same instrument? Y N

Matrix	Analyte	MDL	MDL > QL	Samples Affected	Action

If an MDL study has not been submitted, use only the LFB results to evaluate data.

B. Laboratory Fortified Blank - List all LFB analytes that are outside the LFB criteria.

- Has an appropriate and complete LFB been submitted at the proper frequency? Y N
- Does the LFB contain all target analytes at their QLs? Y N

Matrix	Method	Analyte	% R	Method QC Limits % R	Samples Affected	Action

Comments: _____

_____

Validator: _____

Date: _____

EPA-NE - Data Validation Worksheet
INORG-XIII-A

See DV Report

XIII. PERFORMANCE EVALUATION SAMPLES/ACCURACY CHECK

A. Laboratory Control Samples - List all analytes that are outside criteria.

SDG No.:_____ Case:_____

Are more than one-half of the LCS analytes within criteria for each parameter and method? Y N

Date Prepared	Date Analyzed	Parameter/ Method	Matrix	Analyte	% Recovery (or Observed Conc.)	Method QC Acceptance Criteria	Samples Affected	Action
Comments:								

Validator:_____

Date:_____

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-XIII-B

See DV Report

XIII. PERFORMANCE EVALUATION SAMPLES/ACCURACY CHECK

B. Performance Evaluation Results - List all analytes that are outside criteria.

SDG No.:_____ Case:_____

Indicate the source of the PES: Region 1 EPA PES Non-EPA PES

Are more than one-half of the PES analytes within criteria for each parameter and method? Y N

PE Sample Number	Ampule Number	Parameter/ Method	Type of PES	Matrix	Analyte	Conc.	PES Score*	Samples Affected	Action

* For Region I PESs indicate the Region I PES Score Report Result: Action High, Action Low, Analyte Missed, Contaminant.
For Non-EPA PESs indicate the Non-EPA PES Score: PES Analyte Missed; PES Analyte Contaminant; PES Analyte Hit (% Recovery Limits).

Comments:_____

_____

Validator:_____

Date:_____

EPA-NE - Data Validation Worksheet
INORG-XIV

See DV Report

XIV. ANALYTE QUANTITATION AND REPORTED QUANTITATION LIMITS

Recalculate, from the raw data, the concentrations for one positive detect and one reported sample quantitation limit for a non-detect in a diluted sample or soil sample per analytical method. (Note: Although Section XIV, C.2.a, requires that one calculation for each method in each sample be performed, the validator is only required to reproduce an example, for each method, of one positive detect and one sample quantitation limit calculation on this worksheet.)

Do all soil/sediment samples have % solids greater than 30%? Y N

- If no, were any steps employed to address the high moisture content? _____
- Indicate the action and list the affected sample nos.: _____

Method		Calculation
ICP-AES		
Sample No.:		
Reported Analyte:		
Reported Value:		
Non-Detected Analyte:		
Reported Quantitation Limit:		
ICP-MS		
Sample No.:		
Reported Analyte:		
Reported Value:		
Non-Detected Analyte:		
Reported Quantitation Limit:		
Mercury		
Sample No.:		
Reported Value:		
Sample No.:		
Reported Quantitation Limit:		
Cyanide		
Sample No.:		
Reported Value:		
Sample No.:		
Reported Quantitation Limit:		

Validator: _____

Date: _____

APPENDIX D

SUPPORT DOCUMENTATION

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4186 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Tony Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB# 8631 2526 3713		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE168.4S GW

DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)		PRESERVATIVE USED		TYPE OF ANALYSIS PAHs w. SELECT PESTICIDES PCBs w. SELECT METALS							COMMENTS
									G	G	4°C	4°C								
4/04	0952	2W-SD-SD147-0001	SD 147	0	0.33	SD	G	2	1	1										PHASE I ANALIZE
4/04	1012	2W-SD-SD148-0001	SD 148	0	0.33	SD	G	2	*1	**1										SEE COMMENT
4/04	1030	2W-SD-SD149-0001	SD 149	0	0.33	SD	G	2	1	1										PHASE I ANALIZE
4/04	1050	2W-SD-SD152-0001	SD 152	0	0.33	SD	G	2	*1	**1 (TR)										PHASE I ANALIZE
4/04	1120	2W-SD-SD151-0001	SD 151	0	0.33	SD	G	2	*1	**1										SEE COMMENT
4/04	1145	2W-SD-SD153-0001	SD 153	0	0.33	SD	G	2	*1	**1										↓
4/04	1205	2W-SD-SD154-0001	SD 154	0	0.33	SD	G	2	1	1										PHASE I ANALIZE
4/04	1415	2W-SD-SD161-0001	SD 161	0	0.33	SD	G	2	1	1										
4/04	1430	2W-SD-SD159-0001	SD 159	0	0.33	SD	G	2	1	1										
4/04	1450	2W-SD-SD158-0001	SD 158	0	0.33	SD	G	2	1	1										↓
4/04	1500	2W-SD-SD156-0001	SD 156	0	0.33	SD	G	2	*1	**1										SEE COMMENT
4/04	1515	2W-SD-SD155-0001	SD 155	0	0.33	SD	G	2	*1	**1										↓
4/04	1525	2W-SD-SD157-0001	SD 157	0	0.33	SD	G	2	*1	**1										

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Tony Rojahn	4-05-11	1600	1. RECEIVED BY FED EX	4-05-11	1600
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-6-11	TIME 0930
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD " " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4187 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Tony Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB # 8631 2526 3713		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE16845
GW

DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS: PAHs w. SELECT PESTICIDES	PCBs w. SELECT METALS	PAHs	COMMENTS
									G	4°C				
									G	4°C				
									G	4°C				
4/04	1540	2W-SD-SD160-0001	SD 160	0	0.33	SD	G	2		* 1	** 1			SEE COMMENT
4/04	1555	2W-SD-SD162-0001	SD 162	0	0.33	SD	G	2		* 1	** 1			↓
4/04	0000	FD-040411-01	QC	0	0.33	SD	G	2		1	(1)			PHASE I ANALIZE
4/05	0815	2W-SD-SD138-0001	SD 138	0	0.33	SD	G	2		1	(1)			↓
4/05	0840	2W-SD-SD137-0001	SD 137	0	0.33	SD	G	2		* 1	** 1			SEE COMMENT
4/05	0855	2W-SD-SD128-0001	SD 128	0	0.33	SD	G	2		* 1	** 1			↓
4/05	0925	2W-SD-SD124-0001	SD 124	0	0.33	SD	G	2		* 1	** 1			↓
4/05	0950	2W-SD-SD125-0001	SD 125	0	0.33	SD	G	2		* 1	** 1			↓
4/05	1015	2W-SD-SD118-0001	SD 118	0	0.33	SD	G	2		1	(1)			PHASE I ANALIZE
4/05	1040	2W-SD-SD119-0001	SD 119	0	0.33	SD	G	2		1	(1)			↓
4/05	1100	2W-SD-SD120-0001	SD 120	0	0.33	SD	G	2		1	(1)			↓
4/05	1140	2W-SD-SD126-0001	SD 126	0	0.33	SD	G (TB)	2 1		+ (TB) 1		1		↓
4/05	1150	2W-SD-SD121-0001	SD 121	0	0.33	SD	G	2		1	(1)			↓

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Tony Rojahn	4-05-11	1600	1. RECEIVED BY FED EX	4-05-11	1600
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-6-11	TIME 0930
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD " " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 4188 | PAGE 1 OF 1

PROJECT NO: 112602625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB # 8631 2526 3713		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2011	TIME	SAMPLE ID (SE168X5 GW)	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)		PRESERVATIVE USED		TYPE OF ANALYSIS: PAHs & SELECT PESTICIDES	TYPE OF ANALYSIS: PCBs & SELECT METALS	COMMENTS
									G	G	4°C	4°C			
4/05	1216	2W-SD-SD141-0001	SD 141	0	0.33	SD	G	2	* 1	** 1					SEE COMMENT
4/05	1235	2W-SD-SD136-0001	SD	0	0.33	SD	G	2	1	1					PHASE I ANALYZE
4/05	1250	2W-SD-SD134-0001	SD	0	0.33	SD	G	2	1	1					↓

1. RELINQUISHED BY		DATE 4-05-11	TIME 1600	1. RECEIVED BY FED EX		DATE 4-05-11	TIME 1600
2. RELINQUISHED BY		DATE	TIME	2. RECEIVED BY		DATE 4-6-11	TIME 0930
3. RELINQUISHED BY		DATE	TIME	3. RECEIVED BY		DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD " " " .

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

00003

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO-WE55 NEW LONDON, CT
SDG: WE55-1
SE1685

Sample Receipt

The following samples were received on April 6, 2011 and were logged in under Katahdin Analytical Services work order number SE1685 for a hardcopy due date of April 22, 2011.

KATAHDIN Sample No.	TTNUS Sample Identification
SE1685-1	2W-SD-SD147-0001
SE1685-2	2W-SD-SD148-0001
SE1685-3	2W-SD-SD149-0001
SE1685-4	2W-SD-SD152-0001
SE1685-5	2W-SD-SD151-0001
SE1685-6	2W-SD-SD153-0001
SE1685-7	2W-SD-SD154-0001
SE1685-8	2W-SD-SD161-0001
SE1685-9	2W-SD-SD159-0001
SE1685-10	2W-SD-SD158-0001
SE1685-11	2W-SD-SD156-0001
SE1685-12	2W-SD-SD155-0001
SE1685-13	2W-SD-SD157-0001
SE1685-14	2W-SD-SD160-0001
SE1685-15	2W-SD-SD162-0001
SE1685-16	FD-040411-1
SE1685-17	2W-SD-SD138-0001
SE1685-18	2W-SD-SD137-0001
SE1685-19	2W-SD-SD128-0001
SE1685-20	2W-SD-SD124-0001
SE1685-21	2W-SD-SD125-0001
SE1685-22	2W-SD-SD118-0001
SE1685-23	2W-SD-SD119-0001
SE1685-24	2W-SD-SD120-0001
SE1685-25	2W-SD-SD126-0001
SE1685-26	2W-SD-SD121-0001
SE1685-27	2W-SD-SD141-0001
SE1685-28	2W-SD-SD136-0001
SE1685-29	2W-SD-SD134-0001

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

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

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

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

Organics Analysis

The samples of SDG WE55-1 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, and III 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, for the specific methods listed below or on the Report of Analysis.

8270C SIM Analysis

All soil samples and associated QC were subjected to the GPC sample clean-up process.

Surrogate recoveries for all samples and QC were evaluated using laboratory established acceptance limits.

Sample SE1685-9 was analyzed at a dilution of 1:3 due to matrix interference, sample viscosity or other matrix-related problem. Consequently, the sample PQL was elevated by a factor of 3. The sample also had high recoveries for two surrogates that were outside of the laboratory established acceptance limits, likely due to matrix interference as evident by the sample chromatogram.

Samples SE1685-1, 1DL, 3, 4, 7, 7DL, 8, 9DL, 10, 16, 17, 17DL, 22, 23, 24, 25, 26, 28 and 29 were manually integrated for the analytes acenaphthylene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, benzo(g,h,i)perylene, the internal standards acenaphthene-s10, chrysene-d12 and/or the surrogate fluorene-d10. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Sample SE1685-7 had a low response for the internal standard chyrsene-d12 that resulted in a %D which was outside the DoD QSM 4.1 acceptance limit of -50% to +100% of the responses of the internal standards of the midpoint initial calibration standard. Since the sample was reanalyzed at a dilution and had acceptable internal standard responses, the sample was not reanalyzed undiluted.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are nominal acceptance limits. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS

that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long the LCS is acceptable. Nominal limits are used for the LCS/LCSD until enough data is collected to generate statistically based acceptance limits.

The initial calibration analyzed on the N instrument on 04/21/11 had %RSD values for several analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The target analyte indeno(1,2,3-cd)pyrene failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. This compound was calibrated using the average model. The corresponding independent check standard (file N0186) had low concentrations for the target analytes pyrene, benzo(a)anthracene, benzo(b)fluoranthene and indeno(1,2,3-cd)pyrene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The independent check standard (file N0225), associated with the initial calibration on the N instrument on 04/23/11 had low concentrations for the target analytes benzo(k)fluoranthene and indeno(1,2,3-cd)pyrene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The Form 7 for the CV (file N0192) had a low response for the target analyte indeno(1,2,3-cd)pyrene. This response resulted in a %D that was greater than the acceptance limit of 20% from DoD QSM Version 4.1.

8081 Analysis

All soil samples and associated QC were subjected to the GPC sample clean-up process.

Surrogate recoveries for all samples and QC, as well as spike recoveries for the laboratory control sample and laboratory control sample duplicate (LCS/LCSD) were evaluated using laboratory established acceptance limits.

Samples SE1685-22 and 28 had high recoveries for DCB on channel A, which were outside the laboratory established acceptance limits. Since the recoveries were acceptable on channel B, the samples were not reextracted.

Sample SE1685-26 had high recoveries for TCX on channel B, which was outside the laboratory established acceptance limits. Since the recoveries were acceptable on channel A, the sample was not reextracted.

Samples SE1685-1, 3, 4, 7, 7DL, 9, 9DL, 10, 16, 22, 22DL, 23, 23DL, 24, 24DL, 26, 26DL, and 29 were manually integrated for 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Note: The Form VII has a column for %D that is set to 15%. The DoD QSM criterion for a CV is 20%D. All of the compounds in the CV's were evaluated to 20% criteria.

The closing CV (file 1ED000353) had a low response for 4,4'-DDE on channel A, which resulted in a %D that was outside of the DoD QSM acceptance limits of 20%. Since the response was acceptable on channel B, the associated samples were not reanalyzed.

The opening/closing CV's (files 1ED00211, 1ED00242, and 1ED00249) had low responses for 4,4'-DDE, 4,4'-DDD, 4,4'-DDT, and the surrogate DCB on one or both channels which resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. The low responses are likely due to interference from samples that were analyzed preceding these CV's. All of the affected samples were put through the GPC, but the sample matrices still caused interference on the instrument. After the failing CV, maintenance was performed on the instrument and the subsequent CV was acceptable. For these reasons, the samples were not reanalyzed.

8082 Analysis

All soil samples and associated QC were subjected to the GPC sample clean-up process.

Surrogate recoveries for all samples and QC, as well as spike recoveries for the laboratory control sample and laboratory control sample duplicate (LCS/LCSD) were evaluated using laboratory established acceptance limits.

Samples SE1685-7, 8, 10, and 16 were manually integrated for the surrogate TCX and/or Aroclor 1260. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Samples SE1685-3, 4, 7, 8, 9, the method blank, WG90032-1, the LCS/LCSD, WG90032-2 and 3, had no, low and/or high recoveries for the surrogate TCX on both channels that were outside laboratory established acceptance limits. Since the recoveries of the surrogate DCB were acceptable, no further action was taken.

Sample SE1685-28 had low recoveries for the surrogates DCB and TCX on channel A, sample SE1685-16, had a low recovery for TCX on channel A, and sample SE1685-29 had a high recovery for DCB on channel B which were outside of the laboratory established acceptance limits. Since the recoveries were acceptable on the confirmation columns, no further action was taken.

Sample SE1685-28 had a RPD for Aroclor 1260 that was outside of the method acceptance limits of 40%. This analyte is flagged with a "J" qualifier on the report of analysis (ROA).

Sample SE1685-7 had a retention time for the surrogate TCX on channel A that is flagged with the qualifier "*" on the form 8 because it was outside of the retention time window. The retention time on channel B was acceptable. The retention times of the opening and closing CV, as well as all of the samples within the analytical sequence, were all acceptable. The sample had a high recovery for the surrogate indicating matrix interference.

The LCSD, WG90032-3, had a low recovery for Aroclor 1016, that was outside laboratory established acceptance limits. Since the recovery for the LCS was acceptable, no further action was taken.

The closing calibration verification standard (CV) (file 7ED573) had a low response for the surrogate DCB on channel A, which resulted in a %D that was outside of the DoD QSM acceptance limits of 20%. Since the response was acceptable on channel B, the associated samples were not reanalyzed.

The opening/closing CV (file 7ED593) had low responses for DCB on channel A and Aroclor 1260 on channel B, which resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since the responses were acceptable on the confirmation channel, the samples were not reanalyzed.

The closing CV (file 7ED608) had a high response for TCX on channel A, which resulted in a %D that was outside of the DoD QSM acceptance limits of 20%. Since the response was acceptable on channel B, the associated samples were not reanalyzed.

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

Metals Analysis

The samples of Katahdin SDG WE55-1 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Solid-matrix Katahdin Sample Numbers SE1685-(1, 3, 8, 10, 16 and -17) were digested for ICP analysis on 04/13/11 (QC Batch BD13ICS0) in accordance with USEPA Method 3050B.

Solid-matrix Katahdin Sample Numbers SE1685-(4, 7, 9, 22, 24, 26, 28 and 29) were digested for ICP analysis on 04/14/11 (QC Batch BD14ICS0) in accordance with USEPA Method 3050B. These samples are redigested portions using additional sample volume due to high percent moisture in the samples. The samples are listed throughout the data package with the suffix "R" (eg. SE1685-004R).

ICP analyses of Katahdin SDG WE55-1 sample digestates were performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010. All samples were analyzed within holding times and all analytical run QC criteria were met. Some samples were diluted to reduce spectral interferences cause by high iron concentrations in the samples.

Reporting of Metals Results

Per client request, analytical results for client samples on Form I and preparation blanks on Form IIIP have been reported using the laboratory's limits of detection (LOD). All results were evaluated down to the laboratory's method detection limits (MDLs). Results that fall between the

MDL and the PQL are flagged with "J" in the C-qualifier column, and the measured concentration appears in the concentration column. Results that are less than the MDL are flagged with "U" in the C-qualifier column, and the LOD is listed in the concentration column. These PQLs, MDLs and LODs have been adjusted for each sample based on the sample amounts used in preparation and analysis.

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

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

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

Wet Chemistry Analysis

The samples of SDG WE55-1 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Annual Book of ASTM Standards", Method D2216-98 "Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass".

All analyses were performed within analytical holding times. All quality control criteria were met.

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

Leslie Dimond
05121l

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc. — Sample Receipt Condition Report

Client: Tetra Tech	KAS PM: ~~SMS~~ KAP	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: FedEx
KAS Work Order#: SE1687 5	KIMS Review By: DN	Received By: GN
SDG #:	Cooler: 1 of 2	Date/Time Rec.: 4-6-11/0930

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 1.2
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

0000009

Katahdin Analytical Services, Inc.

Sample Receipt Condition Report

Client: Tetra Tech	KAS PM: SM KAP	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: Fed-Ex
KAS Work Order#: SE1683S	KIMS Review By: GN	Received By: GN
SDG #: GN	Cooler: 2 of 2	Date/Time Rec.: 4-6-11/09:30

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?					
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 2.0
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓			✓	The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

000010

NSB NEW LONDON
SOIL DATA
WE55-1

FRACTION	CHEMICAL	FD-040411-1	UNITS	2W-SD-SD159-0001	RPD	D
M	ARSENIC	4.3	MG/KG	12.6 J	98.22	8.30
M	CADMIUM	0.54 J	MG/KG	1.1 J	68.29	OK 0.56
M	CHROMIUM	16	MG/KG	63.5 J	119.50	47.50
M	COPPER	59.8	MG/KG	106 J	55.73	46.20
M	LEAD	34	MG/KG	82.4 J	83.16	48.40
M	NICKEL	9.8	MG/KG	27.1 J	93.77	OK 17.30
M	ZINC	256	MG/KG	352 J	31.58	96.00

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

HOLDTIME

SDG WE55-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	MG/KG	2W-SD-SD146-0001	SE1778-002	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD118-0001	SE1685-022	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD119-0001	SE1685-023	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD120-0001	SE1685-024	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD121-0001	SE1685-026	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD122-0001	SE1778-008	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD123-0001	SE1778-013	NM	04/06/2011	04/15/2011	04/21/2011	9	6	15
M	MG/KG	2W-SD-SD127-0001	SE1778-007	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD130-0001	SE1778-009	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD134-0001	SE1685-029	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD135-0001	SE1778-016	NM	04/06/2011	04/14/2011	04/21/2011	8	7	15
M	MG/KG	2W-SD-SD136-0001	SE1685-028	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD117-0001	SE1778-022	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
M	MG/KG	2W-SD-SD144-0001	SE1778-003	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD138-0001	SE1685-017	NM	04/05/2011	04/13/2011	04/20/2011	8	7	15

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	MG/KG	2W-SD-SD146-0001	SE1778-002	NM	04/05/2011	04/14/2011	04/22/2011	9	8	17
M	MG/KG	2W-SD-SD147-0001	SE1685-001	NM	04/04/2011	04/13/2011	04/20/2011	9	7	16
M	MG/KG	2W-SD-SD149-0001	SE1685-003	NM	04/04/2011	04/13/2011	04/20/2011	9	7	16
M	MG/KG	2W-SD-SD152-0001	SE1685-004	NM	04/04/2011	04/14/2011	04/21/2011	10	7	17
M	MG/KG	2W-SD-SD154-0001	SE1685-007	NM	04/04/2011	04/14/2011	04/21/2011	10	7	17
M	MG/KG	2W-SD-SD158-0001	SE1685-010	NM	04/04/2011	04/13/2011	04/20/2011	9	7	16
M	MG/KG	2W-SD-SD159-0001	SE1685-009	NM	04/04/2011	04/14/2011	04/21/2011	10	7	17
M	MG/KG	2W-SD-SD161-0001	SE1685-008	NM	04/04/2011	04/13/2011	04/20/2011	9	7	16
M	MG/KG	FD-040411-1	SE1685-016	NM	04/04/2011	04/13/2011	04/20/2011	9	7	16
M	MG/KG	FD-040511-01	SE1778-010	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	FD-040511-02	SE1778-011	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD116-0001	SE1778-020	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
M	MG/KG	2W-SD-SD140-0001	SE1778-004	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD142-0001	SE1778-018	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
TS	%	2W-SD-SD95-0001	SE1779-10	NM	04/07/2011	04/12/2011	04/13/2011	5	1	6
TS	%	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/08/2011	04/11/2011	4	3	7
TS	%	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/08/2011	04/11/2011	4	3	7
TS	%	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/08/2011	04/11/2011	4	3	7

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 2/17/2011

Concentration Units: ug/L

Analyte	CRDL	IDL	M
ALUMINUM	300	11.32	P
ARSENIC	8.0	2.55	P
CADMIUM	10	0.25	P
CALCIUM	100	10.06	P
CHROMIUM	15	0.67	P
COPPER	25	0.53	P
IRON	100	2.62	P
LEAD	5.0	1.63	P
MAGNESIUM	100	4.33	P
NICKEL	40	0.64	P
ZINC	25	0.38	P

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/20/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ARSENIC	0.50	mg/Kg	P	SW846 3050B / 6010/200.7
CADMIUM	0.30	mg/Kg	P	SW846 3050B / 6010/200.7
CHROMIUM	0.40	mg/Kg	P	SW846 3050B / 6010/200.7
COPPER	1.00	mg/Kg	P	SW846 3050B / 6010/200.7
LEAD	0.40	mg/Kg	P	SW846 3050B / 6010/200.7
NICKEL	0.40	mg/Kg	P	SW846 3050B / 6010/200.7
ZINC	1.00	mg/Kg	P	SW846 3050B / 6010/200.7

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/21/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ARSENIC	5.0	ug/L	P	SW846 3050B / 6010/200.7
CADMIUM	3.0	ug/L	P	SW846 3050B / 6010/200.7
CHROMIUM	4.0	ug/L	P	SW846 3050B / 6010/200.7
COPPER	10.0	ug/L	P	SW846 3050B / 6010/200.7
LEAD	4.0	ug/L	P	SW846 3050B / 6010/200.7
NICKEL	4.0	ug/L	P	SW846 3050B / 6010/200.7
ZINC	10.0	ug/L	P	SW846 3050B / 6010/200.7

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/20/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ARSENIC	0.07	mg/Kg	P	SW846 3050B / SW846 6010B
CADMIUM	0.008	mg/Kg	P	SW846 3050B / SW846 6010B
CHROMIUM	0.03	mg/Kg	P	SW846 3050B / SW846 6010B
COPPER	0.16	mg/Kg	P	SW846 3050B / SW846 6010B
LEAD	0.09	mg/Kg	P	SW846 3050B / SW846 6010B
NICKEL	0.04	mg/Kg	P	SW846 3050B / SW846 6010B
ZINC	0.17	mg/Kg	P	SW846 3050B / SW846 6010B

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/21/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ARSENIC	1.43	ug/L	P	SW846 3050B / SW846 6010B
CADMIUM	0.05	ug/L	P	SW846 3050B / SW846 6010B
CHROMIUM	0.36	ug/L	P	SW846 3050B / SW846 6010B
COPPER	0.63	ug/L	P	SW846 3050B / SW846 6010B
LEAD	1.07	ug/L	P	SW846 3050B / SW846 6010B
NICKEL	2.81	ug/L	P	SW846 3050B / SW846 6010B
ZINC	0.73	ug/L	P	SW846 3050B / SW846 6010B

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** BD13ICS0

Matrix: SOIL **SDG Name:** WE55-1

Method: P **Prep Date:** 04/13/2011

Client ID	Lab Sample ID	Initial (g)	Final (L)
LCSOBD13ICS0	LCSOBD13ICS0	1	0.1
PBSBD13ICS0	PBSBD13ICS0	1	0.1
2W-SD-SD147-0001	SE1685-001	1.4	0.1
2W-SD-SD149-0001	SE1685-003	1.42	0.1
2W-SD-SD161-0001	SE1685-008	1.38	0.1
2W-SD-SD158-0001	SE1685-010	1.66	0.1
FD-040411-1	SE1685-016	1.87	0.1
2W-SD-SD138-0001	SE1685-017	1.65	0.1

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSBD13ICS0

Matrix: SOIL **SDG Name:** WE55-1

QC Batch ID: BD13ICS0

Concentration Units : mg/Kgdrywt

Analyte	RESULT	C
ARSENIC	0.50	U
CADMIUM	0.30	U
CHROMIUM	0.032	J
COPPER	1.0	U
LEAD	0.40	U
NICKEL	0.40	U
ZINC	1.0	U

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSOBD13ICS0

Matrix: SOIL **SDG Name:** WE55-1

QC Batch ID: BD13ICS0

Concentration Units : mg/Kgdrywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ARSENIC	10.0	9.58	95.8	80	120
CADMIUM	25.0	24.08	96.3	80	120
CHROMIUM	20.0	19.16	95.8	80	120
COPPER	25.0	23.32	93.3	80	120
LEAD	10.0	9.83	98.3	80	120
NICKEL	50.0	48.34	96.7	80	120
ZINC	50.0	48.09	96.2	80	120

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** BD14ICS0

Matrix: SOIL **SDG Name:** WE55-1

Method: P **Prep Date:** 04/14/2011

Client ID	Lab Sample ID	Initial (g)	Final (L)
LCSOBD14ICS0	LCSOBD14ICS0	1	0.1
PBSBD14ICS0	PBSBD14ICS0	1	0.1
2W-SD-SD152-0001	SE1685-004R	4.98	0.1
2W-SD-SD154-0001	SE1685-007R	4.96	0.1
2W-SD-SD159-0001	SE1685-009R	5.12	0.1
2W-SD-SD118-0001	SE1685-022R	4.73	0.1
2W-SD-SD119-0001	SE1685-023R	5.27	0.1
2W-SD-SD120-0001	SE1685-024R	5.27	0.1
2W-SD-SD121-0001	SE1685-026R	4.85	0.1
2W-SD-SD136-0001	SE1685-028R	5.26	0.1
2W-SD-SD134-0001	SE1685-029R	4.83	0.1

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSBD14ICS0

Matrix: SOIL **SDG Name:** WE55-1

QC Batch ID: BD14ICS0

Concentration Units : mg/Kgdrywt

Analyte	RESULT	C
ARSENIC	-0.089	J
CADMIUM	0.30	U
CHROMIUM	0.034	J
COPPER	1.0	U
LEAD	0.40	U
NICKEL	0.40	U
ZINC	1.0	U

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSOBD14ICS0

Matrix: SOIL **SDG Name:** WE55-1

QC Batch ID: BD14ICS0

Concentration Units : mg/Kgdrywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ARSENIC	10.0	9.51	95.1	80	120
CADMIUM	25.0	24.10	96.4	80	120
CHROMIUM	20.0	19.43	97.2	80	120
COPPER	25.0	23.75	95.0	80	120
LEAD	10.0	9.88	98.8	80	120
NICKEL	50.0	48.57	97.1	80	120
ZINC	50.0	48.41	96.8	80	120

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Instrument ID: THERMO ICAP 6500 **File Name:** IBD20A

Date: 4/20/2011 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements				
Blank		1	14:29	AL AS	CD CA CR	CU FE PB MG	NI	ZN
Std 1		1	14:34	AL AS	CD CA CR	CU FE PB MG	NI	ZN
ICV		1	14:38	AL AS	CD CA CR	CU FE PB MG	NI	ZN
ICB		1	14:43	AL AS	CD CA CR	CU FE PB MG	NI	ZN
PQL		1	14:47	AL AS	CD CA CR	CU FE PB MG	NI	ZN
ICSA		1	14:52	AL AS	CD CA CR	CU FE PB MG	NI	ZN
ICSAB		1	14:57	AL AS	CD CA CR	CU FE PB MG	NI	ZN
CCV		1	15:02	AL AS	CD CA CR	CU FE PB MG	NI	ZN
CCB		1	15:06	AL AS	CD CA CR	CU FE PB MG	NI	ZN
ZZZZZZ		1	15:11					
ZZZZZZ		1	15:15					
ZZZZZZ		1	15:20					
ZZZZZZ		1	15:24					
ZZZZZZ		1	15:29					
ZZZZZZ		1	15:33					
ZZZZZZ		1	15:38					
ZZZZZZ		1	15:42					
ZZZZZZ		1	15:47					
ZZZZZZ		1	15:51					
CCV		1	15:56	AL AS	CD CA CR	CU FE PB MG	NI	ZN
CCB		1	16:00	AL AS	CD CA CR	CU FE PB MG	NI	ZN
ZZZZZZ		1	16:05					
ZZZZZZ		1	16:10					
ZZZZZZ		1	16:14					
ZZZZZZ		1	16:19					
ZZZZZZ		1	16:23					
ZZZZZZ		1	16:28					
ZZZZZZ		1	16:32					
ZZZZZZ		1	16:37					
ZZZZZZ		1	16:41					
ZZZZZZ		1	16:46					
CCV		1	16:51	AL AS	CD CA CR	CU FE PB MG	NI	ZN
CCB		1	16:55	AL AS	CD CA CR	CU FE PB MG	NI	ZN
ZZZZZZ		5	17:00					
ZZZZZZ		1	17:04					
ZZZZZZ		1	17:09					
ZZZZZZ		1	17:13					
ZZZZZZ		1	17:17					
ZZZZZZ		1	17:22					
ZZZZZZ		1	17:27					
ZZZZZZ		1	17:31					
ZZZZZZ		1	17:36					
ZZZZZZ		5	17:40					
CCV		1	17:45	AL AS	CD CA CR	CU FE PB MG	NI	ZN
CCB		1	17:49	AL AS	CD CA CR	CU FE PB MG	NI	ZN
ZZZZZZ		1	17:54					
ZZZZZZ		1	17:58					
ZZZZZZ		1	18:02					
ZZZZZZ		1	18:07					
ZZZZZZ		1	18:12					

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Instrument ID: THERMO ICAP 6500 **File Name:** IBD20A

Date: 4/20/2011 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements										
ZZZZZZ		1	18:16											
ZZZZZZ		1	18:21											
ZZZZZZ		1	18:26											
ZZZZZZ		1	18:30											
ZZZZZZ		1	18:35											
CCV		1	18:39 AL	AS	CD	CA	CR	CU	FE	PB	MG	NI		ZN
CCB		1	18:44 AL	AS	CD	CA	CR	CU	FE	PB	MG	NI		ZN
ZZZZZZ		1	18:48											
ZZZZZZ		1	18:53											
ZZZZZZ		1	18:58											
ZZZZZZ		1	19:02											
ZZZZZZ		1	19:07											
ZZZZZZ		1	19:12											
ZZZZZZ		1	19:16											
ZZZZZZ		1	19:21											
ZZZZZZ		1	19:26											
PBSBD13ICS0		1	19:30	AS	CD		CR	CU		PB		NI		ZN
CCV		1	19:35 AL	AS	CD	CA	CR	CU	FE	PB	MG	NI		ZN
CCB		1	19:39 AL	AS	CD	CA	CR	CU	FE	PB	MG	NI		ZN
LCSOBD13ICS0		1	19:44	AS	CD		CR	CU		PB		NI		ZN
SE1685-001	2W-SD-SD147-0001	1	19:48	AS	CD		CR	CU		PB		NI		ZN
SE1685-003	2W-SD-SD149-0001	1	19:53	AS	CD		CR	CU		PB		NI		ZN
SE1685-008	2W-SD-SD161-0001	1	19:58	AS	CD		CR	CU		PB		NI		ZN
SE1685-010	2W-SD-SD158-0001	1	20:02	AS	CD		CR	CU		PB		NI		ZN
SE1685-016	FD-040411-1	1	20:07	AS	CD		CR	CU		PB		NI		ZN
SE1685-017	2W-SD-SD138-0001	1	20:11	AS	CD		CR	CU		PB		NI		ZN
PBSBD14ICS0		1	20:16	AS	CD		CR	CU		PB		NI		ZN
LCSOBD14ICS0		1	20:21	AS	CD		CR	CU		PB		NI		ZN
ZZZZZZ		5	20:25											
CCV		1	20:30 AL	AS	CD	CA	CR	CU	FE	PB	MG	NI		ZN
CCB		1	20:34 AL	AS	CD	CA	CR	CU	FE	PB	MG	NI		ZN

FORM XIV - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Concentration Units: ug/L

SAMPLE: ICV

File: IBD20A Apr 20, 2011 14:38

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	9707.00	97.1
ARSENIC	400.0	385.00	96.3
CADMIUM	400.0	394.60	98.7
CALCIUM	10000.0	9879.00	98.8
CHROMIUM	400.0	393.20	98.3
COPPER	400.0	394.00	98.5
IRON	10000.0	9976.00	99.8
LEAD	400.0	401.70	100.4
MAGNESIUM	10000.0	10010.00	100.1
NICKEL	400.0	394.20	98.5
ZINC	400.0	397.70	99.4

SAMPLE: CCV

File: IBD20A Apr 20, 2011 15:02

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12530.00	100.2
ARSENIC	500.0	492.30	98.5
CADMIUM	500.0	501.00	100.2
CALCIUM	12500.0	12650.00	101.2
CHROMIUM	500.0	499.10	99.8
COPPER	500.0	494.10	98.8
IRON	12500.0	12580.00	100.6
LEAD	500.0	504.60	100.9
MAGNESIUM	12500.0	12830.00	102.6
NICKEL	500.0	503.10	100.6
ZINC	500.0	497.80	99.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Concentration Units: ug/L

SAMPLE: CCV

File: IBD20A Apr 20, 2011 19:35

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11980.00	95.8
ARSENIC	500.0	480.60	96.1
CADMIUM	500.0	485.60	97.1
CALCIUM	12500.0	12070.00	96.6
CHROMIUM	500.0	479.20	95.8
COPPER	500.0	464.00	92.8
IRON	12500.0	11880.00	95.0
LEAD	500.0	489.90	98.0
MAGNESIUM	12500.0	12480.00	99.8
NICKEL	500.0	485.80	97.2
ZINC	500.0	479.20	95.8

SAMPLE: CCV

File: IBD20A Apr 20, 2011 20:30

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11990.00	95.9
ARSENIC	500.0	479.30	95.9
CADMIUM	500.0	478.80	95.8
CALCIUM	12500.0	11770.00	94.2
CHROMIUM	500.0	484.50	96.9
COPPER	500.0	474.20	94.8
IRON	12500.0	12010.00	96.1
LEAD	500.0	492.00	98.4
MAGNESIUM	12500.0	12000.00	96.0
NICKEL	500.0	481.90	96.4
ZINC	500.0	479.90	96.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Concentration Units: ug/L

SAMPLE: PQL

File: IBD20A Apr 20, 2011 14:47

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	304.20	101.4
ARSENIC	8.0	9.27	115.9
CADMIUM	5.0	5.03	100.6
CALCIUM	100.0	97.75	97.8
CHROMIUM	10.0	9.91	99.1
COPPER	25.0	25.10	100.4
IRON	100.0	102.70	102.7
LEAD	5.0	5.52	110.4
MAGNESIUM	100.0	104.00	104.0
NICKEL	10.0	10.59	105.9
ZINC	20.0	19.84	99.2

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Concentration Units: ug/L

SAMPLE: ICB

File: IBD20A Apr 20, 2011 14:43

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.060	U
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.380	U

SAMPLE: CCB X

File: IBD20A Apr 20, 2011 15:06

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.060	U
CHROMIUM	0.670	U
COPPER	0.556	J
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	9.305	J
NICKEL	0.640	U
ZINC	0.380	U

SAMPLE: CCB X

File: IBD20A Apr 20, 2011 16:00

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.060	U
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	15.880	J
NICKEL	0.640	U
ZINC	0.380	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Concentration Units: ug/L

SAMPLE: CCB

File: IBD20A Apr 20, 2011 19:39

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.060	U
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	2.693	J
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.380	U

SAMPLE: CCB

File: IBD20A Apr 20, 2011 20:34

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.060	U
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	4.073	J
LEAD	1.630	U
MAGNESIUM	12.210	J
NICKEL	0.640	U
ZINC	0.380	U

No analyte of interest

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Concentration Units: ug/L

SAMPLE: ICSA

File: IBD20A Apr 20, 2011 14:52

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	501100	100.2
ARSENIC	0	2	
CADMIUM	0	0	
CALCIUM	500000	469200	93.8
CHROMIUM	3	5	
COPPER	0	4	
IRON	200000	184300	92.2
LEAD	0	1	
MAGNESIUM	500000	450300	90.1
NICKEL	0	3	
ZINC	0	4	

SAMPLE: ICSAB

File: IBD20A Apr 20, 2011 14:57

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	504800	101.0
ARSENIC	100	103	103.0
CADMIUM	1000	922	92.2
CALCIUM	500000	469900	94.0
CHROMIUM	500	485	97.0
COPPER	500	521	104.2
IRON	200000	186800	93.4
LEAD	50	46	92.0
MAGNESIUM	500000	458100	91.6
NICKEL	1000	888	88.8
ZINC	1000	915	91.5

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Instrument ID: THERMO ICAP 6500 **File Name:** IBD21A

Date: 4/21/2011 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements								
Blank		1	12:13	AL	AS	CD	CA	CR	CU FE PB MG	NI		ZN
Std 1		1	12:17	AL	AS	CD	CA	CR	CU FE PB MG	NI		ZN
ICV		1	12:22	AL	AS	CD	CA	CR	CU FE PB MG	NI		ZN
ICB		1	12:26	AL	AS	CD	CA	CR	CU FE PB MG	NI		ZN
PQL		1	12:31	AL	AS	CD	CA	CR	CU FE PB MG	NI		ZN
ICSA		1	12:35	AL	AS	CD	CA	CR	CU FE PB MG	NI		ZN
ICSAB		1	12:40	AL	AS	CD	CA	CR	CU FE PB MG	NI		ZN
CCV		1	12:45	AL	AS	CD	CA	CR	CU FE PB MG	NI		ZN
CCB		1	12:49	AL	AS	CD	CA	CR	CU FE PB MG	NI		ZN
ZZZZZZ		1	12:54									
ZZZZZZ		1	12:58									
ZZZZZZ		1	13:03									
ZZZZZZ		2	13:07									
SE1685-004R	2W-SD-SD152-0001R	10	13:12		AS	CD		CR	CU PB	NI		ZN
SE1685-007R	2W-SD-SD154-0001R	5	13:16		AS	CD		CR	CU PB	NI		ZN
SE1685-009R	2W-SD-SD159-0001R	5	13:21		AS	CD		CR	CU PB	NI		ZN
SE1685-022R	2W-SD-SD118-0001R	2	13:25		AS	CD		CR	CU PB	NI		ZN
SE1685-023R	2W-SD-SD119-0001R	2	13:30		AS	CD		CR	CU PB	NI		ZN
ZZZZZZ		2	13:35									
CCV		1	13:39	AL	AS	CD	CA	CR	CU FE PB MG	NI		ZN
CCB		1	13:44	AL	AS	CD	CA	CR	CU FE PB MG	NI		ZN
SE1685-026R	2W-SD-SD121-0001R	10	13:48		AS	CD		CR	CU PB	NI		ZN
SE1685-028R	2W-SD-SD136-0001R	2	13:53		AS	CD		CR	CU PB	NI		ZN
SE1685-029R	2W-SD-SD134-0001R	2	13:57		AS	CD		CR	CU PB	NI		ZN
ZZZZZZ		1	14:02									
ZZZZZZ		1	14:06									
ZZZZZZ		1	14:11									
ZZZZZZ		1	14:15									
ZZZZZZ		1	14:20									
ZZZZZZ		1	14:24									
ZZZZZZ		1	14:29									
CCV		1	14:33	AL	AS	CD	CA	CR	CU FE PB MG	NI		ZN
CCB		1	14:38	AL	AS	CD	CA	CR	CU FE PB MG	NI		ZN
ZZZZZZ		1	14:42									
ZZZZZZ		1	14:47									
ZZZZZZ		5	14:51									
ZZZZZZ		1	14:56									
ZZZZZZ		1	15:00									
ZZZZZZ		1	15:05									
ZZZZZZ		1	15:09									
ZZZZZZ		1	15:14									
ZZZZZZ		1	15:18									
ZZZZZZ		1	15:23									
CCV		1	15:27	AL	AS	CD	CA	CR	CU FE PB MG	NI		ZN
CCB		1	15:32	AL	AS	CD	CA	CR	CU FE PB MG	NI		ZN
ZZZZZZ		1	15:36									
ZZZZZZ		5	15:41									
ZZZZZZ		5	15:45									
ZZZZZZ		5	15:50									
ZZZZZZ		5	15:54									

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Instrument ID: THERMO ICAP 6500 **File Name:** IBD21A

Date: 4/21/2011 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements					
ZZZZZZ		1	15:59						
ZZZZZZ		1	16:04						
ZZZZZZ		1	16:08						
ZZZZZZ		1	16:13						
ZZZZZZ		1	16:17						
CCV		1	16:22	AL	AS	CD CA CR	CU FE PB MG	NI	ZN
CCB		1	16:26	AL	AS	CD CA CR	CU FE PB MG	NI	ZN
ZZZZZZ		1	16:31						
ZZZZZZ		1	16:35						
ZZZZZZ		1	16:40						
ZZZZZZ		5	16:44						
ZZZZZZ		1	16:49						
ZZZZZZ		1	16:53						
ZZZZZZ		1	16:58						
ZZZZZZ		1	17:02						
ZZZZZZ		1	17:07						
ZZZZZZ		1	17:11						
CCV		1	17:16	AL	AS	CD CA CR	CU FE PB MG	NI	ZN
CCB		1	17:20	AL	AS	CD CA CR	CU FE PB MG	NI	ZN
ZZZZZZ		1	17:25						
ZZZZZZ		1	17:29						
ZZZZZZ		1	17:34						
ZZZZZZ		1	17:38						
ZZZZZZ		1	17:43						
ZZZZZZ		1	17:47						
ZZZZZZ		1	17:52						
ZZZZZZ		1	17:56						
ZZZZZZ		1	18:01						
ZZZZZZ		1	18:05						
CCV		1	18:10	AL	AS	CD CA CR	CU FE PB MG	NI	ZN
CCB		1	18:14	AL	AS	CD CA CR	CU FE PB MG	NI	ZN
ZZZZZZ		1	18:19						
ZZZZZZ		1	18:24						
ZZZZZZ		1	18:28						
ZZZZZZ		1	18:33						
ZZZZZZ		1	18:37						
ZZZZZZ		1	18:42						
ZZZZZZ		1	18:47						
ZZZZZZ		1	18:51						
ZZZZZZ		1	18:56						
ZZZZZZ		1	19:00						
CCV		1	19:05	AL	AS	CD CA CR	CU FE PB MG	NI	ZN
CCB		1	19:09	AL	AS	CD CA CR	CU FE PB MG	NI	ZN
ZZZZZZ		1	19:14						
ZZZZZZ		1	19:18						
ZZZZZZ		1	19:23						
ZZZZZZ		1	19:28						
ZZZZZZ		1	19:32						
ZZZZZZ		1	19:37						
ZZZZZZ		1	19:41						
ZZZZZZ		1	19:46						

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Instrument ID: THERMO ICAP 6500 **File Name:** IBD21A

Date: 4/21/2011 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements										
ZZZZZZ		1	19:51											
ZZZZZZ		1	19:55											
CCV		1	20:00	AL	AS	CD	CA	CR	CU	FE	PB	MG	NI	ZN
CCB		1	20:04	AL	AS	CD	CA	CR	CU	FE	PB	MG	NI	ZN
ZZZZZZ		5	20:09											
ZZZZZZ		1	20:13											
ZZZZZZ		1	20:18											
ZZZZZZ		1	20:22											
ZZZZZZ		1	20:27											
ZZZZZZ		2	20:31											
SE1685-024R	2W-SD-SD120-0001R	5	20:36	AS		CD		CR	CU		PB		NI	ZN
CCV		1	20:41	AL	AS	CD	CA	CR	CU	FE	PB	MG	NI	ZN
CCB		1	20:45	AL	AS	CD	CA	CR	CU	FE	PB	MG	NI	ZN

FORM XIV - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Concentration Units: ug/L

SAMPLE: ICV

File: IBD21A Apr 21, 2011 12:22

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	9703.00	97.0
ARSENIC	400.0	384.60	96.2
CADMIUM	400.0	393.50	98.4
CALCIUM	10000.0	9943.00	99.4
CHROMIUM	400.0	395.10	98.8
COPPER	400.0	392.60	98.2
IRON	10000.0	9981.00	99.8
LEAD	400.0	400.30	100.1
MAGNESIUM	10000.0	10050.00	100.5
NICKEL	400.0	394.30	98.6
ZINC	400.0	395.80	99.0

SAMPLE: CCV

File: IBD21A Apr 21, 2011 12:45

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12540.00	100.3
ARSENIC	500.0	493.80	98.8
CADMIUM	500.0	500.50	100.1
CALCIUM	12500.0	12620.00	101.0
CHROMIUM	500.0	507.40	101.5
COPPER	500.0	503.00	100.6
IRON	12500.0	12600.00	100.8
LEAD	500.0	507.00	101.4
MAGNESIUM	12500.0	12730.00	101.8
NICKEL	500.0	504.40	100.9
ZINC	500.0	501.80	100.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Concentration Units: ug/L

SAMPLE: CCV

File: IBD21A Apr 21, 2011 13:39

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12510.00	100.1
ARSENIC	500.0	496.80	99.4
CADMIUM	500.0	497.80	99.6
CALCIUM	12500.0	12350.00	98.8
CHROMIUM	500.0	509.60	101.9
COPPER	500.0	505.70	101.1
IRON	12500.0	12630.00	101.0
LEAD	500.0	511.00	102.2
MAGNESIUM	12500.0	12700.00	101.6
NICKEL	500.0	504.30	100.9
ZINC	500.0	502.50	100.5

SAMPLE: CCV

File: IBD21A Apr 21, 2011 14:33

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12530.00	100.2
ARSENIC	500.0	494.00	98.8
CADMIUM	500.0	496.30	99.3
CALCIUM	12500.0	12320.00	98.6
CHROMIUM	500.0	507.20	101.4
COPPER	500.0	500.00	100.0
IRON	12500.0	12650.00	101.2
LEAD	500.0	511.80	102.4
MAGNESIUM	12500.0	12540.00	100.3
NICKEL	500.0	500.40	100.1
ZINC	500.0	501.70	100.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Concentration Units: ug/L

SAMPLE: CCV X

File: IBD21A Apr 21, 2011 19:05

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12460.00	99.7
ARSENIC	500.0	499.80	100.0
CADMIUM	500.0	472.20	94.4
CALCIUM	12500.0	10370.00	83.0•
CHROMIUM	500.0	514.20	102.8
COPPER	500.0	509.10	101.8
IRON	12500.0	12880.00	103.0
LEAD	500.0	537.20	107.4
MAGNESIUM	12500.0	12100.00	96.8
NICKEL	500.0	492.90	98.6
ZINC	500.0	511.80	102.4

SAMPLE: CCV

File: IBD21A Apr 21, 2011 20:00

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12470.00	99.8
ARSENIC	500.0	503.20	100.6
CADMIUM	500.0	470.20	94.0
CALCIUM	12500.0	10080.00	80.6• X
CHROMIUM	500.0	521.50	104.3
COPPER	500.0	514.60	102.9
IRON	12500.0	12950.00	103.6
LEAD	500.0	546.10	109.2
MAGNESIUM	12500.0	12030.00	96.2
NICKEL	500.0	496.80	99.4
ZINC	500.0	518.20	103.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Concentration Units: ug/L

SAMPLE: CCV

File: IBD21A Apr 21, 2011 20:41

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12480.00	99.8
ARSENIC	500.0	502.30	100.5
CADMIUM	500.0	465.70	93.1
CALCIUM	12500.0	9605.00	76.8 *
CHROMIUM	500.0	522.50	104.5
COPPER	500.0	514.90	103.0
IRON	12500.0	13070.00	104.6
LEAD	500.0	548.60	109.7
MAGNESIUM	12500.0	11930.00	95.4
NICKEL	500.0	494.20	98.8
ZINC	500.0	519.50	103.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Concentration Units: ug/L

SAMPLE: PQL

File: IBD21A Apr 21, 2011 12:31

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	303.50	101.2
ARSENIC	8.0	9.35	116.9
CADMIUM	5.0	5.00	100.0
CALCIUM	100.0	89.54	89.5
CHROMIUM	10.0	10.12	101.2
COPPER	25.0	25.44	101.8
IRON	100.0	103.60	103.6
LEAD	5.0	4.54	90.8
MAGNESIUM	100.0	100.40	100.4
NICKEL	10.0	10.49	104.9
ZINC	10.0	20.11	100.6

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Concentration Units: ug/L

SAMPLE: ICB

File: IBD21A Apr 21, 2011 12:26

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	-12.380	J
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	-5.267	J
NICKEL	0.640	U
ZINC	0.380	U

SAMPLE: CCB

File: IBD21A Apr 21, 2011 12:49

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	-10.410	J
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.380	U

SAMPLE: CCB

File: IBD21A Apr 21, 2011 13:44

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	-10.230	J
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	3.696	J
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.852	J

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Concentration Units: ug/L

SAMPLE: CCB
File: IBD21A Apr 21, 2011 14:38

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	-17.620	J
CHROMIUM	0.670	U
COPPER	-0.563	J
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.474	J

SAMPLE: CCB
File: IBD21A Apr 21, 2011 15:32

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.060	U
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.487	J

SAMPLE: CCB
File: IBD21A Apr 21, 2011 16:26

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	-12.540	J
CHROMIUM	0.670	U
COPPER	-1.252	J
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.380	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Concentration Units: ug/L

SAMPLE: CCB

File: IBD21A Apr 21, 2011 20:04

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.060	U
CHROMIUM	0.670	U
COPPER	-2.207	J
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.380	U

SAMPLE: CCB

File: IBD21A Apr 21, 2011 20:45

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	-16.570	J
CHROMIUM	0.670	U
COPPER	-2.605	J
IRON	3.060	J
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.380	U

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-1

Concentration Units: ug/L

SAMPLE: ICSA

File: IBD21A Apr 21, 2011 12:35

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	502700	100.5
ARSENIC	0	4	
CADMIUM	0	2	
CALCIUM	500000	473900	94.8
CHROMIUM	3	6	
COPPER	0	6	
IRON	200000	185800	92.9
LEAD	0	-3	
MAGNESIUM	500000	447500	89.5
NICKEL	0	2	
ZINC	0	4	

SAMPLE: ICSAB

File: IBD21A Apr 21, 2011 12:40

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	507400	101.5
ARSENIC	100	101	101.0
CADMIUM	1000	923	92.3
CALCIUM	500000	476900	95.4
CHROMIUM	500	490	98.0
COPPER	500	534	106.8
IRON	200000	187700	93.8
LEAD	50	41	82.0
MAGNESIUM	500000	449000	89.8
NICKEL	1000	888	88.8
ZINC	1000	915	91.5

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG90025	ASTM D2216	11-APR-11	08-APR-11	U 1 %	1 %	N/A
MBLANK	WG90073	ASTM D2216	12-APR-11	11-APR-11	U 1 %	1 %	N/A

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG90025-2	LCS	WG90025	11-APR-11	08-APR-11	%	90	90.	100	80-120	
WG90073-2	LCS	WG90073	12-APR-11	11-APR-11	%	90	90.	100	80-120	

Quality Control Report

Duplicate Sample Summary Report

Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG90025-4	SE1685-16	WG90025	11-APR-11	%	36.	35.	4	20

TOTAL SOLIDS BATCH REPORT
Apr 11 2011, 11:46 am
Batch: WG90025

Sample	Matrix	Type	Batch	Prep Date	Tare	Initial	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SE1672-2	SL	SAMP	WG90025	08-APR-11	1.292 g	6.391 g	5.843 g	MMM	11-APR-11	89.2530	89. %		
SE1672-3	SL	SAMP	WG90025	08-APR-11	1.287 g	5.507 g	5.091 g	MMM	11-APR-11	90.1420	90. %		
SE1672-4	SL	SAMP	WG90025	08-APR-11	1.288 g	5.659 g	5.189 g	MMM	11-APR-11	89.2470	89. %		
SE1673-2	SL	SAMP	WG90025	08-APR-11	1.294 g	6.03 g	4.621 g	MMM	11-APR-11	70.2490	70. %		
SE1673-3	SL	SAMP	WG90025	08-APR-11	1.292 g	6.687 g	5.509 g	MMM	11-APR-11	78.1650	78. %		
SE1673-4	SL	SAMP	WG90025	08-APR-11	1.292 g	5.839 g	4.949 g	MMM	11-APR-11	80.4270	80. %		
SE1678-6	SL	SAMP	WG90025	08-APR-11	1.286 g	5.42 g	5.316 g	MMM	11-APR-11	97.4840	97. %		
SE1678-7	SL	SAMP	WG90025	08-APR-11	1.286 g	6.011 g	5.884 g	MMM	11-APR-11	97.3120	97. %		
SE1678-8	SL	SAMP	WG90025	08-APR-11	1.284 g	5.494 g	5.332 g	MMM	11-APR-11	96.1520	96. %		
SE1678-9	SL	SAMP	WG90025	08-APR-11	1.284 g	5.329 g	5.078 g	MMM	11-APR-11	93.7950	94. %		
SE1685-1	SL	SAMP	WG90025	08-APR-11	1.287 g	7.288 g	4.651 g	MMM	11-APR-11	56.0570	56. %		
SE1685-10	SL	SAMP	WG90025	08-APR-11	1.296 g	7.137 g	3.972 g	MMM	11-APR-11	45.8140	46. %		
SE1685-16	SL	SAMP	WG90025	08-APR-11	1.283 g	6.642 g	3.239 g	MMM	11-APR-11	36.4990	36. %		
SE1685-17	SL	SAMP	WG90025	08-APR-11	1.289 g	6.565 g	3.327 g	MMM	11-APR-11	38.6280	39. %		
SE1685-22	SL	SAMP	WG90025	08-APR-11	1.293 g	8.616 g	3.116 g	MMM	11-APR-11	24.8940	25. %		
SE1685-3	SL	SAMP	WG90025	08-APR-11	1.285 g	6.192 g	5.914 g	MMM	11-APR-11	94.3350	94. %		
SE1685-4	SL	SAMP	WG90025	08-APR-11	1.278 g	7.733 g	2.404 g	MMM	11-APR-11	17.4440	17. %		
SE1685-7	SL	SAMP	WG90025	08-APR-11	1.28 g	5.942 g	2.526 g	MMM	11-APR-11	26.7270	27. %		
SE1685-8	SL	SAMP	WG90025	08-APR-11	1.28 g	8.701 g	4.076 g	MMM	11-APR-11	37.6770	38. %		
SE1685-9	SL	SAMP	WG90025	08-APR-11	1.283 g	7.881 g	2.962 g	MMM	11-APR-11	25.4470	25. %		
WG90025-1	SL	MBLANK	WG90025	08-APR-11	1.292 g	1.292 g	1.292 g	MMM	11-APR-11	0.0000	1 %		
WG90025-2	SL	LCS	WG90025	08-APR-11	1.293 g	6.285 g	5.792 g	MMM	11-APR-11	90.1240	90. %	100	
WG90025-3	SL	DUP	WG90025	08-APR-11	1.29 g	7.728 g	5.924 g	MMM	11-APR-11	71.9790	72. %		2
WG90025-4	SL	DUP	WG90025	08-APR-11	1.287 g	5.632 g	2.806 g	MMM	11-APR-11	34.9600	35. %		4

Comments:

SE1672-2	DOD
SE1672-3	DOD
SE1672-4	DOD
SE1678-6	paint chips
SE1678-7	paint chips
SE1678-8	paint chips
SE1678-9	paint chips
WG90025-1	SE1673-2
WG90025-2	SE1673-2
WG90025-3	SE1673-2
WG90025-4	SE1685-16

Entered by: _____ Date: 4-11-11 Accepted by: _____ Date: 04/11/11

Katahdin Analytical Services 5000025

KATAHDIN ANALYTICAL SERVICES, INC.

TOTAL SOLIDS: ASTM D2216		PQL: 0.10%	BALANCE ID: 30050012
TOTAL VOLATILE SOLIDS: SM2540 G	E160.4	PQL: 0.10%	ASTM CLASS 1 WEIGHTS W690025/B155008
ANALYST IN: MMM/AME	ANALYST OUT: AME		
DATE IN: 4-8-11	DATE OUT: 4-9-11		
TIME IN: 1015	TIME OUT: 0700		
TEMP IN: 101°C	TEMP OUT: 103°C		
Oven ID: 107N0042	Muffle Oven ID:		
CHECKED BY:	DATE: 04/11/11		

TRUE WT (g)	INITIAL WT (g)	FINAL WT (g)
2.0000	1.999	2.000
5.0000	5.000	5.000
10.0000	10.000	10.001
100.0000		

	SAMPLE ID	DISH ID	DISH WT (g)	DISH WET WT (g)	DISH DRY WT (g)	DISH/ASH WT (g)	TIME
1	Blank	1	1.292	1.292	1.292		630
2	LCS	2	1.293	6.285	5.792		31
	SE1673-2	3	1.294	6.030	4.621		32
3	-2 Dup	4	1.290	7.728	5.924		33
	SE1673-3	5	1.292	6.687	5.509		34
	-4	6	1.292	5.839	4.949		35
	SE1672-2	7	1.292	6.391	5.843		36
	-3	8	1.287	5.507	5.091		37
	-4	9	1.288	5.659	5.189		38
	SE1678-6	10	1.286	5.420	5.316		39
	-7	11	1.286	6.011	5.884		40
	-8	12	1.284	5.494	5.332		41
	-9	13	1.284	5.329	5.078		42
	SE1685-1	14	1.287	7.288	4.651		43
	-3	15	1.285	6.192	5.914		44
	-4	16	1.278	7.733	2.404		45
	-7	17	1.280	5.942	2.526		46
	-8	18	1.280	8.701	4.076		47
	-9	19	1.283	7.881	2.962		48
	-10	20	1.296	7.137	3.972		49
	-16	21	1.283	6.642	3.239		50
4	-16 Dup	22	1.287	5.632	2.806		51
	-17	23	1.289	6.565	3.327		52
	-22	24	1.293	8.616	3.116		53

TOTAL SOLIDS BATCH REPORT
Apr 12 2011, 09:35 am
Batch: WG90073

Sample	Matrix	Type	Batch	Prep Date	Tare	Initial	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SE1685-23	SL	SAMP	WG90073	11-APR-11	.984 g	6.016 g	1.466 g		12-APR-11	9.5790	9.6 %		
SE1685-24	SL	SAMP	WG90073	11-APR-11	1.003 g	7.555 g	1.784 g		12-APR-11	11.9200	12. %		
SE1685-25	SL	SAMP	WG90073	11-APR-11	1.018 g	6.039 g	1.613 g		12-APR-11	11.8500	12. %		
SE1685-26	SL	SAMP	WG90073	11-APR-11	1.307 g	6.066 g	2.52 g		12-APR-11	25.4880	25. %		
SE1685-28	SL	SAMP	WG90073	11-APR-11	1.305 g	7.096 g	1.854 g		12-APR-11	9.4800	9.5 %		
SE1685-29	SL	SAMP	WG90073	11-APR-11	.98 g	6.882 g	2.117 g		12-APR-11	19.2650	19. %		
SE1746-1	SL	SAMP	WG90073	11-APR-11	1.298 g	5.758 g	1.834 g		12-APR-11	12.0180	12. %		
WG90073-1	SL	MBLANK	WG90073	11-APR-11	.998 g	.998 g	.998 g		12-APR-11	0.0000	1 %		
WG90073-2	SL	LCS	WG90073	11-APR-11	.959 g	5.965 g	5.454 g		12-APR-11	89.7920	90. %	100	
WG90073-3	SL	DUP	WG90073	11-APR-11	1.3 g	5.839 g	1.846 g		12-APR-11	12.0290	12. %		0

Comments:

WG90073-1	SE1746-1
WG90073-2	SE1746-1
WG90073-3	SE1746-1

Entered by: ARE Date: 4-12-11 Accepted by: Date: 04/12/11

Katahdin Analytical Services 5000027

KATAHDIN ANALYTICAL SERVICES, INC.

WG90073
R155177

TOTAL SOLIDS: ASTM D2216		PQL: 0.10%	BALANCE ID: 3005 0012
TOTAL VOLATILE SOLIDS: SM2540 G	E160.4	PQL: 0.10%	ASTM CLASS 1 WEIGHTS
ANALYST IN: MMM/ARE	ANALYST OUT: ARE		
DATE IN: 4-11-11	DATE OUT: 4-12-11		
TIME IN: 1155	TIME OUT: 7:60		
TEMP IN: 103°	TEMP OUT: 103°		
Oven ID: 107N0042	Muffle Oven ID:		
CHECKED BY:	DATE: 04/12/11		

TRUE WT (g)	INITIAL WT (g)	FINAL WT (g)
2.0000	2.000	2.000
5.0000	5.000	5.001
10.0000	10.001	10.000
100.0000		

SAMPLE ID	DISH ID	DISH WT (g)	DISH WET WT (g)	DISH DRY WT (g)	DISH/ASH WT (g)	TIME
Blank	1	0.998	6.998	0.998		8:00
LCS	2	0.959	5.965	5.454		:01
SE1746-1	3	1.298	5.756	~~1.116~~ 1.834		02
↓ Dup	4	1.300	5.839	1.846		03
SE1685-23	5	0.984	6.016	1.466		04
24	6	1.003	7.555	1.784		05
25	7	1.018	6.039	1.613		06
26	8	1.307	6.066	2.520		07
28	9	1.305	7.096	1.854		08
29	10	0.980	6.882	2.117		09

Katahdin Analytical Services 5000028

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **A. BERNHARDT** **DATE: JULY 14, 2011**

FROM: **A. COGNETTI** **COPIES: DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – PAH/PEST/PCB**
NSB NEW LONDON, CTO WE55
SAMPLE DELIVERY GROUP (SDG) – WE55-2

SAMPLES: 13/Sediment /PAH/PEST/PCB

2W-SD-SD116-0001	2W-SD-SD117-0001	2W-SD-SD122-0001
2W-SD-SD123-0001	2W-SD-SD127-0001	2W-SD-SD130-0001
2W-SD-SD135-0001	2W-SD-SD140-0001	2W-SD-SD142-0001
2W-SD-SD144-0001	2W-SD-SD146-0001	FD-040511-01
FD-040511-02		

Overview

The sample set for NSB New London, CTO WE55, SDG WE55-2 consisted of thirteen (13) sediment environmental samples. All samples were analyzed for polynuclear aromatic hydrocarbons (PAH), select pesticides and polychlorinated biphenyls (PCBs). The select pesticides were 4,4'-DDD, 4,4'-DDE and 4,4'-DDT. There are two (2) field duplicate pairs associated with this SDG: 2W-SD-SD127-0001/FD040511-01 and 2W-SD-SD122-0001/FD040511-02.

The samples were collected by Tetra Tech NUS on April 5 and 6, 2011 and analyzed by Katahdin Analytical Services. All of the samples were analyzed in accordance with USEPA SW-846 Method 8270C SIM for PAH, 8081 for pesticides and 8082 for PCB analytical and reporting protocol.

Data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • GC/MS Instrument Tuning and System Performance
* • Blank Results
• Initial and Continuing Calibration
• Surrogate Spike Recoveries
• Internal Standard Recoveries
• Matrix Spike / Matrix Spike Duplicate Results
* • Laboratory Control Sample Recoveries
* • Field Duplicate Precision
* • Detection Limits
• Compound Identification and Quantification

The asterisk (*) indicates that all quality control criteria were met for this parameter. Qualified (if applicable) analytical results are summarized in Appendix A. Results as reported by the laboratory are presented in Appendix B. Appendix C contains Region I worksheets, and Appendix D contains the documentation to support the findings as discussed in this data validation report. An EPA Region 1 tier III validation was performed on the data in this SDG. The text of this report has been formulated to address only those problem areas affecting data quality.

INITIAL AND CONTINUING CALIBRATION

The PEST continuing calibration verification percent differences (%Ds) for 4,4'-DDE and 4,4'-DDT exceeded the 20% quality control limit on April 21, 2011 @ 23:38 on column ZB-MULTIRESIDUE-2 which is identified on form 10 as GC Column (1). The positive 4,4'-DDE and 4,4'-DDT results were qualified as estimated (J) in the affected samples 2W-SD-SD146-0001, 2W-SD-SD144-0001, 2W-SD-SD140-0001, 2W-SD-SD127-0002, 2W-SD-SD122-0001, 2W-SD-SD130-0001, 2W-SD-SD123-0001, 2W-SD-SD135-0001, FD-040511-01 and FD-040511-02.

The PEST continuing calibration %D for 4,4'-DDT exceeded the 20% quality control limit on April 26, 2011 @13:06 on column ZB-MULTIRESIDUE-2 which is identified on form 10 as GC Column (1). The positive 4,4'-DDT results were qualified as estimated (J) in the affected samples 2W-SD-SD116-0001, 2W-SD-SD117-0001, 2W-SD-SD146-0001-DL, 2W-SD-SD123-0001-DL and 2W-SD-SD142-0001-DL. No action was taken on the 4,4'-DDT results in affected samples 2W-SD-SD142-0001, 2W-SD-SD144-0001-DL and 2W-SD-SD116-0001-DL because these results were not used for reporting purposes.

The PEST continuing calibration %D for 4,4'-DDT exceeded the 20% quality control limit on May 11, 2011 @ 17:15, 18:07 and May 12, 2011 @ 11:58 and 14:16 on column ZB-MULTIRESIDUE-2 which is identified on form 10 as GC Column (1). No action was taken on the positive 4,4'-DDT result in the affected sample 2W-SD-SD135-0001-DL because the positive result was taken from the other column. No action was taken on the 4,4'-DDT result in the affected sample 2W-SD-SD130-0001-DL because the result was not used for reporting purposes.

The PCB continuing calibration %D for Aroclor 1260 exceeded the 20% quality control limit on April 20, 2011 @ 17:30 on column ZB-MULTIRESIDUE2 which is identified on form 10 as GC column (2). No action was taken on the positive Aroclor 1260 results in the affected samples 2W-SD-SD130-0001 and 2W-SD-SD140-0001 because the positive result was reported from the other column. No action was taken on the nondetected Aroclor 1260 results in the affected samples 2W-SD-SD116-0001 and 2W-SD-SD127-0001.

The PCB continuing calibration %D for Aroclor 1260 exceeded the 20% quality control limit on April 22, 2011 @ 7:27 on column ZB-MULTIRESIDUE2 which is identified on form 10 as GC column (2). The positive Aroclor 1260 result in the affected sample 2W-SD-SD123-0001 was qualified as estimated (J). No action was taken on the positive result in sample FD-040511-02 because the result was reported from the other column. No action was taken on the nondetected results in the affected samples 2W-SD-SD117-0001, 2W-SD-SD142-0001, 2W-SD-SD135-0001 and FD-040511-01.

SURROGATE SPIKE RECOVERIES

The percent recovery (%R) of PAH surrogate fluorene-d10 diluted out in sample 2W-SD-SD142-0001-DL. No action was taken.

The following table summarizes the noncompliant PEST surrogate spike recoveries.

Sample	Surrogate Recoveries	Column	Validated	Qualifications
2W-SD-SD144-0001	+ (1)	1	No	
2W-SD-SD140-0001	+ (1) X (1)	Both	Yes	J
2W-SD-SD127-0001	+ (1)	1	No	
2W-SD-SD130-0001	+ (1)	1	No	
2W-SD-SD123-0001	+ (1)	1	No	
2W-SD-SD135-0001	+ (1)	1	No	
2W-SD-SD117-0001	+ (1) X (2)	Both	Yes	J

Surrogate Recoveries: + Recovery greater than upper limit
X Recovery less than lower limit

Number of noncompliant surrogate recoveries noted in ( ).

The following table summarizes the noncompliant PCB surrogate spike recoveries.

Sample	Surrogate Recoveries	Column	Validated	Qualifications
2W-SD-SD140-0001	X (4)	Both	Yes	J, UJ
2W-SD-SD116-0001	X (3)	Both	Yes	J, UJ
2W-SD-SD146-0001	X (4)	Both	Yes	J, UJ
2W-SD-SD144-0001	X (4)	Both	Yes	J, UJ
2W-SD-SD122-0001	X (4)	Both	Yes	J, UJ
FD-040511-01	X (4)	Both	Yes	J, UJ
FD-040511-02	X (3)	Both	Yes	J, UJ
2W-SD-SD123-0001	X (2)	Column 1	Yes	J, UJ

Sample	Surrogate Recoveries	Column	Validated	Qualifications
2W-SD-SD135-0001	X (3)	Both	Yes	J, UJ
2W-SD-SD142-0001	X (4)	Both	Yes	J, UJ
2W-SD-SD117-0001	X (4)	Both	Yes	J, UJ

Surrogate Recoveries: + Recovery greater than upper limit
X Recovery less than lower limit

Number of noncompliant surrogate recoveries noted in ( ).

INTERNAL STANDARD RECOVERIES

Sample 2W-SD-SD142-0001 had a low internal standard area count for internal standard perylene-d12. Positive results in sample 2W-SD-SD142-0001 in the target analytes quantitated using this internal standard were qualified as estimated (J). Low area counts for internal standard perylene-d12 were also noted in the spiked samples 2W-SD-SD140-0001 and 2W-SD-SD123-0001. No action was taken.

Copies of the continuing calibration standards for the dates when the above sample were analyzed are included in Appendix C as reference.

MATRIX SPIKE (MS) / MATRIX SPIKE DUPLICATE (MSD)

The %Rs of several PAHs were less than 10% in both the MS/MSD of spiked sample 2W-SD-SD140-0001. The PAHs were phenanthrene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene and benzo(g,h,i)perylene. Dibenzo(a,h)anthracene had %Rs less than the lower quality control limit but greater than 10% in the MS/MSD. The positive results of the aforementioned analytes were qualified as estimated (J) in sample 2W-SD-SD140-0001.

The %Rs of several PAHs were greater than the upper quality control limit in both the MS/MSD in spiked sample 2W-SD-SD123-0001. The PAHs were fluoranthene, pyrene, chrysene, benzo(b)fluoranthene and benzo(a)pyrene. The positive results of the aforementioned analytes were qualified as estimated (J) in sample 2W-SD-SD123-0001.

The %Rs of Aroclor 1260 were greater than the upper quality control limit in both the MS/MSD in spiked sample 2W-SD-SD123-0001. The positive Aroclor result in sample 2W-SD-SD123-0001 was qualified as estimated (J).

DIFFERENCE BETWEEN COLUMNS/DETECTORS

The relative percent difference (RPD) between columns in the pesticide analyses was greater than 40% in the following samples. Positive results were qualified as estimated (J).

Sample	Analyte	RPD	Qualification
2W-SD-SD122-0001	4,4'-DDT	48.9	J
2W-SD-SD130-0001	4,4'-DDT	43.3	J
2W-SD-SD140-0001	4,4'-DDT	48.2	J
FD-040511-02	4,4'-DDT	61.6	J

The RPD between columns in the PCB analyses was greater than 40% in the following samples. Positive results were qualified as estimated (J).

Sample	Analyte	RPD	Qualification
2W-SD-SD130-0001	Aroclor 1260	51.8	J
2W-SD-SD140-0001	Aroclor 1260	47.2	J

PERCENT SOLIDS

The following samples contained less than 30% solids; 2W-SD-SD116-0001, 2W-SD-SD117-0001, 2W-SD-SD122-0001, 2W-SD-SD123-0001, 2W-SD-SD130-0001, 2W-SD-SD135-0001, 2W-SD-SD140-0001, 2W-SD-SD144-0001, 2W-SD-SD146-0001 and FD-040511-02. The positive and nondetected results in these samples were qualified as estimated (J) and (UJ), respectively in all fractions.

NOTES

Contaminants were detected in the PEST laboratory method blank associated with batch WG90237.

Contaminant	Maximum Concentration (ug/kg)	Action level (ug/kg)
4,4'-DDE	0.13	0.65
4,4'-DDT	0.20	1.0
4,4'-DDD	0.80	4.0

An action level of 5X the maximum concentration of contaminant was established in order to evaluate samples for blank contamination. Sample aliquot, percent solids and dilution factors were taken into account when applying the action level. No validation actions were warranted as all samples were greater than the action level.

The MSD %R of benzo(b)fluoranthene was greater than the upper quality control limit in spiked sample 2W-SD-SD127-0001. No action was taken because the %R in the MS and relative percent difference (RPD) were within quality control limits.

The MS %R of benzo(a)anthracene and the MSD %R of indeno(1,2,3-cd)pyrene were greater than the upper quality control limits in spiked sample 2W-SD-SD123-0001. No action was taken.

The MSD %R of 4,4'-DDT was greater than the upper quality control limit in spiked sample 2W-SD-SD140-0001. No action was taken because the %R in the MS and RPD were within quality control limits.

The MS/MSD %Rs of 4,4'-DDE was less than the lower quality control limit but greater than 10% in spiked sample 2W-SD-SD123-0001. No action was taken. The positive 4,4'-DDE result was taken from a dilution.

Some samples were analyzed at a dilution due to high PAH concentrations exceeding the instrument calibration range. Results from the diluted analyses for target compounds exceeding calibration range were combined with the results of target compounds in the undiluted sample in the Appendix A reported sample results.

Sample	Dilution	Number of PAHs Exceeding Instrument Calibration Limits
2W-SD-SD135-0001	2X	1
2W-SD-SD142-0001	9X	7
2W-SD-SD144-0001	9X	8
2W-SD-SD146-0001	2X	1

Some samples were analyzed at a dilution in the PEST fraction due to high concentrations of analytes exceeding instrument calibration range.

Sample	Dilution
2W-SD-SD116-0001	5X, 4,4'-DDD only
2W-SD-SD123-0001	20X
2W-SD-SD130-0001	2X, 4,4'-DDD only
2W-SD-SD135-0001	5000X
2W-SD-SD142-0001	10X
2W-SD-SD144-0001	20X
2W-SD-SD146-0001	50X

Positive results reported below the limit of quantitation (LOQ) but above the method detection limit (MDL) for the organic analyses were qualified as estimated, (J).

Nondetected results were reported to the limit of detection (LOD).

EXECUTIVE SUMMARY

Laboratory Performance: Continuing calibration %Ds exceeded quality control limits in the PEST and PCB fractions resulting in the qualification of data. Several samples had surrogate spike noncompliances in the PEST and PCB fractions. The RPD between columns in the pesticide and PCB analyses exceeded quality control limits for 4,4'-DDT and Aroclor 1260 in several samples.

Other Factors Affecting Data Quality: Ten samples contained less than 30% solids. The %Rs of several PAHs were outside quality control limits in both the MS/MSD of spiked sample 2W-SD-SD140-0001 and 2W-SD-SD123-0001. The %Rs of Aroclor 1260 were greater than the upper quality control limit in both the MS/MSD in spiked sample 2W-SD-SD123-0001.

The data for these analyses were reviewed with reference to the criteria for SW-846 8270C SIM, 8081 and 8082 listed in the project specific SAP, the "USEPA Region 1 Laboratory Data Validation Functional Guidelines – Part II" (12/96), and the (DOD) QSM document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

Ann Cognetti

Tetra Tech NUS
Ann Cognetti
Chemist/ Data Validator

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C – Regional Worksheets
4. Appendix D - Support Documentation

APPENDIX A

QUALIFIED LABORATORY RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can be any number of issues; e.g. poor chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 02625	NSAMPLE	2W-SD-SD116-0001			2W-SD-SD117-0001			2W-SD-SD122-0001			2W-SD-SD123-0001		
SDG: WE55-2	LAB_ID	SE1778-20			SE1778-22			SE1778-8			SE1778-13		
FRACTION: PAH	SAMP_DATE	4/6/2011			4/6/2011			4/5/2011			4/6/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	7.1			23.1			23.4			13.7		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		79	UJ	Y	27	UJ	Y	3.8	UJ	Y	40	UJ	Y
2-METHYLNAPHTHALENE		79	UJ	Y	27	UJ	Y	22	UJ	Y	40	UJ	Y
ACENAPHTHENE		79	UJ	Y	27	UJ	Y	5.8	J	PY	19	J	PY
ACENAPHTHYLENE		79	UJ	Y	3.4	J	PY	9.2	J	PY	18	J	PY
ANTHRACENE		79	UJ	Y	7.6	J	PY	19	J	PY	34	J	PY
BENZO(A)ANTHRACENE		85	J	PY	71	J	Y	190	J	Y	370	J	Y
BENZO(A)PYRENE		160	J	PY	85	J	Y	240	J	Y	460	J	DY
BENZO(B)FLUORANTHENE		290	J	Y	160	J	Y	420	J	Y	790	J	DY
BENZO(G,H,I)PERYLENE		180	J	Y	71	J	Y	140	J	Y	290	J	Y
BENZO(K)FLUORANTHENE		83	J	PY	60	J	Y	120	J	Y	250	J	Y
CHRYSENE		99	J	PY	94	J	Y	250	J	Y	470	J	DY
DIBENZO(A,H)ANTHRACENE		63	J	PY	25	J	PY	42	J	PY	83	J	Y
FLUORANTHENE		180	J	Y	180	J	Y	370	J	Y	680	J	DY
FLUORENE		79	UJ	Y	27	UJ	Y	9.1	J	PY	22	J	PY
INDENO(1,2,3-CD)PYRENE		210	J	Y	90	J	Y	180	J	Y	360	J	Y
NAPHTHALENE		79	UJ	Y	27	UJ	Y	22	UJ	Y	40	UJ	Y
PHENANTHRENE		86	J	PY	81	J	Y	160	J	Y	230	J	Y
PYRENE		200	J	Y	190	J	Y	440	J	Y	840	J	DY

PROJ_NO: 02625	NSAMPLE	2W-SD-SD127-0001			2W-SD-SD130-0001			2W-SD-SD135-0001			2W-SD-SD135-0001DL		
SDG: WE55-2	LAB_ID	SE1778-7			SE1778-9			SE1778-16			SE1778-16DL		
FRACTION: PAH	SAMP_DATE	4/5/2011			4/5/2011			4/6/2011			4/6/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	58.2			13.5			20.0			20.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		15	U		39	UJ	Y	25	J	PY			
2-METHYLNAPHTHALENE		15	U		39	UJ	Y	16	J	PY			
ACENAPHTHENE		14	J	P	7.6	J	PY	53	J	PY			
ACENAPHTHYLENE		15	U		9.2	J	PY	19	J	PY			
ANTHRACENE		3.7	J	P	20	J	PY	25	J	PY			
BENZO(A)ANTHRACENE		22	J	P	230	J	Y	250	J	Y			
BENZO(A)PYRENE		31			290	J	Y	290	J	Y			
BENZO(B)FLUORANTHENE		60			490	J	Y	490	J	Y			
BENZO(G,H,I)PERYLENE		26	J	P	210	J	Y	150	J	Y			
BENZO(K)FLUORANTHENE		24	J	P	160	J	Y	130	J	Y			
CHRYSENE		36			280	J	Y	340	J	Y			
DIBENZO(A,H)ANTHRACENE		8.7	J	P	60	J	PY	49	J	PY			
FLUORANTHENE		52			450	J	Y	370	J	Y			
FLUORENE		15	U		39	UJ	Y	93	J	Y			
INDENO(1,2,3-CD)PYRENE		29	J	P	240	J	Y	190	J	Y			
NAPHTHALENE		15	U		39	UJ	Y	24	J	PY			
PHENANTHRENE		20	J	P	140	J	Y	200	J	Y			
PYRENE		53			500	J	Y				740	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD140-0001			2W-SD-SD142-0001			2W-SD-SD142-0001DL			2W-SD-SD144-0001		
SDG: WE55-2	LAB_ID	SE1778-4			SE1778-18			SE1778-18DL			SE1778-3		
FRACTION: PAH	SAMP_DATE	4/5/2011			4/6/2011			4/6/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	14.4			30.7			30.7			22.7		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		40	UJ	Y	26	J	P				26	J	PY
2-METHYLNAPHTHALENE		40	UJ	Y	15	J	P				12	J	PY
ACENAPHTHENE		20	J	PY	30	J	P				47	J	Y
ACENAPHTHYLENE		12	J	PY	40	J	P				39	J	PY
ANTHRACENE		35	J	PY	88						120	J	Y
BENZO(A)ANTHRACENE		380	J	DY				1400					
BENZO(A)PYRENE		430	J	DY				1500					
BENZO(B)FLUORANTHENE		730	J	DY				2400					
BENZO(G,H,I)PERYLENE		250	J	DY	560	J	N				590	J	Y
BENZO(K)FLUORANTHENE		210	J	DY	600						530	J	Y
CHRYSENE		440	J	DY				2000					
DIBENZO(A,H)ANTHRACENE		78	J	DPY	170	J	N				180	J	Y
FLUORANTHENE		690	J	DY				3000					
FLUORENE		19	J	PY	53	J	P				86	J	Y
INDENO(1,2,3-CD)PYRENE		310	J	DY	710	J	N						
NAPHTHALENE		40	UJ	Y	18	J	P				13	J	PY
PHENANTHRENE		260	J	DY				1300					
PYRENE		830	J	DY				3500					

PROJ_NO: 02625 SDG: WE55-2 FRACTION: PAH MEDIA: SOIL	NSAMPLE	2W-SD-SD144-0001DL			2W-SD-SD146-0001			2W-SD-SD146-0001DL			FD-040511-01		
	LAB_ID	SE1778-3DL			SE1778-2			SE1778-2DL			SE1778-10		
	SAMP_DATE	4/5/2011			4/5/2011			4/5/2011			4/5/2011		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	22.7			17.2			17.2			59.0		
	DUP_OF										2W-SD-SD127-0001		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE					44	J	PY				13	U	
2-METHYLNAPHTHALENE					32	UJ	Y				13	U	
ACENAPHTHENE					110	J	Y				12	J	P
ACENAPHTHYLENE					16	J	PY				13	U	
ANTHRACENE					38	J	PY				2.3	J	P
BENZO(A)ANTHRACENE		1100	J	Y	430	J	Y				21	J	P
BENZO(A)PYRENE		1000	J	Y	440	J	Y				30		
BENZO(B)FLUORANTHENE		1400	J	Y	690	J	Y				56		
BENZO(G,H,I)PERYLENE					240	J	Y				26	J	P
BENZO(K)FLUORANTHENE					210	J	Y				21	J	P
CHRYSENE		1200	J	Y	520	J	Y				32		
DIBENZO(A,H)ANTHRACENE					80	J	Y				8.3	J	P
FLUORANTHENE		2100	J	Y	770	J	Y				46		
FLUORENE					38	J	PY				13	U	
INDENO(1,2,3-CD)PYRENE		690	J	Y	290	J	Y				30		
NAPHTHALENE					32	UJ	Y				13	U	
PHENANTHRENE		1100	J	Y	390	J	Y				20	J	P
PYRENE		2200	J	Y				1000	J	Y	50		

PROJ_NO: 02625 SDG: WE55-2 FRACTION: PAH MEDIA: SOIL	NSAMPLE	FD-040511-02		
	LAB_ID	SE1778-11		
	SAMP_DATE	4/5/2011		
	QC_TYPE	NM		
	UNITS	UG/KG		
	PCT_SOLIDS	22.6		
	DUP_OF	2W-SD-SD122-0001		
PARAMETER		RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		25	UJ	Y
2-METHYLNAPHTHALENE		25	UJ	Y
ACENAPHTHENE		5.6	J	PY
ACENAPHTHYLENE		10	J	PY
ANTHRACENE		18	J	PY
BENZO(A)ANTHRACENE		210	J	Y
BENZO(A)PYRENE		240	J	Y
BENZO(B)FLUORANTHENE		450	J	Y
BENZO(G,H,I)PERYLENE		150	J	Y
BENZO(K)FLUORANTHENE		140	J	Y
CHRYSENE		270	J	Y
DIBENZO(A,H)ANTHRACENE		45	J	PY
FLUORANTHENE		370	J	Y
FLUORENE		8.8	J	PY
INDENO(1,2,3-CD)PYRENE		190	J	Y
NAPHTHALENE		25	UJ	Y
PHENANTHRENE		170	J	Y
PYRENE		500	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD116-0001			2W-SD-SD116-0001DL			2W-SD-SD117-0001			2W-SD-SD122-0001		
SDG: WE55-2	LAB_ID	SE1778-20			SE1778-20DL			SE1778-22			SE1778-8		
FRACTION: PEST	SAMP_DATE	4/6/2011			4/6/2011			4/6/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	7.1			7.1			23.1			23.4		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD					170	J	Y	11	J	RY	41	J	Y
4,4'-DDE		24	J	Y				7.9	J	RY	21	J	CY
4,4'-DDT		41	J	CY				37	J	CRY	21	J	CPUY

PROJ_NO: 02625	NSAMPLE	2W-SD-SD123-0001DL			2W-SD-SD127-0001			2W-SD-SD130-0001			2W-SD-SD130-0001DL		
SDG: WE55-2	LAB_ID	SE1778-13DL			SE1778-7			SE1778-9			SE1778-9DL		
FRACTION: PEST	SAMP_DATE	4/6/2011			4/5/2011			4/5/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	13.7			58.2			13.5			13.5		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD		680	J	Y	3.7	J	P				110	J	Y
4,4'-DDE		110	J	Y	1.8	J	P	19	J	CY			
4,4'-DDT		140	J	C	5.7	J	C	39	J	CPUY			

PROJ_NO: 02625	NSAMPLE	2W-SD-SD135-0001DL			2W-SD-SD140-0001			2W-SD-SD142-0001DL			2W-SD-SD144-0001DL		
SDG: WE55-2	LAB_ID	SE1778-16DL			SE1778-4			SE1778-18DL			SE1778-3DL		
FRACTION: PEST	SAMP_DATE	4/6/2011			4/5/2011			4/6/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	20.0			14.4			30.7			22.7		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD		130000	J	Y	64	J	RY	640			230	J	Y
4,4'-DDE		11000	J	P	24	J	CRY	240			100	J	Y
4,4'-DDT		56000	J	Y	35	J	CPRUY	260	J	C	280	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD146-0001DL			FD-040511-01			FD-040511-02		
SDG: WE55-2	LAB_ID	SE1778-2DL			SE1778-10			SE1778-11		
FRACTION: PEST	SAMP_DATE	4/5/2011			4/5/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	17.2			59.0			22.6		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD		210	J	Y	3.4	J	P	39	J	Y
4,4'-DDE		280	J	Y	2.8	J	P	22	J	CY
4,4'-DDT		710	J	CY	7.2			19	J	CPUY

PROJ_NO: 02625	NSAMPLE	2W-SD-SD116-0001			2W-SD-SD117-0001			2W-SD-SD122-0001			2W-SD-SD123-0001		
SDG: WE55-2	LAB_ID	SE1778-20			SE1778-22			SE1778-8			SE1778-13		
FRACTION: PCB	SAMP_DATE	4/6/2011			4/6/2011			4/5/2011			4/6/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	7.1			23.1			23.4			13.7		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		16	UJ	RY	5.3	UJ	RY	5.4	UJ	RY	8.8	UJ	RY
AROCLOR-1221		16	UJ	RY	5.3	UJ	RY	5.4	UJ	RY	8.8	UJ	RY
AROCLOR-1232		20	UJ	RY	6.2	UJ	RY	6.4	UJ	RY	10	UJ	RY
AROCLOR-1242		16	UJ	RY	5.3	UJ	RY	5.4	UJ	RY	8.8	UJ	RY
AROCLOR-1248		16	UJ	RY	5.3	UJ	RY	5.4	UJ	RY	8.8	UJ	RY
AROCLOR-1254		16	UJ	RY	5.3	UJ	RY	5.4	UJ	RY	8.8	UJ	RY
AROCLOR-1260		16	UJ	RY	5.3	UJ	RY	180	J	RY	2300	J	CDRY

PROJ_NO: 02625	NSAMPLE	2W-SD-SD127-0001			2W-SD-SD130-0001			2W-SD-SD135-0001			2W-SD-SD140-0001		
SDG: WE55-2	LAB_ID	SE1778-7			SE1778-9			SE1778-16			SE1778-4		
FRACTION: PCB	SAMP_DATE	4/5/2011			4/5/2011			4/6/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	58.2			13.5			20.0			14.4		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		14	U		9.3	UJ	Y	6.3	UJ	RY	7.7	UJ	RY
AROCLOR-1221		14	U		9.3	UJ	Y	6.3	UJ	RY	7.7	UJ	RY
AROCLOR-1232		16	U		11	UJ	Y	7.5	UJ	RY	9.1	UJ	RY
AROCLOR-1242		14	U		9.3	UJ	Y	6.3	UJ	RY	7.7	UJ	RY
AROCLOR-1248		14	U		9.3	UJ	Y	6.3	UJ	RY	7.7	UJ	RY
AROCLOR-1254		14	U		9.3	UJ	Y	6.3	UJ	RY	7.7	UJ	RY
AROCLOR-1260		14	U		360	J	PUY	6.3	UJ	RY	560	J	PRUY

PROJ_NO: 02625	NSAMPLE	2W-SD-SD142-0001			2W-SD-SD144-0001			2W-SD-SD146-0001			FD-040511-01		
SDG: WE55-2	LAB_ID	SE1778-18			SE1778-3			SE1778-2			SE1778-10		
FRACTION: PCB	SAMP_DATE	4/6/2011			4/5/2011			4/5/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	30.7			22.7			17.2			59.0		
	DUP_OF										2W-SD-SD127-0001		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		28	UJ	R	5.3	UJ	RY	7.2	UJ	RY	14	UJ	R
AROCLOR-1221		28	UJ	R	5.3	UJ	RY	7.2	UJ	RY	14	UJ	R
AROCLOR-1232		32	UJ	R	6.2	UJ	RY	8.5	UJ	RY	17	UJ	R
AROCLOR-1242		28	UJ	R	5.3	UJ	RY	7.2	UJ	RY	14	UJ	R
AROCLOR-1248		28	UJ	R	5.3	UJ	RY	7.2	UJ	RY	14	UJ	R
AROCLOR-1254		28	UJ	R	5.3	UJ	RY	7.2	UJ	RY	14	UJ	R
AROCLOR-1260		28	UJ	R	5.3	UJ	RY	7.2	UJ	RY	14	UJ	R

PROJ_NO: 02625	NSAMPLE	FD-040511-02		
SDG: WE55-2	LAB_ID	SE1778-11		
FRACTION: PCB	SAMP_DATE	4/5/2011		
MEDIA: SOIL	QC_TYPE	NM		
	UNITS	UG/KG		
	PCT_SOLIDS	22.6		
	DUP_OF	2W-SD-SD122-0001		
PARAMETER		RESULT	VQL	QLCD
AROCLOR-1016		5.2	UJ	RY
AROCLOR-1221		5.2	UJ	RY
AROCLOR-1232		6.1	UJ	RY
AROCLOR-1242		5.2	UJ	RY
AROCLOR-1248		5.2	UJ	RY
AROCLOR-1254		5.2	UJ	RY
AROCLOR-1260		190	J	RY

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-20
Client ID: 2W-SD-SD116-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 26-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 7.1
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	79.	ug/Kgdrywt	1	20	160	20.	79.
2-Methylnaphthalene	U	79.	ug/Kgdrywt	1	20	160	17.	79.
1-Methylnaphthalene	U	79.	ug/Kgdrywt	1	20	160	13.	79.
Acenaphthylene	U	79.	ug/Kgdrywt	1	20	160	9.5	79.
Acenaphthene	U	79.	ug/Kgdrywt	1	20	160	12.	79.
Fluorene	U	79.	ug/Kgdrywt	1	20	160	25.	79.
Phenanthrene	J	86.	ug/Kgdrywt	1	20	160	14.	79.
Anthracene	U	79.	ug/Kgdrywt	1	20	160	9.5	79.
Fluoranthene		180	ug/Kgdrywt	1	20	160	14.	79.
Pyrene		200	ug/Kgdrywt	1	20	160	16.	79.
Benzo (a) anthracene	J	85.	ug/Kgdrywt	1	20	160	15.	79.
Chrysene	J	99.	ug/Kgdrywt	1	20	160	13.	79.
Benzo (b) Fluoranthene		290	ug/Kgdrywt	1	20	160	19.	79.
Benzo(k)fluoranthene	J	83.	ug/Kgdrywt	1	20	160	24.	79.
Benzo(a)pyrene	J	160	ug/Kgdrywt	1	20	160	26.	79.
Indeno (1,2,3-cd) pyrene		210	ug/Kgdrywt	1	20	160	15.	79.
Dibenzo (a,h) anthracene	J	63.	ug/Kgdrywt	1	20	160	14.	79.
Benzo(g,h,i)perylene		180	ug/Kgdrywt	1	20	160	16.	79.
2-Methylnaphthalene-D10		30.6	%					
Fluorene-D10		35.6	%					
Pyrene-D10		52.5	%					

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Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-22
Client ID: 2W-SD-SD117-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 26-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 23.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	27.	ug/Kgdrywt	1	20	54.	7.0	27.
2-Methylnaphthalene	U	27.	ug/Kgdrywt	1	20	54.	5.9	27.
1-Methylnaphthalene	U	27.	ug/Kgdrywt	1	20	54.	4.6	27.
Acenaphthylene	J	3.4	ug/Kgdrywt	1	20	54.	3.2	27.
Acenaphthene	U	27.	ug/Kgdrywt	1	20	54.	4.0	27.
Fluorene	U	27.	ug/Kgdrywt	1	20	54.	8.6	27.
Phenanthrene		81.	ug/Kgdrywt	1	20	54.	4.8	27.
Anthracene	J	7.6	ug/Kgdrywt	1	20	54.	3.2	27.
Fluoranthene		180	ug/Kgdrywt	1	20	54.	4.8	27.
Pyrene		190	ug/Kgdrywt	1	20	54.	5.7	27.
Benzo (a) anthracene		71.	ug/Kgdrywt	1	20	54.	5.1	27.
Chrysene		94.	ug/Kgdrywt	1	20	54.	4.6	27.
Benzo (b) Fluoranthene		160	ug/Kgdrywt	1	20	54.	6.5	27.
Benzo(k)fluoranthene		60.	ug/Kgdrywt	1	20	54.	8.4	27.
Benzo(a)pyrene		85.	ug/Kgdrywt	1	20	54.	8.9	27.
Indeno (1,2,3-cd) pyrene		90.	ug/Kgdrywt	1	20	54.	5.1	27.
Dibenzo (a,h) anthracene	J	25.	ug/Kgdrywt	1	20	54.	4.8	27.
Benzo(g,h,i)perylene		71.	ug/Kgdrywt	1	20	54.	5.4	27.
2-Methylnaphthalene-D10		41.6	%					
Fluorene-D10		38.0	%					
Pyrene-D10		49.4	%					

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Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-8
Client ID: 2W-SD-SD122-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 26-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 23.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	22.	ug/Kgdrywt	1	20	45.	5.8	22.
2-Methylnaphthalene	U	22.	ug/Kgdrywt	1	20	45.	5.0	22.
1-Methylnaphthalene	U	3.8	ug/Kgdrywt	1	20	45.	3.8	22.
Acenaphthylene	J	9.2	ug/Kgdrywt	1	20	45.	2.7	22.
Acenaphthene	J	5.8	ug/Kgdrywt	1	20	45.	3.4	22.
Fluorene	J	9.1	ug/Kgdrywt	1	20	45.	7.2	22.
Phenanthrene		160	ug/Kgdrywt	1	20	45.	4.0	22.
Anthracene	J	19.	ug/Kgdrywt	1	20	45.	2.7	22.
Fluoranthene		370	ug/Kgdrywt	1	20	45.	4.0	22.
Pyrene		440	ug/Kgdrywt	1	20	45.	4.7	22.
Benzo (a) anthracene		190	ug/Kgdrywt	1	20	45.	4.3	22.
Chrysene		250	ug/Kgdrywt	1	20	45.	3.8	22.
Benzo (b) Fluoranthene		420	ug/Kgdrywt	1	20	45.	5.4	22.
Benzo(k)fluoranthene		120	ug/Kgdrywt	1	20	45.	7.0	22.
Benzo(a)pyrene		240	ug/Kgdrywt	1	20	45.	7.4	22.
Indeno (1,2,3-cd) pyrene		180	ug/Kgdrywt	1	20	45.	4.3	22.
Dibenzo (a,h) anthracene	J	42.	ug/Kgdrywt	1	20	45.	4.0	22.
Benzo(g,h,i)perylene		140	ug/Kgdrywt	1	20	45.	4.5	22.
2-Methylnaphthalene-D10		36.7	%					
Fluorene-D10		37.9	%					
Pyrene-D10		54.5	%					

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ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-13
Client ID: 2W-SD-SD123-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 26-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 14.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	40.	ug/Kgdrywt	1	20	81.	10.	40.
2-Methylnaphthalene	U	40.	ug/Kgdrywt	1	20	81.	8.9	40.
1-Methylnaphthalene	U	40.	ug/Kgdrywt	1	20	81.	6.9	40.
Acenaphthylene	J	18.	ug/Kgdrywt	1	20	81.	4.8	40.
Acenaphthene	J	19.	ug/Kgdrywt	1	20	81.	6.1	40.
Fluorene	J	22.	ug/Kgdrywt	1	20	81.	13.	40.
Phenanthrene		230	ug/Kgdrywt	1	20	81.	7.3	40.
Anthracene	J	34.	ug/Kgdrywt	1	20	81.	4.8	40.
Fluoranthene		680	ug/Kgdrywt	1	20	81.	7.3	40.
Pyrene		840	ug/Kgdrywt	1	20	81.	8.5	40.
Benzo (a) anthracene		370	ug/Kgdrywt	1	20	81.	7.7	40.
Chrysene		470	ug/Kgdrywt	1	20	81.	6.9	40.
Benzo (b) Fluoranthene		790	ug/Kgdrywt	1	20	81.	9.7	40.
Benzo(k)fluoranthene		250	ug/Kgdrywt	1	20	81.	12.	40.
Benzo(a)pyrene		460	ug/Kgdrywt	1	20	81.	13.	40.
Indeno (1,2,3-cd) pyrene		360	ug/Kgdrywt	1	20	81.	7.7	40.
Dibenzo (a,h) anthracene		83.	ug/Kgdrywt	1	20	81.	7.3	40.
Benzo(g,h,i)perylene		290	ug/Kgdrywt	1	20	81.	8.1	40.
2-Methylnaphthalene-D10		30.9	%					
Fluorene-D10		28.8	%					
Pyrene-D10		43.9	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-7
Client ID: 2W-SD-SD127-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 26-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 58.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	15.	ug/Kgdrywt	1	20	30.	4.0	15.
2-Methylnaphthalene	U	15.	ug/Kgdrywt	1	20	30.	3.4	15.
1-Methylnaphthalene	U	15.	ug/Kgdrywt	1	20	30.	2.6	15.
Acenaphthylene	U	15.	ug/Kgdrywt	1	20	30.	1.8	15.
Acenaphthene	J	14.	ug/Kgdrywt	1	20	30.	2.3	15.
Fluorene	U	15.	ug/Kgdrywt	1	20	30.	4.9	15.
Phenanthrene	J	20.	ug/Kgdrywt	1	20	30.	2.8	15.
Anthracene	J	3.7	ug/Kgdrywt	1	20	30.	1.8	15.
Fluoranthene		52.	ug/Kgdrywt	1	20	30.	2.8	15.
Pyrene		53.	ug/Kgdrywt	1	20	30.	3.2	15.
Benzo (a) anthracene	J	22.	ug/Kgdrywt	1	20	30.	2.9	15.
Chrysene		36.	ug/Kgdrywt	1	20	30.	2.6	15.
Benzo (b) Fluoranthene		60.	ug/Kgdrywt	1	20	30.	3.7	15.
Benzo(k)fluoranthene	J	24.	ug/Kgdrywt	1	20	30.	4.7	15.
Benzo(a)pyrene		31.	ug/Kgdrywt	1	20	30.	5.0	15.
Indeno (1,2,3-cd) pyrene	J	29.	ug/Kgdrywt	1	20	30.	2.9	15.
Dibenzo (a,h) anthracene	J	8.7	ug/Kgdrywt	1	20	30.	2.8	15.
Benzo(g,h,i)perylene	J	26.	ug/Kgdrywt	1	20	30.	3.0	15.
2-Methylnaphthalene-D10		40.8	%					
Fluorene-D10		40.1	%					
Pyrene-D10		55.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-9
Client ID: 2W-SD-SD130-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 25-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 14.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	39.	ug/Kgdrywt	1	20	78.	10.	39.
2-Methylnaphthalene	U	39.	ug/Kgdrywt	1	20	78.	8.6	39.
1-Methylnaphthalene	U	39.	ug/Kgdrywt	1	20	78.	6.6	39.
Acenaphthylene	J	9.2	ug/Kgdrywt	1	20	78.	4.7	39.
Acenaphthene	J	7.6	ug/Kgdrywt	1	20	78.	5.8	39.
Fluorene	U	39.	ug/Kgdrywt	1	20	78.	12.	39.
Phenanthrene		140	ug/Kgdrywt	1	20	78.	7.0	39.
Anthracene	J	20.	ug/Kgdrywt	1	20	78.	4.7	39.
Fluoranthene		450	ug/Kgdrywt	1	20	78.	7.0	39.
Pyrene		500	ug/Kgdrywt	1	20	78.	8.2	39.
Benzo (a) anthracene		230	ug/Kgdrywt	1	20	78.	7.4	39.
Chrysene		280	ug/Kgdrywt	1	20	78.	6.6	39.
Benzo (b) Fluoranthene		490	ug/Kgdrywt	1	20	78.	9.4	39.
Benzo(k)fluoranthene		160	ug/Kgdrywt	1	20	78.	12.	39.
Benzo(a)pyrene		290	ug/Kgdrywt	1	20	78.	13.	39.
Indeno (1,2,3-cd) pyrene		240	ug/Kgdrywt	1	20	78.	7.4	39.
Dibenzo (a,h) anthracene	J	60.	ug/Kgdrywt	1	20	78.	7.0	39.
Benzo(g,h,i)perylene		210	ug/Kgdrywt	1	20	78.	7.8	39.
2-Methylnaphthalene-D10		35.0	%					
Fluorene-D10		37.1	%					
Pyrene-D10		56.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-16
Client ID: 2W-SD-SD135-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 26-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 20.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	24.	ug/Kgdrywt	1	20	56.	7.3	28.
2-Methylnaphthalene	J	16.	ug/Kgdrywt	1	20	56.	6.2	28.
1-Methylnaphthalene	J	25.	ug/Kgdrywt	1	20	56.	4.8	28.
Acenaphthylene	J	19.	ug/Kgdrywt	1	20	56.	3.4	28.
Acenaphthene	J	53.	ug/Kgdrywt	1	20	56.	4.2	28.
Fluorene		93.	ug/Kgdrywt	1	20	56.	9.0	28.
Phenanthrene		200	ug/Kgdrywt	1	20	56.	5.1	28.
Anthracene	J	25.	ug/Kgdrywt	1	20	56.	3.4	28.
Fluoranthene		370	ug/Kgdrywt	1	20	56.	5.1	28.
Pyrene	E	810	ug/Kgdrywt	1	20	56.	5.9	28.
Benzo (a) anthracene		250	ug/Kgdrywt	1	20	56.	5.3	28.
Chrysene		340	ug/Kgdrywt	1	20	56.	4.8	28.
Benzo (b) Fluoranthene		490	ug/Kgdrywt	1	20	56.	6.8	28.
Benzo(k)fluoranthene		130	ug/Kgdrywt	1	20	56.	8.7	28.
Benzo(a)pyrene		290	ug/Kgdrywt	1	20	56.	9.3	28.
Indeno (1,2,3-cd) pyrene		190	ug/Kgdrywt	1	20	56.	5.3	28.
Dibenzo (a,h) anthracene	J	49.	ug/Kgdrywt	1	20	56.	5.1	28.
Benzo(g,h,i)perylene		150	ug/Kgdrywt	1	20	56.	5.6	28.
2-Methylnaphthalene-D10		33.2	%					
Fluorene-D10		37.0	%					
Pyrene-D10		63.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-16DL
Client ID: 2W-SD-SD135-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 26-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 20.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	26.	ug/Kgdrywt	2	20	110	15.	56.
2-Methylnaphthalene	J	18.	ug/Kgdrywt	2	20	110	12.	56.
1-Methylnaphthalene	J	30.	ug/Kgdrywt	2	20	110	9.6	56.
Acenaphthylene	J	20.	ug/Kgdrywt	2	20	110	6.8	56.
Acenaphthene	J	57.	ug/Kgdrywt	2	20	110	8.4	56.
Fluorene	J	89.	ug/Kgdrywt	2	20	110	18.	56.
Phenanthrene		220	ug/Kgdrywt	2	20	110	10.	56.
Anthracene	J	43.	ug/Kgdrywt	2	20	110	6.8	56.
Fluoranthene		440	ug/Kgdrywt	2	20	110	10.	56.
Pyrene		740	ug/Kgdrywt	2	20	110	12.	56.
Benzo (a) anthracene		260	ug/Kgdrywt	2	20	110	11.	56.
Chrysene		350	ug/Kgdrywt	2	20	110	9.6	56.
Benzo (b) Fluoranthene		460	ug/Kgdrywt	2	20	110	14.	56.
Benzo(k)fluoranthene		160	ug/Kgdrywt	2	20	110	17.	56.
Benzo(a)pyrene		310	ug/Kgdrywt	2	20	110	18.	56.
Indeno (1,2,3-cd) pyrene		220	ug/Kgdrywt	2	20	110	11.	56.
Dibenzo (a,h) anthracene	J	63.	ug/Kgdrywt	2	20	110	10.	56.
Benzo(g,h,i)perylene		180	ug/Kgdrywt	2	20	110	11.	56.
2-Methylnaphthalene-D10		34.4	%					
Fluorene-D10		40.6	%					
Pyrene-D10		53.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-4
Client ID: 2W-SD-SD140-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 25-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 14.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	40.	ug/Kgdrywt	1	20	80.	10.	40.
2-Methylnaphthalene	U	40.	ug/Kgdrywt	1	20	80.	8.8	40.
1-Methylnaphthalene	U	40.	ug/Kgdrywt	1	20	80.	6.8	40.
Acenaphthylene	J	12.	ug/Kgdrywt	1	20	80.	4.8	40.
Acenaphthene	J	20.	ug/Kgdrywt	1	20	80.	6.0	40.
Fluorene	J	19.	ug/Kgdrywt	1	20	80.	13.	40.
Phenanthrene		260	ug/Kgdrywt	1	20	80.	7.2	40.
Anthracene	J	35.	ug/Kgdrywt	1	20	80.	4.8	40.
Fluoranthene		690	ug/Kgdrywt	1	20	80.	7.2	40.
Pyrene		830	ug/Kgdrywt	1	20	80.	8.4	40.
Benzo (a) anthracene		380	ug/Kgdrywt	1	20	80.	7.6	40.
Chrysene		440	ug/Kgdrywt	1	20	80.	6.8	40.
Benzo (b) Fluoranthene		730	ug/Kgdrywt	1	20	80.	9.6	40.
Benzo(k)fluoranthene		210	ug/Kgdrywt	1	20	80.	12.	40.
Benzo(a)pyrene		430	ug/Kgdrywt	1	20	80.	13.	40.
Indeno (1,2,3-cd) pyrene		310	ug/Kgdrywt	1	20	80.	7.6	40.
Dibenzo (a,h) anthracene	J	78.	ug/Kgdrywt	1	20	80.	7.2	40.
Benzo(g,h,i)perylene		250	ug/Kgdrywt	1	20	80.	8.0	40.
2-Methylnaphthalene-D10		40.3	%					
Fluorene-D10		42.9	%					
Pyrene-D10		64.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-18
Client ID: 2W-SD-SD142-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 26-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 31.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	18.	ug/Kgdrywt	1	20	56.	7.3	28.
2-Methylnaphthalene	J	15.	ug/Kgdrywt	1	20	56.	6.2	28.
1-Methylnaphthalene	J	26.	ug/Kgdrywt	1	20	56.	4.8	28.
Acenaphthylene	J	40.	ug/Kgdrywt	1	20	56.	3.4	28.
Acenaphthene	J	30.	ug/Kgdrywt	1	20	56.	4.2	28.
Fluorene	J	53.	ug/Kgdrywt	1	20	56.	9.0	28.
Phenanthrene	E	1000	ug/Kgdrywt	1	20	56.	5.1	28.
Anthracene		88.	ug/Kgdrywt	1	20	56.	3.4	28.
Fluoranthene	E	2000	ug/Kgdrywt	1	20	56.	5.1	28.
Pyrene	E	2500	ug/Kgdrywt	1	20	56.	5.9	28.
Benzo (a) anthracene	E	1200	ug/Kgdrywt	1	20	56.	5.4	28.
Chrysene	E	1500	ug/Kgdrywt	1	20	56.	4.8	28.
Benzo (b) Fluoranthene	E	2000	ug/Kgdrywt	1	20	56.	6.8	28.
Benzo(k)fluoranthene		600	ug/Kgdrywt	1	20	56.	8.8	28.
Benzo(a)pyrene	E	1200	ug/Kgdrywt	1	20	56.	9.3	28.
Indeno (1,2,3-cd) pyrene		710	ug/Kgdrywt	1	20	56.	5.4	28.
Dibenzo (a,h) anthracene		170	ug/Kgdrywt	1	20	56.	5.1	28.
Benzo(g,h,i)perylene		560	ug/Kgdrywt	1	20	56.	5.6	28.
2-Methylnaphthalene-D10		33.8	%					
Fluorene-D10		30.3	%					
Pyrene-D10		45.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-18DL
Client ID: 2W-SD-SD142-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 27-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 31.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	250	ug/Kgdrywt	9	20	510	66.	250
2-Methylnaphthalene	U	250	ug/Kgdrywt	9	20	510	56.	250
1-Methylnaphthalene	U	250	ug/Kgdrywt	9	20	510	43.	250
Acenaphthylene	J	55.	ug/Kgdrywt	9	20	510	30.	250
Acenaphthene	U	250	ug/Kgdrywt	9	20	510	38.	250
Fluorene	U	250	ug/Kgdrywt	9	20	510	81.	250
Phenanthrene		1300	ug/Kgdrywt	9	20	510	46.	250
Anthracene	J	120	ug/Kgdrywt	9	20	510	30.	250
Fluoranthene		3000	ug/Kgdrywt	9	20	510	46.	250
Pyrene		3500	ug/Kgdrywt	9	20	510	53.	250
Benzo (a) anthracene		1400	ug/Kgdrywt	9	20	510	48.	250
Chrysene		2000	ug/Kgdrywt	9	20	510	43.	250
Benzo (b) Fluoranthene		2400	ug/Kgdrywt	9	20	510	61.	250
Benzo(k)fluoranthene		890	ug/Kgdrywt	9	20	510	79.	250
Benzo(a)pyrene		1500	ug/Kgdrywt	9	20	510	84.	250
Indeno (1,2,3-cd) pyrene		960	ug/Kgdrywt	9	20	510	48.	250
Dibenzo (a,h) anthracene	J	210	ug/Kgdrywt	9	20	510	46.	250
Benzo(g,h,i)perylene		730	ug/Kgdrywt	9	20	510	51.	250
2-Methylnaphthalene-D10		45.4	%					
Fluorene-D10	*	0.00	%					
Pyrene-D10		59.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-3
Client ID: 2W-SD-SD144-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 23-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 23.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	13.	ug/Kgdrywt	1	20	46.	5.9	23.
2-Methylnaphthalene	J	12.	ug/Kgdrywt	1	20	46.	5.0	23.
1-Methylnaphthalene	J	26.	ug/Kgdrywt	1	20	46.	3.9	23.
Acenaphthylene	J	39.	ug/Kgdrywt	1	20	46.	2.7	23.
Acenaphthene		47.	ug/Kgdrywt	1	20	46.	3.4	23.
Fluorene		86.	ug/Kgdrywt	1	20	46.	7.3	23.
Phenanthrene	E	970	ug/Kgdrywt	1	20	46.	4.1	23.
Anthracene		120	ug/Kgdrywt	1	20	46.	2.7	23.
Fluoranthene	E	1600	ug/Kgdrywt	1	20	46.	4.1	23.
Pyrene	E	2100	ug/Kgdrywt	1	20	46.	4.8	23.
Benzo (a) anthracene	E	1000	ug/Kgdrywt	1	20	46.	4.3	23.
Chrysene	E	1300	ug/Kgdrywt	1	20	46.	3.9	23.
Benzo (b) Fluoranthene	E	1600	ug/Kgdrywt	1	20	46.	5.5	23.
Benzo(k)fluoranthene		530	ug/Kgdrywt	1	20	46.	7.1	23.
Benzo(a)pyrene	E	1000	ug/Kgdrywt	1	20	46.	7.5	23.
Indeno (1,2,3-cd) pyrene	E	760	ug/Kgdrywt	1	20	46.	4.3	23.
Dibenzo (a,h) anthracene		180	ug/Kgdrywt	1	20	46.	4.1	23.
Benzo(g,h,i)perylene		590	ug/Kgdrywt	1	20	46.	4.6	23.
2-Methylnaphthalene-D10		38.3	%					
Fluorene-D10		40.4	%					
Pyrene-D10		62.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-3DL
Client ID: 2W-SD-SD144-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 26-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 23.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	200	ug/Kgdrywt	9	20	410	53.	200
2-Methylnaphthalene	U	200	ug/Kgdrywt	9	20	410	45.	200
1-Methylnaphthalene	U	200	ug/Kgdrywt	9	20	410	35.	200
Acenaphthylene	U	200	ug/Kgdrywt	9	20	410	24.	200
Acenaphthene	J	42.	ug/Kgdrywt	9	20	410	31.	200
Fluorene	J	77.	ug/Kgdrywt	9	20	410	66.	200
Phenanthrene		1100	ug/Kgdrywt	9	20	410	37.	200
Anthracene	J	130	ug/Kgdrywt	9	20	410	24.	200
Fluoranthene		2100	ug/Kgdrywt	9	20	410	37.	200
Pyrene		2200	ug/Kgdrywt	9	20	410	43.	200
Benzo (a) anthracene		1100	ug/Kgdrywt	9	20	410	39.	200
Chrysene		1200	ug/Kgdrywt	9	20	410	35.	200
Benzo (b) Fluoranthene		1400	ug/Kgdrywt	9	20	410	49.	200
Benzo(k)fluoranthene		510	ug/Kgdrywt	9	20	410	64.	200
Benzo(a)pyrene		1000	ug/Kgdrywt	9	20	410	68.	200
Indeno (1,2,3-cd) pyrene		690	ug/Kgdrywt	9	20	410	39.	200
Dibenzo (a,h) anthracene	J	210	ug/Kgdrywt	9	20	410	37.	200
Benzo(g,h,i)perylene		550	ug/Kgdrywt	9	20	410	41.	200
2-Methylnaphthalene-D10		45.5	%					
Fluorene-D10		37.9	%					
Pyrene-D10		53.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-2
Client ID: 2W-SD-SD146-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 23-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 17.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	32.	ug/Kgdrywt	1	20	64.	8.4	32.
2-Methylnaphthalene	U	32.	ug/Kgdrywt	1	20	64.	7.1	32.
1-Methylnaphthalene	J	44.	ug/Kgdrywt	1	20	64.	5.4	32.
Acenaphthylene	J	16.	ug/Kgdrywt	1	20	64.	3.8	32.
Acenaphthene		110	ug/Kgdrywt	1	20	64.	4.8	32.
Fluorene	J	38.	ug/Kgdrywt	1	20	64.	10.	32.
Phenanthrene		390	ug/Kgdrywt	1	20	64.	5.8	32.
Anthracene	J	38.	ug/Kgdrywt	1	20	64.	3.8	32.
Fluoranthene		770	ug/Kgdrywt	1	20	64.	5.8	32.
Pyrene	E	980	ug/Kgdrywt	1	20	64.	6.7	32.
Benzo (a) anthracene		430	ug/Kgdrywt	1	20	64.	6.1	32.
Chrysene		520	ug/Kgdrywt	1	20	64.	5.4	32.
Benzo (b) Fluoranthene		690	ug/Kgdrywt	1	20	64.	7.7	32.
Benzo(k)fluoranthene		210	ug/Kgdrywt	1	20	64.	10.	32.
Benzo(a)pyrene		440	ug/Kgdrywt	1	20	64.	10.	32.
Indeno (1,2,3-cd) pyrene		290	ug/Kgdrywt	1	20	64.	6.1	32.
Dibenzo (a,h) anthracene		80.	ug/Kgdrywt	1	20	64.	5.8	32.
Benzo(g,h,i)perylene		240	ug/Kgdrywt	1	20	64.	6.4	32.
2-Methylnaphthalene-D10		34.4	%					
Fluorene-D10		41.8	%					
Pyrene-D10		64.5	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-2DL
Client ID: 2W-SD-SD146-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 26-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 17.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	64.	ug/Kgdrywt	2	20	130	17.	64.
2-Methylnaphthalene	U	64.	ug/Kgdrywt	2	20	130	14.	64.
1-Methylnaphthalene	J	40.	ug/Kgdrywt	2	20	130	11.	64.
Acenaphthylene	U	64.	ug/Kgdrywt	2	20	130	7.7	64.
Acenaphthene	J	96.	ug/Kgdrywt	2	20	130	9.6	64.
Fluorene	J	38.	ug/Kgdrywt	2	20	130	20.	64.
Phenanthrene		360	ug/Kgdrywt	2	20	130	12.	64.
Anthracene	J	39.	ug/Kgdrywt	2	20	130	7.7	64.
Fluoranthene		660	ug/Kgdrywt	2	20	130	12.	64.
Pyrene		1000	ug/Kgdrywt	2	20	130	13.	64.
Benzo (a) anthracene		360	ug/Kgdrywt	2	20	130	12.	64.
Chrysene		460	ug/Kgdrywt	2	20	130	11.	64.
Benzo (b) Fluoranthene		560	ug/Kgdrywt	2	20	130	15.	64.
Benzo(k)fluoranthene		190	ug/Kgdrywt	2	20	130	20.	64.
Benzo(a)pyrene		370	ug/Kgdrywt	2	20	130	21.	64.
Indeno (1,2,3-cd) pyrene		260	ug/Kgdrywt	2	20	130	12.	64.
Dibenzo (a,h) anthracene	J	78.	ug/Kgdrywt	2	20	130	12.	64.
Benzo(g,h,i)perylene		200	ug/Kgdrywt	2	20	130	13.	64.
2-Methylnaphthalene-D10		31.1	%					
Fluorene-D10		36.7	%					
Pyrene-D10		63.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-10
Client ID: FD-040511-01
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 26-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 59.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	13.	ug/Kgdrywt	1	20	27.	3.5	13.
2-Methylnaphthalene	U	13.	ug/Kgdrywt	1	20	27.	2.9	13.
1-Methylnaphthalene	U	13.	ug/Kgdrywt	1	20	27.	2.3	13.
Acenaphthylene	U	13.	ug/Kgdrywt	1	20	27.	1.6	13.
Acenaphthene	J	12.	ug/Kgdrywt	1	20	27.	2.0	13.
Fluorene	U	13.	ug/Kgdrywt	1	20	27.	4.3	13.
Phenanthrene	J	20.	ug/Kgdrywt	1	20	27.	2.4	13.
Anthracene	J	2.3	ug/Kgdrywt	1	20	27.	1.6	13.
Fluoranthene		46.	ug/Kgdrywt	1	20	27.	2.4	13.
Pyrene		50.	ug/Kgdrywt	1	20	27.	2.8	13.
Benzo (a) anthracene	J	21.	ug/Kgdrywt	1	20	27.	2.5	13.
Chrysene		32.	ug/Kgdrywt	1	20	27.	2.3	13.
Benzo (b) Fluoranthene		56.	ug/Kgdrywt	1	20	27.	3.2	13.
Benzo(k)fluoranthene	J	21.	ug/Kgdrywt	1	20	27.	4.1	13.
Benzo(a)pyrene		30.	ug/Kgdrywt	1	20	27.	4.4	13.
Indeno (1,2,3-cd) pyrene		30.	ug/Kgdrywt	1	20	27.	2.5	13.
Dibenzo (a,h) anthracene	J	8.3	ug/Kgdrywt	1	20	27.	2.4	13.
Benzo(g,h,i)perylene	J	26.	ug/Kgdrywt	1	20	27.	2.7	13.
2-Methylnaphthalene-D10		37.4	%					
Fluorene-D10		35.9	%					
Pyrene-D10		53.7	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-11
Client ID: FD-040511-02
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 26-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 22.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	25.	ug/Kgdrywt	1	20	49.	6.4	25.
2-Methylnaphthalene	U	25.	ug/Kgdrywt	1	20	49.	5.4	25.
1-Methylnaphthalene	U	25.	ug/Kgdrywt	1	20	49.	4.2	25.
Acenaphthylene	J	10.	ug/Kgdrywt	1	20	49.	3.0	25.
Acenaphthene	J	5.6	ug/Kgdrywt	1	20	49.	3.7	25.
Fluorene	J	8.8	ug/Kgdrywt	1	20	49.	7.9	25.
Phenanthrene		170	ug/Kgdrywt	1	20	49.	4.4	25.
Anthracene	J	18.	ug/Kgdrywt	1	20	49.	3.0	25.
Fluoranthene		370	ug/Kgdrywt	1	20	49.	4.4	25.
Pyrene		500	ug/Kgdrywt	1	20	49.	5.2	25.
Benzo (a) anthracene		210	ug/Kgdrywt	1	20	49.	4.7	25.
Chrysene		270	ug/Kgdrywt	1	20	49.	4.2	25.
Benzo (b) Fluoranthene		450	ug/Kgdrywt	1	20	49.	5.9	25.
Benzo(k)fluoranthene		140	ug/Kgdrywt	1	20	49.	7.6	25.
Benzo(a)pyrene		240	ug/Kgdrywt	1	20	49.	8.1	25.
Indeno (1,2,3-cd) pyrene		190	ug/Kgdrywt	1	20	49.	4.7	25.
Dibenzo (a,h) anthracene	J	45.	ug/Kgdrywt	1	20	49.	4.4	25.
Benzo(g,h,i)perylene		150	ug/Kgdrywt	1	20	49.	4.9	25.
2-Methylnaphthalene-D10		34.5	%					
Fluorene-D10		33.4	%					
Pyrene-D10		52.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-20
Client ID: 2W-SD-SD116-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 26-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 7.1
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		24.	ug/Kgdrywt	1	3.3	6.4	0.37	3.2
4,4'-DDD	E	170	ug/Kgdrywt	1	3.3	6.4	0.39	3.2
4,4'-DDT		41.	ug/Kgdrywt	1	3.3	6.4	0.60	3.2
Tetrachloro-M-Xylene		54.9	%					
Decachlorobiphenyl		82.5	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-20DL
Client ID: 2W-SD-SD116-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 26-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 7.1
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	26.	ug/Kgdrywt	5	3.3	32.	1.8	16.
4,4'-DDD		170	ug/Kgdrywt	5	3.3	32.	2.0	16.
4,4'-DDT		39.	ug/Kgdrywt	5	3.3	32.	3.0	16.
Tetrachloro-M-Xylene		59.7	%					
Decachlorobiphenyl		72.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-22
Client ID: 2W-SD-SD117-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 26-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 23.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		7.9	ug/Kgdrywt	1	3.3	2.0	0.12	1.0
4,4'-DDD		11.	ug/Kgdrywt	1	3.3	2.0	0.12	1.0
4,4'-DDT		37.	ug/Kgdrywt	1	3.3	2.0	0.19	1.0
Tetrachloro-M-Xylene	*	143.	%					
Decachlorobiphenyl		49.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-8
Client ID: 2W-SD-SD122-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 23.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		21.	ug/Kgdrywt	1	3.3	2.1	0.12	1.0
4,4'-DDD		41.	ug/Kgdrywt	1	3.3	2.1	0.13	1.0
4,4'-DDT	J	21.	ug/Kgdrywt	1	3.3	2.1	0.20	1.0
Tetrachloro-M-Xylene		50.7	%					
Decachlorobiphenyl		72.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-13
Client ID: 2W-SD-SD123-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 14.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	E	110	ug/Kgdrywt	1	3.3	3.4	0.20	1.7
4,4'-DDD	E	530	ug/Kgdrywt	1	3.3	3.4	0.21	1.7
4,4'-DDT	JE	130	ug/Kgdrywt	1	3.3	3.4	0.32	1.7
Tetrachloro-M-Xylene		57.2	%					
Decachlorobiphenyl	*	108.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-13DL
Client ID: 2W-SD-SD123-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 26-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 14.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		110	ug/Kgdrywt	20	3.3	69.	3.9	34
4,4'-DDD		680	ug/Kgdrywt	20	3.3	69.	4.2	34
4,4'-DDT		140	ug/Kgdrywt	20	3.3	69.	6.4	34
Tetrachloro-M-Xylene	*D	0.00	%					
Decachlorobiphenyl	*D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-7
Client ID: 2W-SD-SD127-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 58.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	1.8	ug/Kgdrywt	1	3.3	5.4	0.31	2.7
4,4'-DDD	JB	3.7	ug/Kgdrywt	1	3.3	5.4	0.33	2.7
4,4'-DDT		5.7	ug/Kgdrywt	1	3.3	5.4	0.51	2.7
Tetrachloro-M-Xylene		68.9	%					
Decachlorobiphenyl	*	101.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-9
Client ID: 2W-SD-SD130-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 14.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		19.	ug/Kgdrywt	1	3.3	3.6	0.21	1.8
4,4'-DDD	E	94.	ug/Kgdrywt	1	3.3	3.6	0.22	1.8
4,4'-DDT	J	39.	ug/Kgdrywt	1	3.3	3.6	0.34	1.8
Tetrachloro-M-Xylene		70.0	%					
Decachlorobiphenyl	*	118.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-9DL
Client ID: 2W-SD-SD130-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 11-MAY-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 14.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		22.	ug/Kgdrywt	2	3.3	7.2	0.42	3.6
4,4'-DDD		110	ug/Kgdrywt	2	3.3	7.2	0.44	3.6
4,4'-DDT		40.	ug/Kgdrywt	2	3.3	7.2	0.68	3.6
Tetrachloro-M-Xylene		72.2	%					
Decachlorobiphenyl		75.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-16
Client ID: 2W-SD-SD135-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 20.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	E	4600	ug/Kgdrywt	1	3.3	2.5	0.14	1.2
4,4'-DDD	EJ	2500	ug/Kgdrywt	1	3.3	2.5	0.15	1.2
4,4'-DDT	EJ	4200	ug/Kgdrywt	1	3.3	2.5	0.23	1.2
Tetrachloro-M-Xylene		56.2	%					
Decachlorobiphenyl	*	150.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-16DL
Client ID: 2W-SD-SD135-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 12-MAY-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 20.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	11000	ug/Kgdrywt	5000	3.3	12000	710	6200
4,4'-DDD		130000	ug/Kgdrywt	5000	3.3	12000	750	6200
4,4'-DDT		56000	ug/Kgdrywt	5000	3.3	12000	1200	6200
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-4
Client ID: 2W-SD-SD140-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 14.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		24.	ug/Kgdrywt	1	3.3	3.0	0.17	1.5
4,4'-DDD		64.	ug/Kgdrywt	1	3.3	3.0	0.18	1.5
4,4'-DDT	J	35.	ug/Kgdrywt	1	3.3	3.0	0.28	1.5
Tetrachloro-M-Xylene		38.7	%					
Decachlorobiphenyl	*	156.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-18
Client ID: 2W-SD-SD142-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 26-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 31.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	E	280	ug/Kgdrywt	1	3.3	11.	0.62	5.4
4,4'-DDD	E	660	ug/Kgdrywt	1	3.3	11.	0.65	5.4
4,4'-DDT	E	330	ug/Kgdrywt	1	3.3	11.	1.0	5.4
Tetrachloro-M-Xylene		55.6	%					
Decachlorobiphenyl		57.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-18DL
Client ID: 2W-SD-SD142-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 26-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 31.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		240	ug/Kgdrywt	10	3.3	110	6.2	54.
4,4'-DDD		640	ug/Kgdrywt	10	3.3	110	6.5	54.
4,4'-DDT		260	ug/Kgdrywt	10	3.3	110	10.	54.
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-3
Client ID: 2W-SD-SD144-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 23.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	E	110	ug/Kgdrywt	1	3.3	2.0	0.12	1.0
4,4'-DDD	E	200	ug/Kgdrywt	1	3.3	2.0	0.12	1
4,4'-DDT	E	280	ug/Kgdrywt	1	3.3	2.0	0.19	1.0
Tetrachloro-M-Xylene		48.1	%					
Decachlorobiphenyl	*	114.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-3DL
Client ID: 2W-SD-SD144-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 26-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 23.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		100	ug/Kgdrywt	20	3.3	41.	2.4	20.
4,4'-DDD		230	ug/Kgdrywt	20	3.3	41.	2.5	20
4,4'-DDT		280	ug/Kgdrywt	20	3.3	41.	3.9	20.
Tetrachloro-M-Xylene	*D	0.00	%					
Decachlorobiphenyl	*D	0.00	%					

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Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-2
Client ID: 2W-SD-SD146-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 17.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	E	380	ug/Kgdrywt	1	3.3	2.8	0.16	1.4
4,4'-DDD	E	120	ug/Kgdrywt	1	3.3	2.8	0.17	1.4
4,4'-DDT	JE	1100	ug/Kgdrywt	1	3.3	2.8	0.26	1.4
Tetrachloro-M-Xylene		50.5	%					
Decachlorobiphenyl		55.5	%					

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Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-2DL
Client ID: 2W-SD-SD146-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 26-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 17.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		280	ug/Kgdrywt	50	3.3	140	8.1	70.
4,4'-DDD		210	ug/Kgdrywt	50	3.3	140	8.5	70
4,4'-DDT		710	ug/Kgdrywt	50	3.3	140	13.	70.
Tetrachloro-M-Xylene	*D	0.00	%					
Decachlorobiphenyl	*D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-10
Client ID: FD-040511-01
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 59.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	2.8	ug/Kgdrywt	1	3.3	5.6	0.32	2.8
4,4'-DDD	JB	3.4	ug/Kgdrywt	1	3.3	5.6	0.34	2.8
4,4'-DDT		7.2	ug/Kgdrywt	1	3.3	5.6	0.52	2.8
Tetrachloro-M-Xylene		51.3	%					
Decachlorobiphenyl		84.5	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-11
Client ID: FD-040511-02
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 22.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		22.	ug/Kgdrywt	1	3.3	2.0	0.12	1.0
4,4'-DDD		39.	ug/Kgdrywt	1	3.3	2.0	0.12	1.0
4,4'-DDT	J	19.	ug/Kgdrywt	1	3.3	2.0	0.19	1.0
Tetrachloro-M-Xylene		56.4	%					
Decachlorobiphenyl		75.5	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-20
Client ID: 2W-SD-SD116-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 7.1
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	16.	ug/Kgdrywt	1	17	33.	12.	16.
Aroclor-1221	U	16.	ug/Kgdrywt	1	17	33.	15.	16.
Aroclor-1232	U	20.	ug/Kgdrywt	1	17	33.	18.	20.
Aroclor-1242	U	16.	ug/Kgdrywt	1	17	33.	11.	16.
Aroclor-1248	U	16.	ug/Kgdrywt	1	17	33.	12.	16.
Aroclor-1254	U	16.	ug/Kgdrywt	1	17	33.	9.2	16.
Aroclor-1260	U	16.	ug/Kgdrywt	1	17	33.	12.	16.
Tetrachloro-M-Xylene	*	54.2	%					
Decachlorobiphenyl		60.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-22
Client ID: 2W-SD-SD117-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 22-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 23.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	5.3	ug/Kgdrywt	1	17	10.	3.7	5.3
Aroclor-1221	U	5.3	ug/Kgdrywt	1	17	10.	4.9	5.3
Aroclor-1232	U	6.2	ug/Kgdrywt	1	17	10.	5.8	6.2
Aroclor-1242	U	5.3	ug/Kgdrywt	1	17	10.	3.6	5.3
Aroclor-1248	U	5.3	ug/Kgdrywt	1	17	10.	3.8	5.3
Aroclor-1254	U	5.3	ug/Kgdrywt	1	17	10.	2.9	5.3
Aroclor-1260	U	5.3	ug/Kgdrywt	1	17	10.	3.7	5.3
Tetrachloro-M-Xylene	*	52.2	%					
Decachlorobiphenyl	*	48.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-8
Client ID: 2W-SD-SD122-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 22-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 23.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	5.4	ug/Kgdrywt	1	17	11.	3.8	5.4
Aroclor-1221	U	5.4	ug/Kgdrywt	1	17	11.	5.0	5.4
Aroclor-1232	U	6.4	ug/Kgdrywt	1	17	11.	5.9	6.4
Aroclor-1242	U	5.4	ug/Kgdrywt	1	17	11.	3.7	5.4
Aroclor-1248	U	5.4	ug/Kgdrywt	1	17	11.	3.9	5.4
Aroclor-1254	U	5.4	ug/Kgdrywt	1	17	11.	3.0	5.4
Aroclor-1260		180	ug/Kgdrywt	1	17	11.	3.8	5.4
Tetrachloro-M-Xylene	*	44.2	%					
Decachlorobiphenyl	*	57.7	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-13
Client ID: 2W-SD-SD123-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 22-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 14.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	8.8	ug/Kgdrywt	1	17	18.	6.2	8.8
Aroclor-1221	U	8.8	ug/Kgdrywt	1	17	18.	8.2	8.8
Aroclor-1232	U	10.	ug/Kgdrywt	1	17	18.	9.7	10.
Aroclor-1242	U	8.8	ug/Kgdrywt	1	17	18.	6.0	8.8
Aroclor-1248	U	8.8	ug/Kgdrywt	1	17	18.	6.3	8.8
Aroclor-1254	U	8.8	ug/Kgdrywt	1	17	18.	4.9	8.8
Aroclor-1260		2300	ug/Kgdrywt	1	17	18.	6.2	8.8
Tetrachloro-M-Xylene		56.6	%					
Decachlorobiphenyl		65.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-7
Client ID: 2W-SD-SD127-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 58.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	14.	ug/Kgdrywt	1	17	28.	9.9	14.
Aroclor-1221	U	14.	ug/Kgdrywt	1	17	28.	13.	14.
Aroclor-1232	U	16.	ug/Kgdrywt	1	17	28.	15.	16.
Aroclor-1242	U	14.	ug/Kgdrywt	1	17	28.	9.6	14.
Aroclor-1248	U	14.	ug/Kgdrywt	1	17	28.	10.	14.
Aroclor-1254	U	14.	ug/Kgdrywt	1	17	28.	7.8	14.
Aroclor-1260	U	14.	ug/Kgdrywt	1	17	28.	9.9	14.
Tetrachloro-M-Xylene		67.1	%					
Decachlorobiphenyl		69.4	%					

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ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-9
Client ID: 2W-SD-SD130-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 14.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	9.3	ug/Kgdrywt	1	17	19.	6.6	9.3
Aroclor-1221	U	9.3	ug/Kgdrywt	1	17	19.	8.6	9.3
Aroclor-1232	U	11.	ug/Kgdrywt	1	17	19.	10.	11.
Aroclor-1242	U	9.3	ug/Kgdrywt	1	17	19.	6.3	9.3
Aroclor-1248	U	9.3	ug/Kgdrywt	1	17	19.	6.7	9.3
Aroclor-1254	U	9.3	ug/Kgdrywt	1	17	19.	5.1	9.3
Aroclor-1260	J	360	ug/Kgdrywt	1	17	19.	6.6	9.3
Tetrachloro-M-Xylene		71.7	%					
Decachlorobiphenyl		82.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-16
Client ID: 2W-SD-SD135-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 22-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 20.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	6.3	ug/Kgdrywt	1	17	13.	4.5	6.3
Aroclor-1221	U	6.3	ug/Kgdrywt	1	17	13.	5.9	6.3
Aroclor-1232	U	7.5	ug/Kgdrywt	1	17	13.	6.9	7.5
Aroclor-1242	U	6.3	ug/Kgdrywt	1	17	13.	4.3	6.3
Aroclor-1248	U	6.3	ug/Kgdrywt	1	17	13.	4.6	6.3
Aroclor-1254	U	6.3	ug/Kgdrywt	1	17	13.	3.5	6.3
Aroclor-1260	U	6.3	ug/Kgdrywt	1	17	13.	4.5	6.3
Tetrachloro-M-Xylene	*	47.8	%					
Decachlorobiphenyl		68.7	%					

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ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-4
Client ID: 2W-SD-SD140-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 14.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	7.7	ug/Kgdrywt	1	17	15.	5.4	7.7
Aroclor-1221	U	7.7	ug/Kgdrywt	1	17	15.	7.2	7.7
Aroclor-1232	U	9.1	ug/Kgdrywt	1	17	15.	8.4	9.1
Aroclor-1242	U	7.7	ug/Kgdrywt	1	17	15.	5.3	7.7
Aroclor-1248	U	7.7	ug/Kgdrywt	1	17	15.	5.5	7.7
Aroclor-1254	U	7.7	ug/Kgdrywt	1	17	15.	4.3	7.7
Aroclor-1260	J	560	ug/Kgdrywt	1	17	15.	5.4	7.7
Tetrachloro-M-Xylene	*	44.4	%					
Decachlorobiphenyl	*	44.0	%					

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Accredited in accordance with nelac
Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-18
Client ID: 2W-SD-SD142-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 22-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 31.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	28.	ug/Kgdrywt	1	17	55.	19.	28.
Aroclor-1221	U	28.	ug/Kgdrywt	1	17	55.	26.	28.
Aroclor-1232	U	32.	ug/Kgdrywt	1	17	55.	30.	32.
Aroclor-1242	U	28.	ug/Kgdrywt	1	17	55.	19.	28.
Aroclor-1248	U	28.	ug/Kgdrywt	1	17	55.	20.	28.
Aroclor-1254	U	28.	ug/Kgdrywt	1	17	55.	15.	28.
Aroclor-1260	U	28.	ug/Kgdrywt	1	17	55.	19.	28.
Tetrachloro-M-Xylene	*	47.0	%					
Decachlorobiphenyl	*	44.4	%					

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Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-3
Client ID: 2W-SD-SD144-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 22-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 23.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	5.3	ug/Kgdrywt	1	17	10.	3.7	5.3
Aroclor-1221	U	5.3	ug/Kgdrywt	1	17	10.	4.9	5.3
Aroclor-1232	U	6.2	ug/Kgdrywt	1	17	10.	5.8	6.2
Aroclor-1242	U	5.3	ug/Kgdrywt	1	17	10.	3.6	5.3
Aroclor-1248	U	5.3	ug/Kgdrywt	1	17	10.	3.8	5.3
Aroclor-1254	U	5.3	ug/Kgdrywt	1	17	10.	2.9	5.3
Aroclor-1260	U	5.3	ug/Kgdrywt	1	17	10.	3.7	5.3
Tetrachloro-M-Xylene	*	46.0	%					
Decachlorobiphenyl	*	56.0	%					

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Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-2
Client ID: 2W-SD-SD146-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 22-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 17.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	7.2	ug/Kgdrywt	1	17	14.	5.1	7.2
Aroclor-1221	U	7.2	ug/Kgdrywt	1	17	14.	6.7	7.2
Aroclor-1232	U	8.5	ug/Kgdrywt	1	17	14.	7.9	8.5
Aroclor-1242	U	7.2	ug/Kgdrywt	1	17	14.	4.9	7.2
Aroclor-1248	U	7.2	ug/Kgdrywt	1	17	14.	5.2	7.2
Aroclor-1254	U	7.2	ug/Kgdrywt	1	17	14.	4.0	7.2
Aroclor-1260	U	7.2	ug/Kgdrywt	1	17	14.	5.1	7.2
Tetrachloro-M-Xylene	*	49.8	%					
Decachlorobiphenyl	*	57.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-10
Client ID: FD-040511-01
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 22-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 59.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	14.	ug/Kgdrywt	1	17	29.	10.	14.
Aroclor-1221	U	14.	ug/Kgdrywt	1	17	29.	13.	14.
Aroclor-1232	U	17.	ug/Kgdrywt	1	17	29.	16.	17.
Aroclor-1242	U	14.	ug/Kgdrywt	1	17	29.	9.8	14.
Aroclor-1248	U	14.	ug/Kgdrywt	1	17	29.	10.	14.
Aroclor-1254	U	14.	ug/Kgdrywt	1	17	29.	7.9	14.
Aroclor-1260	U	14.	ug/Kgdrywt	1	17	29.	10.	14.
Tetrachloro-M-Xylene	*	54.4	%					
Decachlorobiphenyl	*	56.1	%					

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ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-11
Client ID: FD-040511-02
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 22-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 22.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	5.2	ug/Kgdrywt	1	17	10.	3.7	5.2
Aroclor-1221	U	5.2	ug/Kgdrywt	1	17	10.	4.8	5.2
Aroclor-1232	U	6.1	ug/Kgdrywt	1	17	10.	5.7	6.1
Aroclor-1242	U	5.2	ug/Kgdrywt	1	17	10.	3.5	5.2
Aroclor-1248	U	5.2	ug/Kgdrywt	1	17	10.	3.7	5.2
Aroclor-1254	U	5.2	ug/Kgdrywt	1	17	10.	2.9	5.2
Aroclor-1260		190	ug/Kgdrywt	1	17	10.	3.7	5.2
Tetrachloro-M-Xylene	*	46.1	%					
Decachlorobiphenyl		60.3	%					

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APPENDIX C

REGIONAL WORKSHEETS

EPA-NE
Data Validation Worksheet Cover Page - Page 1

Site Name NSB New London
Reference No. _____

REGION I ORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name Katahdin
Case/Project No. 02625
SDG No. WE55-L
No. of Samples/Matrix 13, Sediment

SOW/Method No. 8270C, 8081, 8082
Sampling Date(s) April 5 and 6, 2011
Shipping Date(s) _____
Date Rec'd by lab April 8, 2011

Traffic Report Sample Nos. _____

Trip Blank No. _____
Equipment Blank No. _____
Bottle Blank No. _____
Field Duplicate Nos. FD-040511-01; FD-040511-02

PES Nos. _____

The Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision _____ was used to evaluate the data and/or approved modifications to the EPA-NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attach modified criteria from EPA approved QAPjP or amendment to QAPjP).

A Tier II or Tier III evaluation was used to validate the data (circle one). If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc. that received partial Tier III validation

_____

The data were evaluated based upon the following parameters:

- Overall Evaluation of Data
- Data Completeness (CSF Audit - Tier I)
- Preservation & Technical Holding Times
- GC/MS & GC/ECD Instrument Performance Check
- Initial & Continuing Calibrations
- Blanks
- Surrogate Compounds
- Internal Standards
- Matrix Spike/Matrix Spike Duplicate
- Field Duplicates
- Sensitivity Check
- PE Samples/Accuracy Check
- Target Compound Identification
- Compound Quantitation and Reported Quantitation Limits
- TICs
- Semivolatile and Pesticide/PCB Cleanup
- System Performance

Region I Definitions and Qualifiers:

A - Acceptable Data
J - Numerical value associated with compound is an estimated quantity.
R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.
U - Compound not detected at that numerical sample quantitation limit.
UJ - The sample quantitation limit is an estimated quantity.
TB, BB, EB - Compound detected in aqueous trip blank, aqueous bottle blank, or aqueous equipment blank associated with soil/sediment samples.

Validator's Name Ann Cognetti Company Name TetraTech Phone Number (412)921-8862

Date Validation Started 5/24/11 Date Validation Completed 5/25/11

EPA-NE
Data Validation Worksheet Cover Page - Page 2

Check if all criteria are met and no hard copy worksheet provided. Indicate NA if worksheet is not applicable to analytical method. Note: there is no standard worksheet for System Performance, however, the validator must document all system performance issues in the Data Validation Memorandum.

VOA/SV worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	✓
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	✓
VOA/SV-II	GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)	✓
VOA/SV-III	INITIAL CALIBRATION	✓
VOA/SV-IV	CONTINUING CALIBRATION	✓
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	✓
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	
VOA-VI	VOA SURROGATE SPIKE RECOVERIES	
SV-VI	SV SURROGATE SPIKE RECOVERIES	✓
VOA/SV-VII	INTERNAL STANDARD PERFORMANCE	✓
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	✓
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	✓
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	
VOA/SV-Pest/PCB-XII	TARGET COMPOUND IDENTIFICATION	✓
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	✓
VOA/SV-XIV	TENTATIVELY IDENTIFIED COMPOUNDS	
VOA/SV-XV	SEMIVOLATILE CLEANUP	✓
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	✓

Pest/PCB worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	✓
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	✓
Pest/PCB-IIA	GC/ECD INSTRUMENT PERFORMANCE CHECK-RESOLUTION	✓
Pest/PCB-IIB	GC/ECD INSTRUMENT PERFORMANCE CHECK-RETENTION TIMES	
Pest/PCB-IIC	GC/ECD INSTRUMENT PERFORMANCE CHECK-ACCURACY CHECK OF INITIAL CALIBRATION	
Pest/PCB-IID	GC/ECD INSTRUMENT PERFORMANCE CHECK-PESTICIDE DEGRADATION	
Pest/PCB-III	INITIAL CALIBRATION	✓
Pest/PCB-IV	CONTINUING CALIBRATION	✓
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	✓
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	
Pest/PCB-VI	SURROGATE COMPOUNDS: SPIKE RECOVERIES AND RETENTION TIME SHIFT	✓
Pest/PCB-VII	PESTICIDE CLEANUP	
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	✓
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	✓
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	
Pest/PCB-XII	COMPOUND IDENTIFICATION	✓
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	✓
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	✓

I certify that all criteria were met for the worksheets checked above.

Signature: Ann Cognetti Name: Ann Cognetti

Date: 5/25/11

The data validator generates a Data Validation Report, applicable to Data Validation Tiers II and III, that consists of the following components in the order specified below: (Refer to Section 11 for a description of each of the Data Validation Report components).

1. Organic Regional Data Assessment/Inorganic Regional Data Assessment (ORDA/IRDA) Form
2. Data Validation Memorandum
   a. Narrative
   b. Table I-Qualifier Recommendation Summary Table
   c. Table II-Overall Evaluation of Data
   d. Table III-Tentatively Identified Compounds
   e. Data Summary Tables
3. Standard Data Validation Worksheets
   a. Manual
   b. Automated Data Review Reports (i.e., CADRE)
4. Support Documentation
   a. Copy of non-CLP analytical method, e.g., DAS methods, modified EPA methods
   b. Copies of PES Score Reports/Vendor PES QC Acceptance Limits
   c. Copies of Telephone Logs/Communication Forms for:
      - RSCC communications
      - Requests for laboratory data resubmissions/clarifications
      - Communications with samplers resolving sampling problems
      - Communications with TPO/Lead Chemist to report contractually-deficient data for rejection/reduced payment
      - Communications with EPA Site Manager concerning possible data rejection
      - EPA Site Manager authorization for alternate DV tier
   d. Copies of data supporting recommendations for reduced payment resulting from CSF Audit and/or PE sample result evaluation
   e. Original data to support recommendations for data rejection/non-payment identified from Tier II or Tier III data validation
   f. Copies of field sampling notes and/or field report supplied by field sampler
   g. Copies of EPA-approved amendments to QAPjP and/or SAP describing modified criteria to be used for validating site data
5. CSF Completeness Evidence Audit
6. DQO Summary Form

The data validator is responsible for implementing all corrective actions required by the contractor Lead Chemist in response to EPA-NE data validation oversight findings.

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

VOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		
		NA			

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: Ann Cognetti

Date: May 25, 2011

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

SEMIVOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		
	See data validation report				

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: Ann Cognetti

Date: May 25, 2011

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB

COMPLETE SDG FILE (CSF) AUDIT

Organic Fractions: PAH, Pesticide, PCB

Missing Information	Date Lab Contacted	Date Received

Validator: Ann Cognetti Date: 5/25/11

EPA-NE - Data Validation
VOA/SV - Pest/PCB-I

12/96

Sampler: Terry Rojahn Company: Tetra Tech Contacted: Yes (No) Date: _____

I. PRESERVATION AND HOLDING TIMES - Circle sample numbers with exceeded technical holding times or omitted preservation.
List all required preservation codes and circle omitted preservation codes.
Circle all exceeded technical holding times.
Identify extraction technique after "# of Days"/(*Extraction Code).

Sample No. (TR No.)	Matrix	Pres. Code	Date Sampled	VOA			BNA					PEST/PCB				
				Date Analyzed	# of Days from Samp. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action
								See (data) validation report								

Preservation Code:
1. Cool @ 4°C (± 2°)
2. Preserve with HCl to at least pH 2
3. Protect from light
4. Freeze
5. Room Temperature (Avoid excessive heat)

(*Extraction Code:)
L/L - Liquid/Liquid
SON - Sonication
SEP - Separatory Funnel
SOX - Soxhlet
SPE - Solid Phase Extraction

Action Code:
J - Estimate (J) Detected Values
UJ - Estimate (UJ) Non-Detected Values
R - Reject (R) Non-Detected Values

Validator: Ann Cognetta Date: 5/25/11

II. GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)

List all Instrument Performance Checks that are outside method QC tuning acceptance criteria.

Volatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action

Comments:

Semivolatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action

Comments: See data validation report

If tuning compounds and criteria are different from those specified in CLP SOW OLM03.1, then the validator should include a copy of the method-specific tuning criteria with this worksheet.

Validator: Ann Cognetti

Date: 5-25-11

EPA-NE - Data Validation Worksheet
VOA/SV-III

III. INITIAL CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Instrument	Parameter	Matrix	Compound	% RSD	$\overline{RRF}$	Samples Affected	Action

Comments:

See data validation report

Validator: Ann Cognetti

Date: 5-25-11

EPA-NE - Data Validation Worksheet

VOA/SV-IV

IV. CONTINUING CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Date of CCAL	Instrument	Parameter	Matrix	Compound	%D	RRF	Samples Affected	Action

Comments:

See data validation report

Validator: John Cognetti

Date: May 25, 2011

EPA-NE - Data Validation Worksheet

VOA/SV - Pest/PCB-V-A

V. BLANK ANALYSIS

List the blank contamination below.

Concentration Level:____

Sampler: Terry Rojahn Company: Tetra Tech

Contacted: Yes (No) Date:____

1. Laboratory: Method, Storage and Instrument Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)
		See data validation report				

2. Field: Equipment (Rinsate), Trip and Bottle Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

Validator: Ann Cognetta Date: 5/25/11

3. Blank Actions - List the maximum concentrations of blank compounds.

Compound	Type of Blank	Date Blank Sampled/Originated	Max. Conc. (units)	Action Level (units)	Sample QL	Samples Affected	Action

Comments: See data validation report

Validator: Ann Cognetti

Date: 5/25/11

EPA-NE - Data Validation Worksheet
VOA-VI

VI. VOA SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Volatile Method QC Acceptance Criteria				
	Toluene-d_8	BFB	DCE-d_4	Other:	
OLM03.2	Water 88-110 Soil 84-138	Water 86-115 Soil 59-113	Water 76-114 Soil 70-121		
OLC02.1	NA	80-120	NA		
Other:					
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**
	NA				

Validator: Ann Cognetti

Date: 5/25/11

VI. SV SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Base/Neutral Method QC Acceptance Criteria					
	NBZ-d_5	2-FBP	TPH-d_{14}	1,2-DCB-d_4*	Other:	
OLM03.2	Water Soil 35-114 23-120	Water Soil 43-116 30-115	Water Soil 33-141 18-137	Water Soil 16-110 20-130		
OLC02.1	40-110	30-110	20-140	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**
		See data validation report				

Method	Acid Method QC Acceptance Criteria					
	Phenol-d_5	2-FP	2,4,6-TBP	2-CP-d_4*	Other:	
OLM03.2	Water Soil 10-110 24-113	Water Soil 21-110 25-121	Water Soil 10-123 19-122	Water Soil 33-110 20-130		
OLC02.1	15-115	15-110	15-130	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

* Advisory Surrogates - OLM03.2

Validator: Ann Cognetti

Date: May 25, 2011

VII. INTERNAL STANDARD PERFORMANCE

List the internal standards that are outside the area count and retention time method QC acceptance criteria.
IS Area Count method QC acceptance criteria: _____
IS Retention Time method QC acceptance criteria: _____

Sample Number (TR#)	Date and Time Analyzed	Instrument	Parameter	IS Outside Area Count and/or RT Criteria	__IS Area	RT Shift	Acceptable Range (IS area or RT shift)	Action
		See Data Validation Report						

Validator: Ann Cognetta

Date: _____

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-VIII

VIII. MATRIX SPIKE/MATRIX SPIKE DUPLICATE - List all MS/MSD analytes that are outside method QC acceptance criteria.

Use a separate worksheet for each MS/MSD pair.

Sample # _____ Matrix _____ Concentration Level _____

Parameter	Compound	MS %Rec	MSD %Rec	RPD	Method QC Limits		Concentration			% RSD	Action
					% Rec	RPD	Unspiked Sample	MS	MSD		
	See data validation report										

Validator: Ann Cognetti Date: 5/25/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-IX

IX. FIELD DUPLICATE PRECISION - List all field duplicate analytes that are outside criteria.

Use a separate worksheet for each field duplicate pair.

Sample Number _____ Duplicate Sample Number _____ Matrix _____

Parameter	Compound	Sample Conc.	Sample QL		Duplicate Conc.	Duplicate QL		RPD	QC Acceptance Criteria RPD or NA*	Action
			SQL	2xSQL		SQL	2xSQL			

* For instances where one duplicate result is ND (or reported less than the sample QL).

Does the MS/MSD data indicate acceptable laboratory precision? Y N

Comments: See data validation report

Sampler Name: _____ Contractor Name: _____ Date Contacted: _____

Reason for Contact and resolution obtained: _____

Validator: Ann Cognetta Date: 5-25-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-X

X. SENSITIVITY CHECK (Method Detection Limit Study)

List all compounds, surrogates, and internal standards that are outside the MDL criteria.

- Has an appropriate MDL study been submitted with seven replicates for each compound and matrix of interest? Y N
- Date of Preparation/Analysis: _____ Within 1 year? Y N
- Instrument I.D.: _____ Same as samples? Y N
- Column I.D.: _____ Same as samples? Y N

Matrix	Compound	MDL > QL	Method QC Limits < 80% or > 120%	IS Outside Area Count and/or RT Criteria	RSD > 20%	Samples Affected	Action

If an MDL study has not been submitted, use only the LFB results to evaluate data.

(Laboratory Fortified Blank) - List all LFB compounds, surrogates and internal standards that are outside criteria.

- Has an appropriate and complete LFB been submitted at the proper frequency? Y N
- Does it contain all target compounds at the method-required QLs? Y N
- Was the LFB spiked with a standard from a source (vendor) independent of the calibration standard? Y N

Matrix	Compound	Method QC Limits < 60% or > 140% Other:	IS Outside Area Count and/or RT Criteria	Samples Affected	Action

Validator: Lynn Cognetti

Date: 5/25/11

XI. ACCURACY CHECK (Performance Evaluation Results) - List all analytes that are outside criteria.

SDG No: _____ CASE: _____

Are more than one-half of the PES analytes within criteria for each parameter. **Y N**

PE Sample Number	Ampule Number	Parameter	Type of PES	Matrix	Analyte	Conc.	Region I EPA PES Scores*	Non-EPA PES Scores**	Samples Affected	Action

* For Region I PESs indicate the Region I PES Score Report Result: Action High; Action Low; TCL MISS; TCL CONTAMINANT; TIC HIT; TIC MISS; TIC CONTAMINANT

** For Non-EPA PESs indicate the Non-EPA PES Score: PES COMPOUND MISS; PES COMPOUND CONTAMINANT; PES COMPOUND HIT (% Recovery Limits)

Validator: Ann Cognetta Date: 5/25/11

XII. TARGET COMPOUND IDENTIFICATION - List the analytes that are outside the acceptance criteria.

Sample Number	Compound	___MS Ions	____RRT	Action

Validator: Ann Cognetti

Date: 5/25/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XIII

XIII. SAMPLE QUANTITATION

Recalculate, from the raw data, the concentrations for one positive detect and one reported sample quantitation limit for a non-detect in a diluted sample or soil sample per fraction. (Note: Although Section XIII, C.1.a, requires that one calculation for each fraction in each sample be performed, the validator is only required to reproduce an example, for each fraction, of one positive detect and one sample quantitation limit calculation on this worksheet.)

Do all soil/sediment samples have % solids greater than 30%? No Y N
If no, list sample numbers See data validation report

Fraction		Calculation
VOA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
BNA		See data validation report
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
Pesticide/PCB		See data validation report
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		

Validator: Ann Cognetti

Date: 5/25/11

XIV. TENTATIVELY IDENTIFIED COMPOUNDS (TICs)

List the 5 TICs having the highest concentration for each sample parameter.

Sample Number	Parameter	Compound	RRT	Est. Conc.	Action

Validator: Ann Cognetti

Date: 5/25/11

XV. SEMIVOLATILE CLEANUP - List all analytes that are outside method cleanup QC criteria.

Cleanup Procedure	Instrument # or Lot #	Date/Time GPC Calibrated or Check Solution Analyzed	Compound	% Rec	QC Limits	Samples Affected	Action

Did the GPC column meet; resolution requirements? Y or N
peak shape requirements? Y or N
retention time shift requirements? Y or N

Was the GPC calibration, Silica Gel cleanup checked at the method required frequency with correct compounds and concentrations? Y or N

Were all compounds less than QL for the GPC/Silica Gel/Acid-Partition blank? Y or N

Did the blank surrogate recoveries and IS area counts and RTs (if added) meet method QC acceptance criteria? Y or N

Comments: _____

Validator: Ann Coquette

Date: 5/25/11

APPENDIX D

SUPPORT DOCUMENTATION

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO-WE55 NEW LONDON, CT
SDG: WE55-2
SE1778

Sample Receipt

The following samples were received on April 8, 2011 and were logged in under Katahdin Analytical Services work order number SE1778 for a hardcopy due date of April 26, 2011.

KATAHDIN Sample No.	TTNUS Sample Identification
SE1778-1	2W-SD-SD150-0001
SE1778-2	2W-SD-SD146-0001
SE1778-3	2W-SD-SD144-0001
SE1778-4	2W-SD-SD140-0001
SE1778-5	2W-SD-SD133-0001
SE1778-6	2W-SD-SD131-0001
SE1778-7	2W-SD-SD127-0001
SE1778-8	2W-SD-SD122-0001
SE1778-9	2W-SD-SD130-0001
SE1778-10	FD-040511-01
SE1778-11	FD-040511-02
SE1778-12	2W-SD-SD129-0001
SE1778-13	2W-SD-SD123-0001
SE1778-14	2W-SD-SD143-0001
SE1778-15	2W-SD-SD145-0001
SE1778-16	2W-SD-SD135-0001
SE1778-17	2W-SD-SD132-0001
SE1778-18	2W-SD-SD142-0001
SE1778-19	2W-SD-SD139-0001
SE1778-20	2W-SD-SD116-0001
SE1778-21	2W-SD-SD114-0001
SE1778-22	2W-SD-SD117-0001
SE1778-23	2W-SD-SD115-0001

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

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

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

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

Organics Analysis

The samples of SDG WE55-2 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, and III 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, for the specific methods listed below or on the Report of Analysis.

Samples SE1778-4, 7, and 13 were used for the matrix spike (MS) and matrix spike duplicate (MSD) samples, per client request.

8270C SIM Analysis

All soil samples and associated QC were subjected to the GPC sample clean-up process.

Surrogate recoveries for all samples and QC were evaluated using laboratory established acceptance limits.

Samples SE1778-2, 2DL, 3, 3DL, 4, 7, 8, 9, 10, 11, 13, 16, 16DL, 18DL, 20 and 22 were manually integrated for the analytes acenaphthylene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, the internal standard chrysene-d12 and/or the surrogates fluorene-d10 and pyrene-d10. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Sample SE1778-18DL had no recovery for the surrogate fluorene-d10, which is due to the dilution of the sample. Since the surrogate recoveries in the analysis of the undiluted sample were acceptable, no further action was taken.

Sample SE1778-18 had a low response for the internal standard perylene-d12 that resulted in a %D which was outside the DoD QSM 4.1 acceptance limit of -50% to +100% of the responses of the internal standards of the midpoint initial calibration standard. Since the sample was reanalyzed at a dilution and had acceptable internal standard responses, no further action was taken.

The MS's WG90177-4 and WG90177-8 had low responses for the internal standard perylene-d12 that resulted in %D's which were outside the DoD QSM 4.1 acceptance limit of -50% to +100% of the responses of the internal standards of the midpoint initial calibration standard.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are nominal acceptance limits. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS

that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long the LCS is acceptable. Nominal limits are used for the LCS/LCSD until enough data is collected to generate statistically based acceptance limits.

The independent check standard (file N0225), associated with the initial calibration on the N instrument on 04/23/11 had low concentrations for the target analytes benzo(k)fluoranthene and indeno(1,2,3-cd)pyrene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The MS WG90177-4 and MSD WG90177-5 had several spiked target analytes with recoveries that were non-calculable and reported as 0% recovery due to the concentration in the native sample being higher than in the MS and MSD. This is likely due to a non-homogeneous sample.

8081 Analysis

Surrogate recoveries for all samples and QC were evaluated using laboratory established acceptance limits.

All soil samples and associated QC were subjected to the GPC sample clean-up process.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) were evaluated using DOD QSM 4.1 acceptance limits for the full list of target analytes and laboratory nominal acceptance limit for the analyte toxaphene. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

Samples SE1778-2, 2DL, 3, 3DL, 4, 7, 8, 9, 9DL, 10, 11, 13, 13DL, 16, 18, 20, 20DL, and 22 were manually integrated for TCX, DCB, 4,4'-DDE, 4.4'-DDD, and/or 4,4'-DDT. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

The target analytes 4,4'-DDT and 4,4'-DDE were detected below ½ the reporting limit in the method blank WG90237-1. The target analyte 4,4'-DDD was detected at a concentration greater than the reporting limit. According to the DoD QSM section D.1.1.1, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit and is greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). The target analyte 4,4'-DDT was detected at a concentration greater than 10 times the concentration in the method blank for all samples except SE1778-7 and 10. This analyte was flagged with a "B" qualifier indicating that the analyte was detected in the method blank analyzed concurrently with samples SE1778-7 and 10.

Samples SE1778-3, 7, 9, 13, and 16 had high recoveries for the surrogate DCB on channel A, which were outside the laboratory established acceptance limits. Since the recoveries were acceptable on channel B, the samples were not reextracted.

Sample SE1778-4 had a high recovery for the surrogate DCB on channel A and a low recovery for DCB on channel B, which were outside the laboratory established acceptance limits. Since the recoveries for TCX were acceptable and there seems to be matrix interference, the sample was not reextracted.

Sample SE1778-22 had low recoveries for the extraction surrogate DCB on both channels and a high recovery for the extraction surrogate TCX on channel A, which were outside of the laboratory established acceptance limits. Since the recoveries for TCX were within the acceptance limits on channel B, the sample was not reextracted.

Note: The Form VII has a column for %D that is set to 15%. The DoD QSM criterion for a CV is 20%D. All of the compounds in the CV's were evaluated to 20% criteria.

The closing CV (file 1ED00286) had low responses 4,4'-DDE and 4,4'-DDT on both channels, a high response for DCB on channel A and a low response for DCB on channel B. These responses resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. The low responses are likely due to interference from samples that were analyzed preceding these CV's. All of the affected samples were put through the GPC, but the sample matrices still caused interference on the instrument. After the failing CV, maintenance was performed on the instrument and the subsequent CV was acceptable. For these reasons, the samples were not reanalyzed.

The closing CV (file 1ED00310) had a low response for 4,4'-DDT on channel A and a low response for DCB on channel B. These responses resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since the responses were acceptable on the confirmation channels, the associated samples were not reanalyzed.

The opening/closing CV's (files 1EE00174, 1EE00177, 1EE00184 and 1EE00188) had low responses for 4,4'-DDT on channel A, which resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since the responses were acceptable on the confirmation channel, the associated samples were not reanalyzed.

Samples SE1778-2, 4, 8, 9, 11, 13, and 16 had RPD's for 4,4'-DDT and/or 4,4'-DDD that were outside of the method acceptance limits of 40%. These analytes are flagged with a "J" qualifier on the report of analysis (ROA).

8082 Analysis

Surrogate recoveries for all samples and QC, as well as spike recoveries for the LCS/LCSD and MS/MSD, were evaluated using nominal acceptance limits.

All soil samples and associated QC were subjected to the GPC sample clean-up process.

Samples SE1778-2, 3, 4, 8, 10, 18, and 22 had low recoveries for the extraction surrogates TCX and DCB on both channels, which were outside the laboratory established acceptance limits.

Most of the samples had a final volume of 2mL, additional sample weight extracted, and they were all put through the GPC. The acceptance limits were established on extractions with a final volume of 10mL and without a GPC cleanup. For these reasons, no further action was taken.

Samples, SE1778-11, 16, and 20, and the method blank, WG90238-1, had low recoveries for TCX on both channels and for DCB on channel A, which were outside the laboratory established acceptance limits. Since the recoveries of DCB were acceptable on channel B, no further action was taken.

Sample SE1778-13 had low recoveries for TCX and DCB on channel A, which were outside the laboratory established acceptance limits. Since the recoveries were acceptable on channel B, no further action was taken.

The opening calibration verification standard (CV) (files 7ED593) had low responses for DCB on channel A and Aroclor 1260 on channel B, which resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since the responses were acceptable on the confirmation channel, the associated samples were not reanalyzed.

The closing CV (file 7ED608) had a high response for TCX on channel A, which resulted in a %D that was outside of the DoD QSM acceptance limits of 20%. Since the response was acceptable on channel B, the associated samples were not reanalyzed.

The closing CV (file 7ED654) had a low response for Aroclor 1260 on channel B, which resulted in a %D that was outside of the DoD QSM acceptance limits of 20%. Since the response was acceptable on channel A, the associated samples were not reanalyzed.

The MS/MSD, WG90238-8 and 9, had high recoveries for Aroclor 1260 that were outside of laboratory established acceptance limits. Since the associated LCS/LCSD had acceptable recoveries, no further action was taken.

Samples SE1778-4 and 9 had RPDs for Aroclor 1260 that were outside of the method acceptance limits of 40%. This analyte is flagged with a "J" qualifier on the reports of analysis (ROAs).

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

Metals Analysis

The samples of Katahdin SDG WE55-2 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Solid-matrix Katahdin Sample Numbers SE1778-(2R, 3R, 4R, 7, 8R, 9R, 10, 11, and 16) were digested for ICP analysis on 04/14/11 (QC Batch BD14ICS0) in accordance with USEPA Method 3050B. Katahdin Sample Numbers SE1778- 4 and 7 were prepared in duplicate and with a

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4189 | PAGE 1 OF 1

PROJECT NO: 112602625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Terry Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB# 8747 4934 2822		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE1778

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)		PRESERVATIVE USED		TYPE OF ANALYSIS: PAHs & SELECT PESTICIDES PCBs & SELECT METALS						COMMENTS
									G	G	4°C	4°C							
4/05	1630	2W-SD-SD150-0001	SD 150	0	4"	SD	G	2	*1	**1									
4/05	1635	2W-SD-SD146-0001	SD 146	0	4	SD	G	2	1	1									
4/05	1641	2W-SD-SD144-0001	SD 144	0	4	SD	G	2	1	1									
4/05	1651	2W-SD-SD140-0001	SD 140	0	4	SD	G	3	2	1									RUN MS/MSD
4/05	1700	2W-SD-SD133-0001	SD 133	0	4	SD	G	2	*1	**1									
4/05	1705	2W-SD-SD131-0001	SD 131	0	4	SD	G	2	*1	**1									
4/05	1710	2W-SD-SD127-0001	SD 127	0	4	SD	G	3	2	1									RUN MS/MSD
4/05	1715	2W-SD-SD122-0001	SD 122	0	4	SD	G	2	1	1									
4/05	1725	2W-SD-SD130-0001	SD 130	0	4	SD	G	2	1	1									
4/05	0000	FD-040511-01	QC	0	4	SD	G	2	1	1									
4/05	0000	FD-040511-02	QC	0	4	SD	G	2	1	1									
4/06	0835	2W-SD-SD129-0001	SD 129	0	4	SD	G	2	*1	**1									
4/06	0910	2W-SD-SD123-0001	SD 123	0	4	SD	G	3	2	1									RUN MS/MSD

1. RELINQUISHED BY Terry Rojahn	DATE 4-07-11	TIME 1700	1. RECEIVED BY FED EX	DATE 4-07-11	TIME 1700
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-8-11	TIME 10:00
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER to 4°C & HOLD " " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

8100000

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4190 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Tey Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB# 8747 4934 2822		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE1778

DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)										COMMENTS
									G	G									
									PRESERVATIVE USED		4°C	4°C							
									TYPE OF ANALYSIS		PAHs	PESTICIDES w. SELECT	PCBs	METALS w. SELECT					
4/06	0925	2W-SD-SD143-0001	SD 143	0	4"	SD	G	2	*1	**1									
4/06	0945	2W-SD-SD145-0001	SD 145	0	4	SD	G	2	*1	**1									
4/06	1015	2W-SD-SD135-0001	SD 135	0	4	SD	G	2	1	1									
4/06	1030	2W-SD-SD132-0001	SD 132	0	4	SD	G	2	*1	**1									
4/06	1050	2W-SD-SD142-0001	SD 142	0	4	SD	G	2	1	1									
4/06	1100	2W-SD-SD139-0001	SD 139	0	4	SD	G	2	*1	**1									
4/06	1155	2W-SD-SD116-0001	SD 116	0	4	SD	G	2	1	1									
4/06	1215	2W-SD-SD114-0001	SD 114	0	4	SD	G	2	*1	**1									
4/06	1230	2W-SD-SD117-0001	SD 117	0	4	SD	G	2	1	1									
4/06	1240	2W-SD-SD115-0001	SD 115	0	4	SD	G	2	*1	**1									

1. RELINQUISHED BY	DATE	TIME	1. RECEIVED BY	DATE	TIME
Tey Rojahn	4-07-11	1700	FED EX	4-07-11	1700
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
				4-8-11	10:00
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD " " " .

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

9

Client: Ketra Tech	KAS PM: KAP	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: Fed-Ex
KAS Work Order#: SE1778/SE1779	KIMS Review By:	Received By: GN
SDG #:	Cooler: 1 of 3	Date/Time Rec.: 4-8-11/1000

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 1.4
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

Client: Tetra Tech	KAS PM: KAP	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: Fed-Ex
KAS Work Order#: SE1778 / SE1779	KIMS Review By:	Received By: GN
SDG #:	Cooler: 2 of 3	Date/Time Rec.: 4-8-11 / 10:00

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?			✓		in cooler 1
3. Chain of Custody signed by client?			✓		
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.		✓			Temp (°C): 2.2
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

Client: Tetra Tech	KAS PM: KAP	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: FedEx
KAS Work Order#: SE177	KIMS Review By:	Received By: GN
SDG #:	Cooler: 3 of 3	Date/Time Rec.: 4-8-11/1000

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?			-		in cooler 1
3. Chain of Custody signed by client?			✓		
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/.IR gun.	✓				Temp (°C): 3.7
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

000012

Jennifer Obrin

From: Kelly Perkins [kperkins@katahdinlab.com]
Sent: Monday, April 11, 2011 9:30 AM
To: 'Peter Lemay'; 'George'; 'Deb Nadeau'; 'Jennifer Obrin'
Subject: FW: Area A Wetland New London Samples

Kelly Perkins
Project Manager
Katahdin Analytical Services
600 Technology Way
Scarborough, ME 04074
(207) 874-2400 Ext. 17

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From: Bernhardt, Aaron [mailto:Aaron.Bernhardt@tetratech.com]
Sent: Monday, April 11, 2011 8:01 AM
To: kperkins@katahdinlab.com
Cc: Ganser, Leanne
Subject: Area A Wetland New London Samples

Kelly,

You should have received the rest of our sediment samples on Friday from Terry Rojahn. I just wanted to remind you that this is the job where some of the samples may have a low percent solids. You had indicated that you would conduct the percent solids analysis first, before beginning the laboratory analysis to determine whether the sample volume should be increased or whether we needed to evaluate other approaches (i.e., centrifugation, etc). Please let me know whether any samples have less than 30% solids.

Also, would you be able to send preliminary results as you get it in. The Navy is interested in the results from this site because the data are being used to define the remediation boundary.

Thanks,

Aaron

Aaron Bernhardt | Project Manager/Ecological Risk Assessor
Direct: 412.921.8433 | Main: 412.921.7090 | Cell: 412-523-0634
aaron.bernhardt@tetratech.com

Tetra Tech | Risk Assessment Group
661 Andersen Drive Foster Plaza 7 | Pittsburgh, PA 15220 | www.tetratech.com

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Jennifer Obrin SE1778/1779

From: Kelly Perkins [kperkins@katahdinlab.com]
Sent: Wednesday, April 13, 2011 2:07 PM
To: 'George'; 'Peter Lemay'; 'Jennifer Obrin'; 'Deb Nadeau'
Subject: FW: Area A Wetland New London Samples

See below

Kelly Perkins
Project Manager
Katahdin Analytical Services
600 Technology Way
Scarborough, ME 04074
(207) 874-2400 Ext. 17

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From: Bernhardt, Aaron [mailto:Aaron.Bernhardt@tetratech.com]
Sent: Wednesday, April 13, 2011 2:06 PM
To: Kelly Perkins
Subject: RE: Area A Wetland New London Samples

Just for the samples with less than 30% solids. Your approach sounds fine.

From: Kelly Perkins [mailto:kperkins@katahdinlab.com]
Sent: Wednesday, April 13, 2011 2:00 PM
To: Bernhardt, Aaron
Subject: RE: Area A Wetland New London Samples

Thanks! For all the samples or for just those with % solids less than 30%? Please note that the most we can increase the sample volume is by a factor of 2 and still hope to get extraction efficiency. We can concentrate the extracts for the Pest/PCB samples to a final volume of 2 mL (instead of 10 mL) which would lower the reporting limits by a factor of 5.

Thanks and please let me know what you'd like us to do!

Kelly Perkins
Project Manager
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Scarborough, ME 04074
(207) 874-2400 Ext. 17

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0000014

From: Bernhardt, Aaron [mailto:Aaron.Bernhardt@tetratech.com]
Sent: Wednesday, April 13, 2011 1:50 PM
To: Kelly Perkins
Subject: RE: Area A Wetland New London Samples

I am late. Go ahead and start the analysis by increasing the sample volume to offset the moisture content.

Thanks,

Aaron

From: Kelly Perkins [mailto:kperkins@katahdinlab.com]
Sent: Wednesday, April 13, 2011 10:26 AM
To: Bernhardt, Aaron
Subject: RE: Area A Wetland New London Samples

Hi Aaron,

Did you hear anything yet? We haven't extracted the samples yet and are starting to get concerned about getting the data report to you on time.

Thanks!!

Kelly Perkins
Project Manager
Katahdin Analytical Services
600 Technology Way
Scarborough, ME 04074
(207) 874-2400 Ext. 17

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From: Bernhardt, Aaron [mailto:Aaron.Bernhardt@tetratech.com]
Sent: Tuesday, April 12, 2011 10:13 AM
To: Kelly Perkins
Subject: RE: Area A Wetland New London Samples

Still waiting to hear from the regulators. I will send them a reminder e-mail @ noon today. I would probably tend to agree with the lab manager. I do not recall too many "soupy" samples. Most just had a lot of vegetation.

Thanks,

Aaron

From: Kelly Perkins [mailto:kperkins@katahdinlab.com]
Sent: Tuesday, April 12, 2011 9:53 AM
To: Bernhardt, Aaron
Subject: RE: Area A Wetland New London Samples

Hi Aaron,

Any word on the %solids list I sent you yesterday? Also, I've attached a %solids summary for more of the New London samples. Many of these are below 30%. The inorganics manager said they looked like they contained a lot of organic material and did not know if centrifuging would help. Please let me know how you'd like us to proceed.

Thanks!!

Kelly Perkins
Project Manager
Katahdin Analytical Services
600 Technology Way
Scarborough, ME 04074
(207) 874-2400 Ext. 17

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From: Bernhardt, Aaron [mailto:Aaron.Bernhardt@tetratech.com]
Sent: Monday, April 11, 2011 3:25 PM
To: Kelly Perkins
Subject: RE: Area A Wetland New London Samples

I just sent out a quick e-mail to the project team to verify how they want to proceed and I will let you know as soon as they let me know.

Thanks,

Aaron

From: Kelly Perkins [mailto:kperkins@katahdinlab.com]
Sent: Monday, April 11, 2011 12:56 PM
To: Bernhardt, Aaron
Subject: RE: Area A Wetland New London Samples

Hi Aaron,

Attached please find the total solids results we have so far. Please note that so far there are 4 samples with % solids less than 30%. We have not centrifuged these samples. Would you like us to?

Also, I want to confirm whether you want us to use more sample volume for samples with solids less than 30% or for all samples?

Thanks!

Kelly Perkins
Project Manager
Katahdin Analytical Services
600 Technology Way
Scarborough, ME 04074
(207) 874-2400 Ext. 17

000010

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From: Bernhardt, Aaron [mailto:Aaron.Bernhardt@tetratech.com]
Sent: Monday, April 11, 2011 8:01 AM
To: kperkins@katahdinlab.com
Cc: Ganser, Leanne
Subject: Area A Wetland New London Samples

Kelly,

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Also, would you be able to send preliminary results as you get it in. The Navy is interested in the results from this site because the data are being used to define the remediation boundary.

Thanks,

Aaron

Aaron Bernhardt | Project Manager/Ecological Risk Assessor
Direct: 412.921.8433 | Main: 412.921.7090 | Cell: 412-638-0834
aaron.bernhardt@tetratech.com

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661 Andersen Drive Foster Plaza 7 | Pittsburgh, PA 15220 | www.tetratech.com

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Version: 10.0.1209 / Virus Database: 1500/3571 - Release Date: 04/13/11

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	%	2W-SD-SD110-0001	SE1779-24	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	%	FD040711-01	SE1779-18	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD158-0001	SE1685-10	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	UG/KG	2W-SD-SD99-0001	SE1779-2DL	NM	04/07/2011	04/14/2011	05/02/2011	7	18	25
SIM	UG/KG	FD-040411-1	SE1685-16	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	UG/KG	FD-040511-01	SE1778-10	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	FD-040511-02	SE1778-11	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	FD040611-01	SE1779-1	NM	04/06/2011	04/14/2011	04/27/2011	8	13	21
SIM	UG/KG	FD040611-01	SE1779-1DL	NM	04/06/2011	04/14/2011	05/02/2011	8	18	26
SIM	UG/KG	FD040711-01	SE1779-18	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD146-0001	SE1778-2DL	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	2W-SD-SD159-0001	SE1685-9DL	NM	04/04/2011	04/13/2011	04/25/2011	9	12	21
SIM	UG/KG	2W-SD-SD98-0001	SE1779-9	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD154-0001	SE1685-7DL	NM	04/04/2011	04/25/2011	04/25/2011	21	0	21
SIM	UG/KG	2W-SD-SD154-0001	SE1685-7	NM	04/04/2011	04/23/2011	04/23/2011	19	0	19
SIM	UG/KG	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	UG/KG	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/13/2011	04/21/2011	9	8	17
SIM	UG/KG	2W-SD-SD147-0001	SE1685-1DL	NM	04/04/2011	04/13/2011	04/23/2011	9	10	19

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/KG	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	UG/KG	FD040711-01	SE1779-18DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD94-0001	SE1779-5DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD161-0001	SE1685-8	NM	04/04/2011	04/22/2011	04/22/2011	18	0	18
SIM	UG/KG	2W-SD-SD87-0001	SE1779-14	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD87-0001	SE1779-14DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD88-0001	SE1779-12	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD88-0001	SE1779-12DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD89-0001	SE1779-15	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD99-0001	SE1779-2	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	UG/KG	2W-SD-SD90-0001	SE1779-4DL	NM	04/07/2011	04/14/2011	05/02/2011	7	18	25
SIM	UG/KG	2W-SD-SD98-0001	SE1779-9DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD95-0001	SE1779-10	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD95-0001	SE1779-10DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD96-0001	SE1779-7	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	UG/KG	2W-SD-SD96-0001	SE1779-7DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD97-0001	SE1779-8	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD97-0001	SE1779-8DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/KG	2W-SD-SD94-0001	SE1779-5	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	UG/KG	2W-SD-SD89-0001	SE1779-15DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD107-0001	SE1779-28	NM	04/06/2011	04/14/2011	05/05/2011	8	21	29
SIM	UG/KG	2W-SD-SD117-0001	SE1778-22	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	UG/KG	2W-SD-SD116-0001	SE1778-20	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	UG/KG	2W-SD-SD112-0001	SE1779-31DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD112-0001	SE1779-31	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	UG/KG	2W-SD-SD110-0001	SE1779-24DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD108-0001	SE1779-26DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD100-0001	SE1779-17	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD118-0001	SE1685-22	NM	04/05/2011	04/13/2011	04/22/2011	8	9	17
SIM	UG/KG	2W-SD-SD107-0001	SE1779-28DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD110-0001	SE1779-24RE	NM	04/06/2011	04/29/2011	05/02/2011	23	3	26
SIM	UG/KG	2W-SD-SD105-0001	SE1779-22DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD105-0001	SE1779-22	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	UG/KG	2W-SD-SD103-0001	SE1779-21DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD103-0001	SE1779-21	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	UG/KG	2W-SD-SD100-0001	SE1779-17DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/KG	2W-SD-SD146-0001	SE1778-2	NM	04/05/2011	04/14/2011	04/23/2011	9	9	18
SIM	UG/KG	2W-SD-SD90-0001	SE1779-4	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	UG/KG	2W-SD-SD108-0001	SE1779-26	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	UG/KG	2W-SD-SD138-0001	SE1685-17DL	NM	04/05/2011	04/13/2011	04/25/2011	8	12	20
SIM	UG/KG	2W-SD-SD144-0001	SE1778-3DL	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	2W-SD-SD144-0001	SE1778-3	NM	04/05/2011	04/14/2011	04/23/2011	9	9	18
SIM	UG/KG	2W-SD-SD142-0001	SE1778-18DL	NM	04/06/2011	04/14/2011	04/27/2011	8	13	21
SIM	UG/KG	2W-SD-SD110-0001	SE1779-24	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	UG/KG	2W-SD-SD140-0001	SE1778-4	NM	04/05/2011	04/14/2011	04/25/2011	9	11	20
SIM	UG/KG	2W-SD-SD119-0001	SE1685-23	NM	04/05/2011	04/13/2011	04/22/2011	8	9	17
SIM	UG/KG	2W-SD-SD138-0001	SE1685-17	NM	04/05/2011	04/13/2011	04/23/2011	8	10	18
SIM	UG/KG	2W-SD-SD136-0001	SE1685-28	NM	04/05/2011	04/13/2011	04/22/2011	8	9	17
SIM	UG/KG	2W-SD-SD135-0001	SE1778-16DL	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	UG/KG	2W-SD-SD135-0001	SE1778-16	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	UG/KG	2W-SD-SD130-0001	SE1778-9	NM	04/05/2011	04/14/2011	04/25/2011	9	11	20
SIM	UG/KG	2W-SD-SD127-0001	SE1778-7	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	2W-SD-SD120-0001	SE1685-24	NM	04/05/2011	04/14/2011	04/22/2011	9	8	17
SIM	UG/KG	2W-SD-SD126-0001	SE1685-25	NM	04/05/2011	04/14/2011	04/22/2011	9	8	17

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/KG	2W-SD-SD123-0001	SE1778-13	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	UG/KG	2W-SD-SD122-0001	SE1778-8	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	2W-SD-SD134-0001	SE1685-29	NM	04/05/2011	04/14/2011	04/22/2011	9	8	17
SIM	UG/KG	2W-SD-SD121-0001	SE1685-26	NM	04/05/2011	04/14/2011	04/25/2011	9	11	20
SIM	UG/KG	2W-SD-SD142-0001	SE1778-18	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
PCB	%	FD-040411-1	SE1685-16	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	%	2W-SD-SD144-0001	SE1778-3	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	%	2W-SD-SD146-0001	SE1778-2	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	%	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	%	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	%	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	%	2W-SD-SD154-0001	SE1685-7	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	%	2W-SD-SD158-0001	SE1685-10	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	%	2W-SD-SD161-0001	SE1685-8	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	%	FD-040511-01	SE1778-10	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	%	2W-SD-SD130-0001	SE1778-9	NM	04/05/2011	04/15/2011	04/20/2011	10	5	15
PCB	%	2W-SD-SD142-0001	SE1778-18	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PCB	%	FD-040511-02	SE1778-11	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	%	2W-SD-SD159-0001	SE1685-9	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	%	2W-SD-SD119-0001	SE1685-23	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	%	2W-SD-SD135-0001	SE1778-16	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PCB	%	2W-SD-SD116-0001	SE1778-20	NM	04/06/2011	04/15/2011	04/20/2011	9	5	14
PCB	%	2W-SD-SD140-0001	SE1778-4	NM	04/05/2011	04/15/2011	04/20/2011	10	5	15
PCB	%	2W-SD-SD118-0001	SE1685-22	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	%	2W-SD-SD120-0001	SE1685-24	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	%	2W-SD-SD121-0001	SE1685-26	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	%	2W-SD-SD122-0001	SE1778-8	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	%	2W-SD-SD123-0001	SE1778-13	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PCB	%	2W-SD-SD127-0001	SE1778-7	NM	04/05/2011	04/15/2011	04/20/2011	10	5	15
PCB	%	2W-SD-SD134-0001	SE1685-29	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	%	2W-SD-SD136-0001	SE1685-28	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	%	2W-SD-SD138-0001	SE1685-17	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	%	2W-SD-SD117-0001	SE1778-22	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PCB	UG/KG	2W-SD-SD144-0001	SE1778-3	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	UG/KG	FD-040511-02	SE1778-11	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	UG/KG	FD-040511-01	SE1778-10	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	FD-040411-1	SE1685-16	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	UG/KG	2W-SD-SD161-0001	SE1685-8	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	UG/KG	2W-SD-SD159-0001	SE1685-9	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	UG/KG	2W-SD-SD158-0001	SE1685-10	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	UG/KG	2W-SD-SD154-0001	SE1685-7	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	UG/KG	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	UG/KG	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	UG/KG	2W-SD-SD140-0001	SE1778-4	NM	04/05/2011	04/15/2011	04/20/2011	10	5	15
PCB	UG/KG	2W-SD-SD146-0001	SE1778-2	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	UG/KG	2W-SD-SD121-0001	SE1685-26	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	UG/KG	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	UG/KG	2W-SD-SD138-0001	SE1685-17	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	UG/KG	2W-SD-SD136-0001	SE1685-28	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	UG/KG	2W-SD-SD135-0001	SE1778-16	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PCB	UG/KG	2W-SD-SD134-0001	SE1685-29	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	UG/KG	2W-SD-SD130-0001	SE1778-9	NM	04/05/2011	04/15/2011	04/20/2011	10	5	15
PCB	UG/KG	2W-SD-SD127-0001	SE1778-7	NM	04/05/2011	04/15/2011	04/20/2011	10	5	15
PCB	UG/KG	2W-SD-SD122-0001	SE1778-8	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	2W-SD-SD120-0001	SE1685-24	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	UG/KG	2W-SD-SD119-0001	SE1685-23	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	UG/KG	2W-SD-SD118-0001	SE1685-22	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PCB	UG/KG	2W-SD-SD117-0001	SE1778-22	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PCB	UG/KG	2W-SD-SD116-0001	SE1778-20	NM	04/06/2011	04/15/2011	04/20/2011	9	5	14
PCB	UG/KG	2W-SD-SD142-0001	SE1778-18	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PCB	UG/KG	2W-SD-SD123-0001	SE1778-13	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PEST	%	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	%	FD-040411-1	SE1685-16	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PEST	%	2W-SD-SD144-0001	SE1778-3	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	2W-SD-SD116-0001	SE1778-20	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	%	FD-040511-01	SE1778-10	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	2W-SD-SD161-0001	SE1685-8	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	%	2W-SD-SD159-0001	SE1685-9DL	NM	04/04/2011	04/14/2011	04/27/2011	10	13	23
PEST	%	2W-SD-SD159-0001	SE1685-9	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	%	2W-SD-SD158-0001	SE1685-10	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PEST	%	2W-SD-SD154-0001	SE1685-7	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	%	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	%	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	%	2W-SD-SD146-0001	SE1778-2	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	2W-SD-SD142-0001	SE1778-18	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	%	2W-SD-SD140-0001	SE1778-4	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	2W-SD-SD122-0001	SE1778-8	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	FD-040511-02	SE1778-11	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	2W-SD-SD118-0001	SE1685-22	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	%	2W-SD-SD117-0001	SE1778-22	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	%	2W-SD-SD138-0001	SE1685-17	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	%	2W-SD-SD121-0001	SE1685-26	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	%	2W-SD-SD119-0001	SE1685-23	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	%	2W-SD-SD123-0001	SE1778-13	NM	04/06/2011	04/15/2011	04/21/2011	9	6	15
PEST	%	2W-SD-SD127-0001	SE1778-7	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	2W-SD-SD130-0001	SE1778-9	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	%	2W-SD-SD134-0001	SE1685-29	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	%	2W-SD-SD135-0001	SE1778-16	NM	04/06/2011	04/15/2011	04/21/2011	9	6	15
PEST	%	2W-SD-SD136-0001	SE1685-28	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	%	2W-SD-SD120-0001	SE1685-24	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	UG/KG	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	UG/KG	2W-SD-SD146-0001	SE1778-2DL	NM	04/05/2011	04/15/2011	04/26/2011	10	11	21
PEST	UG/KG	2W-SD-SD146-0001	SE1778-2	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	UG/KG	2W-SD-SD144-0001	SE1778-3DL	NM	04/05/2011	04/15/2011	04/26/2011	10	11	21
PEST	UG/KG	2W-SD-SD144-0001	SE1778-3	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	UG/KG	2W-SD-SD142-0001	SE1778-18DL	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	UG/KG	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	UG/KG	2W-SD-SD140-0001	SE1778-4	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	UG/KG	2W-SD-SD159-0001	SE1685-9DL	NM	04/04/2011	04/14/2011	04/27/2011	10	13	23
PEST	UG/KG	2W-SD-SD138-0001	SE1685-17DL	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
PEST	UG/KG	2W-SD-SD142-0001	SE1778-18	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	UG/KG	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	UG/KG	2W-SD-SD154-0001	SE1685-7	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	UG/KG	2W-SD-SD154-0001	SE1685-7DL	NM	04/04/2011	04/14/2011	04/27/2011	10	13	23
PEST	UG/KG	2W-SD-SD159-0001	SE1685-9	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	UG/KG	2W-SD-SD161-0001	SE1685-8	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PEST	UG/KG	FD-040411-1	SE1685-16	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PEST	UG/KG	FD-040511-01	SE1778-10	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	UG/KG	FD-040511-02	SE1778-11	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	UG/KG	2W-SD-SD138-0001	SE1685-17	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	UG/KG	2W-SD-SD120-0001	SE1685-24DL	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
PEST	UG/KG	2W-SD-SD158-0001	SE1685-10	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PEST	UG/KG	2W-SD-SD123-0001	SE1778-13	NM	04/06/2011	04/15/2011	04/21/2011	9	6	15
PEST	UG/KG	2W-SD-SD116-0001	SE1778-20	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	UG/KG	2W-SD-SD116-0001	SE1778-20DL	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	UG/KG	2W-SD-SD117-0001	SE1778-22	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	UG/KG	2W-SD-SD118-0001	SE1685-22	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	UG/KG	2W-SD-SD118-0001	SE1685-22DL	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
PEST	UG/KG	2W-SD-SD119-0001	SE1685-23	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	UG/KG	2W-SD-SD119-0001	SE1685-23DL	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
PEST	UG/KG	2W-SD-SD120-0001	SE1685-24	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	UG/KG	2W-SD-SD121-0001	SE1685-26DL	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
PEST	UG/KG	2W-SD-SD122-0001	SE1778-8	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	UG/KG	2W-SD-SD136-0001	SE1685-28DL	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
PEST	UG/KG	2W-SD-SD123-0001	SE1778-13DL	NM	04/06/2011	04/15/2011	04/26/2011	9	11	20
PEST	UG/KG	2W-SD-SD127-0001	SE1778-7	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	UG/KG	2W-SD-SD130-0001	SE1778-9	NM	04/05/2011	04/15/2011	04/21/2011	10	6	16
PEST	UG/KG	2W-SD-SD130-0001	SE1778-9DL	NM	04/05/2011	04/15/2011	05/11/2011	10	26	36
PEST	UG/KG	2W-SD-SD134-0001	SE1685-29	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	UG/KG	2W-SD-SD134-0001	SE1685-29DL	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
PEST	UG/KG	2W-SD-SD135-0001	SE1778-16	NM	04/06/2011	04/15/2011	04/21/2011	9	6	15
PEST	UG/KG	2W-SD-SD135-0001	SE1778-16DL	NM	04/06/2011	04/15/2011	05/12/2011	9	27 ✓	36
PEST	UG/KG	2W-SD-SD136-0001	SE1685-28	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15
PEST	UG/KG	2W-SD-SD121-0001	SE1685-26	NM	04/05/2011	04/14/2011	04/20/2011	9	6	15

NSB NEW LONDON
SOIL DATA
WE55-2

FRACTION	CHEMICAL	2W-SD-SD127-0001	UNITS	FD-040511-01	RPD	D
PAH	ACENAPHTHENE	14 J	UG/KG	12 J	15.38	2.00
PAH	ANTHRACENE	3.7 J	UG/KG	2.3 J	46.67	1.40
PAH	BENZO(A)ANTHRACENE	22 J	UG/KG	21 J	4.65	1.00
PAH	BENZO(A)PYRENE	31	UG/KG	30	3.28	1.00
PAH	BENZO(B)FLUORANTHENE	60	UG/KG	56	6.90	4.00
PAH	BENZO(G,H,I)PERYLENE	26 J	UG/KG	26 J	0.00	0.00
PAH	BENZO(K)FLUORANTHENE	24 J	UG/KG	21 J	13.33	3.00
PAH	CHRYSENE	36	UG/KG	32	11.76	4.00
PAH	DIBENZO(A,H)ANTHRACENE	8.7 J	UG/KG	8.3 J	4.71	0.40
PAH	FLUORANTHENE	52	UG/KG	46	12.24	6.00
PAH	INDENO(1,2,3-CD)PYRENE	29 J	UG/KG	30	3.39	1.00
PAH	PHENANTHRENE	20 J	UG/KG	20 J	0.00	0.00
PAH	PYRENE	53	UG/KG	50	5.83	3.00

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NSB NEW LONDON
SOIL DATA
WE55-2

FRACTION	CHEMICAL	2W-SD-SD127-0001	UNITS	FD-040511-01	RPD	D
PEST	4,4'-DDD	3.7 J	UG/KG	3.4 J	8.45	0.30
PEST	4,4'-DDE	1.8 J	UG/KG	2.8 J	43.48	1.00
PEST	4,4'-DDT	5.7 J	UG/KG	7.2 J	23.26	1.50

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NSB NEW LONDON
SOIL DATA
WE55-2

FRACTION	CHEMICAL	2W-SD-SD122-0001	UNITS	FD-040511-02	RPD	D
PAH	ACENAPHTHENE	5.8 J	UG/KG	5.6 J	3.51	0.20
PAH	ACENAPHTHYLENE	9.2 J	UG/KG	10 J	8.33	0.80
PAH	ANTHRACENE	19 J	UG/KG	18 J	5.41	1.00
PAH	BENZO(A)ANTHRACENE	190 J	UG/KG	210 J	10.00	20.00
PAH	BENZO(A)PYRENE	240 J	UG/KG	240 J	0.00	0.00
PAH	BENZO(B)FLUORANTHENE	420 J	UG/KG	450 J	6.90	30.00
PAH	BENZO(G,H,I)PERYLENE	140 J	UG/KG	150 J	6.90	10.00
PAH	BENZO(K)FLUORANTHENE	120 J	UG/KG	140 J	15.38	20.00
PAH	CHRYSENE	250 J	UG/KG	270 J	7.69	20.00
PAH	DIBENZO(A,H)ANTHRACENE	42 J	UG/KG	45 J	6.90	3.00
PAH	FLUORANTHENE	370 J	UG/KG	370 J	0.00	0.00
PAH	FLUORENE	9.1 J	UG/KG	8.8 J	3.35	0.30
PAH	INDENO(1,2,3-CD)PYRENE	180 J	UG/KG	190 J	5.41	10.00
PAH	PHENANTHRENE	160 J	UG/KG	170 J	6.06	10.00
PAH	PYRENE	440 J	UG/KG	500 J	12.77	60.00

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NSB NEW LONDON
SOIL DATA
WE55-2

FRACTION	CHEMICAL	2W-SD-SD122-0001	UNITS	FD-040511-02	RPD	D
PEST	4,4'-DDD	41 J	UG/KG	39 J	5.00	2.00
PEST	4,4'-DDE	21 J	UG/KG	22 J	4.65	1.00
PEST	4,4'-DDT	21 J	UG/KG	19 J	10.00	2.00

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NSB NEW LONDON
SOIL DATA
WE55-2

FRACTION	CHEMICAL	2W-SD-SD122-0001	UNITS	FD-040511-02	RPD	D
PCB	AROCLOR-1260	180 J	UG/KG	190 J	5.41	10.00

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

EX-010 - Revision 1 - 03/10/2010

P/P
SON

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - SOIL PESTICIDE/PCB

Extraction Method: (check one)	SW846 3550 (SONIC.) ✓	SW846 3540 (SOX)	SW846 3545 (ASE)
Analytical Method: (check one)	SW846 8081 ✓	SW846 8082 ✓	SW846 3580 (OILS/WIPES)
Standards	Surrogate ID: 660869	Spike ID: Pest: 660865 PCB: 660863	Spike ID: PCB: 660874
Solvents	Solvent Lot # (MeCl2): JH4506	Solvent Lot # (Acetone): 336E13	Solvent Lot # (Hexane): 54E15
Consumables	Filter Paper Lot # (SON) FO 0022356	Filter Paper Lot # (KD) FO001062	Acid Lot # —
	Sodium Sulfate (granular) Lot #: 279101001	Sodium Sulfate (powder) Lot #: 279 78001	Vial Lot #
Misc.	Nitrogen Bath Temperature:	Sonicator Horns Tuned: <20%	Balance ID: Mettler PG400
Prep Start Time: 1115	Prep End Time: 1450		

GAEX203 0000007

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spike Vol. (mL)	Fraction: Pest	Fraction: PCB	Pre-GPC: Date Conc.	Pre-GPC: Conc. Init.	Pre-GPC: Final Vol. (mL)	Acid Wash	Post-GPC: Date Conc.	Post-GPC: Conc. Init.	Post-GPC: Final Vol. (mL)	Tray Loc.	Comments
4-15-11	KF	WG90237-1 WG90238-1	30.01	0.2mL	NR	✓	✓	4-15-11	WS	10mL		4-20-11	KF	1mL	PP966 F3	Batch R155560
		WG90237-2	29.97	1mL	1mL	✓								5mL	F4	MBR155562
		-3	30.01												F5	
		-4	31.66												F6	MS SE1778-4A
		-5	30.65												F7	MSD " -4A
		-6	31.16												F8	MS SE1778-7A
		-7	31.37												F9	MSD " -7A
		-8	30.07												F10	MS SE1778-13A
		-9	32.04												F11	MSD " -13A
		-10	30.05												F12	TDX LCS
		WG90238-2	30.02				✓								PP967 A1	

EX-010 - Revision 1 - 03/10/2010 GAEX203 0000008

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spike Vol. (mL)	Fraction: Pest	Fraction: PCB	Pre-GPC: Date Conc.	Pre-GPC: Conc. Init.	Pre-GPC: Final Vol. (mL)	Acid Wash	Post-GPC: Date Conc.	Post-GPC: Conc. Init.	Post-GPC: Final Vol. (mL)	Tray Loc.	Comments
4-15-11	KF	WG90238 -3	29.99	1mL	1mL		✓	4-15-11	WS	10mL		4-20-11	KF	5mL	PP967 A2	
		-4	32.26												A3	MS SE1778-4A
		-5	30.60												A4	MSD " -4A
		-6	30.32												A5	
		-7	30.56												A6	MS SE1778-7A
		-8	30.20												A7	MSD " -7A
		-9	32.30												A8	MS SE1778-13A
		SE1778-2A	40.93	0.2mL	NR	✓	✓							1mL	A9	MSD " -13A
		-3A	43.36												A10	
		-4A	46.60												A11	
		-7A	31.18	1mL				4-15-11	WS	10mL				5mL	A12	
		-8A (KF 4/15)	40.03	0.2mL										1mL	B1	
		-9A	40.56												B2	
		-10A	30.20	1mL						10mL				5mL	B3	
		-11A	43.47	0.2mL										1mL	B4	
		-13C	42.01												B5	
		-16A	40.12												B6	
		-18A	30.09	1mL						10mL				5mL	B7	
		-20A	43.28	0.2mL										1mL	B8	
		-22A	41.79												B9	
		SE1685-7A	41.77												B10	RE
		-8A	32.37	1mL						10mL				5mL	B11	RE
GPC Blank								4-20-11								

Reviewed By _____ Date _____

Katahdin Analytical Services 3000254

EX-008 - Revision 1 - 12/20/2009

Sim
Sow

KATAHDIN ANALYTICAL SERVICES, INC.

ORGANIC EXTRACTIONS LOG - SOIL SEMIVOLATILE

Extraction Method: (check one)	SW846 3550 (SONIC.) ✓	SW846 3540 (SOX)	SW846 3545 (ASE)
	SW846 3580 (OIL / WIPES)	OTHER	
Analytical Method: (check one)	SW846 8270 ✓	OTHER	
Standards	Surrogate ID (1): Sv2458	Spike ID (1): Sv2455	Spike ID (3):
	Surrogate ID (2):	Spike ID (2):	
Solvents / Chemicals / Consumables	Solvent Lot # (MeCl2): J44E06	Solvent Lot # (Acetone): J36E13	Sodium Sulfate (granular) Lot # 279b001
	Filter Paper Lot # (SON) FC0022256	Filter Paper Lot # (KD) FC000662	Sodium Sulfate (powder) Lot # 279b001
Misc.	Nitrogen Bath Temperature: 38°C	Sonicator Horns Tuned: ✓ 20%	Balance ID: Mettler PG400

Start: 8:50 Sml 11:40

QAEX197

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction ABN	Fraction ACID	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc.	Comments
4-14-11	WS	WG-30177-1	30.62	1mL	NR		✓	4/14/11	KD	5mL	4-15-11	WS	1mL	Sv624 01	R155447
		-2	29.55		1mL									02	
		-3	30.23											04	
		-4	33.10											05	MS SE1778-4b
		-5	32.88											06	MSD -4b
		-6	30.63											07	MS -7c
		-7	31.01											08	MSD -7
		-8	32.36											09	MS -13a
↓	↓	-9	32.03	↓	↓		↓	↓	↓	↓	↓	↓	↓	A1	MSD -13
															KD 4/14/11

0000123

EX-008 - Revision 1 - 12/20/2009

QAEX197

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction ABN	Fraction ACID	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc.	Comments
4-14-11	WS	SE1685-24b	58.71	1mL	NR		✓	4/14/11	KD	5mL	4-15-11	WS	1mL	Sv624 A10	
		-25a	58.75											E1	
		-26a	59.61											E2	
		-29b	57.78											E3	
		SE1778-2a	54.17	✓	✓						4-19-11	KF	1mL	E4	
		-3a	57.97	✓										E5	
		-4b	51.93	✓										E6	MS/D
		-7c	33.73	✓										E7	MS/D
		-8a	56.71	✓										E8	
		-9b	56.51	✓										E9	
		-10a	38.18	✓										E10	
		-11a	53.96	✓										Sv624 A1	
		-13a	54.05	✓	✓									A2	MS/D
		-16a	53.22	✓										A3	
		-18b	34.51	✓										A4	
		-20b	53.62	✓										A5	
↓	↓	-22b	48.08	✓	↓		↓	↓	↓	↓	↓	↓	↓	A6	
															KD 4/14/11

0000124

GPC blank 4-18-11

A7b

Reviewed By _____

EX-010 - Revision 1 - 03/10/2010

P/P
SON

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - SOIL PESTICIDE/PCB

4/12/11

Extraction Method: (check one)	SW846 3550 (SONIC.) ✓	SW846 3540 (SOX)	SW846 3545 (ASE)
Analytical Method: (check one)	SW846 8081 ✓	SW846 8082 ✓	SW846 3580 (OILS/WIPES)
Standards	Surrogate ID: GC0869	Spike ID: Pest: GC0865 TMX: GC0863	Spike ID: PCB: GC0874
Solvents	Solvent Lot # (MeCl2): J44506	Solvent Lot # (Acetone): 336E13	Solvent Lot # (Hexane): 54E18
Consumables	Filter Paper Lot # (SON) FO 002256	Filter Paper Lot # (KD) FO0010162	Acid Lot # —
	Sodium Sulfate (granular) Lot #: 279b001	Sodium Sulfate (powder) Lot #: 279B001	Vial Lot #
Misc.	Nitrogen Bath Temperature:	Sonicator Horns Tuned: <20%	Balance ID: Mettler PG400
Prep Start Time: 1115	Prep End Time: 1450		

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spike Vol. (mL)	Fraction: Pest	Fraction: PCB	Pre-GPC: Date Conc.	Pre-GPC: Conc. Init.	Pre-GPC: Final Vol. (mL)	Acid Wash	Post-GPC: Date Conc.	Post-GPC: Conc. Init.	Post-GPC: Final Vol. (mL)	Tray Loc.	Comments
4-15-11	KF	WG90237-1 WG90238-1	30.01	0.2mL	NR	✓	✓	4-15-11	WJ	10mL		4-20-11	KF	1mL	AA966 F3	Pest-B155560
		WG90237-2	29.47	1mL	1mL	✓								5mL	F4	PCB-B155562
		-3	30.01												F5	
		-4	31.66												F6	MS SE1778-4A
		-5	30.68												F7	MSD " -4A
		-6	31.16												F8	MS SE1778-7A
		-7	31.37												F9	MSD " -7A
		-8	30.07												F10	MS SE1778-13A
		-9	32.24												F11	MSD " -13A
		-10	30.05												F12	TBX LCS
		WG90238-2	30.92				✓								AA967 A1	

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spike Vol. (mL)	Fraction: Pest	Fraction: PCB	Pre-GPC: Date Conc.	Pre-GPC: Conc. Init.	Pre-GPC: Final Vol. (mL)	Acid Wash	Post-GPC: Date Conc.	Post-GPC: Conc. Init.	Post-GPC: Final Vol. (mL)	Tray Loc.	Comments
4-15-11	KF	WG90238 -3	29.99	1mL	1mL		✓	4-15-11	WJ	10mL		4-20-11	KF	5mL	AA967 A2	
		-4	32.26												A3	MS SE1778-4A
		-5	30.60												A4	MSD " -4A
		-6	30.32												A5	MS SE1778-7A
		-7	30.56												A6	MSD " -7A
		-8	30.20												A7	MS SE1778-13A
		-9	32.30												A8	MSD " -13A
		SE1778-2A	40.93	0.2mL	NR	✓	✓							1mL	A9	
		-3A	42.36												A10	
		-4A	46.00												A11	
		-7A	31.18	1mL				4-15-11	WJ	10mL				5mL	A12	
		-8A (# MS)	40.03	0.2mL										1mL	B1	
		-9A	40.56												B2	
		-10A	30.20	1mL						10mL				5mL	B3	
		-11A	43.47	0.2mL										1mL	B4	
		-13c	42.01												B5	
		-16A	40.12												B6	
		-18A	30.09	1mL						10mL				5mL	B7	
		-20A	43.38	0.2mL										1mL	B8	
		-22A	41.79												B9	
		~~SE1685-7A~~	41.77												B10	AE
		-8A	32.37	1mL												

Reviewed By _____ Date _____

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EX-010 - Revision 1 - 03/10/2010

EX-EX205

00000007

00000008

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Lab File ID: ND019 DFTPP Injection Date: 04/23/11

Instrument ID: GCMS-N DFTPP Injection Time: 0813

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	41.7
68	Less than 2.0% of mass 69	0.6 (1.5)1
69	Less than 100.0% of mass 198	41.9
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	40.0 - 60.0% of mass 198	55.4
197	Less than 1.0% of mass 198	0.4
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.6
275	10.0 - 30.0% of mass 198	21.3
365	1.0 - 100.0% of mass 198	2.5
441	0.0 - 100.0% of mass 443	10.3 (68.6)2
442	40.0 - 100.0% of mass 198	70.6
443	17.0 - 23.0% of mass 442	15.0 (21.3)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00N0423	N0206	04/23/11	0920
02		SSTD8.00N0423	N0207	04/23/11	1006
03		SSTD5.00N0423	N0208	04/23/11	1047
04		SSTD2.00N0423	N0209	04/23/11	1129
05		SSTD0.50N0423	N0210	04/23/11	1210
06		SSTD0.20N0423	N0211	04/23/11	1251
07	WG90177-BLANK	WG90177-1	N0213	04/23/11	1413
08	WG90177-LCS	WG90177-2	N0214	04/23/11	1455
09	WG90177-LCSD	WG90177-3	N0215	04/23/11	1536
10	2W-SD-SD146-0001	SE1778-2	N0220	04/23/11	1903
11	2W-SD-SD144-0001	SE1778-3	N0221	04/23/11	1944
12					
13					
14					
15					
16					
17					
18					
19					
20					

FORM V SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GCMS-N Calibration Date(s): 04/23/11 04/23/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 0920 1251

LAB FILE ID: RF0.2: N0211 RF0.5: N0210 RF1: N0206
RF2: N0209 RF5: N0208 RF8: N0207

								COEFFICENTS			%RSD	MAX %RSD
COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	A0	A1	A2	OR R^2	OR R^2
1-Methylnaphthalene	0.718	0.706	0.645	0.593	0.570	0.498	AVRG		0.62183269		13.578	15.000
Naphthalene	0.919	1.012	1.030	0.948	0.886	0.778	AVRG		0.92879948		9.902	15.000
2-Methylnaphthalene	21153	45821	83698	142160	315110	470760	2ORDR	9.843e-003	1.01400021	0.17180786	0.99775	0.99000
Acenaphthylene	1.769	1.929	2.050	1.861	1.873	1.758	AVRG		1.87311374		5.785	15.000
Acenaphthene	1.182	1.214	1.257	1.155	1.189	1.127	AVRG		1.18748112		3.835	15.000
Fluorene	1.345	1.360	1.408	1.316	1.361	1.246	AVRG		1.33938633		4.062	15.000
Phenanthrene	1.063	1.150	1.252	1.169	1.192	1.105	AVRG		1.15520084		5.724	15.000
Anthracene	1.156	1.180	1.256	1.197	1.223	1.144	AVRG		1.19273217		3.508	15.000
Fluoranthene	0.940	1.026	1.091	1.024	1.143	0.994	AVRG		1.03634267		6.918	15.000
Pyrene	14747	36229	70748	137770	383130	499060	LINR	-0.1203594	0.62063841		0.99902	0.99000
Benzo(a)anthracene	3588	14130	37708	77060	253700	305840	LINR	6.118e-002	0.97384518		0.99901	0.99000
Chrysene	11869	31146	58272	105950	296490	337680	LINR	-0.3180268	0.89853612		0.99529	0.99000
Benzo(b)fluoranthene	0.922	1.061	1.150	1.139	1.238	1.188	AVRG		1.11627767		10.000	15.000
Benzo(k)fluoranthene	1.751	1.728	1.629	1.469	1.510	1.395	AVRG		1.58031907		9.172	15.000
Benzo(a)pyrene	0.783	0.953	1.104	1.046	1.156	1.104	AVRG		1.02439701		13.375	15.000
Indeno(1,2,3-cd)pyrene	0.812	0.903	0.682	0.672	0.758	0.810	AVRG		0.77285831		11.357	15.000
Dibenzo(a,h)anthracene	2186	6987	20659	43533	134670	168030	LINR	0.11724949	1.20006162		0.99924	0.99000
Benzo(g,h,i)perylene	0.870	0.916	0.964	0.941	0.922	0.953	AVRG		0.92776171		3.627	15.000
2-Methylnaphthalene-D10	1.185	1.312	1.328	1.207	1.204	1.145	AVRG		1.23002853		5.962	15.000
Fluorene-D10	1.297	1.334	1.306	1.157	1.118	1.023	AVRG		1.20603860		10.381	15.000
Pyrene-D10	1.175	1.171	1.163	1.107	0.977	1.030	AVRG		1.10395782		7.515	15.000

FORM VI SV

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG90177-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Lab File ID: N0213 Lab Sample ID: WG90177-1

Instrument ID: GCMS-N Date Extracted: 04/14/11

Matrix: (soil/water) SOIL Date Analyzed: 04/23/11

Level: (low/med) LOW Time Analyzed: 1413

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG90177-LCS	WG90177-2	N0214	04/23/11	1455
02	WG90177-LCSD	WG90177-3	N0215	04/23/11	1536
03	2W-SD-SD146-0001	SE1778-2	N0220	04/23/11	1903
04	2W-SD-SD144-0001	SE1778-3	N0221	04/23/11	1944
05	2W-SD-SD140-0001	SE1778-4	N0231	04/25/11	1516
06	2W-SD-SD140-0001MS	WG90177-4	N0232	04/25/11	1557
07	2W-SD-SD140-0001MSD	WG90177-5	N0233	04/25/11	1638
08	2W-SD-SD127-0001MS	WG90177-6	N0235	04/25/11	1801
09	2W-SD-SD127-0001MSD	WG90177-7	N0236	04/25/11	1842
10	2W-SD-SD130-0001	SE1778-9	N0238	04/25/11	2005
11	2W-SD-SD146-0001	SE1778-2DL	N0249	04/26/11	1046
12	2W-SD-SD144-0001	SE1778-3DL	N0250	04/26/11	1128
13	2W-SD-SD135-0001	SE1778-16DL	N0251	04/26/11	1209
14	2W-SD-SD127-0001	SE1778-7	N0253	04/26/11	1332
15	2W-SD-SD122-0001	SE1778-8	N0254	04/26/11	1413
16	FD-040511-01	SE1778-10	N0255	04/26/11	1455
17	FD-040511-02	SE1778-11	N0256	04/26/11	1536
18	2W-SD-SD123-0001	SE1778-13	N0257	04/26/11	1618
19	2W-SD-SD123-0001MS	WG90177-8	N0258	04/26/11	1659
20	2W-SD-SD123-0001MSD	WG90177-9	N0259	04/26/11	1740
21	2W-SD-SD135-0001	SE1778-16	N0260	04/26/11	1822
22	2W-SD-SD142-0001	SE1778-18	N0261	04/26/11	1903
23	2W-SD-SD116-0001	SE1778-20	N0262	04/26/11	1945
24	2W-SD-SD117-0001	SE1778-22	N0263	04/26/11	2026
25	2W-SD-SD142-0001	SE1778-18DL	N0277	04/27/11	1817
26					
27					
28					
29					
30					

COMMENTS:

FORM IVSV

Katahdin Analytical Services A0000028

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG90177-1
Client ID: Method Blank Sample
Project:
SDG: WE55-2

Sample Date:
Received Date: 14-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 23-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 28-apr-2011 12:24

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.6	10.
2-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.2	10.
1-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Acenaphthylene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10.	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10.	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	U	10.	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo (a) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo (b) Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	U	10.	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno (1,2,3-cd) pyrene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo (a,h) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	U	10.	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene-D10		47.0	%					
Fluorene-D10		40.0	%					
Pyrene-D10		76.6	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Lab File ID: ND020 DFTPP Injection Date: 04/25/11

Instrument ID: GCMS-N DFTPP Injection Time: 0918

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	37.7
68	Less than 2.0% of mass 69	0.5 (1.3)1
69	Less than 100.0% of mass 198	41.3
70	Less than 2.0% of mass 69	0.1 (0.3)1
127	40.0 - 60.0% of mass 198	54.5
197	Less than 1.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	22.0
365	1.0 - 100.0% of mass 198	2.5
441	0.0 - 100.0% of mass 443	11.7 (72.0)2
442	40.0 - 100.0% of mass 198	80.2
443	17.0 - 23.0% of mass 442	16.3 (20.3)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00N0425	N0224	04/25/11	0940
02		SIM IND CHECK	N0225	04/25/11	1026
03	2W-SD-SD140-0001	SE1778-4	N0231	04/25/11	1516
04	2W-SD-SD140-0001MS	WG90177-4	N0232	04/25/11	1557
05	2W-SD-SD140-0001MSD	WG90177-5	N0233	04/25/11	1638
06	2W-SD-SD127-0001MS	WG90177-6	N0235	04/25/11	1801
07	2W-SD-SD127-0001MSD	WG90177-7	N0236	04/25/11	1842
08	2W-SD-SD130-0001	SE1778-9	N0238	04/25/11	2005
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

FORM V SV

Katahdin Analytical Services A0000030

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GCMS-N Calibration Date: 04/25/11 Time: 0940

Lab File ID: N0224 Init. Calib. Date(s): 04/23/11 04/23/11

Init. Calib. Times: 0920 1251

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1-Methylnaphthalene	0.6220000	0.6036300	0.6036300	0.01	-2.95	20.00	AVRG
Naphthalene	0.9290000	0.9499400	0.9499400	0.01	2.25	20.00	AVRG
2-Methylnaphthalene	0.8860700	1.0000000	0.7476700	0.01	-11.39	20.00	2RDR
Acenaphthylene	1.8730000	1.8927000	1.8927000	0.01	1.05	20.00	AVRG
Acenaphthene	1.1870000	1.1396000	1.1396000	0.01	-3.99	20.01	AVRG
Fluorene	1.3390000	1.3134000	1.3134000	0.01	-1.91	20.00	AVRG
Phenanthrene	1.1550000	1.1703000	1.1703000	0.01	1.32	20.00	AVRG
Anthracene	1.1930000	1.1864000	1.1864000	0.01	-0.55	20.00	AVRG
Fluoranthene	1.0360000	1.0494000	1.0494000	0.01	1.29	20.01	AVRG
Pyrene	1.0014000	1.0000000	1.7687000	0.01	0.14	20.00	LINR
Benzo(a)anthracene	1.0779000	1.0000000	1.0566000	0.01	7.79	20.00	LINR
Chrysene	0.9486300	1.0000000	1.3389000	0.01	-5.14	20.00	LINR
Benzo(b)fluoranthene	1.1160000	1.1940000	1.1940000	0.01	6.99	20.00	AVRG
Benzo(k)fluoranthene	1.5800000	1.3448000	1.3448000	0.01	-14.89	20.00	AVRG
Benzo(a)pyrene	1.0240000	1.0515000	1.0515000	0.01	2.68	20.01	AVRG
Indeno(1,2,3-cd)pyrene	0.7730000	0.6871800	0.6871800	0.01	-11.10	20.00	AVRG
Dibenzo(a,h)anthracene	0.9909200	1.0000000	0.7475600	0.01	-0.91	20.00	LINR
Benzo(g,h,i)perylene	0.9280000	0.8591100	0.8591100	0.01	-7.42	20.00	AVRG
2-Methylnaphthalene-D10	1.2300000	1.1268000	1.1268000	0.01	-8.39	20.00	AVRG
Fluorene-D10	1.2060000	1.2198000	1.2198000	0.01	1.14	20.00	AVRG
Pyrene-D10	1.1040000	1.0198000	1.0198000	0.01	-7.63	20.00	AVRG

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Lab File ID: ND021 DFTPP Injection Date: 04/26/11

Instrument ID: GCMS-N DFTPP Injection Time: 0837

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	39.6
68	Less than 2.0% of mass 69	0.3 (0.8)1
69	Less than 100.0% of mass 198	40.5
70	Less than 2.0% of mass 69	0.1 (0.3)1
127	40.0 - 60.0% of mass 198	56.4
197	Less than 1.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.3
275	10.0 - 30.0% of mass 198	21.5
365	1.0 - 100.0% of mass 198	2.4
441	0.0 - 100.0% of mass 443	11.0 (74.6)2
442	40.0 - 100.0% of mass 198	76.4
443	17.0 - 23.0% of mass 442	14.7 (19.2)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00N0426	N0248	04/26/11	1003
02	2W-SD-SD146-0001	SE1778-2DL	N0249	04/26/11	1046
03	2W-SD-SD144-0001	SE1778-3DL	N0250	04/26/11	1128
04	2W-SD-SD135-0001	SE1778-16DL	N0251	04/26/11	1209
05	2W-SD-SD127-0001	SE1778-7	N0253	04/26/11	1332
06	2W-SD-SD122-0001	SE1778-8	N0254	04/26/11	1413
07	FD-040511-01	SE1778-10	N0255	04/26/11	1455
08	FD-040511-02	SE1778-11	N0256	04/26/11	1536
09	2W-SD-SD123-0001	SE1778-13	N0257	04/26/11	1618
10	2W-SD-SD123-0001MS	WG90177-8	N0258	04/26/11	1659
11	2W-SD-SD123-0001MSD	WG90177-9	N0259	04/26/11	1740
12	2W-SD-SD135-0001	SE1778-16	N0260	04/26/11	1822
13	2W-SD-SD142-0001	SE1778-18	N0261	04/26/11	1903
14	2W-SD-SD116-0001	SE1778-20	N0262	04/26/11	1945
15	2W-SD-SD117-0001	SE1778-22	N0263	04/26/11	2026
16					
17					
18					
19					
20					

FORM V SV

Katahdin Analytical Services A0000031

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GCMS-N Calibration Date: 04/26/11 Time: 1003

Lab File ID: N0248 Init. Calib. Date(s): 04/23/11 04/23/11

Init. Calib. Times: 0920 1251

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1-Methylnaphthalene	0.6220000	0.5992300	0.5992300	0.01	-3.66	20.00	AVRG
Naphthalene	0.9290000	0.9183200	0.9183200	0.01	-1.15	20.00	AVRG
2-Methylnaphthalene	1.0542000	1.0000000	0.8711800	0.01	5.42	20.00	2RDR
Acenaphthylene	1.8730000	1.7332000	1.7332000	0.01	-7.46	20.00	AVRG
Acenaphthene	1.1870000	1.0593000	1.0593000	0.01	-10.76	20.01	AVRG
Fluorene	1.3390000	1.2564000	1.2564000	0.01	-6.17	20.00	AVRG
Phenanthrene	1.1550000	1.0968000	1.0968000	0.01	-5.04	20.00	AVRG
Anthracene	1.1930000	1.1488000	1.1488000	0.01	-3.70	20.00	AVRG
Fluoranthene	1.0360000	1.0221000	1.0221000	0.01	-1.34	20.01	AVRG
Pyrene	0.8655700	1.0000000	1.5498000	0.01	-13.44	20.00	LINR
Benzo(a)anthracene	0.9499300	1.0000000	0.9251900	0.01	-5.01	20.00	LINR
Chrysene	0.9724000	1.0000000	1.3654000	0.01	-2.76	20.00	LINR
Benzo(b)fluoranthene	1.1160000	1.0426000	1.0426000	0.01	-6.58	20.00	AVRG
Benzo(k)fluoranthene	1.5800000	1.4041000	1.4041000	0.01	-11.13	20.00	AVRG
Benzo(a)pyrene	1.0240000	0.9773800	0.9773800	0.01	-4.55	20.01	AVRG
Indeno(1,2,3-cd)pyrene	0.7730000	0.8453500	0.8453500	0.01	9.36	20.00	AVRG
Dibenzo(a,h)anthracene	0.8412300	1.0000000	0.6228300	0.01	-15.88	20.00	LINR
Benzo(g,h,i)perylene	0.9280000	0.7699900	0.7699900	0.01	-17.03	20.00	AVRG
2-Methylnaphthalene-D10	1.2300000	1.0866000	1.0866000	0.01	-11.66	20.00	AVRG
Fluorene-D10	1.2060000	1.1752000	1.1752000	0.01	-2.55	20.00	AVRG
Pyrene-D10	1.1040000	0.9502700	0.9502700	0.01	-13.92	20.00	AVRG

FORM VII PEST

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Lab File ID: ND022 DFTPP Injection Date: 04/27/11

Instrument ID: GCMS-N DFTPP Injection Time: 1020

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	41.0
68	Less than 2.0% of mass 69	0.5 (1.1)1
69	Less than 100.0% of mass 198	42.3
70	Less than 2.0% of mass 69	0.2 (0.6)1
127	40.0 - 60.0% of mass 198	56.2
197	Less than 1.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.5
275	10.0 - 30.0% of mass 198	22.2
365	1.0 - 100.0% of mass 198	2.8
441	0.0 - 100.0% of mass 443	11.1 (68.2)2
442	40.0 - 100.0% of mass 198	77.3
443	17.0 - 23.0% of mass 442	16.3 (21.1)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD8.00N0427	N0267	04/27/11	1124
02		SSTD5.00N0427	N0268	04/27/11	1205
03		SSTD2.00N0427	N0269	04/27/11	1247
04		SSTD1.00N0427	N0270	04/27/11	1328
05		SSTD0.50N0427	N0271	04/27/11	1409
06		SSTD0.20N0427	N0272	04/27/11	1450
07		SIM IND CHECK	N0273	04/27/11	1531
08	2W-SD-SD142-0001	SE1778-18DL	N0277	04/27/11	1817
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

FORM V SV

Katahdin Analytical Services A0000032

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GCMS-N Calibration Date(s): 04/27/11 04/27/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 1124 1450

LAB FILE ID: RF0.2: N0272 RF0.5: N0271 RF1: N0270
RF2: N0269 RF5: N0268 RF8: N0267

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	COEFFICENTS A0	COEFFICENTS A1	COEFFICENTS A2	%RSD OR R^2	MAX %RSD OR R^2
1-Methylnaphthalene	0.717	0.672	0.619	0.578	0.528	0.484	AVRG		0.59976324		14.594	15.000
Naphthalene	0.969	1.027	0.973	0.891	0.786	0.721	AVRG		0.89455167		13.338	15.000
2-Methylnaphthalene	40153	85891	109020	182380	454030	626760	2ORDR	-0.1226858	1.34480121	0.12163870	0.99959	0.99000
Acenaphthylene	1.813	1.896	1.926	1.732	1.623	1.532	AVRG		1.75345750		8.851	15.000
Acenaphthene	1.163	1.163	1.179	1.061	1.027	0.994	AVRG		1.09787632		7.298	15.000
Fluorene	1.380	1.373	1.364	1.242	1.213	1.131	AVRG		1.28361382		8.079	15.000
Phenanthrene	1.119	1.205	1.197	1.052	1.013	0.955	AVRG		1.08998546		9.282	15.000
Anthracene	1.136	1.217	1.235	1.079	1.069	1.009	AVRG		1.12412374		7.916	15.000
Fluoranthene	1.083	1.115	1.123	1.008	1.029	0.953	AVRG		1.05173525		6.317	15.000
Pyrene	33237	83671	109230	232680	648280	806000	LINR	-0.2197102	0.81916551		0.99780	0.99000
Benzo(a)anthracene	0.859	1.004	1.026	0.943	0.959	0.938	AVRG		0.95480243		6.138	15.000
Chrysene	31072	75712	90685	187540	520190	655240	LINR	-0.2588826	1.01655161		0.99819	0.99000
Benzo(b)fluoranthene	0.947	1.118	1.196	1.076	1.071	1.057	AVRG		1.07766403		7.568	15.000
Benzo(k)fluoranthene	1.644	1.532	1.485	1.307	1.295	1.239	AVRG		1.41678046		11.293	15.000
Benzo(a)pyrene	0.994	1.078	1.108	0.999	1.039	1.022	AVRG		1.03994544		4.347	15.000
Indeno(1,2,3-cd)pyrene	13595	26822	36367	89768	289930	423020	LINR	0.15930412	1.24011988		0.99663	0.99000
Dibenzo(a,h)anthracene	0.665	0.751	0.766	0.704	0.752	0.812	AVRG		0.74180833		6.887	15.000
Benzo(g,h,i)perylene	0.950	0.936	0.926	0.822	0.834	0.878	AVRG		0.89096425		6.117	15.000
2-Methylnaphthalene-D10	1.199	1.139	1.221	1.018	0.982	0.976	AVRG		1.08919579		10.165	15.000
Fluorene-D10	23126	63934	81853	150010	381220	514840	LINR	-0.2510654	1.06942662		0.99771	0.99000
Pyrene-D10	1.020	0.973	0.947	0.853	0.811	0.787	AVRG		0.89862397		10.506	15.000

FORM VI SV

FORM 2
SOIL SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Level:(low/med) LOW

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	WG90177-BLANK	WG90177-1	47	40	77						0
02	WG90177-LCS	WG90177-2	42	46	62						0
03	WG90177-LCSD	WG90177-3	41	41	55						0
04	2W-SD-SD146-0001	SE1778-2	34	42	64						0
05	2W-SD-SD144-0001	SE1778-3	38	40	63						0
06	2W-SD-SD140-0001	SE1778-4	49	54	58						0
07	2W-SD-SD140-0001MS	WG90177-4	40	43	64						0
08	2W-SD-SD140-0001MSD	WG90177-5	43	46	51						0
09	2W-SD-SD127-0001MS	WG90177-6	51	55	69						0
10	2W-SD-SD127-0001MSD	WG90177-7	54	57	75						0
11	2W-SD-SD130-0001	SE1778-9	35	37	56						0
12	2W-SD-SD146-0001	SE1778-2DL	31	37	64						0
13	2W-SD-SD144-0001	SE1778-3DL	46	38	54						0
14	2W-SD-SD135-0001	SE1778-16DL	34	41	53						0
15	2W-SD-SD127-0001	SE1778-7	41	40	55						0
16	2W-SD-SD122-0001	SE1778-8	37	38	54						0
17	FD-040511-01	SE1778-10	37	36	54						0
18	FD-040511-02	SE1778-11	34	33	52						0
19	2W-SD-SD123-0001	SE1778-13	31	29	44						0
20	2W-SD-SD123-0001MS	WG90177-8	42	44	61						0
21	2W-SD-SD123-0001MSD	WG90177-9	46	45	63						0
22	2W-SD-SD135-0001	SE1778-16	33	37	64						0
23	2W-SD-SD142-0001	SE1778-18	34	30	46						0
24	2W-SD-SD116-0001	SE1778-20	30	36	52						0
25	2W-SD-SD117-0001	SE1778-22	42	38	49						0
26	2W-SD-SD142-0001	SE1778-18DL	45	0*	59						1
27											
28											

		QC LIMITS
S1	= 2-Methylnaphthalene-D1	(19- 94)
S2	= Fluorene-D10	(20- 96)
S3	= Pyrene-D10	(31-128)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

Katahdin Analytical Services A0000023

LCS/LCSD Recovery Report

LCS ID: WG90177-2
LCSD ID: WG90177-3
Project:
SDG: WE55-2
Report Date: 28-apr-2011 12:24

Received Date: 14-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 23-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Naphthalene	66.7	33.7	50.5	33.3	49.9	ug/Kgdrywt	1	50	40-100
2-Methylnaphthalene	66.7	30.8	46.2	29.4	44.1	ug/Kgdrywt	5	50	40-100
1-Methylnaphthalene	66.7	31.1	46.6	31.4	47.1	ug/Kgdrywt	1	50	40-100
Acenaphthylene	66.7	30.8	46.2	29.3	43.9	ug/Kgdrywt	5	50	40-100
Acenaphthene	66.7	32.4	48.6	30.5	45.7	ug/Kgdrywt	6	50	40-100
Fluorene	66.7	34.8	52.2	31.6	47.4	ug/Kgdrywt	10	50	40-100
Phenanthrene	66.7	41.9	62.8	38.6	57.9	ug/Kgdrywt	8	50	40-100
Anthracene	66.7	41.0	61.5	37.5	56.2	ug/Kgdrywt	9	50	40-100
Fluoranthene	66.7	51.9	77.8	44.6	66.9	ug/Kgdrywt	15	50	40-100
Pyrene	66.7	46.1	69.1	39.2	58.8	ug/Kgdrywt	16	50	40-100
Benzo (a) anthracene	66.7	43.4	65.1	34.3	51.4	ug/Kgdrywt	23	50	40-100
Chrysene	66.7	45.1	67.6	41.1	61.6	ug/Kgdrywt	9	50	40-100
Benzo (b) Fluoranthene	66.7	48.8	73.2	41.5	62.2	ug/Kgdrywt	16	50	40-100
Benzo(k)fluoranthene	66.7	46.3	69.4	45.5	68.2	ug/Kgdrywt	2	50	40-100
Benzo(a)pyrene	66.7	51.5	77.2	46.2	69.3	ug/Kgdrywt	11	50	40-100
Indeno (1,2,3-cd) pyrene	66.7	57.6	86.4	48.7	73.0	ug/Kgdrywt	17	50	40-100
Dibenzo (a,h) anthracene	66.7	45.2	67.8	38.2	57.3	ug/Kgdrywt	17	50	40-100
Benzo(g,h,i)perylene	66.7	46.8	70.2	40.6	60.9	ug/Kgdrywt	14	50	40-100
2-Methylnaphthalene-D10			42.3		41.4				19-94
Fluorene-D10			45.8		41.4				20-96
Pyrene-D10			62.4		55.0				31-128

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MS/MSD Recovery Report

MS ID: WG90177-4
MSD ID: WG90177-5
Sample ID: SE1778-4
Client ID: 2W-SD-SD140-0001
Project:
SDG: WE55-2

Received Date: 08-APR-11
Extract Date: 14-apr-0011 00:00
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177
Report Date: 29-apr-2011 08:26

Analysis Date: 25-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 14.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Naphthalene	268.	410.	ug/Kgdrywt	U63.	150	200	56.3	48.2	27	50	40-100
2-Methylnaphthalene	268.	410.	ug/Kgdrywt	U63.	130	180	48.5	42.6	30	50	40-100
1-Methylnaphthalene	268.	410.	ug/Kgdrywt	U63.	150	190	55.2	47.3	27	50	40-100
Acenaphthylene	268.	410.	ug/Kgdrywt	J18.	160	210	51.8	47.5	30	50	40-100
Acenaphthene	268.	410.	ug/Kgdrywt	J32.	160	220	49.0	45.6	29	50	40-100
Fluorene	268.	410.	ug/Kgdrywt	J30.	170	220	52.3	46.6	26	50	40-100
Phenanthrene	268.	410.	ug/Kgdrywt	410	320	410	0*	0*	22	50	40-100
Anthracene	268.	410.	ug/Kgdrywt	J55.	180	220	45.0	40.6	23	50	40-100
Fluoranthene	268.	410.	ug/Kgdrywt	1100	540	690	0*	0*	24	50	40-100
Pyrene	268.	410.	ug/Kgdrywt	1300	600	790	0*	0*	27	50	40-100
Benzo (a) anthracene	268.	410.	ug/Kgdrywt	600	380	490	0*	0*	25	50	40-100
Chrysene	268.	410.	ug/Kgdrywt	690	400	500	0*	0*	22	50	40-100
Benzo (b) Fluoranthene	268.	410.	ug/Kgdrywt	1200	530	680	0*	0*	25	50	40-100
Benzo(k)fluoranthene	268.	410.	ug/Kgdrywt	330	270	360	0*	8.29*	28	50	40-100
Benzo(a)pyrene	268.	410.	ug/Kgdrywt	680	400	510	0*	0*	24	50	40-100
Indeno (1,2,3-cd) pyrene	268.	410.	ug/Kgdrywt	480	300	360	0*	0*	20	50	40-100
Dibenzo (a,h) anthracene	268.	410.	ug/Kgdrywt	J120	170	200	16.4*	17.8*	16	50	40-100
Benzo(g,h,i)perylene	268.	410.	ug/Kgdrywt	390	260	320	0*	0*	21	50	40-100
2-Methylnaphthalene-D10							48.9	42.7			19-94
Fluorene-D10							54.1	45.8			20-96
Pyrene-D10							57.8	50.7			31-128

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ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG90177-6
MSD ID: WG90177-7
Sample ID: SE1778-7
Client ID: 2W-SD-SD127-0001
Project:
SDG: WE55-2

Received Date: 08-APR-11
Extract Date: 14-apr-0011 00:00
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177
Report Date: 28-apr-2011 12:24

Analysis Date: 25-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 58.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Naphthalene	112.	111.	ug/Kgdrywt	U15.	60.	65.	53.1	58.4	8	50	40-100
2-Methylnaphthalene	112.	111.	ug/Kgdrywt	U15.	55.	63.	49.2	56.8	13	50	40-100
1-Methylnaphthalene	112.	111.	ug/Kgdrywt	U15.	63.	65.	55.8	58.3	3	50	40-100
Acenaphthylene	112.	111.	ug/Kgdrywt	U15.	65.	69.	57.7	61.9	6	50	40-100
Acenaphthene	112.	111.	ug/Kgdrywt	J14.	82.	88.	61.1	67.1	7	50	40-100
Fluorene	112.	111.	ug/Kgdrywt	U15.	72.	76.	64.5	68.7	5	50	40-100
Phenanthrene	112.	111.	ug/Kgdrywt	J20.	110	110	77.4	80.2	2	50	40-100
Anthracene	112.	111.	ug/Kgdrywt	J3.7	75.	76.	63.2	65.3	2	50	40-100
Fluoranthene	112.	111.	ug/Kgdrywt	52.	140	140	78.6	84.2	4	50	40-100
Pyrene	112.	111.	ug/Kgdrywt	53.	150	160	86.6	97.7	7	50	40-100
Benzo (a) anthracene	112.	111.	ug/Kgdrywt	J22.	110	110	77.1	79.9	2	50	40-100
Chrysene	112.	111.	ug/Kgdrywt	36.	120	130	75.2	87.1	10	50	40-100
Benzo (b) Fluoranthene	112.	111.	ug/Kgdrywt	60.	160	180	87.2	110.*	14	50	40-100
Benzo(k)fluoranthene	112.	111.	ug/Kgdrywt	J24.	97.	88.	65.4	58.2	10	50	40-100
Benzo(a)pyrene	112.	111.	ug/Kgdrywt	31.	120	120	78.9	81.7	2	50	40-100
Indeno (1,2,3-cd) pyrene	112.	111.	ug/Kgdrywt	J29.	110	120	73.6	77.2	3	50	40-100
Dibenzo (a,h) anthracene	112.	111.	ug/Kgdrywt	J8.7	85.	88.	68.3	71.4	3	50	40-100
Benzo(g,h,i)perylene	112.	111.	ug/Kgdrywt	J26.	100	110	70.4	76.8	6	50	40-100
2-Methylnaphthalene-D10							51.0	54.5			19-94
Fluorene-D10							55.2	57.1			20-96
Pyrene-D10							69.0	75.0			31-128

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ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

MS/MSD Recovery Report

MS ID: WG90177-8
MSD ID: WG90177-9
Sample ID: SE1778-13
Client ID: 2W-SD-SD123-0001
Project:
SDG: WE55-2

Received Date: 08-APR-11
Extract Date: 14-apr-0011 00:00
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177
Report Date: 28-apr-2011 12:24

Analysis Date: 26-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 14.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Naphthalene	449.	455.	ug/Kgdrywt	U40.	230	250	50.8	54.1	8	50	40-100
2-Methylnaphthalene	449.	455.	ug/Kgdrywt	U40.	230	220	51.6	49.0	4	50	40-100
1-Methylnaphthalene	449.	455.	ug/Kgdrywt	U40.	230	240	52.1	52.1	1	50	40-100
Acenaphthylene	449.	455.	ug/Kgdrywt	J18.	230	240	48.2	48.9	2	50	40-100
Acenaphthene	449.	455.	ug/Kgdrywt	J19.	250	260	51.7	52.6	3	50	40-100
Fluorene	449.	455.	ug/Kgdrywt	J22.	260	250	53.1	51.1	2	50	40-100
Phenanthrene	449.	455.	ug/Kgdrywt	230	600	600	82.4	80.7	0	50	40-100
Anthracene	449.	455.	ug/Kgdrywt	J34.	290	290	56.7	56.2	0	50	40-100
Fluoranthene	449.	455.	ug/Kgdrywt	680	1400	1300	154.*	128.*	8	50	40-100
Pyrene	449.	455.	ug/Kgdrywt	840	1700	1500	183.*	152.*	8	50	40-100
Benzo (a) anthracene	449.	455.	ug/Kgdrywt	370	820	790	101.*	92.6	4	50	40-100
Chrysene	449.	455.	ug/Kgdrywt	470	1000	980	118.*	111.*	2	50	40-100
Benzo (b) Fluoranthene	449.	455.	ug/Kgdrywt	790	1600	1400	185.*	143.*	12	50	40-100
Benzo(k)fluoranthene	449.	455.	ug/Kgdrywt	250	620	590	81.0	74.5	4	50	40-100
Benzo(a)pyrene	449.	455.	ug/Kgdrywt	460	1000	940	124.*	104.*	8	50	40-100
Indeno (1,2,3-cd) pyrene	449.	455.	ug/Kgdrywt	360	800	840	99.1	106.*	4	50	40-100
Dibenzo (a,h) anthracene	449.	455.	ug/Kgdrywt	83.	290	320	47.0	53.2	10	50	40-100
Benzo(g,h,i)perylene	449.	455.	ug/Kgdrywt	290	610	650	72.4	80.0	6	50	40-100
2-Methylnaphthalene-D10							41.9	46.4			19-94
Fluorene-D10							44.5	45.0			20-96
Pyrene-D10							61.5	62.8			31-128

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FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Lab File ID (Standard): N0206 Date Analyzed: 04/23/11

Instrument ID: GCMS-N Time Analyzed: 0920

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD		23189	7.40	81163	10.14	36627	14.23
UPPER LIMIT		46378	7.94	162326	10.68	73254	14.77
LOWER LIMIT		11595	6.86	40582	9.60	18314	13.69
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01	WG90177-BLANK	WG90177-1	27773	7.40	99818	10.15	45741	14.24
02	WG90177-LCS	WG90177-2	22318	7.40	78573	10.14	37989	14.23
03	WG90177-LCSD	WG90177-3	23059	7.40	79588	10.14	37704	14.23
04	2W-SD-SD146-0001	SE1778-2	19576	7.40	69429	10.14	36644	14.23
05	2W-SD-SD144-0001	SE1778-3	19851	7.40	73173	10.14	38365	14.24
06		SSTD1.00N0425	19154	7.39	67221	10.13	31890	14.23
07	2W-SD-SD140-0001	SE1778-4	15922	7.40	55408	10.14	28590	14.23
08	2W-SD-SD140-0001MS	WG90177-4	14828	7.39	52604	10.14	26773	14.23
09	2W-SD-SD140-0001MSD	WG90177-5	15744	7.39	58371	10.14	27854	14.23
10	2W-SD-SD127-0001MS	WG90177-6	19907	7.39	73403	10.14	36852	14.23
11	2W-SD-SD127-0001MSD	WG90177-7	16501	7.39	59046	10.14	27905	14.23
12	2W-SD-SD130-0001	SE1778-9	17520	7.40	67734	10.14	31219	14.23
13		SSTD1.00N0426	17352	7.39	63029	10.13	30523	14.23
14	2W-SD-SD146-0001	SE1778-2DL	20740	7.39	73750	10.14	39296	14.23
15	2W-SD-SD144-0001	SE1778-3DL	13651	7.39	49512	10.17	20959	14.26
16	2W-SD-SD135-0001	SE1778-16DL	15262	7.39	50959	10.14	28296	14.23
17	2W-SD-SD127-0001	SE1778-7	14937	7.39	56129	10.15	26200	14.24
18	2W-SD-SD122-0001	SE1778-8	17002	7.39	60417	10.14	32887	14.23
19	FD-040511-01	SE1778-10	16475	7.39	65378	10.15	31805	14.24
20	FD-040511-02	SE1778-11	19337	7.39	66804	10.14	35796	14.23

IS1 (DCB) = 1,4-Dichlorobenzene-D4
IS2 (NPT) = Naphthalene-D8
IS3 (ANT) = Acenaphthene-D10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

Katahdin Analytical Services A0000037

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Lab File ID (Standard): N0206 Date Analyzed: 04/23/11

Instrument ID: GCMS-N Time Analyzed: 0920

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
12 HOUR STD		23189		7.40		81163		10.14		36627		14.23	
UPPER LIMIT		46378		7.94		162326		10.68		73254		14.77	
LOWER LIMIT		11595		6.86		40582		9.60		18314		13.69	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	2W-SD-SD123-0001	SE1778-13		19202		7.39		66170		10.14		33205		14.23	
02	2W-SD-SD123-0001MS	WG90177-8		14757		7.39		52470		10.13		28071		14.23	
03	2W-SD-SD123-0001MSD	WG90177-9		18965		7.39		65741		10.13		31872		14.23	
04	2W-SD-SD135-0001	SE1778-16		20636		7.39		77763		10.14		38615		14.23	
05	2W-SD-SD142-0001	SE1778-18		15539		7.39		52680		10.14		26231		14.24	
06	2W-SD-SD116-0001	SE1778-20		16346		7.39		59720		10.14		30337		14.24	
07	2W-SD-SD117-0001	SE1778-22		16200		7.39		58494		10.14		30199		14.24	
08															
09															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

IS1 (DCB) = 1,4-Dichlorobenzene-D4
IS2 (NPT) = Naphthalene-D8
IS3 (ANT) = Acenaphthene-D10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Lab File ID (Standard): N0206 Date Analyzed: 04/23/11

Instrument ID: GCMS-N Time Analyzed: 0920

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
12 HOUR STD		48008		17.75		29725		24.04		21276		27.19	
UPPER LIMIT		96016		18.29		59450		24.58		42552		27.73	
LOWER LIMIT		24004		17.21		14863		23.50		10638		26.65	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	WG90177-BLANK	WG90177-1		65456		17.76		34619		24.07		20784		27.21	
02	WG90177-LCS	WG90177-2		58211		17.75		43607		24.04		28991		27.19	
03	WG90177-LCSD	WG90177-3		50989		17.75		37371		24.04		21927		27.20	
04	2W-SD-SD146-0001	SE1778-2		51993		17.73		26014		24.03		14514		27.17	
05	2W-SD-SD144-0001	SE1778-3		51028		17.73		24174		24.03		14055		27.17	
06		SSTD1.00N0425		43985		17.73		29451		24.03		22549		27.19	
07	2W-SD-SD140-0001	SE1778-4		39381		17.73		21854		24.03		15324		27.17	
08	2W-SD-SD140-0001MS	WG90177-4		36391		17.73		17716		24.03		9786*		27.17	
09	2W-SD-SD140-0001MSD	WG90177-5		39112		17.73		21002		24.03		12692		27.17	
10	2W-SD-SD127-0001MS	WG90177-6		40149		17.73		26099		24.03		17250		27.17	
11	2W-SD-SD127-0001MSD	WG90177-7		35020		17.73		18282		24.03		11703		27.17	
12	2W-SD-SD130-0001	SE1778-9		41147		17.73		21334		24.03		11194		27.17	
13		SSTD1.00N0426		42962		17.75		30974		24.04		23164		27.19	
14	2W-SD-SD146-0001	SE1778-2DL		54268		17.73		21259		24.03		14100		27.17	
15	2W-SD-SD144-0001	SE1778-3DL		31207		17.75		18242		24.03		14500		27.17	
16	2W-SD-SD135-0001	SE1778-16DL		38654		17.73		21477		24.03		14518		27.17	
17	2W-SD-SD127-0001	SE1778-7		34472		17.75		17285		24.04		11753		27.19	
18	2W-SD-SD122-0001	SE1778-8		48206		17.73		24511		24.03		13563		27.17	
19	FD-040511-01	SE1778-10		39554		17.75		18587		24.04		11257		27.17	
20	FD-040511-02	SE1778-11		47107		17.73		22087		24.03		11321		27.17	

IS4 (PHN) = Phenanthrene-D10
IS5 (CRY) = Chrysene-D12
IS6 (PRY) = Perylene-D12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Lab File ID (Standard): N0206 Date Analyzed: 04/23/11

Instrument ID: GCMS-N Time Analyzed: 0920

		IS4(PHN) AREA #	IS4(PHN) RT #	IS5(CRY) AREA #	IS5(CRY) RT #	IS6(PRY) AREA #	IS6(PRY) RT #
12 HOUR STD		48008	17.75	29725	24.04	21276	27.19
UPPER LIMIT		96016	18.29	59450	24.58	42552	27.73
LOWER LIMIT		24004	17.21	14863	23.50	10638	26.65
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01	2W-SD-SD123-0001	SE1778-13	41623	17.73	21869	24.03	11515	27.17
02	2W-SD-SD123-0001MS	WG90177-8	39694	17.73	21124	24.03	10097*	27.17
03	2W-SD-SD123-0001MSD	WG90177-9	41073	17.73	21680	24.03	11348	27.19
04	2W-SD-SD135-0001	SE1778-16	48752	17.75	21766	24.04	11162	27.19
05	2W-SD-SD142-0001	SE1778-18	29552	17.73	16357	24.03	9385*	27.17
06	2W-SD-SD116-0001	SE1778-20	41167	17.75	20974	24.04	12645	27.19
07	2W-SD-SD117-0001	SE1778-22	38239	17.75	20008	24.03	11243	27.19
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

IS4 (PHN) = Phenanthrene-D10
IS5 (CRY) = Chrysene-D12
IS6 (PRY) = Perylene-D12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Lab File ID (Standard): N0270 Date Analyzed: 04/27/11

Instrument ID: GCMS-N Time Analyzed: 1328

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
12 HOUR STD		30911		7.39		110565		10.13		51598		14.23	
UPPER LIMIT		61822		7.93		221130		10.67		103196		14.77	
LOWER LIMIT		15456		6.85		55283		9.59		25799		13.69	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	2W-SD-SD142-0001	SE1778-18DL		28122		7.39		101780		10.15		53034	14.24
02													
03													
04													
05													
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													

IS1 (DCB) = 1,4-Dichlorobenzene-D4
IS2 (NPT) = Naphthalene-D8
IS3 (ANT) = Acenaphthene-D10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Lab File ID (Standard): N0270 Date Analyzed: 04/27/11

Instrument ID: GCMS-N Time Analyzed: 1328

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
12 HOUR STD		71439		17.73		55478		24.03		44505		27.19	
UPPER LIMIT		142878		18.27		110956		24.57		89010		27.73	
LOWER LIMIT		35720		17.19		27739		23.49		22253		26.65	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	2W-SD-SD142-0001	SE1778-18DL		77714		17.73		58638		24.02		36998	27.16
02													
03													
04													
05													
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													

IS4 (PHN) = Phenanthrene-D10
IS5 (CRY) = Chrysene-D12
IS6 (PRY) = Perylene-D12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/14/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 3.99 DCB: 12.45

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		EVAL	03/14/11	1636		
02		INDAB 0.05	03/14/11	1653	3.99	12.46
03		INDAB 0.005	03/14/11	1711	3.99	12.46
04		INDAB 0.01	03/14/11	1728	3.99	12.46
05		INDAB 0.025	03/14/11	1746	3.99	12.46
06		INDAB 0.1	03/14/11	1803	3.99	12.45
07		INDAB 0.25	03/14/11	1821	3.99	12.45
08		IND 0.05	03/14/11	1838		
09		EVAL	04/21/11	1215		
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

Katahdin Analytical Services A0000153

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date(s): 03/14/11 03/14/11

Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Calibration Time(s): 1653 2208

LAB FILE ID: RF0.005: 1EC00336 RF0.01: 1EC00337 RF0.025: 1EC00338
RF0.05: 1EC00335 RF0.1: 1EC00339 RF0.25: 1EC00340

COMPOUND	RF0.005	RF0.01	RF0.025	RF0.05	RF0.1	RF0.25	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
alpha-BHC	42286	98975	263600	575490	1159800	2785300	2ORDR	1.445e-003	8.292e-008	2.257e-015	0.99990	0.99000
gamma-BHC	41023	94679	248190	541340	1077400	2599400	2ORDR	1.227e-003	8.938e-008	2.423e-015	0.99992	0.99000
Heptachlor	33913	77145	199690	431790	898560	2168400	2ORDR	1.522e-003	1.086e-007	2.74e-015	0.99983	0.99000
Aldrin	34053	78690	207280	449080	901280	2144800	2ORDR	1.349e-003	1.06e-007	4.596e-015	0.99991	0.99000
beta-BHC	18943	41916	103350	219580	440280	1093100	2ORDR	6.587e-004	2.249e-007	2.885e-015	0.99996	0.99000
delta-BHC	22802	56298	154390	352190	744020	1870800	2ORDR	2.124e-003	1.338e-007	-7.51e-016	0.99975	0.99000
Heptachlor Epoxide	33300	73660	194170	410930	818780	1967200	2ORDR	9.962e-004	1.176e-007	4.533e-015	0.99995	0.99000
Endosulfan I	29940	67129	171790	372790	717530	1746300	2ORDR	7.115e-004	1.341e-007	4.96e-015	0.99992	0.99000
gamma-Chlordane	33764	74001	194310	409970	792700	1999800	2ORDR	4.019e-004	1.245e-007	1.549e-016	0.99993	0.99000
alpha-Chlordane	32234	71601	182100	391440	765810	1870500	2ORDR	7.29e-004	1.267e-007	3.488e-015	0.99995	0.99000
4,4'-DDE	33174	76349	193750	432540	832280	2053000	2ORDR	8.631e-004	1.164e-007	2.408e-015	0.99987	0.99000
Dieldrin	31476	70727	187960	405640	780650	1942500	2ORDR	6.886e-004	1.248e-007	1.814e-015	0.99990	0.99000
Endrin	22887	50965	130680	286740	584670	1460500	2ORDR	1.202e-003	1.698e-007	3.202e-016	0.99991	0.99000
4,4'-DDD	25710	57934	153270	334650	646910	1645400	2ORDR	7.003e-004	1.528e-007	-7.47e-016	0.99989	0.99000
Endosulfan II	26905	62119	160910	337890	667650	1654000	2ORDR	6.749e-004	1.471e-007	2.228e-015	0.99997	0.99000
4,4'-DDT	26654	60105	155870	332670	666860	1688100	2ORDR	8.1e-004	1.496e-007	-1.2e-015	0.99996	0.99000
Endrin Aldehyde	20958	50290	125870	266980	531270	1330200	2ORDR	6.868e-004	1.865e-007	6.934e-016	0.99997	0.99000
Endosulfan sulfate	16143	39987	98255	217180	447320	1129400	2ORDR	1.279e-003	2.238e-007	-3.23e-015	0.99989	0.99000
Methoxychlor	14777	31569	77669	158640	317350	793600	2ORDR	2.118e-004	3.145e-007	3.248e-016	1.00000	0.99000
Endrin Ketone	21773	50358	127580	277020	545050	1336900	2ORDR	8.753e-004	1.786e-007	5.792e-015	0.99994	0.99000
Toxaphene	6233	15827	32398	69336	178740	753150	2ORDR	1.995e-002	1.413e-005	-1.17e-012	0.99998	0.99000
(2)	5739	15913	35114	76647	204540	863920	2ORDR	3.983e-002	1.23e-005	-8.89e-013	0.99995	0.99000
(3)	11543	31229	66573	146320	392970	1670600	2ORDR	3.939e-002	6.42e-006	-2.74e-013	0.99995	0.99000
(4)	7977	21669	46822	102430	265400	1133400	2ORDR	2.996e-002	9.505e-006	-6.25e-013	0.99998	0.99000
(5)	7260	18809	41093	92516	251890	1077000	2ORDR	4.726e-002	1.001e-005	-7.17e-013	0.99992	0.99000
(6)	17955	48087	105080	234150	604660	2444600	2ORDR	3.572e-002	4.1e-006	-9.81e-015	0.99996	0.99000
(7)	6296	16764	37544	85000	229830	1026800	2ORDR	4.648e-002	1.107e-005	-1.34e-012	0.99993	0.99000
(8)	8165	21995	48084	112210	300100	1274700	2ORDR	4.923e-002	8.361e-006	-4.35e-013	0.99992	0.99000
(9)	10262	27418	58964	134400	358090	1532300	2ORDR	4.305e-002	7.037e-006	-3.52e-013	0.99994	0.99000
(10)	8481	20537	42276	95642	246630	1078700	2ORDR	2.689e-002	1.03e-005	-9.78e-013	0.99996	0.99000
Tetrachloro-m-Xylene	30689	67167	177620	367610	735800	1795000	2ORDR	7.751e-004	1.327e-007	3.426e-015	0.99998	0.99000
Decachlorobiphenyl	18549	39608	94521	190170	375940	941370	2ORDR	-1.76e-004	2.658e-007	3.643e-017	0.99999	0.99000

FORM VI PESTICIDE

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/14/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :03/14/11
Time Analyzed :1636

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EC00321.D	3.68	3.96

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 03/14/11 Time: 1838

Lab File ID: 1EC00328 Init. Calib. Date(s): 03/14/11 03/14/11

Init. Calib. Times: 1653 2208

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
alpha-BHC	4.76e-002	5.e-002	10967000	0.001	-4.80	15.00	2RDR
Endosulfan sulfate	4.65e-002	5.e-002	4056200.0	0.001	-7.00	15.00	2RDR
beta-BHC	5.24e-002	5.e-002	4583400.0	0.001	4.80	15.00	2RDR
delta-BHC	4.83e-002	5.e-002	6914500.0	0.001	-3.40	15.00	2RDR
Heptachlor	4.75e-002	5.e-002	8373100.0	0.001	-5.00	15.00	2RDR
Aldrin	4.75e-002	5.e-002	8545600.0	0.001	-5.00	15.00	2RDR
Heptachlor Epoxide	4.76e-002	5.e-002	7812300.0	0.001	-4.80	15.00	2RDR
gamma-Chlordane	4.88e-002	5.e-002	7774800.0	0.001	-2.40	15.00	2RDR
alpha-Chlordane	4.88e-002	5.e-002	7514500.0	0.001	-2.40	15.00	2RDR
4,4'-DDE	4.89e-002	5.e-002	8175700.0	0.001	-2.20	15.00	2RDR
Endosulfan I	4.76e-002	5.e-002	6907600.0	0.001	-4.80	15.00	2RDR
Dieldrin	4.89e-002	5.e-002	7675000.0	0.001	-2.20	15.00	2RDR
Endrin	4.56e-002	5.e-002	5221100.0	0.001	-8.80	15.00	2RDR
4,4'-DDD	4.78e-002	5.e-002	6178400.0	0.001	-4.40	15.00	2RDR
Endosulfan II	4.59e-002	5.e-002	6115500.0	0.001	-8.20	15.00	2RDR
4,4'-DDT	4.92e-002	5.e-002	6480700.0	0.001	-1.60	15.00	2RDR
Endrin Aldehyde	4.42e-002	5.e-002	4660200.0	0.001	-11.60	15.00	2RDR
Methoxychlor	5.07e-002	5.e-002	3210500.0	0.001	1.40	15.00	2RDR
Endrin Ketone	4.6e-002	5.e-002	5010700.0	0.001	-8.00	15.00	2RDR
gamma-BHC	4.7e-002	5.e-002	10100000	0.001	-6.00	15.00	2RDR

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :04/21/11
Time Analyzed :1215

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1ED00251.D	0.05	0.13

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 3.88 DCB: 12.21

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.025	04/21/11	1621	3.88	12.22
02	WG90237-BLAN	WG90237-1	04/21/11	1714	3.88	12.22
03	WG90237-LCS	WG90237-2	04/21/11	1732	3.88	12.22
04	WG90237-LCSD	WG90237-3	04/21/11	1749	3.88	12.22
05	2W-SD-SD140-	WG90237-4	04/21/11	1807	3.88	12.21
06	2W-SD-SD140-	WG90237-5	04/21/11	1824	3.88	12.21
07	2W-SD-SD127-	WG90237-6	04/21/11	1841	3.88	12.21
08	2W-SD-SD127-	WG90237-7	04/21/11	1859	3.88	12.21
09	2W-SD-SD123-	WG90237-8	04/21/11	1916	3.88	12.21
10	2W-SD-SD123-	WG90237-9	04/21/11	1934	3.88	12.21
11		INDAB 0.05	04/21/11	2009	3.88	12.21
12	2W-SD-SD146-	SE1778-2	04/21/11	2044	3.88	12.21
13	2W-SD-SD144-	SE1778-3	04/21/11	2101	3.88	12.21
14	2W-SD-SD140-	SE1778-4	04/21/11	2119	3.88	12.20
15	2W-SD-SD127-	SE1778-7	04/21/11	2136	3.88	12.21
16	2W-SD-SD122-	SE1778-8	04/21/11	2154	3.88	12.21
17	2W-SD-SD130-	SE1778-9	04/21/11	2211	3.88	12.21
18	FD-040511-01	SE1778-10	04/21/11	2229	3.88	12.21
19	FD-040511-02	SE1778-11	04/21/11	2246	3.88	12.21
20	2W-SD-SD123-	SE1778-13	04/21/11	2303	3.88	12.21

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000154

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 04/21/11 Time: 1621

Lab File ID: 1ED00262 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.63e-002	2.5e-002	11894000	0.001	5.20	15.00	2RDR	
gamma-BHC	2.57e-002	2.5e-002	10889000	0.001	2.80	15.00	2RDR	
Heptachlor	2.39e-002	2.5e-002	8213900.0	0.001	-4.40	15.00	2RDR	
beta-BHC	2.57e-002	2.5e-002	4455600.0	0.001	2.80	15.00	2RDR	
Aldrin	2.41e-002	2.5e-002	8494200.0	0.001	-3.60	15.00	2RDR	
delta-BHC	3.19e-002	2.5e-002	8904400.0	0.001	27.60	15.00	2RDR	<-
Heptachlor Epoxide	2.33e-002	2.5e-002	7529200.0	0.001	-6.80	15.00	2RDR	
Endosulfan I	2.3e-002	2.5e-002	6616300.0	0.001	-8.00	15.00	2RDR	
4,4'-DDE	2.23e-002	2.5e-002	7342600.0	0.001	-10.80	15.00	2RDR	
Dieldrin	2.3e-002	2.5e-002	7129900.0	0.001	-8.00	15.00	2RDR	
Endrin	2.64e-002	2.5e-002	5941600.0	0.001	5.60	15.00	2RDR	
4,4'-DDD	2.13e-002	2.5e-002	5398400.0	0.001	-14.80	15.00	2RDR	
Endosulfan II	2.17e-002	2.5e-002	5715900.0	0.001	-13.20	15.00	2RDR	
4,4'-DDT	2.18e-002	2.5e-002	5610100.0	0.001	-12.80	15.00	2RDR	
Endrin Aldehyde	2.05e-002	2.5e-002	4243800.0	0.001	-18.00	15.00	2RDR	<-
Endosulfan sulfate	2.49e-002	2.5e-002	4234800.0	0.001	-0.40	15.00	2RDR	
Methoxychlor	2.13e-002	2.5e-002	2683000.0	0.001	-14.80	15.00	2RDR	
alpha-Chlordane	2.25e-002	2.5e-002	6836800.0	0.001	-10.00	15.00	2RDR	
gamma-Chlordane	2.3e-002	2.5e-002	7247900.0	0.001	-8.00	15.00	2RDR	
Endrin Ketone	2.41e-002	2.5e-002	5174500.0	0.001	-3.60	15.00	2RDR	
Tetrachloro-m-Xylene	2.67e-002	2.5e-002	7792100.0	0.001	6.80	15.00	2RDR	
Decachlorobiphenyl	2.12e-002	2.5e-002	3216800.0	0.001	-15.20	15.00	2RDR	<-

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 04/21/11 Time: 2009

Lab File ID: 1ED00274 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.26e-002	5.e-002	12140000	0.001	5.20	15.00	2RDR	
gamma-BHC	5.2e-002	5.e-002	11200000	0.001	4.00	15.00	2RDR	
Heptachlor	4.8e-002	5.e-002	8469000.0	0.001	-4.00	15.00	2RDR	
beta-BHC	4.88e-002	5.e-002	4266400.0	0.001	-2.40	15.00	2RDR	
Aldrin	4.7e-002	5.e-002	8454200.0	0.001	-6.00	15.00	2RDR	
delta-BHC	6.06e-002	5.e-002	8755500.0	0.001	21.20	15.00	2RDR	<-
Heptachlor Epoxide	4.67e-002	5.e-002	7665500.0	0.001	-6.60	15.00	2RDR	
Endosulfan I	4.56e-002	5.e-002	6620100.0	0.001	-8.80	15.00	2RDR	
4,4'-DDE	4.51e-002	5.e-002	7533900.0	0.001	-9.80	15.00	2RDR	
Dieldrin	4.64e-002	5.e-002	7289400.0	0.001	-7.20	15.00	2RDR	
Endrin	5.18e-002	5.e-002	5961000.0	0.001	3.60	15.00	2RDR	
4,4'-DDD	4.47e-002	5.e-002	5774500.0	0.001	-10.60	15.00	2RDR	
Endosulfan II	4.19e-002	5.e-002	5579600.0	0.001	-16.20	15.00	2RDR	<-
4,4'-DDT	4.18e-002	5.e-002	5496200.0	0.001	-16.40	15.00	2RDR	<-
Endrin Aldehyde	4.17e-002	5.e-002	4395900.0	0.001	-16.60	15.00	2RDR	<-
Endosulfan sulfate	4.7e-002	5.e-002	4099000.0	0.001	-6.00	15.00	2RDR	
Methoxychlor	4.1e-002	5.e-002	2596300.0	0.001	-18.00	15.00	2RDR	<-
alpha-Chlordane	4.48e-002	5.e-002	6888600.0	0.001	-10.40	15.00	2RDR	
gamma-Chlordane	4.63e-002	5.e-002	7367800.0	0.001	-7.40	15.00	2RDR	
Endrin Ketone	4.93e-002	5.e-002	5370900.0	0.001	-1.40	15.00	2RDR	
Tetrachloro-m-Xylene	5.41e-002	5.e-002	7949900.0	0.001	8.20	15.00	2RDR	
Decachlorobiphenyl	4.26e-002	5.e-002	3219200.0	0.001	-14.80	15.00	2RDR	

FORM VII PEST

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 3.88 DCB: 12.21

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	2W-SD-SD135-	SE1778-16	04/21/11	2321	3.89	12.21
02		INDAB 0.025	04/21/11	2338	3.88	12.21
03		EVAL	04/26/11	0810		
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000155

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 04/21/11 Time: 2338

Lab File ID: 1ED00286 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.27e-002	2.5e-002	10162000	0.001	-9.20	15.00	2RDR	
gamma-BHC	2.01e-002	2.5e-002	8415600.0	0.001	-19.60	15.00	2RDR	<-
Heptachlor	1.86e-002	2.5e-002	6283800.0	0.001	-25.60	15.00	2RDR	<-
beta-BHC	1.99e-002	2.5e-002	3422300.0	0.001	-20.40	15.00	2RDR	<-
Aldrin	1.96e-002	2.5e-002	6827400.0	0.001	-21.60	15.00	2RDR	<-
delta-BHC	2.41e-002	2.5e-002	6565200.0	0.001	-3.60	15.00	2RDR	
Heptachlor Epoxide	1.9e-002	2.5e-002	6088400.0	0.001	-24.00	15.00	2RDR	<-
Endosulfan I	1.91e-002	2.5e-002	5444400.0	0.001	-23.60	15.00	2RDR	<-
4,4'-DDE	1.79e-002	2.5e-002	5826100.0	0.001	-28.40	15.00	2RDR	<-
Dieldrin	1.81e-002	2.5e-002	5569900.0	0.001	-27.60	15.00	2RDR	<-
Endrin	2.21e-002	2.5e-002	4909100.0	0.001	-11.60	15.00	2RDR	
4,4'-DDD	2.79e-002	2.5e-002	7129200.0	0.001	11.60	15.00	2RDR	
Endosulfan II	1.9e-002	2.5e-002	4976900.0	0.001	-24.00	15.00	2RDR	<-
4,4'-DDT	7.3e-003	2.5e-002	1735800.0	0.001	-70.80	15.00	2RDR	<-
Endrin Aldehyde	1.99e-002	2.5e-002	4117600.0	0.001	-20.40	15.00	2RDR	<-
Endosulfan sulfate	1.64e-002	2.5e-002	2701500.0	0.001	-34.40	15.00	2RDR	<-
Methoxychlor	3.94e-002	2.5e-002	4985200.0	0.001	57.60	15.00	2RDR	<-
alpha-Chlordane	1.93e-002	2.5e-002	5837500.0	0.001	-22.80	15.00	2RDR	<-
gamma-Chlordane	1.93e-002	2.5e-002	6058400.0	0.001	-22.80	15.00	2RDR	<-
Endrin Ketone	1.68e-002	2.5e-002	3564500.0	0.001	-32.80	15.00	2RDR	<-
Tetrachloro-m-Xylene	2.44e-002	2.5e-002	7094800.0	0.001	-2.40	15.00	2RDR	
Decachlorobiphenyl	5.99e-002	2.5e-002	9049100.0	0.001	139.60	15.00	2RDR	<-

Katahdin Analytical Services A0000133

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :04/26/11
Time Analyzed :0810

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1ED00300.D	0.06	0.14

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 3.85 DCB: 12.16

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	04/26/11	0827	3.86	12.18
02	2W-SD-SD142-	SE1778-18	04/26/11	0917	3.87	12.19
03	2W-SD-SD116-	SE1778-20	04/26/11	0934	3.86	12.18
04	2W-SD-SD117-	SE1778-22	04/26/11	0952	3.90	12.18
05	2W-SD-SD146-	SE1778-2DL	04/26/11	1009		
06	2W-SD-SD144-	SE1778-3DL	04/26/11	1027		
07	2W-SD-SD123-	SE1778-13DL	04/26/11	1044		
08	2W-SD-SD142-	SE1778-18DL	04/26/11	1159		
09	2W-SD-SD116-	SE1778-20DL	04/26/11	1217	3.86	12.18
10		INDAB 0.025	04/26/11	1306	3.87	12.19
11		EVAL	05/11/11	1658		
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

Katahdin Analytical Services A0000156

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 04/26/11 Time: 0827

Lab File ID: 1ED00301 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.24e-002	5.e-002	12095000	0.001	4.80	15.00	2RDR	
gamma-BHC	5.15e-002	5.e-002	11074000	0.001	3.00	15.00	2RDR	
Heptachlor	4.8e-002	5.e-002	8473400.0	0.001	-4.00	15.00	2RDR	
beta-BHC	4.93e-002	5.e-002	4315500.0	0.001	-1.40	15.00	2RDR	
Aldrin	4.77e-002	5.e-002	8585800.0	0.001	-4.60	15.00	2RDR	
delta-BHC	7.12e-002	5.e-002	10349000	0.001	42.40	15.00	2RDR	<-
Heptachlor Epoxide	4.75e-002	5.e-002	7782100.0	0.001	-5.00	15.00	2RDR	
Endosulfan I	4.68e-002	5.e-002	6785100.0	0.001	-6.40	15.00	2RDR	
4,4'-DDE	4.38e-002	5.e-002	7313700.0	0.001	-12.40	15.00	2RDR	
Dieldrin	4.66e-002	5.e-002	7314400.0	0.001	-6.80	15.00	2RDR	
Endrin	5.2e-002	5.e-002	5981600.0	0.001	4.00	15.00	2RDR	
4,4'-DDD	4.37e-002	5.e-002	5639700.0	0.001	-12.60	15.00	2RDR	
Endosulfan II	4.25e-002	5.e-002	5658700.0	0.001	-15.00	15.00	2RDR	
4,4'-DDT	4.54e-002	5.e-002	5978000.0	0.001	-9.20	15.00	2RDR	
Endrin Aldehyde	4.03e-002	5.e-002	4249400.0	0.001	-19.40	15.00	2RDR	<-
Endosulfan sulfate	5.43e-002	5.e-002	4750500.0	0.001	8.60	15.00	2RDR	
Methoxychlor	3.99e-002	5.e-002	2524300.0	0.001	-20.20	15.00	2RDR	<-
alpha-Chlordane	4.57e-002	5.e-002	7025900.0	0.001	-8.60	15.00	2RDR	
gamma-Chlordane	4.65e-002	5.e-002	7401600.0	0.001	-7.00	15.00	2RDR	
Endrin Ketone	5.04e-002	5.e-002	5495300.0	0.001	0.80	15.00	2RDR	
Tetrachloro-m-Xylene	5.11e-002	5.e-002	7519500.0	0.001	2.20	15.00	2RDR	
Decachlorobiphenyl	4.03e-002	5.e-002	3045800.0	0.001	-19.40	15.00	2RDR	<-

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 04/26/11 Time: 1306

Lab File ID: 1ED00310 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.6e-002	2.5e-002	11730000	0.001	4.00	15.00	2RDR	
gamma-BHC	2.59e-002	2.5e-002	10969000	0.001	3.60	15.00	2RDR	
Heptachlor	2.53e-002	2.5e-002	8714100.0	0.001	1.20	15.00	2RDR	
beta-BHC	2.42e-002	2.5e-002	4187700.0	0.001	-3.20	15.00	2RDR	
Aldrin	2.35e-002	2.5e-002	8284000.0	0.001	-6.00	15.00	2RDR	
delta-BHC	3.57e-002	2.5e-002	10061000	0.001	42.80	15.00	2RDR	<-
Heptachlor Epoxide	2.2e-002	2.5e-002	7106000.0	0.001	-12.00	15.00	2RDR	
Endosulfan I	1.99e-002	2.5e-002	5696500.0	0.001	-20.40	15.00	2RDR	<-
4,4'-DDE	2.01e-002	2.5e-002	6590800.0	0.001	-19.60	15.00	2RDR	<-
Dieldrin	2.14e-002	2.5e-002	6627600.0	0.001	-14.40	15.00	2RDR	
Endrin	2.6e-002	2.5e-002	5844400.0	0.001	4.00	15.00	2RDR	
4,4'-DDD	2.23e-002	2.5e-002	5665700.0	0.001	-10.80	15.00	2RDR	
Endosulfan II	2.11e-002	2.5e-002	5540000.0	0.001	-15.60	15.00	2RDR	<-
4,4'-DDT	1.95e-002	2.5e-002	5008700.0	0.001	-22.00	15.00	2RDR	<-
Endrin Aldehyde	1.99e-002	2.5e-002	4116300.0	0.001	-20.40	15.00	2RDR	<-
Endosulfan sulfate	2.83e-002	2.5e-002	4832800.0	0.001	13.20	15.00	2RDR	
Methoxychlor	1.86e-002	2.5e-002	2336700.0	0.001	-25.60	15.00	2RDR	<-
alpha-Chlordane	1.98e-002	2.5e-002	6003200.0	0.001	-20.80	15.00	2RDR	<-
gamma-Chlordane	2.04e-002	2.5e-002	6422000.0	0.001	-18.40	15.00	2RDR	<-
Endrin Ketone	2.63e-002	2.5e-002	5668500.0	0.001	5.20	15.00	2RDR	
Tetrachloro-m-Xylene	2.58e-002	2.5e-002	7509000.0	0.001	3.20	15.00	2RDR	
Decachlorobiphenyl	2.04e-002	2.5e-002	3097100.0	0.001	-18.40	15.00	2RDR	<-

FORM VII PEST

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :05/11/11
Time Analyzed :1658

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EE00173.D	2.03	1.85

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 3.82 DCB: 12.10

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	05/11/11	1715	3.82	12.10
02	2W-SD-SD130-	SE1778-9DL	05/11/11	1732	3.82	12.10
03		INDAB 0.025	05/11/11	1807	3.82	12.10
04		EVAL	05/12/11	1140		
05		INDAB 0.05	05/12/11	1158	3.80	12.06
06	2W-SD-SD135-	SE1778-16DL	05/12/11	1336		
07		INDAB 0.025	05/12/11	1416	3.81	12.07
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

Katahdin Analytical Services A0000157

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 05/11/11 Time: 1715

Lab File ID: 1EE00174 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.17e-002	5.e-002	11920000	0.001	3.40	15.00	2RDR	
gamma-BHC	5.02e-002	5.e-002	10803000	0.001	0.40	15.00	2RDR	
Heptachlor	3.88e-002	5.e-002	6799600.0	0.001	-22.40	15.00	2RDR	<-
beta-BHC	4.82e-002	5.e-002	4214900.0	0.001	-3.60	15.00	2RDR	
Aldrin	4.65e-002	5.e-002	8369200.0	0.001	-7.00	15.00	2RDR	
delta-BHC	6.16e-002	5.e-002	8905500.0	0.001	23.20	15.00	2RDR	<-
Heptachlor Epoxide	4.59e-002	5.e-002	7521300.0	0.001	-8.20	15.00	2RDR	
Endosulfan I	4.53e-002	5.e-002	6563200.0	0.001	-9.40	15.00	2RDR	
4,4'-DDE	4.35e-002	5.e-002	7276000.0	0.001	-13.00	15.00	2RDR	
Dieldrin	4.71e-002	5.e-002	7389800.0	0.001	-5.80	15.00	2RDR	
Endrin	5.3e-002	5.e-002	6094700.0	0.001	6.00	15.00	2RDR	
4,4'-DDD	4.26e-002	5.e-002	5486800.0	0.001	-14.80	15.00	2RDR	
Endosulfan II	4.3e-002	5.e-002	5735600.0	0.001	-14.00	15.00	2RDR	
4,4'-DDT	3.83e-002	5.e-002	5016700.0	0.001	-23.40	15.00	2RDR	<-
Endrin Aldehyde	3.9e-002	5.e-002	4100500.0	0.001	-22.00	15.00	2RDR	<-
Endosulfan sulfate	5.17e-002	5.e-002	4517300.0	0.001	3.40	15.00	2RDR	
Methoxychlor	3.58e-002	5.e-002	2265300.0	0.001	-28.40	15.00	2RDR	<-
alpha-Chlordane	4.44e-002	5.e-002	6825200.0	0.001	-11.20	15.00	2RDR	
gamma-Chlordane	4.57e-002	5.e-002	7269200.0	0.001	-8.60	15.00	2RDR	
Endrin Ketone	5.15e-002	5.e-002	5620800.0	0.001	3.00	15.00	2RDR	
Tetrachloro-m-Xylene	5.28e-002	5.e-002	7766000.0	0.001	5.60	15.00	2RDR	
Decachlorobiphenyl	4.22e-002	5.e-002	3188500.0	0.001	-15.60	15.00	2RDR	<-

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 05/11/11 Time: 1807

Lab File ID: 1EE00177 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.65e-002	2.5e-002	11985000	0.001	6.00	15.00	2RDR	
gamma-BHC	2.54e-002	2.5e-002	10747000	0.001	1.60	15.00	2RDR	
Heptachlor	2.05e-002	2.5e-002	6949900.0	0.001	-18.00	15.00	2RDR	<-
beta-BHC	2.45e-002	2.5e-002	4241400.0	0.001	-2.00	15.00	2RDR	
Aldrin	2.42e-002	2.5e-002	8531900.0	0.001	-3.20	15.00	2RDR	
delta-BHC	3.03e-002	2.5e-002	8441700.0	0.001	21.20	15.00	2RDR	<-
Heptachlor Epoxide	2.29e-002	2.5e-002	7388800.0	0.001	-8.40	15.00	2RDR	
Endosulfan I	2.25e-002	2.5e-002	6470200.0	0.001	-10.00	15.00	2RDR	
4,4'-DDE	2.19e-002	2.5e-002	7187500.0	0.001	-12.40	15.00	2RDR	
Dieldrin	2.22e-002	2.5e-002	6890700.0	0.001	-11.20	15.00	2RDR	
Endrin	2.58e-002	2.5e-002	5801000.0	0.001	3.20	15.00	2RDR	
4,4'-DDD	2.13e-002	2.5e-002	5393100.0	0.001	-14.80	15.00	2RDR	
Endosulfan II	2.11e-002	2.5e-002	5541600.0	0.001	-15.60	15.00	2RDR	<-
4,4'-DDT	1.92e-002	2.5e-002	4932600.0	0.001	-23.20	15.00	2RDR	<-
Endrin Aldehyde	1.91e-002	2.5e-002	3958200.0	0.001	-23.60	15.00	2RDR	<-
Endosulfan sulfate	2.63e-002	2.5e-002	4482600.0	0.001	5.20	15.00	2RDR	
Methoxychlor	1.78e-002	2.5e-002	2239700.0	0.001	-28.80	15.00	2RDR	<-
alpha-Chlordane	2.17e-002	2.5e-002	6575900.0	0.001	-13.20	15.00	2RDR	
gamma-Chlordane	2.24e-002	2.5e-002	7051900.0	0.001	-10.40	15.00	2RDR	
Endrin Ketone	2.55e-002	2.5e-002	5484600.0	0.001	2.00	15.00	2RDR	
Tetrachloro-m-Xylene	2.72e-002	2.5e-002	7931200.0	0.001	8.80	15.00	2RDR	
Decachlorobiphenyl	2.23e-002	2.5e-002	3375700.0	0.001	-10.80	15.00	2RDR	

NOT TC

NOT TC

NOT TC

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM): Date Analyzed :05/12/11
Lab Sample ID (PEM): EVAL Time Analyzed :1140

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EE00183.D	1.78	2.10

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 05/12/11 Time: 1158

Lab File ID: 1EE00184 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.24e-002	5.e-002	12100000	0.001	4.80	15.00	2RDR	
gamma-BHC	5.2e-002	5.e-002	11189000	0.001	4.00	15.00	2RDR	
Heptachlor	3.99e-002	5.e-002	7005100.0	0.001	20.20	15.00	2RDR	<-
beta-BHC	4.93e-002	5.e-002	4316100.0	0.001	-1.40	15.00	2RDR	
Aldrin	4.85e-002	5.e-002	8737100.0	0.001	-3.00	15.00	2RDR	
delta-BHC	6.44e-002	5.e-002	9336400.0	0.001	28.80	15.00	2RDR	<-
Heptachlor Epoxide	4.77e-002	5.e-002	7819800.0	0.001	-4.60	15.00	2RDR	
Endosulfan I	4.59e-002	5.e-002	6661800.0	0.001	-8.20	15.00	2RDR	
4,4'-DDE	4.49e-002	5.e-002	7510300.0	0.001	-10.20	15.00	2RDR	
Dieldrin	4.7e-002	5.e-002	7375400.0	0.001	-6.00	15.00	2RDR	
Endrin	5.3e-002	5.e-002	6092700.0	0.001	6.00	15.00	2RDR	
4,4'-DDD	4.47e-002	5.e-002	5767500.0	0.001	-10.60	15.00	2RDR	
Endosulfan II	4.41e-002	5.e-002	5881600.0	0.001	-11.80	15.00	2RDR	
4,4'-DDT	3.84e-002	5.e-002	5032200.0	0.001	23.20	15.00	2RDR	<-
Endrin Aldehyde	4.03e-002	5.e-002	4247200.0	0.001	-19.40	15.00	2RDR	<-
Endosulfan sulfate	5.09e-002	5.e-002	4446100.0	0.001	1.80	15.00	2RDR	
Methoxychlor	3.62e-002	5.e-002	2289600.0	0.001	27.60	15.00	2RDR	<-
alpha-Chlordane	4.66e-002	5.e-002	7170600.0	0.001	-6.80	15.00	2RDR	
gamma-Chlordane	4.64e-002	5.e-002	7376200.0	0.001	-7.20	15.00	2RDR	
Endrin Ketone	5.14e-002	5.e-002	5607100.0	0.001	2.80	15.00	2RDR	
Tetrachloro-m-Xylene	5.36e-002	5.e-002	7890000.0	0.001	7.20	15.00	2RDR	
Decachlorobiphenyl	4.2e-002	5.e-002	3177000.0	0.001	-16.00	15.00	2RDR	<-

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 05/12/11 Time: 1416

Lab File ID: 1EE00188 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	___ RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.65e-002	2.5e-002	11994000	0.001	6.00	15.00	2RDR	
gamma-BHC	2.64e-002	2.5e-002	11202000	0.001	5.60	15.00	2RDR	
Heptachlor	1.83e-002	2.5e-002	6171400.0	0.001	-26.80	15.00	2RDR	<-
beta-BHC	2.61e-002	2.5e-002	4520700.0	0.001	4.40	15.00	2RDR	
Aldrin	2.5e-002	2.5e-002	8840000.0	0.001	0.00	15.00	2RDR	
delta-BHC	3.36e-002	2.5e-002	9432000.0	0.001	34.40	15.00	2RDR	<-
Heptachlor Epoxide	2.43e-002	2.5e-002	7867300.0	0.001	-2.80	15.00	2RDR	
Endosulfan I	2.34e-002	2.5e-002	6736600.0	0.001	-6.40	15.00	2RDR	
4,4'-DDE	2.24e-002	2.5e-002	7377400.0	0.001	-10.40	15.00	2RDR	
Dieldrin	2.39e-002	2.5e-002	7425200.0	0.001	-4.40	15.00	2RDR	
Endrin	2.7e-002	2.5e-002	6065400.0	0.001	8.00	15.00	2RDR	
4,4'-DDD	2.23e-002	2.5e-002	5659400.0	0.001	-10.80	15.00	2RDR	
Endosulfan II	2.21e-002	2.5e-002	5819000.0	0.001	-11.60	15.00	2RDR	
4,4'-DDT	1.86e-002	2.5e-002	4771500.0	0.001	-25.60	15.00	2RDR	<-
Endrin Aldehyde	2.04e-002	2.5e-002	4216200.0	0.001	-18.40	15.00	2RDR	<-
Endosulfan sulfate	2.73e-002	2.5e-002	4654200.0	0.001	9.20	15.00	2RDR	
Methoxychlor	1.68e-002	2.5e-002	2104600.0	0.001	-32.80	15.00	2RDR	<-
alpha-Chlordane	2.35e-002	2.5e-002	7143500.0	0.001	-6.00	15.00	2RDR	
gamma-Chlordane	2.33e-002	2.5e-002	7365600.0	0.001	-6.80	15.00	2RDR	
Endrin Ketone	2.56e-002	2.5e-002	5522900.0	0.001	2.40	15.00	2RDR	
Tetrachloro-m-Xylene	2.76e-002	2.5e-002	8059800.0	0.001	10.40	15.00	2RDR	
Decachlorobiphenyl	2.19e-002	2.5e-002	3319800.0	0.001	-12.40	15.00	2RDR	

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/14/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.22 DCB: 12.54

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		EVAL	03/14/11	1636		
02		INDAB 0.05	03/14/11	1653	4.22	12.54
03		INDAB 0.005	03/14/11	1711	4.22	12.54
04		INDAB 0.01	03/14/11	1728	4.22	12.54
05		INDAB 0.025	03/14/11	1746	4.22	12.54
06		INDAB 0.1	03/14/11	1803	4.22	12.54
07		INDAB 0.25	03/14/11	1821	4.22	12.54
08		IND 0.05	03/14/11	1838		
09		EVAL	04/21/11	1215		
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

Katahdin Analytical Services A0000158

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date(s): 03/14/11 03/14/11

Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Calibration Time(s): 1653 2208

LAB FILE ID: RF0.005: 1EC00336 RF0.01: 1EC00337 RF0.025: 1EC00338
RF0.05: 1EC00335 RF0.1: 1EC00339 RF0.25: 1EC00340

								COEFFICENTS			%RSD	MAX %RSD
COMPOUND	RF0.005	RF0.01	RF0.025	RF0.05	RF0.1	RF0.25	CURVE	A0	A1	A2	OR R^2	OR R^2
alpha-BHC	55114	126210	336710	725340	1458800	3571100	2ORDR	1.201e-003	6.686e-008	7.809e-016	0.99993	0.99000
gamma-BHC	53474	121630	312920	674850	1330400	3326500	2ORDR	7.753e-004	7.411e-008	2.449e-016	0.99995	0.99000
Heptachlor	50731	113970	293940	621690	1225200	2969600	2ORDR	7.777e-004	7.895e-008	1.674e-015	0.99996	0.99000
Aldrin	44448	100500	265360	565430	1138600	2747400	2ORDR	1.156e-003	8.499e-008	2.02e-015	0.99994	0.99000
beta-BHC	24639	53079	130640	280260	555560	1404800	2ORDR	4.905e-004	1.797e-007	-1.51e-015	0.99996	0.99000
delta-BHC	33348	75574	200660	441740	936790	2392000	2ORDR	1.652e-003	1.079e-007	-1.74e-015	0.99982	0.99000
Heptachlor Epoxide	42917	96258	247430	531960	1036000	2528900	2ORDR	7.432e-004	9.344e-008	2.027e-015	0.99994	0.99000
Endosulfan I	38638	87005	220400	464510	931760	2242300	2ORDR	8.937e-004	1.039e-007	3.183e-015	0.99995	0.99000
gamma-Chlordane	42374	94905	241090	520480	1036800	2549500	2ORDR	9.034e-004	9.445e-008	1.271e-015	0.99994	0.99000
alpha-Chlordane	42256	91830	231060	487060	987470	2382300	2ORDR	9.142e-004	9.864e-008	2.469e-015	0.99994	0.99000
4,4'-DDE	44195	99066	253800	547360	1077500	2573000	2ORDR	9.814e-004	8.869e-008	3.137e-015	0.99994	0.99000
Dieldrin	42061	94650	246930	517440	1036900	2532800	2ORDR	8.618e-004	9.42e-008	1.636e-015	0.99997	0.99000
Endrin	33113	72859	191800	410720	820900	2032800	2ORDR	9.416e-004	1.198e-007	1.335e-015	0.99995	0.99000
4,4'-DDD	33690	75552	196270	418650	846890	2106100	2ORDR	9.799e-004	1.168e-007	6.482e-016	0.99995	0.99000
Endosulfan II	35203	80441	206810	438710	872880	2148700	2ORDR	8.147e-004	1.122e-007	1.736e-015	0.99996	0.99000
4,4'-DDT	36361	80918	205940	435170	877030	2138000	2ORDR	8.897e-004	1.115e-007	2.322e-015	0.99996	0.99000
Endrin Aldehyde	27250	66865	167240	353520	712520	1744600	2ORDR	9.23e-004	1.375e-007	2.999e-015	0.99996	0.99000
Endosulfan sulfate	22824	52506	138740	297690	608420	1561900	2ORDR	1.068e-003	1.657e-007	-4.06e-015	0.99995	0.99000
Methoxychlor	19580	41548	101370	212260	419360	1030800	2ORDR	3.474e-004	2.344e-007	7.514e-015	0.99998	0.99000
Endrin Ketone	32229	71471	175770	396970	765450	1855300	2ORDR	9.11e-004	1.254e-007	4.78e-015	0.99986	0.99000
Toxaphene	11082	28433	63029	140130	364930	1528300	2ORDR	3.56e-002	6.868e-006	-2.28e-013	0.99996	0.99000
(2)	9728	25841	56293	121220	316190	1344900	2ORDR	2.946e-002	7.98e-006	-4.22e-013	0.99998	0.99000
(3)	17555	45438	99275	214400	563510	2276100	2ORDR	3.464e-002	4.413e-006	-1.53e-014	0.99996	0.99000
(4)	18495	44996	94424	206280	508800	2048300	2ORDR	1.538e-002	4.878e-006	-1.46e-015	0.99998	0.99000
(5)	24709	66403	142890	310480	780760	3167800	2ORDR	2.337e-002	3.182e-006	-1.05e-014	0.99998	0.99000
(6)	17713	48926	107120	228030	572500	2333600	2ORDR	2.109e-002	4.347e-006	-3.05e-014	0.99999	0.99000
(7)	12029	31513	71093	153780	403800	1697400	2ORDR	3.481e-002	6.22e-006	-2.06e-013	0.99997	0.99000
(8)	29223	76663	168960	366330	952240	3795000	2ORDR	3.414e-002	2.597e-006	7.708e-015	0.99997	0.99000
(9)	19487	52219	114750	244940	633410	2562900	2ORDR	2.946e-002	3.926e-006	-1.4e-014	0.99998	0.99000
(10)	11262	30747	69098	141700	360760	1545200	2ORDR	1.728e-002	7.011e-006	-3.57e-013	0.99999	0.99000
Tetrachloro-m-Xylene	41421	91676	230050	486410	967460	2386800	2ORDR	6.416e-004	1.017e-007	1.174e-015	0.99997	0.99000
Decachlorobiphenyl	22211	48904	119080	245400	478580	1180700	2ORDR	1.094e-004	2.053e-007	5.435e-015	0.99998	0.99000

FORM VI PESTICIDE

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/14/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :03/14/11
Time Analyzed :1636

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EC00321.D	3.74	3.48

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 03/14/11 Time: 1838

Lab File ID: 1EC00328 Init. Calib. Date(s): 03/14/11 03/14/11

Init. Calib. Times: 1653 2208

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
alpha-BHC	4.92e-002	5.e-002	14226000	0.001	-1.60	15.00	2RDR
Endosulfan sulfate	4.81e-002	5.e-002	5722400.0	0.001	-3.80	15.00	2RDR
beta-BHC	5.37e-002	5.e-002	5936900.0	0.001	7.40	15.00	2RDR
delta-BHC	5.04e-002	5.e-002	9102500.0	0.001	0.80	15.00	2RDR
Heptachlor	5.03e-002	5.e-002	12388000	0.001	0.60	15.00	2RDR
Aldrin	4.84e-002	5.e-002	10973000	0.001	-3.20	15.00	2RDR
Heptachlor Epoxide	4.94e-002	5.e-002	10299000	0.001	-1.20	15.00	2RDR
gamma-Chlordane	5.e-002	5.e-002	10327000	0.001	0.00	15.00	2RDR
alpha-Chlordane	4.92e-002	5.e-002	9678400.0	0.001	-1.60	15.00	2RDR
4,4'-DDE	4.97e-002	5.e-002	10791000	0.001	-0.60	15.00	2RDR
Endosulfan I	4.95e-002	5.e-002	9229100.0	0.001	-1.00	15.00	2RDR
Dieldrin	4.88e-002	5.e-002	10099000	0.001	-2.40	15.00	2RDR
Endrin	4.87e-002	5.e-002	7945600.0	0.001	-2.60	15.00	2RDR
4,4'-DDD	4.94e-002	5.e-002	8264900.0	0.001	-1.20	15.00	2RDR
Endosulfan II	4.78e-002	5.e-002	8327700.0	0.001	-4.40	15.00	2RDR
4,4'-DDT	4.85e-002	5.e-002	8465600.0	0.001	-3.00	15.00	2RDR
Endrin Aldehyde	4.48e-002	5.e-002	6338200.0	0.001	-10.40	15.00	2RDR
Methoxychlor	5.08e-002	5.e-002	4272000.0	0.001	1.60	15.00	2RDR
Endrin Ketone	4.7e-002	5.e-002	7255400.0	0.001	-6.00	15.00	2RDR
gamma-BHC	4.8e-002	5.e-002	12729000	0.001	-4.00	15.00	2RDR

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :04/21/11
Time Analyzed :1215

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1ED00251.D	0.05	0.14

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.13 DCB: 12.36

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.025	04/21/11	1621	4.12	12.36
02	WG90237-BLAN	WG90237-1	04/21/11	1714	4.12	12.36
03	WG90237-LCS	WG90237-2	04/21/11	1732	4.12	12.36
04	WG90237-LCSD	WG90237-3	04/21/11	1749	4.12	12.36
05	2W-SD-SD140-	WG90237-4	04/21/11	1807	4.12	12.36
06	2W-SD-SD140-	WG90237-5	04/21/11	1824	4.12	12.36
07	2W-SD-SD127-	WG90237-6	04/21/11	1841	4.12	12.36
08	2W-SD-SD127-	WG90237-7	04/21/11	1859	4.12	12.36
09	2W-SD-SD123-	WG90237-8	04/21/11	1916	4.12	12.36
10	2W-SD-SD123-	WG90237-9	04/21/11	1934	4.12	12.36
11		INDAB 0.05	04/21/11	2009	4.12	12.36
12	2W-SD-SD146-	SE1778-2	04/21/11	2044	4.13	12.37
13	2W-SD-SD144-	SE1778-3	04/21/11	2101	4.12	12.38
14	2W-SD-SD140-	SE1778-4	04/21/11	2119	4.13	12.37
15	2W-SD-SD127-	SE1778-7	04/21/11	2136	4.12	12.36
16	2W-SD-SD122-	SE1778-8	04/21/11	2154	4.12	12.36
17	2W-SD-SD130-	SE1778-9	04/21/11	2211	4.13	12.36
18	FD-040511-01	SE1778-10	04/21/11	2229	4.13	12.36
19	FD-040511-02	SE1778-11	04/21/11	2246	4.13	12.36
20	2W-SD-SD123-	SE1778-13	04/21/11	2303	4.13	12.37

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000159

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 04/21/11 Time: 1621

Lab File ID: 1ED00262 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.77e-002	2.5e-002	15808000	0.001	10.80	15.00	2RDR	
gamma-BHC	2.78e-002	2.5e-002	14558000	0.001	11.20	15.00	2RDR	
Heptachlor	2.38e-002	2.5e-002	11610000	0.001	-4.80	15.00	2RDR	
beta-BHC	2.7e-002	2.5e-002	5898600.0	0.001	8.00	15.00	2RDR	
Aldrin	2.55e-002	2.5e-002	11356000	0.001	2.00	15.00	2RDR	
delta-BHC	3.42e-002	2.5e-002	12120000	0.001	36.80	15.00	2RDR	<-
Heptachlor Epoxide	2.49e-002	2.5e-002	10297000	0.001	-0.40	15.00	2RDR	
Endosulfan I	2.38e-002	2.5e-002	8754000.0	0.001	-4.80	15.00	2RDR	
4,4'-DDE	2.27e-002	2.5e-002	9705600.0	0.001	-9.20	15.00	2RDR	
Dieldrin	2.33e-002	2.5e-002	9495400.0	0.001	-6.80	15.00	2RDR	
Endrin	2.57e-002	2.5e-002	8241100.0	0.001	2.80	15.00	2RDR	
4,4'-DDD	2.27e-002	2.5e-002	7420000.0	0.001	-9.20	15.00	2RDR	
Endosulfan II	2.29e-002	2.5e-002	7856700.0	0.001	-8.40	15.00	2RDR	
4,4'-DDT	2.29e-002	2.5e-002	7846300.0	0.001	-8.40	15.00	2RDR	
Endrin Aldehyde	2.17e-002	2.5e-002	6017800.0	0.001	-13.20	15.00	2RDR	
Endosulfan sulfate	2.6e-002	2.5e-002	6045100.0	0.001	4.00	15.00	2RDR	
Methoxychlor	2.2e-002	2.5e-002	3676600.0	0.001	-12.00	15.00	2RDR	
alpha-Chlordane	2.41e-002	2.5e-002	9342400.0	0.001	-3.60	15.00	2RDR	
gamma-Chlordane	2.4e-002	2.5e-002	9737500.0	0.001	-4.00	15.00	2RDR	
Endrin Ketone	2.36e-002	2.5e-002	7202200.0	0.001	-5.60	15.00	2RDR	
Tetrachloro-m-Xylene	2.8e-002	2.5e-002	10740000	0.001	12.00	15.00	2RDR	
Decachlorobiphenyl	2.18e-002	2.5e-002	4212900.0	0.001	-12.80	15.00	2RDR	

NOT TC

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 04/21/11 Time: 2009

Lab File ID: 1ED00274 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.46e-002	5.e-002	15833000	0.001	9.20	15.00	2RDR	
gamma-BHC	5.49e-002	5.e-002	14579000	0.001	9.80	15.00	2RDR	
Heptachlor	4.78e-002	5.e-002	11759000	0.001	-4.40	15.00	2RDR	
beta-BHC	5.27e-002	5.e-002	5826100.0	0.001	5.40	15.00	2RDR	
Aldrin	4.97e-002	5.e-002	11272000	0.001	-0.60	15.00	2RDR	
delta-BHC	6.51e-002	5.e-002	11865000	0.001	30.20 NOT TC	15.00	2RDR	<--
Heptachlor Epoxide	4.76e-002	5.e-002	9928500.0	0.001	-4.80	15.00	2RDR	
Endosulfan I	4.69e-002	5.e-002	8741600.0	0.001	-6.20	15.00	2RDR	
4,4'-DDE	4.45e-002	5.e-002	9645200.0	0.001	-11.00	15.00	2RDR	
Dieldrin	4.65e-002	5.e-002	9612200.0	0.001	-7.00	15.00	2RDR	
Endrin	5.05e-002	5.e-002	8241300.0	0.001	1.00	15.00	2RDR	
4,4'-DDD	4.58e-002	5.e-002	7650300.0	0.001	-8.40	15.00	2RDR	
Endosulfan II	4.41e-002	5.e-002	7673400.0	0.001	-11.80	15.00	2RDR	
4,4'-DDT	4.09e-002	5.e-002	7131000.0	0.001	-18.20 ok	15.00	2RDR	<--
Endrin Aldehyde	4.24e-002	5.e-002	5991700.0	0.001	-15.20	15.00	2RDR	<--
Endosulfan sulfate	4.7e-002	5.e-002	5581800.0	0.001	-6.00	15.00	2RDR	
Methoxychlor	4.2e-002	5.e-002	3529900.0	0.001	-16.00	15.00	2RDR	<--
alpha-Chlordane	4.68e-002	5.e-002	9192900.0	0.001	-6.40	15.00	2RDR	
gamma-Chlordane	4.61e-002	5.e-002	9503500.0	0.001	-7.80	15.00	2RDR	
Endrin Ketone	4.85e-002	5.e-002	7484200.0	0.001	-3.00	15.00	2RDR	
Tetrachloro-m-Xylene	5.53e-002	5.e-002	10691000	0.001	10.60	15.00	2RDR	
Decachlorobiphenyl	4.25e-002	5.e-002	4111800.0	0.001	-15.00	15.00	2RDR	

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.13 DCB: 12.36

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	2W-SD-SD135-	SE1778-16	04/21/11	2321	4.13	12.37
02		INDAB 0.025	04/21/11	2338	4.13	12.36
03		EVAL	04/26/11	0810		
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000160

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 04/21/11 Time: 2338

Lab File ID: 1ED00286 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.14e-002	2.5e-002	12038000	0.001	-14.40	15.00	2RDR	
gamma-BHC	2.11e-002	2.5e-002	10960000	0.001	-15.60	15.00	2RDR	<-
Heptachlor	1.7e-002	2.5e-002	8179600.0	0.001	-32.00	15.00	2RDR	<-
beta-BHC	2.09e-002	2.5e-002	4536800.0	0.001	-16.40	15.00	2RDR	<-
Aldrin	2.e-002	2.5e-002	8832200.0	0.001	-20.00	15.00	2RDR	<-
delta-BHC	2.45e-002	2.5e-002	8489000.0	0.001	-2.00	15.00	2RDR	
Heptachlor Epoxide	1.89e-002	2.5e-002	7756100.0	0.001	-24.40	15.00	2RDR	<-
Endosulfan I	2.04e-002	2.5e-002	7462200.0	0.001	-18.40	15.00	2RDR	<-
4,4'-DDE	1.79e-002	2.5e-002	7570100.0	0.001	-28.40	15.00	2RDR	<-
Dieldrin	2.31e-002	2.5e-002	9384000.0	0.001	-7.60	15.00	2RDR	
Endrin	1.91e-002	2.5e-002	6051700.0	0.001	-23.60	15.00	2RDR	<-
4,4'-DDD	2.81e-002	2.5e-002	9276000.0	0.001	12.40	15.00	2RDR	
Endosulfan II	1.84e-002	2.5e-002	6250100.0	0.001	-26.40	15.00	2RDR	<-
4,4'-DDT	8.18e-003	2.5e-002	2611600.0	0.001	-67.28	15.00	2RDR	<-
Endrin Aldehyde	1.71e-002	2.5e-002	4707000.0	0.001	-31.60	15.00	2RDR	<-
Endosulfan sulfate	1.47e-002	2.5e-002	3287200.0	0.001	-41.20	15.00	2RDR	<-
Methoxychlor	6.34e-002	2.5e-002	10671000	0.001	153.60	15.00	2RDR	<-
alpha-Chlordane	2.01e-002	2.5e-002	7745000.0	0.001	-19.60	15.00	2RDR	<-
gamma-Chlordane	1.85e-002	2.5e-002	7439900.0	0.001	-26.00	15.00	2RDR	<-
Endrin Ketone	7.18e-002	2.5e-002	22155000	0.001	187.20	15.00	2RDR	<-
Tetrachloro-m-Xylene	2.47e-002	2.5e-002	9424200.0	0.001	-1.20	15.00	2RDR	
Decachlorobiphenyl	1.97e-002	2.5e-002	3799900.0	0.001	-21.20	15.00	2RDR	<-

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :04/26/11
Time Analyzed :0810

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1ED00300.D	0.14	0.20

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.09 DCB: 12.30

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	04/26/11	0827	4.11	12.34
02	2W-SD-SD142-	SE1778-18	04/26/11	0917	4.09	12.34
03	2W-SD-SD116-	SE1778-20	04/26/11	0934	4.11	12.33
04	2W-SD-SD117-	SE1778-22	04/26/11	0952	4.11	12.34
05	2W-SD-SD146-	SE1778-2DL	04/26/11	1009		
06	2W-SD-SD144-	SE1778-3DL	04/26/11	1027		
07	2W-SD-SD123-	SE1778-13DL	04/26/11	1044		
08	2W-SD-SD142-	SE1778-18DL	04/26/11	1159		
09	2W-SD-SD116-	SE1778-20DL	04/26/11	1217	4.11	12.34
10		INDAB 0.025	04/26/11	1306	4.09	12.33
11		EVAL	05/11/11	1658		
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

Katahdin Analytical Services A0000161

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 04/26/11 Time: 0827

Lab File ID: 1ED00301 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.46e-002	5.e-002	15829000	0.001	9.20	15.00	2RDR	
gamma-BHC	5.54e-002	5.e-002	14696000	0.001	10.80	15.00	2RDR	
Heptachlor	4.68e-002	5.e-002	11506000	0.001	-6.40	15.00	2RDR	
beta-BHC	5.3e-002	5.e-002	5859400.0	0.001	6.00	15.00	2RDR	
Aldrin	5.05e-002	5.e-002	11461000	0.001	1.00	15.00	2RDR	
delta-BHC	7.63e-002	5.e-002	13988000	0.001	52.60 NOT TC	15.00	2RDR	<-
Heptachlor Epoxide	4.9e-002	5.e-002	10224000	0.001	-2.00	15.00	2RDR	
Endosulfan I	4.71e-002	5.e-002	8773400.0	0.001	-5.80	15.00	2RDR	
4,4'-DDE	4.5e-002	5.e-002	9749800.0	0.001	-10.00	15.00	2RDR	
Dieldrin	4.71e-002	5.e-002	9739100.0	0.001	-5.80	15.00	2RDR	
Endrin	4.99e-002	5.e-002	8140800.0	0.001	-0.20	15.00	2RDR	
4,4'-DDD	4.39e-002	5.e-002	7325500.0	0.001	-12.20	15.00	2RDR	
Endosulfan II	4.48e-002	5.e-002	7795100.0	0.001	-10.40	15.00	2RDR	
4,4'-DDT	4.4e-002	5.e-002	7673500.0	0.001	-12.00	15.00	2RDR	
Endrin Aldehyde	4.24e-002	5.e-002	5988900.0	0.001	-15.20	15.00	2RDR	<-
Endosulfan sulfate	5.39e-002	5.e-002	6427400.0	0.001	7.80	15.00	2RDR	
Methoxychlor	4.19e-002	5.e-002	3524900.0	0.001	-16.20	15.00	2RDR	<-
alpha-Chlordane	4.8e-002	5.e-002	9433800.0	0.001	-4.00	15.00	2RDR	
gamma-Chlordane	4.78e-002	5.e-002	9864600.0	0.001	-4.40	15.00	2RDR	
Endrin Ketone	5.03e-002	5.e-002	7765700.0	0.001	0.60	15.00	2RDR	
Tetrachloro-m-Xylene	5.26e-002	5.e-002	10165000	0.001	5.20	15.00	2RDR	
Decachlorobiphenyl	4.17e-002	5.e-002	4032400.0	0.001	-16.60	15.00	2RDR	<-

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 04/26/11 Time: 1306

Lab File ID: 1ED00310 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.69e-002	2.5e-002	15294000	0.001	7.60	15.00	2RDR	
gamma-BHC	2.7e-002	2.5e-002	14153000	0.001	8.00	15.00	2RDR	
Heptachlor	2.4e-002	2.5e-002	11679000	0.001	-4.00	15.00	2RDR	
beta-BHC	2.59e-002	2.5e-002	5667400.0	0.001	3.60	15.00	2RDR	
Aldrin	2.44e-002	2.5e-002	10891000	0.001	-2.40	15.00	2RDR	
delta-BHC	3.75e-002	2.5e-002	13354000	0.001	50.00	15.00	2RDR	<-
Heptachlor Epoxide	2.34e-002	2.5e-002	9651800.0	0.001	-6.40	15.00	2RDR	
Endosulfan I	2.27e-002	2.5e-002	8329700.0	0.001	-9.20	15.00	2RDR	
4,4'-DDE	2.1e-002	2.5e-002	8978600.0	0.001	-16.00	15.00	2RDR	<-
Dieldrin	2.15e-002	2.5e-002	8725000.0	0.001	-14.00	15.00	2RDR	
Endrin	2.4e-002	2.5e-002	7667600.0	0.001	-4.00	15.00	2RDR	
4,4'-DDD	2.33e-002	2.5e-002	7632100.0	0.001	-6.80	15.00	2RDR	
Endosulfan II	2.14e-002	2.5e-002	7302600.0	0.001	-14.40	15.00	2RDR	
4,4'-DDT	2.01e-002	2.5e-002	6866400.0	0.001	-19.60	15.00	2RDR	<-
Endrin Aldehyde	2.07e-002	2.5e-002	5721900.0	0.001	-17.20	15.00	2RDR	<-
Endosulfan sulfate	2.77e-002	2.5e-002	6453200.0	0.001	10.80	15.00	2RDR	
Methoxychlor	2.07e-002	2.5e-002	3454500.0	0.001	-17.20	15.00	2RDR	<-
alpha-Chlordane	2.28e-002	2.5e-002	8808200.0	0.001	-8.80	15.00	2RDR	
gamma-Chlordane	2.28e-002	2.5e-002	9255600.0	0.001	-8.80	15.00	2RDR	
Endrin Ketone	2.57e-002	2.5e-002	7852300.0	0.001	2.80	15.00	2RDR	
Tetrachloro-m-Xylene	2.65e-002	2.5e-002	10147000	0.001	6.00	15.00	2RDR	
Decachlorobiphenyl	1.93e-002	2.5e-002	3735900.0	0.001	-22.80	15.00	2RDR	<-

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM): Date Analyzed :05/11/11
Lab Sample ID (PEM): EVAL Time Analyzed :1658

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EE00173.D	2.04	1.62

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.07 DCB: 12.26

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	05/11/11	1715	4.07	12.26
02	2W-SD-SD130-	SE1778-9DL	05/11/11	1732	4.07	12.27
03		INDAB 0.025	05/11/11	1807	4.07	12.26
04		EVAL	05/12/11	1140		
05		INDAB 0.05	05/12/11	1158	4.04	12.22
06	2W-SD-SD135-	SE1778-16DL	05/12/11	1336		
07		INDAB 0.025	05/12/11	1416	4.03	12.22
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000162

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 05/11/11 Time: 1715

Lab File ID: 1EE00174 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.67e-002	5.e-002	16431000	0.001	13.40	15.00	2RDR	
gamma-BHC	5.55e-002	5.e-002	14738000	0.001	11.00	15.00	2RDR	
Heptachlor	4.01e-002	5.e-002	9870500.0	0.001	-19.80	15.00	2RDR	<-
beta-BHC	5.31e-002	5.e-002	5872400.0	0.001	6.20	15.00	2RDR	
Aldrin	5.18e-002	5.e-002	11748000	0.001	3.60	15.00	2RDR	
delta-BHC	6.99e-002	5.e-002	12771000	0.001	39.80 NOT TC	15.00	2RDR	<-
Heptachlor Epoxide	4.93e-002	5.e-002	10271000	0.001	-1.40	15.00	2RDR	
Endosulfan I	4.95e-002	5.e-002	9215300.0	0.001	-1.00	15.00	2RDR	
4,4'-DDE	4.7e-002	5.e-002	10199000	0.001	-6.00	15.00	2RDR	
Dieldrin	4.8e-002	5.e-002	9931100.0	0.001	-4.00	15.00	2RDR	
Endrin	5.24e-002	5.e-002	8543500.0	0.001	4.80	15.00	2RDR	
4,4'-DDD	4.65e-002	5.e-002	7770400.0	0.001	-7.00	15.00	2RDR	
Endosulfan II	4.6e-002	5.e-002	8004600.0	0.001	-8.00	15.00	2RDR	
4,4'-DDT	4.19e-002	5.e-002	7292700.0	0.001	-16.20	15.00	2RDR	<-
Endrin Aldehyde	4.24e-002	5.e-002	5991400.0	0.001	-15.20	15.00	2RDR	<-
Endosulfan sulfate	5.41e-002	5.e-002	6448200.0	0.001	8.20	15.00	2RDR	
Methoxychlor	3.98e-002	5.e-002	3350500.0	0.001	-20.40 NOT TC	15.00	2RDR	<-
alpha-Chlordane	4.8e-002	5.e-002	9441400.0	0.001	-4.00	15.00	2RDR	
gamma-Chlordane	4.76e-002	5.e-002	9824900.0	0.001	-4.80	15.00	2RDR	
Endrin Ketone	5.16e-002	5.e-002	7963500.0	0.001	3.20	15.00	2RDR	
Tetrachloro-m-Xylene	5.74e-002	5.e-002	11088000	0.001	14.80	15.00	2RDR	
Decachlorobiphenyl	4.48e-002	5.e-002	4325200.0	0.001	-10.40	15.00	2RDR	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 05/11/11 Time: 1807

Lab File ID: 1EE00177 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.88e-002	2.5e-002	16449000	0.001	15.20	15.00	2RDR	<-
gamma-BHC	2.8e-002	2.5e-002	14681000	0.001	12.00	15.00	2RDR	
Heptachlor	2.07e-002	2.5e-002	10054000	0.001	-17.20	15.00	2RDR	<-
beta-BHC	2.72e-002	2.5e-002	5954000.0	0.001	8.80	15.00	2RDR	
Aldrin	2.57e-002	2.5e-002	11476000	0.001	2.80	15.00	2RDR	
delta-BHC	3.39e-002	2.5e-002	12020000	0.001	35.60	15.00	2RDR	<-
Heptachlor Epoxide	2.47e-002	2.5e-002	10212000	0.001	-1.20	15.00	2RDR	
Endosulfan I	2.43e-002	2.5e-002	8933400.0	0.001	-2.80	15.00	2RDR	
4,4'-DDE	2.34e-002	2.5e-002	10015000	0.001	-6.40	15.00	2RDR	
Dieldrin	2.42e-002	2.5e-002	9852400.0	0.001	-3.20	15.00	2RDR	
Endrin	2.63e-002	2.5e-002	8434800.0	0.001	5.20	15.00	2RDR	
4,4'-DDD	2.32e-002	2.5e-002	7589800.0	0.001	-7.20	15.00	2RDR	
Endosulfan II	2.24e-002	2.5e-002	7675100.0	0.001	-10.40	15.00	2RDR	
4,4'-DDT	2.06e-002	2.5e-002	7031700.0	0.001	-17.60	15.00	2RDR	<-
Endrin Aldehyde	2.07e-002	2.5e-002	5724200.0	0.001	-17.20	15.00	2RDR	<-
Endosulfan sulfate	2.65e-002	2.5e-002	6154300.0	0.001	-6.00	15.00	2RDR	
Methoxychlor	1.99e-002	2.5e-002	3325900.0	0.001	-20.40	15.00	2RDR	<-
alpha-Chlordane	2.35e-002	2.5e-002	9088200.0	0.001	-6.00	15.00	2RDR	
gamma-Chlordane	2.35e-002	2.5e-002	9533100.0	0.001	-6.00	15.00	2RDR	
Endrin Ketone	2.57e-002	2.5e-002	7857000.0	0.001	2.80	15.00	2RDR	
Tetrachloro-m-Xylene	2.95e-002	2.5e-002	11300000	0.001	18.00	15.00	2RDR	<-
Decachlorobiphenyl	2.27e-002	2.5e-002	4398600.0	0.001	-9.20	15.00	2RDR	

FORM VII PEST

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 03/14/11 03/30/11

Client Sample ID (PEM): Date Analyzed :05/12/11
Lab Sample ID (PEM): EVAL Time Analyzed :1140

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EE00183.D	1.59	1.79

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 05/12/11 Time: 1158

Lab File ID: 1EE00184 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.83e-002	5.e-002	16907000	0.001	16.60	15.00	2RDR	<-
gamma-BHC	5.8e-002	5.e-002	15414000	0.001	16.00	15.00	2RDR	<-
Heptachlor	4.09e-002	5.e-002	10065000	0.001	-18.20	15.00	2RDR	<-
beta-BHC	5.64e-002	5.e-002	6237900.0	0.001	12.80	15.00	2RDR	
Aldrin	5.35e-002	5.e-002	12147000	0.001	7.00	15.00	2RDR	
delta-BHC	7.08e-002	5.e-002	12946000	0.001	41.60	15.00	2RDR	<-
Heptachlor Epoxide	5.17e-002	5.e-002	10770000	0.001	3.40	15.00	2RDR	
Endosulfan I	5.07e-002	5.e-002	9439700.0	0.001	1.40	15.00	2RDR	
4,4'-DDE	4.79e-002	5.e-002	10396000	0.001	-4.20	15.00	2RDR	
Dieldrin	5.02e-002	5.e-002	10382000	0.001	0.40	15.00	2RDR	
Endrin	5.3e-002	5.e-002	8652300.0	0.001	6.00	15.00	2RDR	
4,4'-DDD	4.77e-002	5.e-002	7982700.0	0.001	-4.60	15.00	2RDR	
Endosulfan II	4.78e-002	5.e-002	8327900.0	0.001	-4.40	15.00	2RDR	
4,4'-DDT	4.24e-002	5.e-002	7383500.0	0.001	-15.20	15.00	2RDR	<-
Endrin Aldehyde	4.44e-002	5.e-002	6285100.0	0.001	-11.20	15.00	2RDR	
Endosulfan sulfate	5.45e-002	5.e-002	6501700.0	0.001	9.00	15.00	2RDR	
Methoxychlor	4.05e-002	5.e-002	3407500.0	0.001	-19.00	15.00	2RDR	<-
alpha-Chlordane	4.94e-002	5.e-002	9708000.0	0.001	-1.20	15.00	2RDR	
gamma-Chlordane	5.02e-002	5.e-002	10362000	0.001	0.40	15.00	2RDR	
Endrin Ketone	4.96e-002	5.e-002	7659100.0	0.001	-0.80	15.00	2RDR	
Tetrachloro-m-Xylene	5.8e-002	5.e-002	11214000	0.001	16.00	15.00	2RDR	<-
Decachlorobiphenyl	4.6e-002	5.e-002	4449100.0	0.001	-8.00	15.00	2RDR	

WOR TC

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date: 05/12/11 Time: 1416

Lab File ID: 1EE00188 Init. Calib. Date(s): 03/14/11 03/30/11

Init. Calib. Times: 1653 1337

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	2.95e-002	2.5e-002	16849000	0.001	18.00	15.00	2RDR	<-
gamma-BHC	2.87e-002	2.5e-002	15060000	0.001	14.80	15.00	2RDR	
Heptachlor	1.94e-002	2.5e-002	9373200.0	0.001	-22.40	15.00	2RDR	<-
beta-BHC	2.82e-002	2.5e-002	6169500.0	0.001	12.80	15.00	2RDR	
Aldrin	2.77e-002	2.5e-002	12387000	0.001	10.80	15.00	2RDR	
delta-BHC	3.71e-002	2.5e-002	13209000	0.001	48.40	15.00	2RDR	<-
Heptachlor Epoxide	2.63e-002	2.5e-002	10875000	0.001	5.20	15.00	2RDR	
Endosulfan I	2.56e-002	2.5e-002	9453000.0	0.001	2.40	15.00	2RDR	
4,4'-DDE	2.47e-002	2.5e-002	10591000	0.001	-1.20	15.00	2RDR	
Dieldrin	2.53e-002	2.5e-002	10324000	0.001	1.20	15.00	2RDR	
Endrin	2.7e-002	2.5e-002	8695100.0	0.001	8.00	15.00	2RDR	
4,4'-DDD	2.4e-002	2.5e-002	7872500.0	0.001	-4.00	15.00	2RDR	
Endosulfan II	2.4e-002	2.5e-002	8249500.0	0.001	-4.00	15.00	2RDR	
4,4'-DDT	2.04e-002	2.5e-002	6983900.0	0.001	-18.40	15.00	2RDR	<-
Endrin Aldehyde	2.22e-002	2.5e-002	6176800.0	0.001	-11.20	15.00	2RDR	
Endosulfan sulfate	2.92e-002	2.5e-002	6810700.0	0.001	16.80	15.00	2RDR	<-
Methoxychlor	1.88e-002	2.5e-002	3133500.0	0.001	-24.80	15.00	2RDR	<-
alpha-Chlordane	2.59e-002	2.5e-002	10053000	0.001	3.60	15.00	2RDR	
gamma-Chlordane	2.57e-002	2.5e-002	10460000	0.001	2.80	15.00	2RDR	
Endrin Ketone	2.59e-002	2.5e-002	7911300.0	0.001	3.60	15.00	2RDR	
Tetrachloro-m-Xylene	2.94e-002	2.5e-002	11278000	0.001	17.60	15.00	2RDR	<-
Decachlorobiphenyl	2.36e-002	2.5e-002	4571200.0	0.001	-5.60	15.00	2RDR	

FORM VII PEST

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG90237-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Lab Sample ID: WG90237-1 Lab File ID: 1ED00264

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3550

Sulfur Cleanup: (Y/N) N Date Extracted: 04/15/11

Date Analyzed (1): 04/21/11 Date Analyzed (2): 04/21/11

Time Analyzed (1): 1714 Time Analyzed (2): 1714

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column (1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	WG90237-LCS	WG90237-2	1ED00265	04/21/11	04/21/11
02	WG90237-LCSD	WG90237-3	1ED00266	04/21/11	04/21/11
03	2W-SD-SD140-0001MS	WG90237-4	1ED00267	04/21/11	04/21/11
04	2W-SD-SD140-0001MSD	WG90237-5	1ED00268	04/21/11	04/21/11
05	2W-SD-SD127-0001MS	WG90237-6	1ED00269	04/21/11	04/21/11
06	2W-SD-SD127-0001MSD	WG90237-7	1ED00270	04/21/11	04/21/11
07	2W-SD-SD123-0001MS	WG90237-8	1ED00271	04/21/11	04/21/11
08	2W-SD-SD123-0001MSD	WG90237-9	1ED00272	04/21/11	04/21/11
09	2W-SD-SD146-0001	SE1778-2	1ED00276	04/21/11	04/21/11
10	2W-SD-SD144-0001	SE1778-3	1ED00277	04/21/11	04/21/11
11	2W-SD-SD140-0001	SE1778-4	1ED00278	04/21/11	04/21/11
12	2W-SD-SD127-0001	SE1778-7	1ED00279	04/21/11	04/21/11
13	2W-SD-SD122-0001	SE1778-8	1ED00280	04/21/11	04/21/11
14	2W-SD-SD130-0001	SE1778-9	1ED00281	04/21/11	04/21/11
15	FD-040511-01	SE1778-10	1ED00282	04/21/11	04/21/11
16	FD-040511-02	SE1778-11	1ED00283	04/21/11	04/21/11
17	2W-SD-SD123-0001	SE1778-13	1ED00284	04/21/11	04/21/11
18	2W-SD-SD135-0001	SE1778-16	1ED00285	04/21/11	04/21/11
19	2W-SD-SD142-0001	SE1778-18	1ED00302	04/26/11	04/26/11
20	2W-SD-SD116-0001	SE1778-20	1ED00303	04/26/11	04/26/11
21	2W-SD-SD117-0001	SE1778-22	1ED00304	04/26/11	04/26/11
22	2W-SD-SD146-0001	SE1778-2DL	1ED00305	04/26/11	04/26/11
23	2W-SD-SD144-0001	SE1778-3DL	1ED00306	04/26/11	04/26/11
24	2W-SD-SD123-0001	SE1778-13DL	1ED00307	04/26/11	04/26/11

COMMENTS: _____

Katahdin Analytical Services A0000115

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG90237-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Lab Sample ID: WG90237-1 Lab File ID: 1ED00264

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3550

Sulfur Cleanup: (Y/N) N Date Extracted: 04/15/11

Date Analyzed (1): 04/21/11 Date Analyzed (2): 04/21/11

Time Analyzed (1): 1714 Time Analyzed (2): 1714

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column (1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	2W-SD-SD142-0001	SE1778-18DL	1ED00308	04/26/11	04/26/11
02	2W-SD-SD116-0001	SE1778-20DL	1ED00309	04/26/11	04/26/11
03	2W-SD-SD130-0001	SE1778-9DL	1EE00175	05/11/11	05/11/11
04	2W-SD-SD135-0001	SE1778-16DL	1EE00187	05/12/11	05/12/11
05					
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23					
24					

COMMENTS: _____

Katahdin Analytical Services A0000116

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG90237-1
Client ID: Method Blank Sample
Project:
SDG: WE55-2

Sample Date:
Received Date: 15-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: NA
Report Date: 30-apr-2011 12:59

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	0.13	ug/Kgdrywt	1	3.3	0.66	0.038	0.33
4,4'-DDD		0.80	ug/Kgdrywt	1	3.3	0.66	0.040	0.33
4,4'-DDT	J	0.20	ug/Kgdrywt	1	3.3	0.66	0.062	0.33
Tetrachloro-M-Xylene		61.0	%					
Decachlorobiphenyl		78.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: WG90237-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: WG90237-1 Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.63	7.56	7.70	0.104	
	2	7.82	7.75	7.89	0.127	19.9
4,4'-DDD	1	8.48	8.41	8.55	0.748	
	2	8.58	8.51	8.65	0.804	7.2
4,4'-DDT	1	8.88	8.80	8.94	0.194	
	2	9.03	8.97	9.11	0.198	2.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 2
SOIL PESTICIDE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES\P Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column(1): ZB-MULTIRESIDUE-2ID: 0.53 (mm)GC Column(2): ZB-MULTIRESIDUE-1ID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	DCB1 REC#	DCB2 REC#	OTHR (1)	OTHR (2)	TOT OUT
01	WG90237-BLANK	WG90237-1	59	61	76	78			0
02	WG90237-LCS	WG90237-2	70	72	70	72			0
03	WG90237-LCSD	WG90237-3	67	69	72	74			0
04	2W-SD-SD140-0001MS	WG90237-4	68	69	67	65			0
05	2W-SD-SD140-0001MSD	WG90237-5	70	71	72	67			0
06	2W-SD-SD127-0001MS	WG90237-6	61	62	58	51			0
07	2W-SD-SD127-0001MSD	WG90237-7	70	70	64	59			0
08	2W-SD-SD123-0001MS	WG90237-8	74	75	65	61			0
09	2W-SD-SD123-0001MSD	WG90237-9	72	72	73	61			0
10	2W-SD-SD146-0001	SE1778-2	50	50	55	52			0
11	2W-SD-SD144-0001	SE1778-3	48	46	114*	69			1
12	2W-SD-SD140-0001	SE1778-4	39	38	156*	38*			2
13	2W-SD-SD127-0001	SE1778-7	69	69	101*	61			1
14	2W-SD-SD122-0001	SE1778-8	51	46	61	72			0
15	2W-SD-SD130-0001	SE1778-9	70	63	117*	65			1
16	FD-040511-01	SE1778-10	51	50	84	45			0
17	FD-040511-02	SE1778-11	56	46	60	75			0
18	2W-SD-SD123-0001	SE1778-13	57	57	108*	57			1
19	2W-SD-SD135-0001	SE1778-16	56	55	150*	54			1
20	2W-SD-SD142-0001	SE1778-18	54	55	57	52			0
21	2W-SD-SD116-0001	SE1778-20	50	55	82	60			0
22	2W-SD-SD117-0001	SE1778-22	144*	50	49*	43*			3
23	2W-SD-SD146-0001	SE1778-2DL	D	D	D	D			0
24	2W-SD-SD144-0001	SE1778-3DL	D	D	D	D			0
25	2W-SD-SD123-0001	SE1778-13DL	D	D	D	D			0
26	2W-SD-SD142-0001	SE1778-18DL	D	D	D	D			0
27	2W-SD-SD116-0001	SE1778-20DL	60	58	72	57			0
28	2W-SD-SD130-0001	SE1778-9DL	69	72	75	74			0

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-Xylene (32- 89)
S2 (DCB) = Decachlorobiphenyl (44- 99)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

Katahdin Analytical Services A0000085

FORM 2
SOIL PESTICIDE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES\P Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column(1): ZB-MULTIRESIDUE-2ID: 0.53 (mm)GC Column(2): ZB-MULTIRESIDUE-1ID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	DCB1 REC#	DCB2 REC#	OTHR (1)	OTHR (2)	TOT OUT
01	2W-SD-SD135-0001	SE1778-16DL	D	D	D	D			0
02									
03									
04									
05									
06									
07									
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-Xylene (32- 89)
S2 (DCB) = Decachlorobiphenyl (44- 99)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

Katahdin Analytical Services A0000086

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG90237-2
LCSD ID: WG90237-3
Project:
SDG: WE55-2
Report Date: 30-apr-2011 13:00

Received Date: 15-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
4,4'-DDE	16.7	12.4	74.2	12.7	76.0	ug/Kgdrywt	2	50	52-103
4,4'-DDD	16.7	12.7	76.0	13.0	77.8	ug/Kgdrywt	2	50	48-111
4,4'-DDT	16.7	12.6	75.4	13.0	77.8	ug/Kgdrywt	7	50	39-112
Tetrachloro-M-Xylene			72.1		69.1				32-89
Decachlorobiphenyl			72.7		74.5				44-99

600 Technology Way
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Tel:(207) 874-2400 Fax:(207) 775-4029

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ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG90237-4
MSD ID: WG90237-5
Sample ID: SE1778-4
Client ID: 2W-SD-SD140-0001
Project:
SDG: WE55-2

Received Date: 08-APR-11
Extract Date: 15-apr-0011 00:00
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237
Report Date: 30-apr-2011 13:00

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 14.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
4,4'-DDE	110.	114.	ug/Kgdrywt	24.	100	110	71.3	76.1	8	50	52-103
4,4'-DDD	110.	114.	ug/Kgdrywt	64.	140	170	79.8	95.8	14	50	48-111
4,4'-DDT	110.	114.	ug/Kgdrywt	J35.	130	210	84.6	155.*	49	50	39-112
Tetrachloro-M-Xylene							68.9	70.8			32-89
Decachlorobiphenyl							66.7	72.6			44-99

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MS/MSD Recovery Report

MS ID: WG90237-6
MSD ID: WG90237-7
Sample ID: SE1778-7
Client ID: 2W-SD-SD127-0001
Project:
SDG: WE55-2

Received Date: 08-APR-11
Extract Date: 15-apr-0011 00:00
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237
Report Date: 30-apr-2011 13:00

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 58.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
4,4'-DDE	27.6	27.4	ug/Kgdrywt	J1.8	17.	18.	57.1	61.1	7	50	52-103
4,4'-DDD	27.6	27.4	ug/Kgdrywt	J3.7	19.	20.	57.4	59.6	2	50	48-111
4,4'-DDT	27.6	27.4	ug/Kgdrywt	5.7	24.	24.	64.8	65.2	0	50	39-112
Tetrachloro-M-Xylene							62.4	70.7			32-89
Decachlorobiphenyl							58.2	64.3			44-99

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MS/MSD Recovery Report

MS ID: WG90237-8
MSD ID: WG90237-9
Sample ID: SE1778-13
Client ID: 2W-SD-SD123-0001
Project:
SDG: WE55-2

Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237
Report Date: 13-MAY-11

Analysis Date: 21-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 14.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
4,4'-DDE	121.	113.	ug/Kgdrywt	E110	150	160	28.9*	43.3*	9	50	52-103
4,4'-DDD	121	113	ug/Kgdrywt	E530	600	620	52.9	75.2	3	50	48-111
4,4'-DDT	121	113	ug/Kgdrywt	JE130	J230	J190	80.99	53	18	50	39-112
Tetrachloro-M-Xylene							75.1	72.6			32-89
Decachlorobiphenyl							65.1	73.0			44-99

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FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 116-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-20 Date(s) Analyzed: 04/26/11 04/26/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.61	7.53	7.67	22.2	
	2	7.81	7.72	7.86	24.1	8.2
4,4'-DDD	1	8.47	8.38	8.52	167	
	2	8.56	8.48	8.62	161	3.6
4,4'-DDT	1	8.86	8.77	8.91	41.1	
	2	9.02	8.93	9.07	36.0	13.2
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

Katahdin Analytical Services A0000078

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 116-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-20DL Date(s) Analyzed: 04/26/11 04/26/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.61	7.53	7.67	22.8	
	2	7.80	7.72	7.86	26.3	14.2
4,4'-DDD	1	8.47	8.38	8.52	163	
	2	8.56	8.48	8.62	173	6.0
4,4'-DDT	1	8.86	8.77	8.91	38.7	
	2	9.02	8.93	9.07	37.8	2.4
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 117-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-22 Date(s) Analyzed: 04/26/11 04/26/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.61	7.53	7.67	7.94	
	2	7.81	7.72	7.86	7.64	3.8
4,4'-DDD	1	8.47	8.38	8.52	10.6	
	2	8.57	8.48	8.62	9.79	7.9
4,4'-DDT	1	8.86	8.77	8.91	36.6	
	2	9.02	8.93	9.07	34.3	6.5
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

Katahdin Analytical Services A0000082

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 122-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-8 Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.63	7.56	7.70	21.4	
	2	7.82	7.75	7.89	21.0	1.9
4,4'-DDD	1	8.48	8.41	8.55	36.5	
	2	8.58	8.51	8.65	40.8	11.1
4,4'-DDT	1	8.87	8.80	8.94	20.6	
	2	9.03	8.97	9.11	12.5	48.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 123-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-13 Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.63	7.56	7.70	104	
	2	7.83	7.75	7.89	114	9.2
4,4'-DDD	1	8.49	8.41	8.55	443	
	2	8.58	8.51	8.65	534	18.6
4,4'-DDT	1	8.87	8.80	8.94	128	
	2	9.03	8.97	9.11	18.7	149.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

Result not taken from this analysis

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 123-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-13DL Date(s) Analyzed: 04/26/11 04/26/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.61	7.53	7.67	99.5	
	2	7.81	7.72	7.86	114	13.6
4,4'-DDD	1	8.46	8.38	8.52	552	
	2	8.56	8.48	8.62	678	20.5
4,4'-DDT	1	8.85	8.77	8.91	142	
	2	8.97	8.93	9.07	132	7.3
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

Katahdin Analytical Services A0000068

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 127-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-7 Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.63	7.56	7.70	1.64	
	2	7.82	7.75	7.89	1.80	9.3
4,4'-DDD	1	8.48	8.41	8.55	3.56	
	2	8.58	8.51	8.65	3.70	3.8
4,4'-DDT	1	8.87	8.80	8.94	5.73	
	2	9.03	8.97	9.11	5.29	8.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 130-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-9 Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.63	7.56	7.70	19.2	
	2	7.82	7.75	7.89	19.2	0.0
4,4'-DDD	1	8.48	8.41	8.55	92.1	
	2	8.58	8.51	8.65	94.4	2.5
4,4'-DDT	1	8.87	8.80	8.94	38.8	
	2	9.03	8.97	9.11	25.0	43.3
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 130-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-9DL Date(s) Analyzed: 05/11/11 05/11/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.57	7.50	7.64	20.5	
	2	7.76	7.69	7.83	22.2	8.0
4,4'-DDD	1	8.42	8.35	8.49	95.6	
	2	8.52	8.45	8.59	109	13.1
4,4'-DDT	1	8.81	8.74	8.88	40.3	
	2	8.97	8.91	9.05	31.6	24.2
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 135-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-16 Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.65	7.56	7.70	4340	
	2	7.86	7.75	7.89	4650	6.9
4,4'-DDD	1	8.53	8.41	8.55	1680	
	2	8.64	8.51	8.65	2540	40.8
4,4'-DDT	1	8.92	8.80	8.94	1160	
	2	9.08	8.97	9.11	4170	112.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

Results not taken from this analysis

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 135-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-16DL Date(s) Analyzed: 05/12/11 05/12/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.55	7.48	7.62	9060	
	2	7.73	7.66	7.80	11400	22.9
4,4'-DDD	1	8.40	8.33	8.47	118000	
	2	8.49	8.42	8.56	132000	11.2
4,4'-DDT	1	8.79	8.72	8.86	49800	
	2	8.94	8.87	9.01	55500	10.8
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

Katahdin Analytical Services A0000072

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 140-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-4 Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.63	7.56	7.70	23.6	
	2	7.82	7.75	7.89	23.4	0.8
4,4'-DDD	1	8.48	8.41	8.55	57.3	
	2	8.58	8.51	8.65	64.5	11.8
4,4'-DDT	1	8.87	8.80	8.94	35.0	
	2	9.03	8.97	9.11	21.4	48.2
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 142-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-18 Date(s) Analyzed: 04/26/11 04/26/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.62	7.53	7.67	277	
	2	7.80	7.72	7.86	277	0.0
4,4'-DDD	1	8.47	8.38	8.52	645	
	2	8.56	8.48	8.62	664	2.9
4,4'-DDT	1	8.86	8.77	8.91	331	
	2	9.01	8.93	9.07	304	8.5
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

Katahdin Analytical Services A0000074

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 142-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-18DL Date(s) Analyzed: 04/26/11 04/26/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.62	7.53	7.67	244	
	2	7.80	7.72	7.86	234	4.2
4,4'-DDD	1	8.47	8.38	8.52	612	
	2	8.56	8.48	8.62	641	4.6
4,4'-DDT	1	8.86	8.77	8.91	261	
	2	9.01	8.93	9.07	249	4.7
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 144-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-3 Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.63	7.56	7.70	109	
	2	7.82	7.75	7.89	112	2.7
4,4'-DDD	1	8.48	8.41	8.55	199	
	2	8.58	8.51	8.65	204	2.5
4,4'-DDT	1	8.87	8.80	8.94	240	
	2	9.03	8.97	9.11	285	17.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

Katahdin Analytical Services A0000048

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 144-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-3DL Date(s) Analyzed: 04/26/11 04/26/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.61	7.53	7.67	102	
	2	7.81	7.72	7.86	101	1.0
4,4'-DDD	1	8.47	8.38	8.52	230	
	2	8.56	8.48	8.62	225	2.2
4,4'-DDT	1	8.86	8.77	8.91	284	
	2	9.02	8.93	9.07	280	1.4
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 146-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-2 Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.63	7.56	7.70	342	
	2	7.82	7.75	7.89	379	10.3
4,4'-DDD	1	8.49	8.41	8.55	121	
	2	8.58	8.51	8.65	115	5.1
4,4'-DDT	1	8.88	8.80	8.94	658	
	2	9.04	8.97	9.11	1070	47.7
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

2-Result not taken from this analysis

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 146-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-2DL Date(s) Analyzed: 04/26/11 04/26/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.61	7.53	7.67	258	
	2	7.81	7.72	7.86	280	8.2
4,4'-DDD	1	8.47	8.38	8.52	206	
	2	8.56	8.48	8.62	208	1.0
4,4'-DDT	1	8.86	8.77	8.91	708	
	2	9.02	8.93	9.07	707	0.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

FD-040511-01

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-10 Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.63	7.56	7.70	2.69	
	2	7.82	7.75	7.89	2.84	5.4
4,4'-DDD	1	8.49	8.41	8.55	3.13	
	2	8.58	8.51	8.65	3.42	8.8
4,4'-DDT	1	8.87	8.80	8.94	6.84	
	2	9.03	8.97	9.11	7.25	5.8
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

Katahdin Analytical Services A0000062

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

FD-040511-02

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-11 Date(s) Analyzed: 04/21/11 04/21/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.63	7.56	7.70	22.5	
	2	7.82	7.75	7.89	22.2	1.3
4,4'-DDD	1	8.48	8.41	8.55	33.7	
	2	8.58	8.51	8.65	38.9	14.3
4,4'-DDT	1	8.87	8.80	8.94	18.9	
	2	9.04	8.97	9.11	10.0	61.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 14.52 TCX: 4.13

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		AR1660 1.0	02/04/11	1440	14.52	4.13
02		AR1660 0.05	02/04/11	1506	14.53	4.13
03		AR1660 0.1	02/04/11	1532	14.53	4.14
04		AR1660 0.25	02/04/11	1558	14.53	4.14
05		AR1660 2.5	02/04/11	1624	14.53	4.14
06		AR1660 10	02/04/11	1650	14.52	4.14
07		AR1016 1.0	02/04/11	1716		
08		AR1260 1.0	02/04/11	1742		
09		AR1242 1.0	02/04/11	1808		
10		AR1248 1.0	02/04/11	2043		
11		AR1254 1.0	02/04/11	2319		
12		AR1221 1.0	02/05/11	0155		
13		AR1232 1.0	02/05/11	0431		
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000222

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date(s): 02/04/11 02/05/11

Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm) Calibration Time(s): 1440 1152

LAB FILE ID: RF0.05: 7EB079 RF0.1: 7EB080 RF0.25: 7EB081
RF1: 7EB078 RF2.5: 7EB082 RF10: 7EB083

COMPOUND	RF0.05	RF0.1	RF0.25	RF1	RF2.5	RF10	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
Aroclor-1016	2e+007	2e+007	2e+007	2e+007	2.e+007	2e+007	AVRG		20486731.2		10.518	20.000
(2)	4e+007	4e+007	4e+007	4e+007	4e+007	3e+007	AVRG		37618686.1		6.469	20.000
(3)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		20888256.2		5.924	20.000
(4)	2e+007	2e+007	2e+007	2e+007	2e+007	1e+007	AVRG		15404363.7		3.740	20.000
(5)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		17968177.2		3.266	20.000
Aroclor-1221	1768800	1630900	2113600	2685900	7757700	3e+007	2ORDR	-0.2682737	3.364e-007	1.756e-015	0.99557	0.99000
(2)	410990	814040	2060800	7112800	2e+007	6e+007	2ORDR	-5.54e-003	1.338e-007	4.604e-016	0.99998	0.99000
(3)	1037400	2024300	5055000	2e+007	4e+007	1e+008	2ORDR	-7.68e-003	5.379e-008	1.594e-016	0.99999	0.99000
(4)	132350	262740	677200	2482700	6152300	2e+007	2ORDR	1.026e-003	3.812e-007	4.356e-015	0.99999	0.99000
Aroclor-1232	2e+007	2e+007	2e+007	1e+007	1e+007	1e+007	AVRG		14979275.1		12.448	20.000
(2)	1e+007	1e+007	9991900	9596400	9245400	8112600	AVRG		9898193.25		12.199	20.000
(3)	2.e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		18197358.0		7.654	20.000
(4)	1e+007	1e+007	1e+007	9934800	9780000	9258200	AVRG		10469351.7		9.396	20.000
(5)	9484000	8863200	8587200	7759600	7569300	7487700	AVRG		8291841.25		9.778	20.000
Aroclor-1242	2e+007	2e+007	2e+007	2e+007	2e+007	1e+007	AVRG		17472265.6		15.601	20.000
(2)	4e+007	3e+007	3e+007	3e+007	3e+007	3e+007	AVRG		31969283.8		9.191	20.000
(3)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		18125896.9		10.234	20.000
(4)	2e+007	2e+007	2e+007	2e+007	2e+007	1e+007	AVRG		16019371.2		6.404	20.000
(5)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		17257137.6		4.661	20.000
Aroclor-1248	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		17455594.6		6.804	20.000
(2)	2e+007	2e+007	2e+007	2e+007	2.e+007	2e+007	AVRG		20516931.7		4.258	20.000
(3)	3e+007	3e+007	3e+007	3e+007	3e+007	2e+007	AVRG		26489435.3		5.367	20.000
(4)	3e+007	3e+007	3e+007	3e+007	3e+007	3.e+007	AVRG		32123470.6		3.936	20.000
(5)	1e+007	1e+007	1e+007	1e+007	1e+007	1e+007	AVRG		13868712.5		1.560	20.000
Aroclor-1254	2e+007	3e+007	3e+007	2e+007	3e+007	2e+007	AVRG		24602597.6		6.804	20.000
(2)	3e+007	4e+007	4e+007	3e+007	4e+007	3e+007	AVRG		34208794.7		5.848	20.000
(3)	4.e+007	4e+007	4e+007	4e+007	5e+007	4e+007	AVRG		42081695.9		5.406	20.000
(4)	3e+007	3e+007	3e+007	3e+007	3e+007	3.e+007	AVRG		30541884.2		4.978	20.000
(5)	3e+007	3e+007	3e+007	3e+007	3.e+007	3e+007	AVRG		28341452.5		5.321	20.000
Aroclor-1260	3e+007	3e+007	3e+007	3e+007	3e+007	3e+007	AVRG		28281617.7		2.523	20.000
(2)	4e+007	4e+007	4e+007	4e+007	4e+007	4e+007	AVRG		37204029.3		3.411	20.000
(3)	3e+007	3e+007	3e+007	3e+007	3e+007	3e+007	AVRG		32277606.1		1.985	20.000
(4)	5e+007	5e+007	5e+007	5e+007	6e+007	5e+007	AVRG		53984860.5		3.984	20.000
(5)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		24056199.5		2.206	20.000
Tetrachloro-m-xylene	7e+008	7e+008	7e+008	8e+008	7e+008	7e+008	AVRG		726350611		3.695	20.000
Decachlorobiphenyl	4e+008	5e+008	4.e+008	4e+008	4e+008	4e+008	AVRG		408613948		12.742	20.000

Katahdin Analytical Services A0000196

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Included
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m
Cal Date : 08-Feb-2011 13:56 rthomas

Calibration File Names:
Level 1: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB079.D
Level 2: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB080.D
Level 3: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB081.D
Level 4: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB078.D
Level 5: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB082.D
Level 6: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB083.D

	Compound	0.0500000 Level 1	0.1000000 Level 2	0.2500000 Level 3	1.0000 Level 4	2.5000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
M	1 Total PCBs	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
	2 Aroclor-1221 (1)	1768818	1630936	2113620	2685863	7757723	26789391	QUAD	-0.26827	3.364e-007	1.756e-015	0.99557
	(2)	410991	814040	2060758	7112842	17734958	61693984	QUAD	-0.00554	1.338e-007	4.604e-016	0.99998
	(3)	1037386	2024274	5054952	17533640	41592811	133362297	QUAD	-0.00768	5.379e-008	1.594e-016	0.99999
	(4)	132354	262735	677197	2482676	6152330	21128077	QUAD	0.00103	3.812e-007	4.356e-015	0.99999
	4 Aroclor-1232 (1)	16442520	16350690	16453472	14721789	14161365	11745815	AVRG		14979275		12.44858
	(2)	11413080	11029790	9991864	9596410	9245446	8112570	AVRG		9898193		12.19877
	(3)	20207620	19385000	18086868	17533478	17641199	16329983	AVRG		18197358		7.65446
	(4)	11874800	11213440	10754756	9934859	9780021	9258234	AVRG		10469352		9.39575
	(5)	9483960	8863200	8587252	7759601	7569308	7487726	AVRG		8291841		9.77801
	5 Aroclor-1242 (1)	21144840	19002170	18664144	17116932	15330835	13574673	AVRG		17472266		15.60120
	(2)	36102220	32893420	32946464	31707537	31025834	27140228	AVRG		31969284		9.19105
	(3)	21251480	18448020	18235976	17305218	17961446	15553242	AVRG		18125897		10.23372
	(4)	17479020	16371330	16226616	15125243	16332256	14581762	AVRG		16019371		6.40359

Katahdin Analytical Services A0000197

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Included
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m
Cal Date : 08-Feb-2011 13:56 rthomas

	Compound	0.0500000 Level 1	0.1000000 Level 2	0.2500000 Level 3	1.0000 Level 4	2.5000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	(5)	18009640	17959780	17463152	16444265	17578829	16087159	AVRG		17257138		4.66141
6	Aroclor-1016 (1)	22641200	21748160	21734512	20565714	19559621	16671180	AVRG		20486731		10.51764
	(2)	39025560	38918290	39323904	37783174	37834588	32826601	AVRG		37618686		6.46932
	(3)	21826140	21784430	21635556	20853951	20656593	18572867	AVRG		20888256		5.92440
	(4)	15858180	16037730	15687128	15073477	15287110	14482558	AVRG		15404364		3.74048
	(5)	18361880	18122800	18680280	17770897	17901135	16972071	AVRG		17968177		3.26575
7	Aroclor-1248 (1)	15593880	16610780	18541224	18461945	18259220	17266519	AVRG		17455595		6.80385
	(2)	21336520	20880260	21137520	20595573	20227667	18924050	AVRG		20516932		4.25801
	(3)	27092840	27941860	27250924	26637673	26153918	23859397	AVRG		26489435		5.36678
	(4)	33527720	32414430	32674260	32314455	32050801	29759157	AVRG		32123471		3.93560
	(5)	13927420	14097050	14006124	13545390	13660164	13976127	AVRG		13868713		1.55998
8	Aroclor-1254 (1)	24012660	26296840	25542556	22092489	26158670	23512371	AVRG		24602598		6.80446
	(2)	32969400	36483490	35053424	32010620	36330214	32405620	AVRG		34208795		5.84756
	(3)	40346700	43506030	43605384	40547085	45080473	39404504	AVRG		42081696		5.40589
	(4)	29020840	31276090	31242424	28747945	32752639	30211367	AVRG		30541884		4.97813
	(5)	26446540	29411260	28879324	26709549	30260552	28341490	AVRG		28341453		5.32088
9	Aroclor-1260 (1)	28557480	28599970	28786440	27694796	28930343	27120677	AVRG		28281618		2.52278
	(2)	38121920	37767040	38050432	36277467	37976220	35031097	AVRG		37204029		3.41103
	(3)	32930880	32238670	32577884	31370456	32870018	31677729	AVRG		32277606		1.98482
	(4)	51929440	53330380	54307920	54221263	57888255	52231905	AVRG		53984860		3.98348
	(5)	23595500	23992290	23897660	23469555	24781539	24600653	AVRG		24056200		2.20604
10	Aroclor-1262 (1)	29822000	30921410	32334820	31875938	30722965	29519160	AVRG		30866049		3.57990

Katahdin Analytical Services A0000198

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Included
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m
Cal Date : 08-Feb-2011 13:56 rthomas

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2500000 Level 3	1.0000 Level 4	2.5000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
(2)	42729620	39409430	41483408	41795309	40820552	38314340	AVRG		40758776		3.99899
(3)	28765620	29968550	30929144	31236470	30844467	29421841	AVRG		30194349		3.22381
(4)	68063400	68497110	72820660	75741301	73771790	64493487	AVRG		70564625		5.99781
(5)	22718040	21077880	21348644	21535977	21775098	22094323	AVRG		21758327		2.69129
11 Aroclor-1268(1)	89661060	88334500	89754132	89937818	90475663	+++++	AVRG		89632635		0.88281
(2)	76096280	75562070	78295940	78626975	79232937	+++++	AVRG		77562840		2.10007
(3)	63006120	62322430	63806116	64576018	66770074	+++++	AVRG		64096152		2.67949
(4)	165098840	161070530	168221924	169919482	165270052	+++++	AVRG		165916166		2.04187
(5)	23341300	26918480	26037728	25486543	26396744	+++++	AVRG		25636159		5.40251
$ 3 Tetrachloro-m-xylene	685050000	714807500	744615800	763660450	720869860	729100055	AVRG		726350611		3.69534
$ 12 Decachlorobiphenyl	443665000	494424500	403648200	354943500	369755600	385246890	AVRG		408613948		12.74156

Katahdin Analytical Services A0000199

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date: 02/04/11 Time: 1716

Lab File ID: 7EB040 Init. Calib. Date(s): 02/04/11 02/05/11

Init. Calib. Times: 1440 1152

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	20487000	21660000	0.001	5.72	20.00	AVRG
(2)	37619000	40473000	0.001	7.59	20.00	AVRG
(3)	20888000	22066000	0.001	5.64	20.00	AVRG
(4)	15404000	16109000	0.001	4.58	20.00	AVRG
(5)	17968000	18342000	0.001	2.08	20.00	AVRG
Average %D: 5.1200						

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date: 02/04/11 Time: 1742

Lab File ID: 7EB041 Init. Calib. Date(s): 02/04/11 02/05/11

Init. Calib. Times: 1440 1152

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1260	28282000	27910000	0.001	-1.32	20.00	AVRG
(2)	37204000	37381000	0.001	0.48	20.00	AVRG
(3)	32278000	34770000	0.001	7.72	20.00	AVRG
(4)	53985000	48832000	0.001	-9.54	20.00	AVRG
(5)	24056000	23066000	0.001	-4.12	20.00	AVRG
Average %D: -1.360						

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 13.62 TCX: 3.80

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		AR1660 0.25	04/20/11	1730	13.62	3.80
02	WG90238-BLAN	WG90238-1	04/20/11	1941	13.61	3.80
03	WG90238-LCS	WG90238-2	04/20/11	2007	13.62	3.80
04	WG90238-LCSD	WG90238-3	04/20/11	2033	13.61	3.80
05	2W-SD-SD140-	SE1778-4	04/20/11	2059	13.60	3.80
06	2W-SD-SD127-	SE1778-7	04/20/11	2125	13.61	3.80
07	2W-SD-SD130-	SE1778-9	04/20/11	2151	13.60	3.80
08	2W-SD-SD116-	SE1778-20	04/20/11	2217	13.61	3.80
09	2W-SD-SD140-	WG90238-4	04/20/11	2243	13.60	3.80
10	2W-SD-SD140-	WG90238-5	04/20/11	2309	13.60	3.80
11		AR1660 1.0	04/21/11	0001	13.61	3.80
12		AR1660 0.25	04/21/11	2010	13.64	3.79
13	2W-SD-SD127-	WG90238-6	04/21/11	2312	13.62	3.79
14	2W-SD-SD127-	WG90238-7	04/21/11	2338	13.62	3.79
15	2W-SD-SD123-	WG90238-8	04/22/11	0004	13.62	3.79
16	2W-SD-SD123-	WG90238-9	04/22/11	0030	13.62	3.79
17	2W-SD-SD146-	SE1778-2	04/22/11	0056	13.61	3.79
18	2W-SD-SD144-	SE1778-3	04/22/11	0122	13.61	3.79
19	2W-SD-SD122-	SE1778-8	04/22/11	0148	13.62	3.79
20		AR1660 1.0	04/22/11	0241	13.62	3.79

QC LIMITS

DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000223

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date: 04/20/11 Time: 1730

Lab File ID: 7ED593 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	20487000	22647000	0.001	10.54	20.00	AVRG	
(2)	37619000	31260000	0.001	-16.90	20.00	AVRG	
(3)	20888000	21000000	0.001	0.54	20.00	AVRG	
(4)	15404000	14853000	0.001	-3.58	20.00	AVRG	
(5)	17968000	16538000	0.001	-7.96	20.00	AVRG	
Average %D: -3.480							
Aroclor-1260	28282000	26402000	0.001	-6.65	20.00	AVRG	
(2)	37204000	35981000	0.001	-3.29	20.00	AVRG	
(3)	32278000	29808000	0.001	-7.65	20.00	AVRG	
(4)	53985000	50485000	0.001	-6.48	20.00	AVRG	
(5)	24056000	21268000	0.001	-11.59	20.00	AVRG	
Average %D: -7.120							
Decachlorobiphenyl	408610000	317190000	0.001	-22.37	20.00	AVRG	<-
Tetrachloro-m-xylene	726350000	819370000	0.001	12.81	20.00	AVRG	

Katahdin Analytical Services A0000212

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date: 04/21/11 Time: 0001

Lab File ID: 7ED608 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	20487000	24597000	0.001	20.06	20.00	AVRG	<-
(2)	37619000	42951000	0.001	14.17	20.00	AVRG	
(3)	20888000	23566000	0.001	12.82	20.00	AVRG	
(4)	15404000	16642000	0.001	8.04	20.00	AVRG	
(5)	17968000	19141000	0.001	6.53	20.00	AVRG	
Average %D: 12.320 ✓							
Aroclor-1260	28282000	31179000	0.001	10.24	20.00	AVRG	
(2)	37204000	42103000	0.001	13.17	20.00	AVRG	
(3)	32278000	33856000	0.001	4.89	20.00	AVRG	
(4)	53985000	61671000	0.001	14.24	20.00	AVRG	
(5)	24056000	24371000	0.001	1.31	20.00	AVRG	
Average %D: 8.7700							
Decachlorobiphenyl	408610000	396340000	0.001	-3.00	20.00	AVRG	
Tetrachloro-m-xylene	726350000	940300000	0.001	29.46	20.00	AVRG	<-

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date: 04/21/11 Time: 2010

Lab File ID: 7ED628 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	20487000	23724000	0.001	15.80	20.00	AVRG
(2)	37619000	41012000	0.001	9.02	20.00	AVRG
(3)	20888000	23053000	0.001	10.36	20.00	AVRG
(4)	15404000	16409000	0.001	6.52	20.00	AVRG
(5)	17968000	19256000	0.001	7.17	20.00	AVRG
Average %D: 9.7600						
Aroclor-1260	28282000	31761000	0.001	12.30	20.00	AVRG
(2)	37204000	41602000	0.001	11.82	20.00	AVRG
(3)	32278000	31755000	0.001	-1.62	20.00	AVRG
(4)	53985000	48302000	0.001	-10.53	20.00	AVRG
(5)	24056000	19769000	0.001	-17.82	20.00	AVRG
Average %D: -1.160						
Decachlorobiphenyl	408610000	407620000	0.001	-0.24	20.00	AVRG
Tetrachloro-m-xylene	726350000	863280000	0.001	18.85	20.00	AVRG

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date: 04/22/11 Time: 0241

Lab File ID: 7ED643 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	20487000	23058000	0.001	12.55	20.00	AVRG
(2)	37619000	40360000	0.001	7.29	20.00	AVRG
(3)	20888000	22065000	0.001	5.63	20.00	AVRG
(4)	15404000	15863000	0.001	2.98	20.00	AVRG
(5)	17968000	18189000	0.001	1.23	20.00	AVRG
Average %D: 5.9400						
Aroclor-1260	28282000	31251000	0.001	10.50	20.00	AVRG
(2)	37204000	42998000	0.001	15.57	20.00	AVRG
(3)	32278000	34009000	0.001	5.36	20.00	AVRG
(4)	53985000	59412000	0.001	10.05	20.00	AVRG
(5)	24056000	24005000	0.001	-0.21	20.00	AVRG
Average %D: 8.2600						
Decachlorobiphenyl	408610000	395150000	0.001	-3.29	20.00	AVRG
Tetrachloro-m-xylene	726350000	855420000	0.001	17.77	20.00	AVRG

Katahdin Analytical Services A0000218

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 13.62 TCX: 3.80

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01	FD-040511-01	SE1778-10	04/22/11	0425	13.62	3.79
02	FD-040511-02	SE1778-11	04/22/11	0451	13.61	3.79
03	2W-SD-SD123-	SE1778-13	04/22/11	0517	13.63	3.79
04	2W-SD-SD135-	SE1778-16	04/22/11	0543	13.63	3.80
05	2W-SD-SD142-	SE1778-18	04/22/11	0609	13.62	3.79
06	2W-SD-SD117-	SE1778-22	04/22/11	0635	13.62	3.79
07		AR1660 0.25	04/22/11	0727	13.62	3.79
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS

DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000224

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date: 04/22/11 Time: 0727

Lab File ID: 7ED654 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	20487000	19664000	0.001	-4.02	20.00	AVRG
(2)	37619000	33874000	0.001	-9.96	20.00	AVRG
(3)	20888000	19238000	0.001	-7.90	20.00	AVRG
(4)	15404000	13623000	0.001	-11.56	20.00	AVRG
(5)	17968000	15602000	0.001	-13.17	20.00	AVRG
Average %D: -9.320						
Aroclor-1260	28282000	25818000	0.001	-8.71	20.00	AVRG
(2)	37204000	33918000	0.001	-8.83	20.00	AVRG
(3)	32278000	29125000	0.001	-9.77	20.00	AVRG
(4)	53985000	49613000	0.001	-8.10	20.00	AVRG
(5)	24056000	21592000	0.001	-10.24	20.00	AVRG
Average %D: -9.120						
Decachlorobiphenyl	408610000	330860000	0.001	-19.03	20.00	AVRG
Tetrachloro-m-xylene	726350000	714180000	0.001	-1.68	20.00	AVRG

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.70 DCB: 18.53

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		AR1660 1.0	02/04/11	1440	4.70	18.53
02		AR1660 0.05	02/04/11	1506	4.70	18.53
03		AR1660 0.1	02/04/11	1532	4.70	18.53
04		AR1660 0.25	02/04/11	1558	4.71	18.54
05		AR1660 2.5	02/04/11	1624	4.70	18.54
06		AR1660 10	02/04/11	1650	4.71	18.54
07		AR1016 1.0	02/04/11	1716		
08		AR1260 1.0	02/04/11	1742		
09		AR1242 1.0	02/04/11	1808		
10		AR1248 1.0	02/04/11	2043		
11		AR1254 1.0	02/04/11	2319		
12		AR1221 1.0	02/05/11	0155		
13		AR1232 1.0	02/05/11	0431		
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000225

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date(s): 02/04/11 02/05/11

Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm) Calibration Time(s): 1440 1152

LAB FILE ID: RF0.05: 7EB079 RF0.1: 7EB080 RF0.25: 7EB081
RF1: 7EB078 RF2.5: 7EB082 RF10: 7EB083

COMPOUND	RF0.05	RF0.1	RF0.25	RF1	RF2.5	RF10	CURVE	COEFF. A1	%RSD OR R^2	MAX %RSD OR R^2
Aroclor-1016	4080400	4278900	4279100	4016600	3889900	3461600	AVRG	4001089.55	7.617	20.000
(2)	7759600	7811300	7789800	7382100	7471300	6602600	AVRG	7469455.83	6.172	20.000
(3)	4659000	4647200	4482400	4152700	4199900	3834000	AVRG	4329209.13	7.496	20.000
(4)	3257000	3186500	3104200	2948300	3008100	2840100	AVRG	3057334.82	5.072	20.000
(5)	3709700	3676800	3542800	3341100	3386000	3197900	AVRG	3475712.35	5.798	20.000
Aroclor-1221	1039200	1051900	1052200	899640	885540	840780	AVRG	961555.900	10.042	20.000
(2)	1814900	1836700	1833500	1645700	1652600	1473100	AVRG	1709432.57	8.512	20.000
(3)	1220300	1231600	1229700	1085300	1071500	926270	AVRG	1127455.90	10.886	20.000
(4)	4345500	4177900	4097900	3666400	3546800	3066500	AVRG	3816841.87	12.550	20.000
Aroclor-1232	3667600	3431500	3467900	3137000	3011200	2643000	AVRG	3226366.78	11.511	20.000
(2)	2157700	2085800	2178900	1955400	1879700	1697600	AVRG	1992512.92	9.303	20.000
(3)	3706100	3541200	3754400	3505700	3426600	3216000	AVRG	3525002.38	5.548	20.000
(4)	2345500	2136000	2239600	1997800	1968200	1829000	AVRG	2086005.67	9.124	20.000
(5)	1598700	1462300	1585400	1414200	1432100	1366900	AVRG	1476596.45	6.415	20.000
Aroclor-1242	3861400	3638700	3604700	3378200	3331000	2882400	AVRG	3449408.78	9.790	20.000
(2)	7073700	6449200	6554300	6347300	6434600	5550600	AVRG	6401615.55	7.670	20.000
(3)	3924000	3787600	3776600	3577400	3602900	3193900	AVRG	3643732.97	7.000	20.000
(4)	3237700	3072200	3037600	2905400	2988400	2706900	AVRG	2991359.50	5.936	20.000
(5)	3221900	2996600	2910400	2851100	3000800	2760800	AVRG	2956951.68	5.359	20.000
Aroclor-1248	4164800	4309500	4135100	3922300	3835500	3611400	AVRG	3996429.57	6.381	20.000
(2)	5112700	5298400	5145000	4958000	4849200	4467000	AVRG	4971729.55	5.875	20.000
(3)	4092600	4335700	4257100	4125700	4083100	3858000	AVRG	4125362.50	3.997	20.000
(4)	5684100	5898000	5826000	5590000	5490500	5096100	AVRG	5597443.47	5.134	20.000
(5)	5122300	5249000	5207600	5082400	5016400	4721900	AVRG	5066598.40	3.722	20.000
Aroclor-1254	5055600	5175500	4960600	4947000	4854400	4460200	AVRG	4908922.30	4.998	20.000
(2)	5623400	5753900	5498600	5456600	5342600	4876100	AVRG	5425208.12	5.603	20.000
(3)	7271900	7516000	7198200	7078600	7055100	6298600	AVRG	7069741.38	5.837	20.000
(4)	4710900	5023500	4873000	4202900	4788000	4348100	AVRG	4657746.13	6.807	20.000
(5)	4407100	4573300	4479400	3977000	4505900	4182500	AVRG	4354190.70	5.250	20.000
Aroclor-1260	4598000	4729600	4758500	4450600	4566400	4278300	AVRG	4563563.23	3.931	20.000
(2)	5626700	5723000	5737600	5368300	5474000	5028500	AVRG	5493034.22	4.900	20.000
(3)	4343800	4315400	4390600	4073900	4273400	4000300	AVRG	4232895.70	3.735	20.000
(4)	8710100	8438400	8395900	7844800	8038200	7350400	AVRG	8129649.60	6.026	20.000
(5)	3571000	3753600	3864900	3617200	3820900	3674500	AVRG	3716993.10	3.116	20.000
Tetrachloro-m-xylene	2e+008	2e+008	2e+008	2e+008	2e+008	2e+008	AVRG	165867068	1.743	20.000
Decachlorobiphenyl	6e+007	6e+007	6e+007	5e+007	6e+007	5e+007	AVRG	55352153.3	2.400	20.000

FORM VI PCB

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date: 02/04/11 Time: 1716

Lab File ID: 7EB040 Init. Calib. Date(s): 02/04/11 02/05/11

Init. Calib. Times: 1440 1152

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	4001100.0	4200200.0	0.001	4.98	20.00	AVRG
(2)	7469400.0	7974600.0	0.001	6.76	20.00	AVRG
(3)	4329200.0	4447000.0	0.001	2.72	20.00	AVRG
(4)	3057400.0	3120300.0	0.001	2.06	20.00	AVRG
(5)	3475700.0	3485200.0	0.001	0.27	20.00	AVRG
Average %D: 3.3600						

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Disabled
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m\PCB041.
Cal Date : 07-Feb-2011 08:18 rthomas
Curve Type : Average

Calibration File Names:
Level 1: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB079.D
Level 2: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB080.D
Level 3: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB081.D
Level 4: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB078.D
Level 5: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB082.D
Level 6: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB083.D

Compound	0.05000 Level 1	0.10000 Level 2	0.25000 Level 3	1.000 Level 4	2.500 Level 5	10.000 Level 6	___ RRF	% RSD
M 1 Total PCBs	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Aroclor-1221(1)	1039220	1051920	1052232	899642	885544	840778	961556	10.042
(2)	1814880	1836720	1833548	1645708	1652638	1473101	1709433	8.512
(3)	1220340	1231630	1229704	1085329	1071463	926270	1127456	10.886
(4)	4345480	4177940	4097868	3666449	3546812	3066503	3816842	12.551
4 Aroclor-1232(1)	3667580	3431480	3467876	3137029	3011206	2643030	3226367	11.511
(2)	2157660	2085810	2178864	1955454	1879735	1697555	1992513	9.303
(3)	3706100	3541220	3754424	3505693	3426626	3215951	3525002	5.548
(4)	2345460	2136000	2239600	1997762	1968196	1829016	2086006	9.124
(5)	1598680	1462260	1585444	1414192	1432111	1366892	1476596	6.415
5 Aroclor-1016(1)	4080380	4278910	4279120	4016561	3889935	3461632	4001090	7.617
(2)	7759620	7811310	7789756	7382125	7471324	6602600	7469456	6.172
(3)	4658960	4647250	4482424	4152730	4199926	3833965	4329209	7.495
(4)	3256960	3186460	3104152	2948265	3008100	2840072	3057335	5.072
(5)	3709740	3676790	3542812	3341071	3385968	3197893	3475712	5.798
6 Aroclor-1242(1)	3861380	3638720	3604680	3378206	3331034	2882433	3449409	9.790
(2)	7073700	6449250	6554280	6347310	6434570	5550583	6401616	7.670
(3)	3924000	3787640	3776552	3577381	3602878	3193947	3643733	7.000
(4)	3237680	3072240	3037580	2905355	2988400	2706902	2991360	5.936
(5)	3221940	2996580	2910384	2851125	3000826	2760856	2956952	5.359
7 Aroclor-1248(1)	4164760	4309480	4135060	3922326	3835512	3611439	3996430	6.381
(2)	5112660	5298440	5145000	4958008	4849256	4467013	4971730	5.875
(3)	4092600	4335690	4257116	4125670	4083074	3858025	4125363	3.997
(4)	5684080	5898000	5826008	5590008	5490469	5096096	5597443	5.134
(5)	5122340	5248990	5207564	5082441	5016364	4721892	5066598	3.722
8 Aroclor-1254(1)	5055600	5175510	4960656	4947058	4854458	4460252	4908922	4.998
(2)	5623420	5753880	5498636	5456568	5342621	4876124	5425208	5.603
(3)	7271880	7516000	7198208	7078589	7055148	6298623	7069741	5.837

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Disabled
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m\PCB041.
Cal Date : 07-Feb-2011 08:18 rthomas
Curve Type : Average

Compound	0.05000 Level 1	0.10000 Level 2	0.25000 Level 3	1.000 Level 4	2.500 Level 5	10.000 Level 6	___ RRF	% RSD
(4)	4710920	5023460	4873044	4202910	4788026	4348116	4657746	6.807
(5)	4407080	4573260	4479432	3976967	4505894	4182511	4354191	5.250
9 Aroclor-1260 (1)	4598040	4729600	4758512	4450600	4566352	4278276	4563563	3.931
(2)	5626680	5723040	5737636	5368336	5474016	5028498	5493034	4.900
(3)	4343760	4315370	4390640	4073908	4273381	4000315	4232896	3.735
(4)	8710080	8438420	8395948	7844828	8038218	7350403	8129650	6.026
(5)	3570980	3753550	3864872	3617212	3820878	3674466	3716993	3.116
10 Aroclor-1262 (1)	5488240	4787810	4879024	4671957	4479292	4179446	4747628	9.268
(2)	6608580	6165700	6290816	6075326	5854975	5329926	6054221	7.164
(3)	5464700	5209670	5272876	5192256	4961269	4651357	5125355	5.519
(4)	11193360	10107000	10437584	10227262	9899018	8741464	10100948	7.934
(5)	5499260	4565170	5197664	5090975	4919062	4688767	4993483	6.872
11 Aroclor-1268 (1)	12705680	12371630	12526056	12077161	11865761	10252861	11966525	7.458
(2)	10730440	10518950	10550172	10216764	10072694	8842331	10155225	6.756
(3)	8817940	8421000	8471000	8279377	8195481	7491050	8279308	5.335
(4)	24405840	23826440	24342748	23117328	22182297	17901631	22629381	10.881
(5)	4155240	4001960	3968276	3745560	3688117	3557650	3852800	5.836
$ 2 Tetrachloro-m-xylene	164229000	162632000	168882200	169544750	166432940	163481515	165867068	1.743
$ 12 Decachlorobiphenyl	55282000	56253500	56951400	53107350	55703980	54814690	55352153	2.400

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date: 02/04/11 Time: 1742

Lab File ID: 7EB041 Init. Calib. Date(s): 02/04/11 02/05/11

Init. Calib. Times: 1440 1152

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1260	4563600.0	4516800.0	0.001	-1.02	20.00	AVRG
(2)	5493000.0	5430500.0	0.001	-1.14	20.00	AVRG
(3)	4232900.0	4611800.0	0.001	8.95	20.00	AVRG
(4)	8129600.0	7165100.0	0.001	-11.86	20.00	AVRG
(5)	3717000.0	3493300.0	0.001	-6.02	20.00	AVRG
Average %D: -2.220						

FORM VII PEST

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.37 DCB: 17.64

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		AR1660 0.25	04/20/11	1730	4.37	17.66
02	WG90238-BLAN	WG90238-1	04/20/11	1941	4.37	17.65
03	WG90238-LCS	WG90238-2	04/20/11	2007	4.37	17.65
04	WG90238-LCSD	WG90238-3	04/20/11	2033	4.37	17.65
05	2W-SD-SD140-	SE1778-4	04/20/11	2059	4.38	17.65
06	2W-SD-SD127-	SE1778-7	04/20/11	2125	4.37	17.65
07	2W-SD-SD130-	SE1778-9	04/20/11	2151	4.37	17.65
08	2W-SD-SD116-	SE1778-20	04/20/11	2217	4.37	17.65
09	2W-SD-SD140-	WG90238-4	04/20/11	2243	4.37	17.64
10	2W-SD-SD140-	WG90238-5	04/20/11	2309	4.37	17.64
11		AR1660 1.0	04/21/11	0001	4.37	17.64
12		AR1660 0.25	04/21/11	2010	4.37	17.68
13	2W-SD-SD127-	WG90238-6	04/21/11	2312	4.37	17.67
14	2W-SD-SD127-	WG90238-7	04/21/11	2338	4.37	17.67
15	2W-SD-SD123-	WG90238-8	04/22/11	0004	4.37	17.66
16	2W-SD-SD123-	WG90238-9	04/22/11	0030	4.37	17.66
17	2W-SD-SD146-	SE1778-2	04/22/11	0056	4.37	17.66
18	2W-SD-SD144-	SE1778-3	04/22/11	0122	4.37	17.67
19	2W-SD-SD122-	SE1778-8	04/22/11	0148	4.37	17.66
20		AR1660 1.0	04/22/11	0241	4.37	17.67

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000226

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date: 04/20/11 Time: 1730

Lab File ID: 7ED593 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	4001100.0	3576400.0	0.001	-10.61	20.00	AVRG	
(2)	7469400.0	6317200.0	0.001	-15.43	20.00	AVRG	
(3)	4329200.0	3562900.0	0.001	-17.70	20.00	AVRG	
(4)	3057400.0	2265500.0	0.001	-25.90	20.00	AVRG	<-
(5)	3475700.0	2797700.0	0.001	-19.51	20.00	AVRG	
Average %D: -17.84							
Aroclor-1260	4563600.0	3647100.0	0.001	-20.08	20.00	AVRG	<-
(2)	5493000.0	4192400.0	0.001	-23.68	20.00	AVRG	<-
(3)	4232900.0	3073000.0	0.001	-27.40	20.00	AVRG	<-
(4)	8129600.0	6140900.0	0.001	-24.46	20.00	AVRG	<-
(5)	3717000.0	2874300.0	0.001	-22.67	20.00	AVRG	<-
Average %D: -23.64							
Tetrachloro-m-xylene	165860000	158310000	0.001	-4.55	20.00	AVRG	
Decachlorobiphenyl	55352000	50061000	0.001	-9.56	20.00	AVRG	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date: 04/21/11 Time: 0001

Lab File ID: 7ED608 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	4001100.0	4078500.0	0.001	1.93	20.00	AVRG
(2)	7469400.0	7156800.0	0.001	-4.18	20.00	AVRG
(3)	4329200.0	3983900.0	0.001	-7.98	20.00	AVRG
(4)	3057400.0	2815500.0	0.001	-7.91	20.00	AVRG
(5)	3475700.0	3203300.0	0.001	-7.84	20.00	AVRG
Average %D: -5.190						
Aroclor-1260	4563600.0	3993200.0	0.001	-12.50	20.00	AVRG
(2)	5493000.0	4611600.0	0.001	-16.05	20.00	AVRG
(3)	4232900.0	3493600.0	0.001	-17.47	20.00	AVRG
(4)	8129600.0	6962600.0	0.001	-14.36	20.00	AVRG
(5)	3717000.0	3197800.0	0.001	-13.97	20.00	AVRG
Average %D: -14.87						
Tetrachloro-m-xylene	165860000	183890000	0.001	10.87	20.00	AVRG
Decachlorobiphenyl	55352000	55248000	0.001	-0.19	20.00	AVRG

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date: 04/21/11 Time: 2010

Lab File ID: 7ED628 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	4001100.0	4150800.0	0.001	3.74	20.00	AVRG	
(2)	7469400.0	7321300.0	0.001	-1.98	20.00	AVRG	
(3)	4329200.0	4215600.0	0.001	-2.62	20.00	AVRG	
(4)	3057400.0	2962100.0	0.001	-3.12	20.00	AVRG	
(5)	3475700.0	3392100.0	0.001	-2.40	20.00	AVRG	
Average %D: -1.280							
Aroclor-1260	4563600.0	4250000.0	0.001	-6.87	20.00	AVRG	
(2)	5493000.0	4821800.0	0.001	-12.22	20.00	AVRG	
(3)	4232900.0	3487400.0	0.001	-17.61	20.00	AVRG	
(4)	8129600.0	6495800.0	0.001	-20.10	20.00	AVRG	<-
(5)	3717000.0	3100200.0	0.001	-16.59	20.00	AVRG	
Average %D: -14.68							
Tetrachloro-m-xylene	165860000	180280000	0.001	8.69	20.00	AVRG	
Decachlorobiphenyl	55352000	58962000	0.001	6.52	20.00	AVRG	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date: 04/22/11 Time: 0241

Lab File ID: 7ED643 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	4001100.0	3962400.0	0.001	-0.97	20.00	AVRG
(2)	7469400.0	7140700.0	0.001	-4.40	20.00	AVRG
(3)	4329200.0	3994300.0	0.001	-7.74	20.00	AVRG
(4)	3057400.0	2830000.0	0.001	-7.44	20.00	AVRG
(5)	3475700.0	3268800.0	0.001	-5.95	20.00	AVRG
Average %D: -5.300						
Aroclor-1260	4563600.0	4189300.0	0.001	-8.20	20.00	AVRG
(2)	5493000.0	4814100.0	0.001	-12.36	20.00	AVRG
(3)	4232900.0	3632300.0	0.001	-14.19	20.00	AVRG
(4)	8129600.0	7145000.0	0.001	-12.11	20.00	AVRG
(5)	3717000.0	3270100.0	0.001	-12.02	20.00	AVRG
Average %D: -11.78						
Tetrachloro-m-xylene	165860000	177980000	0.001	7.31	20.00	AVRG
Decachlorobiphenyl	55352000	59172000	0.001	6.90	20.00	AVRG

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.37 DCB: 17.64

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	FD-040511-01	SE1778-10	04/22/11	0425	4.37	17.66
02	FD-040511-02	SE1778-11	04/22/11	0451	4.37	17.66
03	2W-SD-SD123-	SE1778-13	04/22/11	0517	4.37	17.67
04	2W-SD-SD135-	SE1778-16	04/22/11	0543	4.37	17.67
05	2W-SD-SD142-	SE1778-18	04/22/11	0609	4.37	17.66
06	2W-SD-SD117-	SE1778-22	04/22/11	0635	4.37	17.66
07		AR1660 0.25	04/22/11	0727	4.36	17.66
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000227

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date: 04/22/11 Time: 0727

Lab File ID: 7ED654 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	4001100.0	3693800.0	0.001	-7.68	20.00	AVRG	
(2)	7469400.0	6454700.0	0.001	-13.58	20.00	AVRG	
(3)	4329200.0	3679700.0	0.001	-15.00	20.00	AVRG	
(4)	3057400.0	2625100.0	0.001	-14.14	20.00	AVRG	
(5)	3475700.0	2985100.0	0.001	-14.12	20.00	AVRG	
Average %D: -12.92							
Aroclor-1260	4563600.0	3183700.0	0.001	-30.24	20.00	AVRG	<-
(2)	5493000.0	4464900.0	0.001	-18.72	20.00	AVRG	
(3)	4232900.0	3441100.0	0.001	-18.71	20.00	AVRG	
(4)	8129600.0	6545800.0	0.001	-19.48	20.00	AVRG	
(5)	3717000.0	3107000.0	0.001	-16.41	20.00	AVRG	
Average %D: -20.72							
Tetrachloro-m-xylene	165860000	163720000	0.001	-1.29	20.00	AVRG	
Decachlorobiphenyl	55352000	50920000	0.001	-8.01	20.00	AVRG	

FORM VII PEST

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG90238-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Lab Sample ID: WG90238-1 Lab File ID: 7ED598

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3550

Sulfur Cleanup: (Y/N) N Date Extracted: 04/15/11

Date Analyzed (1): 04/20/11 Date Analyzed (2): 04/20/11

Time Analyzed (1): 1941 Time Analyzed (2): 1941

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column (1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	WG90238-LCS	WG90238-2	7ED599	04/20/11	04/20/11
02	WG90238-LCSD	WG90238-3	7ED600	04/20/11	04/20/11
03	2W-SD-SD140-0001	SE1778-4	7ED601	04/20/11	04/20/11
04	2W-SD-SD127-0001	SE1778-7	7ED602	04/20/11	04/20/11
05	2W-SD-SD130-0001	SE1778-9	7ED603	04/20/11	04/20/11
06	2W-SD-SD116-0001	SE1778-20	7ED604	04/20/11	04/20/11
07	2W-SD-SD140-0001MS	WG90238-4	7ED605	04/20/11	04/20/11
08	2W-SD-SD140-0001MSD	WG90238-5	7ED606	04/20/11	04/20/11
09	2W-SD-SD127-0001MS	WG90238-6	7ED635	04/21/11	04/21/11
10	2W-SD-SD127-0001MSD	WG90238-7	7ED636	04/21/11	04/21/11
11	2W-SD-SD123-0001MS	WG90238-8	7ED637	04/22/11	04/22/11
12	2W-SD-SD123-0001MSD	WG90238-9	7ED638	04/22/11	04/22/11
13	2W-SD-SD146-0001	SE1778-2	7ED639	04/22/11	04/22/11
14	2W-SD-SD144-0001	SE1778-3	7ED640	04/22/11	04/22/11
15	2W-SD-SD122-0001	SE1778-8	7ED641	04/22/11	04/22/11
16	FD-040511-01	SE1778-10	7ED647	04/22/11	04/22/11
17	FD-040511-02	SE1778-11	7ED648	04/22/11	04/22/11
18	2W-SD-SD123-0001	SE1778-13	7ED649	04/22/11	04/22/11
19	2W-SD-SD135-0001	SE1778-16	7ED650	04/22/11	04/22/11
20	2W-SD-SD142-0001	SE1778-18	7ED651	04/22/11	04/22/11
21	2W-SD-SD117-0001	SE1778-22	7ED652	04/22/11	04/22/11
22					
23					
24					

COMMENTS: _____

FORM IVPCB

Katahdin Analytical Services A0000195

Report of Analytical Results

Client:
Lab ID: WG90238-1
Client ID: Method Blank Sample
Project:
SDG: WE55-2

Sample Date:
Received Date: 15-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: NA
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	1.7	ug/Kgdrywt	1	17	3.4	1.2	1.7
Aroclor-1221	U	1.7	ug/Kgdrywt	1	17	3.4	1.6	1.7
Aroclor-1232	U	2.0	ug/Kgdrywt	1	17	3.4	1.9	2.0
Aroclor-1242	U	1.7	ug/Kgdrywt	1	17	3.4	1.2	1.7
Aroclor-1248	U	1.7	ug/Kgdrywt	1	17	3.4	1.2	1.7
Aroclor-1254	U	1.7	ug/Kgdrywt	1	17	3.4	0.94	1.7
Aroclor-1260	U	1.7	ug/Kgdrywt	1	17	3.4	1.2	1.7
Tetrachloro-M-Xylene	*	50.2	%					
Decachlorobiphenyl		77.2	%					

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FORM 2
SOIL PCB SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

GC Column(1): ZB-MULTIRESIDUE1ID: 0.53 (mm) GC Column(2): ZB-MULTIRESIDUE2ID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	DCB1 REC#	DCB2 REC#	OTHR (1)	OTHR (2)	TOT OUT
01	WG90238-BLANK	WG90238-1	47*	50*	57*	77			3
02	WG90238-LCS	WG90238-2	77	66	77	77			0
03	WG90238-LCSD	WG90238-3	78	70	79	77			0
04	2W-SD-SD140-0001	SE1778-4	44*	41*	43*	44*			4
05	2W-SD-SD127-0001	SE1778-7	67	66	66	69			0
06	2W-SD-SD130-0001	SE1778-9	71	72	66	82			0
07	2W-SD-SD116-0001	SE1778-20	54*	52*	52*	60			3
08	2W-SD-SD140-0001MS	WG90238-4	66	63	62	72			0
09	2W-SD-SD140-0001MSD	WG90238-5	65	62	63	64			0
10	2W-SD-SD127-0001MS	WG90238-6	77	74	83	80			0
11	2W-SD-SD127-0001MSD	WG90238-7	69	67	77	76			0
12	2W-SD-SD123-0001MS	WG90238-8	81	78	81	84			0
13	2W-SD-SD123-0001MSD	WG90238-9	68	68	69	73			0
14	2W-SD-SD146-0001	SE1778-2	50*	50*	44*	57*			4
15	2W-SD-SD144-0001	SE1778-3	40*	46*	44*	56*			4
16	2W-SD-SD122-0001	SE1778-8	41*	44*	54*	58*			4
17	FD-040511-01	SE1778-10	54*	52*	56*	55*			4
18	FD-040511-02	SE1778-11	42*	46*	44*	60			3
19	2W-SD-SD123-0001	SE1778-13	51*	56	54*	65			2
20	2W-SD-SD135-0001	SE1778-16	42*	48*	55*	69			3
21	2W-SD-SD142-0001	SE1778-18	44*	47*	39*	44*			4
22	2W-SD-SD117-0001	SE1778-22	52*	51*	40*	49*			4
23									
24									
25									
26									
27									
28									

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (56-115)
S2 (DCB) = Decachlorobiphenyl (59-124)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

Katahdin Analytical Services A0000182

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG90238-2
LCSD ID: WG90238-3
Project:
SDG: WE55-2
Report Date: 10-MAY-11

Received Date: 15-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Aroclor-1016	167.	127.	76.0	132.	79.0	ug/Kgdrywt	4	50	53-123
Aroclor-1260	167.	135.	80.8	140.	83.8	ug/Kgdrywt	4	50	58-120
Tetrachloro-M-Xylene			76.9		78.4				56-115
Decachlorobiphenyl			77.2		78.7				59-124

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ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG90238-4
MSD ID: WG90238-5
Sample ID: SE1778-4
Client ID: 2W-SD-SD140-0001
Project:
SDG: WE55-2

Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238
Report Date: 10-MAY-11

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 14.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Aroclor-1016	1080	1140	ug/Kgdrywt	U7.7	900	820	83.4	71.9	9	30	53-123
Aroclor-1260	1080	1140	ug/Kgdrywt	J560	1600	1400	93.6	78.2	8	30	58-120
Tetrachloro-M-Xylene							66.0	65.2			56-115
Decachlorobiphenyl							72.1	64.3			59-124

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MS/MSD Recovery Report

MS ID: WG90238-6
MSD ID: WG90238-7
Sample ID: SE1778-7
Client ID: 2W-SD-SD127-0001
Project:
SDG: WE55-2

Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238
Report Date: 10-MAY-11

Analysis Date: 21-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 58.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Aroclor-1016	284.	281.	ug/Kgdrywt	U14.	250	220	87.3	78.2	12	30	53-123
Aroclor-1260	284.	281.	ug/Kgdrywt	U14.	260	230	91.9	82.5	12	30	58-120
Tetrachloro-M-Xylene							77.4	69.3			56-115
Decachlorobiphenyl							82.7	76.8			59-124

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Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

MS/MSD Recovery Report

MS ID: WG90238-8
MSD ID: WG90238-9
Sample ID: SE1778-13
Client ID: 2W-SD-SD123-0001
Project:
SDG: WE55-2

Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238
Report Date: 10-MAY-11

Analysis Date: 22-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 14.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Aroclor-1016	1210	1130	ug/Kgdrywt	U8.8	1300	1200	108.	111.	5	30	53-123
Aroclor-1260	1210	1130	ug/Kgdrywt	2300	4200	3800	166.*	137.*	11	30	58-120
Tetrachloro-M-Xylene							80.9	68.4			56-115
Decachlorobiphenyl							83.8	72.9			59-124

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FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 122-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-8 Date(s) Analyzed: 04/22/11 04/22/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.38	7.30	7.44	136		
Aroclor-1260	2	8.30	8.23	8.37	145		
	3	9.71	9.64	9.78	125		
COLUMN 1	4	10.42	10.36	10.50	188		
	5					149	
	1	9.16	9.09	9.23	124		
	2	9.63	9.56	9.70	113		
	3	10.57	10.51	10.65	383		
COLUMN 2	4	12.41	12.34	12.48	144		
	5	13.57	13.50	13.64	151	183	20.5
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

Katahdin Analytical Services A0000169

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 123-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-13 Date(s) Analyzed: 04/22/11 04/22/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.38	7.30	7.44	2090		
Aroclor-1260	2	8.30	8.23	8.37	2130		
	3	9.71	9.64	9.78	2210		
COLUMN 1	4	10.42	10.36	10.50	2380		
	5					2200	
	1	9.16	9.09	9.23	2060		
	2	9.64	9.56	9.70	1980		
	3	10.58	10.51	10.65	2660		
COLUMN 2	4	12.41	12.34	12.48	2280		
	5	13.58	13.50	13.64	2600	2320	5.3
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

Katahdin Analytical Services A0000176

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 130-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-9 Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.39	7.30	7.44	462		
Aroclor-1260	2	8.33	8.23	8.37	559		
	3	9.70	9.64	9.78	203		
COLUMN 1	4	10.41	10.35	10.49	222		
	5					362	
	1	9.14	9.07	9.21	191		
	2	9.62	9.55	9.69	178		
	3	12.39	12.32	12.46	226		
COLUMN 2	4	13.56	13.49	13.63	258		
	5					213	51.8
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

Katahdin Analytical Services A0000171

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 140-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-4 Date(s) Analyzed: 04/20/11 04/20/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.39	7.30	7.44	626		
Aroclor-1260	2	7.84	7.74	7.88	1130		
	3	8.29	8.23	8.37	310		
COLUMN 1	4	9.70	9.64	9.78	322		
	5	10.41	10.35	10.49	415	560	
	1	9.15	9.07	9.21	223		
	2	9.62	9.55	9.69	226		
	3	10.55	10.49	10.63	658		
COLUMN 2	4	12.39	12.32	12.46	296		
	5	13.56	13.49	13.63	326	346	47.2
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: FD-040511-02

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-11 Date(s) Analyzed: 04/22/11 04/22/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.38	7.30	7.44	158		
Aroclor-1260	2	8.30	8.23	8.37	178		
	3	9.71	9.64	9.78	156		
COLUMN 1	4	10.42	10.36	10.50	251		
	5					186	
	1	9.16	9.09	9.23	129		
	2	9.63	9.56	9.70	140		
	3	12.41	12.34	12.48	164		
COLUMN 2	4	13.57	13.50	13.64	162		
	5					149	22.1
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

Katahdin Analytical Services A0000174

TETRA TECH NUS, INC. **CALCULATION WORKSHEET** PAGE 1 OF 1

CLIENT		JOB NUMBER	
NSB New London		5DGWE55-2	
SUBJECT			
Sample Calculation			
BASED ON		DRAWING NUMBER	
BY	CHECKED BY	APPROVED BY	DATE
Ann Cognetti			May 25, 2011

I. PAH; Sample 2W-SD-SD144-0001; Benzo(a)pyrene

$$\frac{27139}{14500} * 9 * \frac{0.001}{0.058*1} * 1000 * \frac{100}{23} * \frac{0.8}{1.02439701} = 986.1 \text{ ug/kg}$$

II. PCB; Sample 2W-SD-SD140-0001; Aroclor 1260

$$\frac{58590449}{28281617.7} * 1 * 1000 * \frac{0.002}{0.046} * \frac{100}{14.4} = 625.5$$

$$\frac{1388004\,81}{37204029.3} * 1 * 1000 * \frac{0.002}{0.046} * \frac{100}{14.4} = 1126$$

$$\frac{33105828}{32277606.1} * 1 * 1000 * \frac{0.002}{0.046} * \frac{100}{14.4} = 309.7$$

$$\frac{57520720}{53984860.5} * 1 * 1000 * \frac{0.002}{0.046} * \frac{100}{14.4} = 321.7$$

$$\frac{33053135}{24056199.5} * 1 * 1000 * \frac{0.002}{0.046} * \frac{100}{14.4} = 414.9$$

$$\frac{625.5 + 1126 + 309.7 + 321.7 + 414.9}{5} = 559.6 \text{ ug/kg}$$

Sample Calculation

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-3DL
Client ID: 2W-SD-SD144-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90177

Analysis Date: 26-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 23.
Report Date: 28-APR-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	200	ug/Kgdrywt	9	20	410	53.	200
2-Methylnaphthalene	U	200	ug/Kgdrywt	9	20	410	45.	200
1-Methylnaphthalene	U	200	ug/Kgdrywt	9	20	410	35.	200
Acenaphthylene	U	200	ug/Kgdrywt	9	20	410	24.	200
Acenaphthene	J	42.	ug/Kgdrywt	9	20	410	31.	200
Fluorene	J	77.	ug/Kgdrywt	9	20	410	66.	200
Phenanthrene		1100	ug/Kgdrywt	9	20	410	37.	200
Anthracene	J	130	ug/Kgdrywt	9	20	410	24.	200
Fluoranthene		2100	ug/Kgdrywt	9	20	410	37.	200
Pyrene		2200	ug/Kgdrywt	9	20	410	43.	200
Benzo (a) anthracene		1100	ug/Kgdrywt	9	20	410	39.	200
Chrysene		1200	ug/Kgdrywt	9	20	410	35.	200
Benzo (b) Fluoranthene		1400	ug/Kgdrywt	9	20	410	49.	200
Benzo(k)fluoranthene		510	ug/Kgdrywt	9	20	410	64.	200
Benzo(a)pyrene		1000	ug/Kgdrywt	9	20	410	68.	200
Indeno (1,2,3-cd) pyrene		690	ug/Kgdrywt	9	20	410	39.	200
Dibenzo (a,h) anthracene	J	210	ug/Kgdrywt	9	20	410	37.	200
Benzo(g,h,i)perylene		550	ug/Kgdrywt	9	20	410	41.	200
2-Methylnaphthalene-D10		45.5	%					
Fluorene-D10		37.9	%					
Pyrene-D10		53.6	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Sample Calculation

Data File: \\target_server\GG\chem\gcms-n.i\N042611.b\N0250.D
Report Date: 28-Apr-2011 11:10

Katahdin Analytical Services

Data file : \\target_server\GG\chem\gcms-n.i\N042611.b\N0250.D
Lab Smp Id: SE1778-3DL Client Smp ID: 2W-SD-SD144-0001
Inj Date : 26-APR-2011 11:28 MS Autotune Date: 20-SEP-2006 13:50
Operator : JCG Inst ID: gcms-n.i
Smp Info : SE1778-3DL
Misc Info : WG90726,WG90177,N0206
Comment :
Method : \\target_server\GG\chem\gcms-n.i\N042611.b\NSPSIM06.m
Meth Date : 26-Apr-2011 10:40 cgomez Quant Type: ISTD
Cal Date : 23-APR-2011 12:51 Cal File: N0211.D
Als bottle: 4
Dil Factor: 9.00000
Integrator: HP RTE Compound Sublist: ttnl-we55.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariabl

Name	Value	Description
DF	9.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.05800	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	77.289	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kgdrywt)	REVIEW
*	7 1,4-Dichlorobenzene-D4	152	7.386	7.386	(1.000)	13651	0.80000		
*	20 Naphthalene-D8	136	10.165	10.127	(1.000)	49512	0.80000		
$	26 2-Methylnaphthalene-D10	152	11.861	11.739	(0.832)	3266	0.10135	69.2	
*	39 Acenaphthene-D10	164	14.260	14.226	(1.000)	20959	0.80000		
	40 Acenaphthene	153	14.327	14.304	(1.005)	1907	0.06130	41.9(a)	
$	47 Fluorene-D10	176	15.509	15.477	(1.088)	2664	0.08431	57.6(M)	M6
	49 Fluorene	166	15.573	15.541	(1.092)	3957	0.11277	77.0(aQ)	
*	59 Phenanthrene-D10	188	17.746	17.746	(1.000)	31207	0.80000		
	60 Phenanthrene	178	17.806	17.794	(1.003)	72891	1.61754	1100	
	61 Anthracene	178	17.938	17.926	(1.011)	8760	0.18828	129(a)	
	64 Fluoranthene	202	20.609	20.622	(1.161)	125982	3.11633	2130	
$	65 Pyrene-D10	212	21.080	21.093	(0.877)	3002	0.11925	81.5	
	66 Pyrene	202	21.119	21.132	(0.879)	124513	3.29271	2250	
	68 Benzo(a)anthracene	228	24.019	24.019	(1.000)	35114	1.54859	1060	
*	69 Chrysene-D12	240	24.031	24.042	(1.000)	18242	0.80000		
	70 Chrysene	228	24.099	24.099	(1.003)	49966	1.71450	1170	
	74 Benzo(b)fluoranthene	252	26.414	26.414	(0.972)	41238	2.03820	1390	
	75 Benzo(k)fluoranthene	252	26.469	26.469	(0.974)	21225	0.74101	506(M)	M6
	76 Benzo(a)pyrene	252	27.061	27.061	(0.996)	27139	1.46166	999	
*	77 Perylene-D12	264	27.172	27.186	(1.000)	14500	0.80000		
	79 Indeno(1,2,3-cd)pyrene	276	29.290	29.304	(1.078)	14149	1.01006	690(H)	

Sample Calculation

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GCMS-N Calibration Date(s): 04/23/11 04/23/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 0920 1251

LAB FILE ID: RF0.2: N0211 RF0.5: N0210 RF1: N0206
RF2: N0209 RF5: N0208 RF8: N0207

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
1-Methylnaphthalene	0.718	0.706	0.645	0.593	0.570	0.498	AVRG		0.62183269		13.578	15.000
Naphthalene	0.919	1.012	1.030	0.948	0.886	0.778	AVRG		0.92879948		9.902	15.000
2-Methylnaphthalene	21153	45821	83698	142160	315110	470760	2ORDR	9.843e-003	1.01400021	0.17180786	0.99775	0.99000
Acenaphthylene	1.769	1.929	2.050	1.861	1.873	1.758	AVRG		1.87311374		5.785	15.000
Acenaphthene	1.182	1.214	1.257	1.155	1.189	1.127	AVRG		1.18748112		3.835	15.000
Fluorene	1.345	1.360	1.408	1.316	1.361	1.246	AVRG		1.33938633		4.062	15.000
Phenanthrene	1.063	1.150	1.252	1.169	1.192	1.105	AVRG		1.15520084		5.724	15.000
Anthracene	1.156	1.180	1.256	1.197	1.223	1.144	AVRG		1.19273217		3.508	15.000
Fluoranthene	0.940	1.026	1.091	1.024	1.143	0.994	AVRG		1.03634267		6.918	15.000
Pyrene	14747	36229	70748	137770	383130	499060	LINR	-0.1203594	0.62063841		0.99902	0.99000
Benzo(a)anthracene	3588	14130	37708	77060	253700	305840	LINR	6.118e-002	0.97384518		0.99901	0.99000
Chrysene	11869	31146	58272	105950	296490	337680	LINR	-0.3180268	0.89853612		0.99529	0.99000
Benzo(b)fluoranthene	0.922	1.061	1.150	1.139	1.238	1.188	AVRG		1.11627767		10.000	15.000
Benzo(k)fluoranthene	1.751	1.728	1.629	1.469	1.510	1.395	AVRG		1.58031907		9.172	15.000
Benzo(a)pyrene	0.783	0.953	1.104	1.046	1.156	1.104	AVRG		1.02439701		13.375	15.000
Indeno(1,2,3-cd)pyrene	0.812	0.903	0.682	0.672	0.758	0.810	AVRG		0.77285831		11.357	15.000
Dibenzo(a,h)anthracene	2186	6987	20659	43533	134670	168030	LINR	0.11724949	1.20006162		0.99924	0.99000
Benzo(g,h,i)perylene	0.870	0.916	0.964	0.941	0.922	0.953	AVRG		0.92776171		3.627	15.000
2-Methylnaphthalene-D10	1.185	1.312	1.328	1.207	1.204	1.145	AVRG		1.23002853		5.962	15.000
Fluorene-D10	1.297	1.334	1.306	1.157	1.118	1.023	AVRG		1.20603860		10.381	15.000
Pyrene-D10	1.175	1.171	1.163	1.107	0.977	1.030	AVRG		1.10395782		7.515	15.000

FORM VI SV

Sample Calculation

Katahdin
ANALYTICAL SERVICES

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Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-4
Client ID: 2W-SD-SD140-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90238

Analysis Date: 20-APR-11
Analyst: JLP
Analysis Method: SW846 8082
Matrix: SL
% Solids: 14.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	7.7	ug/Kgdrywt	1	17	15.	5.4	7.7
Aroclor-1221	U	7.7	ug/Kgdrywt	1	17	15.	7.2	7.7
Aroclor-1232	U	9.1	ug/Kgdrywt	1	17	15.	8.4	9.1
Aroclor-1242	U	7.7	ug/Kgdrywt	1	17	15.	5.3	7.7
Aroclor-1248	U	7.7	ug/Kgdrywt	1	17	15.	5.5	7.7
Aroclor-1254	U	7.7	ug/Kgdrywt	1	17	15.	4.3	7.7
Aroclor-1260	J	560	ug/Kgdrywt	1	17	15.	5.4	7.7
Tetrachloro-M-Xylene	*	44.4	%					
Decachlorobiphenyl	*	44.0	%					

600 Technology Way
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Sample Calculation

Data File: \\Target_server\gg\chem\gc07.i\GC07ED20.b\7ED601.D
Report Date: 26-Apr-2011 10:30

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc07.i\GC07ED20.b\7ED601.D
Lab Smp Id: SE1778-4 Client Smp ID: 2W-SD-SD140-0001
Inj Date : 20-APR-2011 20:59
Operator : JLP Inst ID: gc07.i
Smp Info : SE1778-4
Misc Info : WG90716,WG90238,7ED
Comment :
Method : \\Target_server\gg\chem\gc07.i\GC07ED20.b\PCB041.m
Meth Date : 21-Apr-2011 09:05 jprescott Quant Type: ESTD
Cal Date : 05-FEB-2011 11:52 Cal File: 7EB083.D
Als bottle: 60
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8082.sub
Target Version: 4.12 Sample Matrix: SOIL
Processing Host: V200T2

Concentration Formula: Amt * DF * 1000*Vt*(100/(100-M))/Ws * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00200	Final Volume (L)
M	85.622	% Moisture
Ws	0.04600	Weight of Sample (Kg)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO	REVIEW CODE
$ 3 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.803	3.800	0.003	32230306	0.04437	13.4			(aR)
9 Aroclor-1260					CAS #: 11096-82-5			
7.388	7.370	0.018	58590449	2.07168	626	80.00- 120.00	100.00	
7.843	7.805	0.038	138800481	3.73079	1130	94.69- 142.03	236.90	
8.291	8.295	-0.004	33105828	1.02566	310	89.28- 133.92	56.50	
9.696	9.705	-0.009	57520720	1.06550	322	72.48- 108.72	98.17	
10.410	10.420	-0.010	33053135	1.37400	415	0.00- 0.00	56.41	
		Average of Peak Concentrations =			560			
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
13.603	13.615	-0.012	17588274	0.04304	13.0			(aR)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Sample Calculation

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC07 Calibration Date(s): 02/04/11 02/05/11

Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm) Calibration Time(s): 1440 1152

LAB FILE ID: RF0.05: 7EB079 RF0.1: 7EB080 RF0.25: 7EB081
RF1: 7EB078 RF2.5: 7EB082 RF10: 7EB083

COMPOUND	RF0.05	RF0.1	RF0.25	RF1	RF2.5	RF10	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
Aroclor-1016	2e+007	2e+007	2e+007	2e+007	2.e+007	2e+007	AVRG		20486731.2		10.518	20.000
(2)	4e+007	4e+007	4e+007	4e+007	4e+007	3e+007	AVRG		37618686.1		6.469	20.000
(3)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		20888256.2		5.924	20.000
(4)	2e+007	2e+007	2e+007	2e+007	2e+007	1e+007	AVRG		15404363.7		3.740	20.000
(5)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		17968177.2		3.266	20.000
Aroclor-1221	1768800	1630900	2113600	2685900	7757700	3e+007	2ORDR	-0.2682737	3.364e-007	1.756e-015	0.99557	0.99000
(2)	410990	814040	2060800	7112800	2e+007	6e+007	2ORDR	-5.54e-003	1.338e-007	4.604e-016	0.99998	0.99000
(3)	1037400	2024300	5055000	2e+007	4e+007	1e+008	2ORDR	-7.68e-003	5.379e-008	1.594e-016	0.99999	0.99000
(4)	132350	262740	677200	2482700	6152300	2e+007	2ORDR	1.026e-003	3.812e-007	4.356e-015	0.99999	0.99000
Aroclor-1232	2e+007	2e+007	2e+007	1e+007	1e+007	1e+007	AVRG		14979275.1		12.448	20.000
(2)	1e+007	1e+007	9991900	9596400	9245400	8112600	AVRG		9898193.25		12.199	20.000
(3)	2.e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		18197358.0		7.654	20.000
(4)	1e+007	1e+007	1e+007	9934800	9780000	9258200	AVRG		10469351.7		9.396	20.000
(5)	9484000	8863200	8587200	7759600	7569300	7487700	AVRG		8291841.25		9.778	20.000
Aroclor-1242	2e+007	2e+007	2e+007	2e+007	2e+007	1e+007	AVRG		17472265.6		15.601	20.000
(2)	4e+007	3e+007	3e+007	3e+007	3e+007	3e+007	AVRG		31969283.8		9.191	20.000
(3)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		18125896.9		10.234	20.000
(4)	2e+007	2e+007	2e+007	2e+007	2e+007	1e+007	AVRG		16019371.2		6.404	20.000
(5)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		17257137.6		4.661	20.000
Aroclor-1248	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		17455594.6		6.804	20.000
(2)	2e+007	2e+007	2e+007	2e+007	2.e+007	2e+007	AVRG		20516931.7		4.258	20.000
(3)	3e+007	3e+007	3e+007	3e+007	3e+007	2e+007	AVRG		26489435.3		5.367	20.000
(4)	3e+007	3e+007	3e+007	3e+007	3e+007	3.e+007	AVRG		32123470.6		3.936	20.000
(5)	1e+007	1e+007	1e+007	1e+007	1e+007	1e+007	AVRG		13868712.5		1.560	20.000
Aroclor-1254	2e+007	3e+007	3e+007	2e+007	3e+007	2e+007	AVRG		24602597.6		6.804	20.000
(2)	3e+007	4e+007	4e+007	3e+007	4e+007	3e+007	AVRG		34208794.7		5.848	20.000
(3)	4.e+007	4e+007	4e+007	4e+007	5e+007	4e+007	AVRG		42081695.9		5.406	20.000
(4)	3e+007	3e+007	3e+007	3e+007	3e+007	3.e+007	AVRG		30541884.2		4.978	20.000
(5)	3e+007	3e+007	3e+007	3e+007	3.e+007	3e+007	AVRG		28341452.5		5.321	20.000
Aroclor-1260	3e+007	3e+007	3e+007	3e+007	3e+007	3e+007	AVRG		28281617.7		2.523	20.000
(2)	4e+007	4e+007	4e+007	4e+007	4e+007	4e+007	AVRG		37204029.3		3.411	20.000
(3)	3e+007	3e+007	3e+007	3e+007	3e+007	3e+007	AVRG		32277606.1		1.985	20.000
(4)	5e+007	5e+007	5e+007	5e+007	6e+007	5e+007	AVRG		53984860.5		3.984	20.000
(5)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		24056199.5		2.206	20.000
Tetrachloro-m-xylene	7e+008	7e+008	7e+008	8e+008	7e+008	7e+008	AVRG		726350611		3.695	20.000
Decachlorobiphenyl	4e+008	5e+008	4.e+008	4e+008	4e+008	4e+008	AVRG		408613948		12.742	20.000

FORM VI PCB

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1778-3DL
Client ID: 2W-SD-SD144-0001
Project: CTO-WE55 New London, CT
SDG: WE55-2

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 15-APR-11
Extracted By: KF
Extraction Method: SW846 3550
Lab Prep Batch: WG90237

Analysis Date: 26-APR-11
Analyst: CB
Analysis Method: SW846 8081A
Matrix: SL
% Solids: 23.
Report Date: 13-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		100	ug/Kgdrywt	20	3.3	41.	2.4	20.
4,4'-DDD		230	ug/Kgdrywt	20	3.3	41.	2.5	20
4,4'-DDT		280	ug/Kgdrywt	20	3.3	41.	3.9	20.
Tetrachloro-M-Xylene	*D	0.00	%					
Decachlorobiphenyl	*D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

FORM 10

PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 144-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-2

Lab Sample ID: SE1778-3DL Date(s) Analyzed: 04/26/11 04/26/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.61	7.53	7.67	102	
	2	7.81	7.72	7.86	101	1.0
4,4'-DDD	1	8.47	8.38	8.52	230	
	2	8.56	8.48	8.62	225	2.2
4,4'-DDT	1	8.86	8.77	8.91	284	
	2	9.02	8.93	9.07	280	1.4
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

Data File: 1ED00306.D
Report Date: 26-Apr-2011 13:30

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc01.i\GC01ED26.b\GC01ED26.b\1ED00306.D
Lab Smp Id: SE1778-3DL Client Smp ID: 2W-SD-SD144-0001
Inj Date : 26-APR-2011 10:27
Operator : CB Inst ID: gc01.i
Smp Info : SE1778-3DL
Misc Info : WG90724,WG90237,1EC00322
Comment :
Method : \\target_server\gg\chem\gc01.i\GC01ED26.b\PEST061B.m\PEST061B.m
Meth Date : 26-Apr-2011 08:59 cbyrne Quant Type: ESTD
Cal Date : 30-MAR-2011 13:37 Cal File: 1EC00632.D
Als bottle: 8
Dil Factor: 20.00000
Integrator: Falcon Compound Sublist: tetratnl-we55.sub
Target Version: 4.12
Processing Host: V200T5

Concentration Formula: Amt * DF * 1000*Vt*(1/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	20.000	Dilution Factor
Vt	0.00200	Final Volume (L)
Ws	0.04240	Weight of Sample (Kg)
M	77.289	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kgdrywt)	REVIEW CODE
19 4,4'-DDE	7.805	7.806	-0.001	261477	0.02439	101	
24 4,4'-DDD	8.563	8.564	-0.001	453587	0.05411	225	
27 4,4'-DDT	9.016	9.017	-0.001	589477	0.06744	280(M)	

M3
CB 4/26/11

QC Flag Legend

M - Compound response manually integrated.

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-2

Instrument ID: GC01 Calibration Date(s): 03/14/11 03/14/11

Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Calibration Time(s): 1653 2208

LAB FILE ID: RF0.005: 1EC00336 RF0.01: 1EC00337 RF0.025: 1EC00338
RF0.05: 1EC00335 RF0.1: 1EC00339 RF0.25: 1EC00340

COMPOUND	RF0.005	RF0.01	RF0.025	RF0.05	RF0.1	RF0.25	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
alpha-BHC	55114	126210	336710	725340	1458800	3571100	2ORDR	1.201e-003	6.686e-008	7.809e-016	0.99993	0.99000
gamma-BHC	53474	121630	312920	674850	1330400	3326500	2ORDR	7.753e-004	7.411e-008	2.449e-016	0.99995	0.99000
Heptachlor	50731	113970	293940	621690	1225200	2969600	2ORDR	7.777e-004	7.895e-008	1.674e-015	0.99996	0.99000
Aldrin	44448	100500	265360	565430	1138600	2747400	2ORDR	1.156e-003	8.499e-008	2.02e-015	0.99994	0.99000
beta-BHC	24639	53079	130640	280260	555560	1404800	2ORDR	4.905e-004	1.797e-007	-1.51e-015	0.99996	0.99000
delta-BHC	33348	75574	200660	441740	936790	2392000	2ORDR	1.652e-003	1.079e-007	-1.74e-015	0.99982	0.99000
Heptachlor Epoxide	42917	96258	247430	531960	1036000	2528900	2ORDR	7.432e-004	9.344e-008	2.027e-015	0.99994	0.99000
Endosulfan I	38638	87005	220400	464510	931760	2242300	2ORDR	8.937e-004	1.039e-007	3.183e-015	0.99995	0.99000
gamma-Chlordane	42374	94905	241090	520480	1036800	2549500	2ORDR	9.034e-004	9.445e-008	1.271e-015	0.99994	0.99000
alpha-Chlordane	42256	91830	231060	487060	987470	2382300	2ORDR	9.142e-004	9.864e-008	2.469e-015	0.99994	0.99000
4,4'-DDE	44195	99066	253800	547360	1077500	2573000	2ORDR	9.814e-004	8.869e-008	3.137e-015	0.99994	0.99000
Dieldrin	42061	94650	246930	517440	1036900	2532800	2ORDR	8.618e-004	9.42e-008	1.636e-015	0.99997	0.99000
Endrin	33113	72859	191800	410720	820900	2032800	2ORDR	9.416e-004	1.198e-007	1.335e-015	0.99995	0.99000
4,4'-DDD	33690	75552	196270	418650	846890	2106100	2ORDR	9.799e-004	1.168e-007	6.482e-016	0.99995	0.99000
Endosulfan II	35203	80441	206810	438710	872880	2148700	2ORDR	8.147e-004	1.122e-007	1.736e-015	0.99996	0.99000
4,4'-DDT	36361	80918	205940	435170	877030	2138000	2ORDR	8.897e-004	1.115e-007	2.322e-015	0.99996	0.99000
Endrin Aldehyde	27250	66865	167240	353520	712520	1744600	2ORDR	9.23e-004	1.375e-007	2.999e-015	0.99996	0.99000
Endosulfan sulfate	22824	52506	138740	297690	608420	1561900	2ORDR	1.068e-003	1.657e-007	-4.06e-015	0.99995	0.99000
Methoxychlor	19580	41548	101370	212260	419360	1030800	2ORDR	3.474e-004	2.344e-007	7.514e-015	0.99998	0.99000
Endrin Ketone	32229	71471	175770	396970	765450	1855300	2ORDR	9.11e-004	1.254e-007	4.78e-015	0.99986	0.99000
Toxaphene	11082	28433	63029	140130	364930	1528300	2ORDR	3.56e-002	6.868e-006	-2.28e-013	0.99996	0.99000
(2)	9728	25841	56293	121220	316190	1344900	2ORDR	2.946e-002	7.98e-006	-4.22e-013	0.99998	0.99000
(3)	17555	45438	99275	214400	563510	2276100	2ORDR	3.464e-002	4.413e-006	-1.53e-014	0.99996	0.99000
(4)	18495	44996	94424	206280	508800	2048300	2ORDR	1.538e-002	4.878e-006	-1.46e-015	0.99998	0.99000
(5)	24709	66403	142890	310480	780760	3167800	2ORDR	2.337e-002	3.182e-006	-1.05e-014	0.99998	0.99000
(6)	17713	48926	107120	228030	572500	2333600	2ORDR	2.109e-002	4.347e-006	-3.05e-014	0.99999	0.99000
(7)	12029	31513	71093	153780	403800	1697400	2ORDR	3.481e-002	6.22e-006	-2.06e-013	0.99997	0.99000
(8)	29223	76663	168960	366330	952240	3795000	2ORDR	3.414e-002	2.597e-006	7.708e-015	0.99997	0.99000
(9)	19487	52219	114750	244940	633410	2562900	2ORDR	2.946e-002	3.926e-006	-1.4e-014	0.99998	0.99000
(10)	11262	30747	69098	141700	360760	1545200	2ORDR	1.728e-002	7.011e-006	-3.57e-013	0.99999	0.99000
Tetrachloro-m-Xylene	41421	91676	230050	486410	967460	2386800	2ORDR	6.416e-004	1.017e-007	1.174e-015	0.99997	0.99000
Decachlorobiphenyl	22211	48904	119080	245400	478580	1180700	2ORDR	1.094e-004	2.053e-007	5.435e-015	0.99998	0.99000

FORM VI PESTICIDE

P/P
SON

4/28/11

EX-010 - Revision 1 - 03/10/2010

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - SOIL PESTICIDE/PCB

Extraction Method: (check one)	SW846 3550 (SONIC.) ✓	SW846 3540 (SOX)	SW846 3545 (ASE)
Analytical Method: (check one)	SW846 8081 ✓	SW846 8082 ✓	SW846 3580 (OILS/WIPES)
Standards	Surrogate ID: GC0869	Spike ID: Pest: GC0865 TMX: GC0863	Spike ID: PCB: GC0874
Solvents	Solvent Lot # (Med2): J44806	Solvent Lot # (Acetone): J36E13	Solvent Lot # (Hexane): J45E18
Consumables	Filter Paper Lot # (SON) F0002256	Filter Paper Lot # (KD) F0001062	Acid Lot # —
	Sodium Sulfate (granular) Lot #: 27761001	Sodium Sulfate (powder) Lot #: 27970001	Vial Lot #
Misc.	Nitrogen Bath Temperature:	Sonicator Horns Tuned: <20%	Balance ID: Mettler PJ400
Prep Start Time: 1115	Prep End Time: 1450		

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spike Vol. (mL)	Fraction: Pest	Fraction: PCB	Pre-GPC: Date Conc.	Pre-GPC: Conc. Init.	Pre-GPC: Final Vol. (mL)	Acid Wash	Post-GPC: Date Conc.	Post-GPC: Conc. Init.	Post-GPC: Final Vol. (mL)	Tray Loc.	Comments
4-15-11	KF	WG90237-1 WG90238-1	30.01	0.2mL	NR	✓	✓	4-15-11	WJ	10mL		4-20-11	KF	1mL	AP966 E3	Post: R155560
		WG90237-2	29.97	1mL	1mL	✓								5mL	F4	MB: R155562
		-3	30.01												F5	
		-4	31.66												F6	MS SE1778-4A
		-5	30.68												F7	MSD " -4A
		-6	31.16												F8	MS SE1778-7A
		-7	31.37												F9	MSD " -7A
		-8	30.07												F10	MS SE1778-13A
		-9	32.24												F11	MSD " -13A
		-10	30.05												F12	TDX LCS
		WG90238-2	30.02				✓								AP967 A1	

EX-010 - Revision 1 - 03/10/2010

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spike Vol. (mL)	Fraction: Pest	Fraction: PCB	Pre-GPC: Date Conc.	Pre-GPC: Conc. Init.	Pre-GPC: Final Vol. (mL)	Acid Wash	Post-GPC: Date Conc.	Post-GPC: Conc. Init.	Post-GPC: Final Vol. (mL)	Tray Loc.	Comments
4-15-11	KF	WG90238 -3	29.99	1mL	1mL		✓	4-15-11	WJ	10mL		4-20-11	KF	5mL	AP967 A2	
		-4	32.26												A3	MS SE1778-4A
		-5	30.60												A4	MSD " -4A
		-6	30.32												A5	MS SE1778-7A
		-7	30.56												A6	MSD " -7A
		-8	30.20												A7	MS SE1778-13A
		-9	32.30												A8	MSD " -13A
		SE1778-2A	40.93	0.2mL	NR	✓	✓							1mL	A9	
		-3A	43.36												A10	
		-4A	46.00												A11	
		-7A	31.18	1mL				4-15-11	WJ	10mL				5mL	A12	
		-8 (#MS) A	40.03	0.2mL										1mL	B1	
		-9A	40.56												B2	
		-10A	30.20	1mL						10mL				5mL	B3	
		-11A	43.47	0.2mL										1mL	B4	
		-13c	42.01												B5	
		-16A	40.12												B6	
		-18A	30.09	1mL						10mL				5mL	B7	
		-20A	43.38	0.2mL										1mL	B8	
		-22A	41.79												B9	
		~~SE1685-7A~~	41.77												B10	RE
		-8A	32.37	1mL											B11	RE

EX-010 - Revision 1 - 03/10/2010

QAEX203

0000008

Reviewed By _____ Date _____

PR Blank 4-20-11

Katahdin Analytical Services
GPC Logbook

Analytical Method: (check one)	SW846 8081 ✓	SW846 8082 ✓	SW846 8270	OLM04.3
MeCl2 Lot #: K06E10		Flow: 5.0 ml/min, set at 4.7 ml/min.		
GPC Dump Time: 15.5		GPC Collect Time: 8.6		

Tray Pos. No.	Sample Identification	Date Extracted	Extract Vol.	GPC Init.	Date GPC Started	GPC Inj. Vol.	Comments
1	GPC Blank	—	—	WS	4-19-11	5mL	
2	WG90237-1 WG90238-1	4-15-11	10mL				
3	WG-90238-2						
4	↓ -3						
5	WG-90237-10						
6	↓ -2						
7	↓ -3						
8	SE1778-20						
9	↓ -4						
10	WG-90237-4						
11	WG-90238-4						
12	WG-90237-5						
13	SE1778-7						
14	WG-90238-9						
15	WG90237-8						
16	WG90238-6						
17	WG-90237-9						
18	-6						
19	↓ -7						
20	WG-90238-7						
21	↓ -5						
22	↓ -8	↓		↓	↓		

Katahdin Analytical Services
GPC Logbook

Tray Pos. No.	Sample Identification	Date Extracted	Extract Vol.	GPC Init.	Date GPC Started	GPC Inj. Vol.	Comments
23	SE1778-2	4-15-11	10mL	WS	4-11-11	5mL	
24	↓ -3						
25	SE1685-8RE						
26	SE1778-22						
27	-10						
28	-16						
29	-9						
30	-8						
31	-11						
32	-18						
33	-13						
34	SE1685-7RE	↓	↓	↓	↓	↓	
35							
36							
37							
38							
39							
40							
41							
42						WS 4-20-11	
43							

Reviewed by: Review Date:

Katahdin Analytical Services 2000414

Data File: \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00321.D
Report Date: 16-Mar-2011 10:16

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00321.D
Lab Smp Id: EVAL
Inj Date : 14-MAR-2011 16:36
Operator : CB Inst ID: gc01.i
Smp Info : EVAL
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m
Meth Date : 15-Mar-2011 13:58 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 22:08 Cal File: 1EC00340.D
Als bottle: 6 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: eval.sub
Target Version: 4.12
Processing Host: V200T5

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
19 4,4'-DDE	7.768	7.764	0.004	52208	0.00695	0.0695	
23 Endrin	8.428	8.425	0.003	1226091	0.20991	2.10	
24 4,4'-DDD	8.617	8.614	0.003	2948	0.00115	0.0115	
27 4,4'-DDT	9.013	9.009	0.004	1444301	0.21442	2.14	
28 Endrin Aldehyde	9.140	9.137	0.003	13877	0.00327	0.0327	
33 Endrin Ketone	10.280	10.277	0.003	36689	0.00744	0.0744	

Data File: 1EC00321.D
Report Date: 16-Mar-2011 10:17

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\GC01EC14.b\1EC00321.D
Lab Smp Id: EVAL
Inj Date : 14-MAR-2011 16:36
Operator : CB Inst ID: gc01.i
Smp Info : EVAL
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m\PEST061.m
Meth Date : 15-Mar-2011 15:49 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 22:08 Cal File: 1EC00340.D
Als bottle: 6 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: eval.sub
Target Version: 4.12
Processing Host: V200T5

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
19 4,4'-DDE	7.925	7.925	0.000	66538	0.00690	0.0690	
23 Endrin	8.455	8.455	0.000	1701907	0.20867	2.09	
24 4,4'-DDD	8.682	8.682	0.000	2597	0.00128	0.0128	
27 4,4'-DDT	9.138	9.139	-0.001	1781741	0.20696	2.07	
28 Endrin Aldehyde	8.972	8.972	0.000	17309	0.00330	0.0330	
33 Endrin Ketone	10.013	10.014	-0.001	43968	0.00643	0.0643	

Data File: \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00322.D
Report Date: 16-Mar-2011 10:16

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00322.D
Lab Smp Id: INDAB 0.05
Inj Date : 14-MAR-2011 16:53
Operator : CB Inst ID: gc01.i
Smp Info : INDAB 0.05
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m
Meth Date : 15-Mar-2011 13:58 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 20:40 Cal File: 1EC00335.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICAL.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	REVIEW CODE
$ 4 Tetrachloro-m-Xylene	3.991	3.989	0.002	367614	0.05000	0.0500	
5 alpha-BHC	4.737	4.737	0.000	575486	0.05000	0.0499	
6 gamma-BHC	5.244	5.244	0.000	541341	0.05000	0.0503	
7 beta-BHC	5.659	5.659	0.000	219578	0.05000	0.0502	
8 delta-BHC	6.042	6.042	0.000	352192	0.05000	0.0421	
9 Heptachlor	5.794	5.790	0.004	431794	0.05000	0.0563	
10 Aldrin	6.241	6.237	0.004	449081	0.05000	0.0499	
13 Heptachlor Epoxide	7.009	7.007	0.002	410927	0.05000	0.0501	
15 gamma-Chlordane	7.391	7.389	0.002	409968	0.05000	0.0515	
17 alpha-Chlordane	7.496	7.494	0.002	391440	0.05000	0.0509	
19 4,4'-DDE	7.767	7.764	0.003	432536	0.05000	0.0517	
20 Endosulfan I	7.591	7.587	0.004	372789	0.05000	0.0514	
21 Dieldrin	7.999	7.995	0.004	405638	0.05000	0.0516	
23 Endrin	8.427	8.425	0.002	286739	0.05000	0.0499	
24 4,4'-DDD	8.617	8.614	0.003	334647	0.05000	0.0517	
26 Endosulfan II	8.866	8.862	0.004	337887	0.05000	0.0506	
27 4,4'-DDT	9.012	9.009	0.003	332668	0.05000	0.0585	
28 Endrin Aldehyde	9.141	9.137	0.004	266979	0.05000	0.0430	
29 Methoxychlor	9.891	9.887	0.004	158644	0.05000	0.0501	
32 Endosulfan sulfate	9.477	9.474	0.003	217183	0.05000	0.0497	
33 Endrin Ketone	10.282	10.277	0.005	277025	0.05000	0.0508	
$ 34 Decachlorobiphenyl	12.456	12.447	0.009	190173	0.05000	0.0504	

Data File: 1EC00322.D
Report Date: 16-Mar-2011 10:17

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\GC01EC14.b\1EC00322.D
Lab Smp Id: INDAB 0.05
Inj Date : 14-MAR-2011 16:53
Operator : CB Inst ID: gc01.i
Smp Info : INDAB 0.05
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m\PEST061.m
Meth Date : 15-Mar-2011 15:49 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 20:40 Cal File: 1EC00335.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICAL.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	REVIEW CODE
$ 4	Tetrachloro-m-Xylene	4.219	4.219	0.000	486413	0.05000	0.0504	
5	alpha-BHC	4.814	4.814	0.000	725339	0.05000	0.0501	
6	gamma-BHC	5.262	5.264	-0.002	674852	0.05000	0.0509	
7	beta-BHC	5.536	5.539	-0.003	280260	0.05000	0.0507	
8	delta-BHC	5.879	5.880	-0.001	441743	0.05000	0.0391	
9	Heptachlor	6.077	6.077	0.000	621693	0.05000	0.0611	
10	Aldrin	6.557	6.559	-0.002	565426	0.05000	0.0499	
13	Heptachlor Epoxide	7.172	7.172	0.000	531956	0.05000	0.0510	
15	gamma-Chlordane	7.542	7.542	0.000	520477	0.05000	0.0504	
17	alpha-Chlordane	7.656	7.655	0.001	487057	0.05000	0.0495	
19	4,4'-DDE	7.926	7.925	0.001	547365	0.05000	0.0505	
20	Endosulfan I	7.724	7.725	-0.001	464511	0.05000	0.0498	
21	Dieldrin	8.124	8.125	-0.001	517435	0.05000	0.0500	
23	Endrin	8.456	8.455	0.001	410721	0.05000	0.0504	
24	4,4'-DDD	8.682	8.682	0.000	418654	0.05000	0.0500	
26	Endosulfan II	8.782	8.782	0.000	438713	0.05000	0.0504	
27	4,4'-DDT	9.139	9.139	0.000	435174	0.05000	0.0574	
28	Endrin Aldehyde	8.972	8.972	0.000	353518	0.05000	0.0428	
29	Methoxychlor	9.854	9.854	0.000	212263	0.05000	0.0505	
32	Endosulfan sulfate	9.316	9.315	0.001	297689	0.05000	0.0500	
33	Endrin Ketone	10.014	10.014	0.000	396972	0.05000	0.0514	
$ 34	Decachlorobiphenyl	12.541	12.539	0.002	245398	0.05000	0.0508	

Data File: \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00323.D
Report Date: 16-Mar-2011 10:16

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00323.D
Lab Smp Id: INDAB 0.005
Inj Date : 14-MAR-2011 17:11
Operator : CB Inst ID: gc01.i
Smp Info : INDAB 0.005
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m
Meth Date : 15-Mar-2011 13:58 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 20:58 Cal File: 1EC00336.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICAL.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	REVIEW CODE
$ 4	Tetrachloro-m-Xylene	3.988	3.989	-0.001	30689	0.00500	0.00485	
5	alpha-BHC	4.737	4.737	0.000	42286	0.00500	0.00496	
6	gamma-BHC	5.243	5.244	-0.001	41023	0.00500	0.00490(a)	
7	beta-BHC	5.660	5.659	0.001	18943	0.00500	0.00492	
8	delta-BHC	6.043	6.042	0.001	22802	0.00500	0.00517	
9	Heptachlor	5.792	5.790	0.002	33913	0.00500	0.00577	
10	Aldrin	6.238	6.237	0.001	34053	0.00500	0.00496	
13	Heptachlor Epoxide	7.008	7.007	0.001	33300	0.00500	0.00492	
15	gamma-Chlordane	7.390	7.389	0.001	33764	0.00500	0.00461	
17	alpha-Chlordane	7.493	7.494	-0.001	32234	0.00500	0.00482	
19	4,4'-DDE	7.765	7.764	0.001	33174	0.00500	0.00473	
20	Endosulfan I	7.588	7.587	0.001	29940	0.00500	0.00473	
21	Dieldrin	7.997	7.995	0.002	31476	0.00500	0.00462	
23	Endrin	8.427	8.425	0.002	22887	0.00500	0.00509	
24	4,4'-DDD	8.617	8.614	0.003	25710	0.00500	0.00463	
26	Endosulfan II	8.863	8.862	0.001	26905	0.00500	0.00463	
27	4,4'-DDT	9.012	9.009	0.003	26654	0.00500	0.00501	
28	Endrin Aldehyde	9.140	9.137	0.003	20958	0.00500	0.00506	
29	Methoxychlor	9.890	9.887	0.003	14777	0.00500	0.00486	
32	Endosulfan sulfate	9.477	9.474	0.003	16143	0.00500	0.00489	
33	Endrin Ketone	10.280	10.277	0.003	21773	0.00500	0.00477(M)	M5
$ 34	Decachlorobiphenyl	12.455	12.447	0.008	18549	0.00500	0.00475	

CB 3/16/11

Data File: 1EC00323.D
Report Date: 16-Mar-2011 10:17

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\GC01EC14.b\1EC00323.D
Lab Smp Id: INDAB 0.005
Inj Date : 14-MAR-2011 17:11
Operator : CB Inst ID: gc01.i
Smp Info : INDAB 0.005
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m\PEST061.m
Meth Date : 15-Mar-2011 15:49 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 20:58 Cal File: 1EC00336.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICAL.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	REVIEW CODE
$ 4	Tetrachloro-m-Xylene	4.218	4.219	-0.001	41421	0.00500	0.00485	
5	alpha-BHC	4.813	4.814	-0.001	55114	0.00500	0.00489	
6	gamma-BHC	5.262	5.264	-0.002	53474	0.00500	0.00474(a)	
7	beta-BHC	5.537	5.539	-0.002	24639	0.00500	0.00492	
8	delta-BHC	5.878	5.880	-0.002	33348	0.00500	0.00526	
9	Heptachlor	6.077	6.077	0.000	50731	0.00500	0.00600	
10	Aldrin	6.558	6.559	-0.001	44448	0.00500	0.00494	
13	Heptachlor Epoxide	7.172	7.172	0.000	42917	0.00500	0.00476	
15	gamma-Chlordane	7.542	7.542	0.000	42374	0.00500	0.00491	
17	alpha-Chlordane	7.653	7.655	-0.002	42256	0.00500	0.00509	
19	4,4'-DDE	7.925	7.925	0.000	44195	0.00500	0.00491	
20	Endosulfan I	7.723	7.725	-0.002	38638	0.00500	0.00491	
21	Dieldrin	8.125	8.125	0.000	42061	0.00500	0.00483	
23	Endrin	8.453	8.455	-0.002	33113	0.00500	0.00491	
24	4,4'-DDD	8.682	8.682	0.000	33690	0.00500	0.00492	
26	Endosulfan II	8.782	8.782	0.000	35203	0.00500	0.00477	
27	4,4'-DDT	9.138	9.139	-0.001	36361	0.00500	0.00518	
28	Endrin Aldehyde	8.973	8.972	0.001	27250	0.00500	0.00504	
29	Methoxychlor	9.853	9.854	-0.001	19580	0.00500	0.00492	
32	Endosulfan sulfate	9.313	9.315	-0.002	22824	0.00500	0.00485	
33	Endrin Ketone	10.013	10.014	-0.001	32229	0.00500	0.00496	
$ 34	Decachlorobiphenyl	12.540	12.539	0.001	22211	0.00500	0.00467	

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Report Date: 16-Mar-2011 10:16

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00324.D
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Inj Date : 14-MAR-2011 17:28
Operator : CB Inst ID: gc01.i
Smp Info : INDAB 0.01
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m
Meth Date : 15-Mar-2011 13:58 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 21:15 Cal File: 1EC00337.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICAL.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	REVIEW CODE
$ 4 Tetrachloro-m-Xylene	3.990	3.989	0.001	67167	0.01000	0.00970	
5 alpha-BHC	4.737	4.737	0.000	98975	0.01000	0.00967	
6 gamma-BHC	5.244	5.244	0.000	94679	0.01000	0.00971(a)	
7 beta-BHC	5.659	5.659	0.000	41916	0.01000	0.0101	
8 delta-BHC	6.042	6.042	0.000	56298	0.01000	0.00948	
9 Heptachlor	5.792	5.790	0.002	77145	0.01000	0.0106	
10 Aldrin	6.239	6.237	0.002	78690	0.01000	0.00972	
13 Heptachlor Epoxide	7.009	7.007	0.002	73660	0.01000	0.00968	
15 gamma-Chlordane	7.389	7.389	0.000	74001	0.01000	0.00962	
17 alpha-Chlordane	7.494	7.494	0.000	71601	0.01000	0.00982	
19 4,4'-DDE	7.765	7.764	0.001	76349	0.01000	0.00977	
20 Endosulfan I	7.589	7.587	0.002	67129	0.01000	0.00974	
21 Dieldrin	7.997	7.995	0.002	70727	0.01000	0.00953	
23 Endrin	8.427	8.425	0.002	50965	0.01000	0.00986	
24 4,4'-DDD	8.615	8.614	0.001	57934	0.01000	0.00955	
26 Endosulfan II	8.864	8.862	0.002	62119	0.01000	0.00982	
27 4,4'-DDT	9.012	9.009	0.003	60105	0.01000	0.0103	
28 Endrin Aldehyde	9.139	9.137	0.002	50290	0.01000	0.00997	
29 Methoxychlor	9.889	9.887	0.002	31569	0.01000	0.0101	
32 Endosulfan sulfate	9.477	9.474	0.003	39987	0.01000	0.0102	
33 Endrin Ketone	10.280	10.277	0.003	50358	0.01000	0.00988	
$ 34 Decachlorobiphenyl	12.455	12.447	0.008	39608	0.01000	0.0104	

Data File: 1EC00324.D
Report Date: 16-Mar-2011 10:17

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\GC01EC14.b\1EC00324.D
Lab Smp Id: INDAB 0.01
Inj Date : 14-MAR-2011 17:28
Operator : CB Inst ID: gc01.i
Smp Info : INDAB 0.01
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m\PEST061.m
Meth Date : 15-Mar-2011 15:49 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 21:15 Cal File: 1EC00337.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICAL.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	REVIEW CODE
$ 4	Tetrachloro-m-Xylene	4.219	4.219	0.000	91676	0.01000	0.00997	
5	alpha-BHC	4.812	4.814	-0.002	126207	0.01000	0.00965	
6	gamma-BHC	5.262	5.264	-0.002	121628	0.01000	0.00979(a)	
7	beta-BHC	5.535	5.539	-0.004	53079	0.01000	0.0100	
8	delta-BHC	5.879	5.880	-0.001	75574	0.01000	0.00953	
9	Heptachlor	6.077	6.077	0.000	113969	0.01000	0.0111	
10	Aldrin	6.559	6.559	0.000	100502	0.01000	0.00972	
13	Heptachlor Epoxide	7.172	7.172	0.000	96258	0.01000	0.00976	
15	gamma-Chlordane	7.540	7.542	-0.002	94905	0.01000	0.00988	
17	alpha-Chlordane	7.654	7.655	-0.001	91830	0.01000	0.00999	
19	4,4'-DDE	7.925	7.925	0.000	99066	0.01000	0.00980	
20	Endosulfan I	7.724	7.725	-0.001	87005	0.01000	0.00996	
21	Dieldrin	8.124	8.125	-0.001	94650	0.01000	0.00979	
23	Endrin	8.454	8.455	-0.001	72859	0.01000	0.00968	
24	4,4'-DDD	8.680	8.682	-0.002	75552	0.01000	0.00981	
26	Endosulfan II	8.782	8.782	0.000	80441	0.01000	0.00985	
27	4,4'-DDT	9.137	9.139	-0.002	80918	0.01000	0.0104	
28	Endrin Aldehyde	8.972	8.972	0.000	66865	0.01000	0.0100	
29	Methoxychlor	9.852	9.854	-0.002	41548	0.01000	0.0101	
32	Endosulfan sulfate	9.314	9.315	-0.001	52506	0.01000	0.00976	
33	Endrin Ketone	10.012	10.014	-0.002	71471	0.01000	0.00990	
$ 34	Decachlorobiphenyl	12.540	12.539	0.001	48904	0.01000	0.0102	

Data File: \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00325.D
Report Date: 16-Mar-2011 10:16

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00325.D
Lab Smp Id: INDAB 0.025
Inj Date : 14-MAR-2011 17:46
Operator : CB Inst ID: gc01.i
Smp Info : INDAB 0.025
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m
Meth Date : 15-Mar-2011 13:58 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 21:33 Cal File: 1EC00338.D
Als bottle: 10 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICAL.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	REVIEW CODE
$ 4 Tetrachloro-m-Xylene	3.991	3.989	0.002	177618	0.02500	0.0244	
5 alpha-BHC	4.738	4.737	0.001	263605	0.02500	0.0234	
6 gamma-BHC	5.245	5.244	0.001	248192	0.02500	0.0236(a)	
7 beta-BHC	5.660	5.659	0.001	103351	0.02500	0.0239	
8 delta-BHC	6.043	6.042	0.001	154387	0.02500	0.0213	
9 Heptachlor	5.793	5.790	0.003	199692	0.02500	0.0252	
10 Aldrin	6.240	6.237	0.003	207275	0.02500	0.0235	
13 Heptachlor Epoxide	7.008	7.007	0.001	194170	0.02500	0.0240	
15 gamma-Chlordane	7.391	7.389	0.002	194313	0.02500	0.0246	
17 alpha-Chlordane	7.495	7.494	0.001	182102	0.02500	0.0239	
19 4,4'-DDE	7.766	7.764	0.002	193747	0.02500	0.0235	
20 Endosulfan I	7.590	7.587	0.003	171787	0.02500	0.0239	
21 Dieldrin	7.998	7.995	0.003	187956	0.02500	0.0242	
23 Endrin	8.428	8.425	0.003	130678	0.02500	0.0234	
24 4,4'-DDD	8.616	8.614	0.002	153272	0.02500	0.0241	
26 Endosulfan II	8.865	8.862	0.003	160910	0.02500	0.0244	
27 4,4'-DDT	9.013	9.009	0.004	155866	0.02500	0.0261	
28 Endrin Aldehyde	9.141	9.137	0.004	125870	0.02500	0.0224	
29 Methoxychlor	9.888	9.887	0.001	77669	0.02500	0.0246	
32 Endosulfan sulfate	9.476	9.474	0.002	98255	0.02500	0.0232	
33 Endrin Ketone	10.280	10.277	0.003	127582	0.02500	0.0238	
$ 34 Decachlorobiphenyl	12.455	12.447	0.008	94521	0.02500	0.0249	

Data File: 1EC00325.D
Report Date: 16-Mar-2011 10:17

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\GC01EC14.b\1EC00325.D
Lab Smp Id: INDAB 0.025
Inj Date : 14-MAR-2011 17:46
Operator : CB Inst ID: gc01.i
Smp Info : INDAB 0.025
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m\PEST061.m
Meth Date : 15-Mar-2011 15:49 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 21:33 Cal File: 1EC00338.D
Als bottle: 10 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICAL.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	REVIEW CODE
$ 4	Tetrachloro-m-Xylene	4.218	4.219	-0.001	230050	0.02500	0.0241	
5	alpha-BHC	4.813	4.814	-0.001	336710	0.02500	0.0238	
6	gamma-BHC	5.261	5.264	-0.003	312919	0.02500	0.0240(a)	
7	beta-BHC	5.536	5.539	-0.003	130640	0.02500	0.0239	
8	delta-BHC	5.878	5.880	-0.002	200657	0.02500	0.0212	
9	Heptachlor	6.076	6.077	-0.001	293941	0.02500	0.0269	
10	Aldrin	6.558	6.559	-0.001	265361	0.02500	0.0238	
13	Heptachlor Epoxide	7.171	7.172	-0.001	247433	0.02500	0.0240	
15	gamma-Chlordane	7.541	7.542	-0.001	241091	0.02500	0.0237	
17	alpha-Chlordane	7.655	7.655	0.000	231063	0.02500	0.0238	
19	4,4'-DDE	7.925	7.925	0.000	253796	0.02500	0.0237	
20	Endosulfan I	7.725	7.725	0.000	220399	0.02500	0.0240	
21	Dieldrin	8.125	8.125	0.000	246928	0.02500	0.0242	
23	Endrin	8.455	8.455	0.000	191800	0.02500	0.0240	
24	4,4'-DDD	8.681	8.682	-0.001	196266	0.02500	0.0239	
26	Endosulfan II	8.783	8.782	0.001	206813	0.02500	0.0241	
27	4,4'-DDT	9.138	9.139	-0.001	205941	0.02500	0.0258	
28	Endrin Aldehyde	8.971	8.972	-0.001	167245	0.02500	0.0224	
29	Methoxychlor	9.853	9.854	-0.001	101367	0.02500	0.0242	
32	Endosulfan sulfate	9.315	9.315	0.000	138739	0.02500	0.0240	
33	Endrin Ketone	10.013	10.014	-0.001	175766	0.02500	0.0231	
$ 34	Decachlorobiphenyl	12.538	12.539	-0.001	119077	0.02500	0.0246	

Data File: \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00326.D
Report Date: 16-Mar-2011 10:16

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00326.D
Lab Smp Id: INDAB 0.1
Inj Date : 14-MAR-2011 18:03
Operator : CB Inst ID: gc01.i
Smp Info : INDAB 0.1
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m
Meth Date : 15-Mar-2011 13:58 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 21:50 Cal File: 1EC00339.D
Als bottle: 11 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICAL.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	REVIEW CODE
$ 4 Tetrachloro-m-Xylene	3.989	3.989	0.000	735802	0.10000	0.100	
5 alpha-BHC	4.736	4.737	-0.001	1159856	0.10000	0.101	
6 gamma-BHC	5.243	5.244	-0.001	1077417	0.10000	0.100	
7 beta-BHC	5.658	5.659	-0.001	440284	0.10000	0.100	
8 delta-BHC	6.043	6.042	0.001	744024	0.10000	0.100	
9 Heptachlor	5.791	5.790	0.001	898555	0.10000	0.103	
10 Aldrin	6.239	6.237	0.002	901284	0.10000	0.101	
13 Heptachlor Epoxide	7.008	7.007	0.001	818780	0.10000	0.100	
15 gamma-Chlordane	7.389	7.389	0.000	792701	0.10000	0.0992	
17 alpha-Chlordane	7.493	7.494	-0.001	765806	0.10000	0.0998	
19 4,4'-DDE	7.766	7.764	0.002	832281	0.10000	0.0994	
20 Endosulfan I	7.588	7.587	0.001	717529	0.10000	0.0995	
21 Dieldrin	7.996	7.995	0.001	780653	0.10000	0.0992	
23 Endrin	8.426	8.425	0.001	584672	0.10000	0.101	
24 4,4'-DDD	8.616	8.614	0.002	646911	0.10000	0.0992	
26 Endosulfan II	8.863	8.862	0.001	667653	0.10000	0.0998	
27 4,4'-DDT	9.009	9.009	0.000	666864	0.10000	0.103	
28 Endrin Aldehyde	9.138	9.137	0.001	531268	0.10000	0.0988	
29 Methoxychlor	9.888	9.887	0.001	317352	0.10000	0.100	
32 Endosulfan sulfate	9.474	9.474	0.000	447315	0.10000	0.101	
33 Endrin Ketone	10.279	10.277	0.002	545049	0.10000	0.0999	
$ 34 Decachlorobiphenyl	12.451	12.447	0.004	375944	0.10000	0.0997	

Data File: 1EC00326.D
Report Date: 16-Mar-2011 10:17

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\GC01EC14.b\1EC00326.D
Lab Smp Id: INDAB 0.1
Inj Date : 14-MAR-2011 18:03
Operator : CB Inst ID: gc01.i
Smp Info : INDAB 0.1
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m\PEST061.m
Meth Date : 15-Mar-2011 15:49 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 21:50 Cal File: 1EC00339.D
Als bottle: 11 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICAL.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	REVIEW CODE
$ 4 Tetrachloro-m-Xylene	4.218	4.219	-0.001	967464	0.10000	0.100	
5 alpha-BHC	4.813	4.814	-0.001	1458804	0.10000	0.100	
6 gamma-BHC	5.261	5.264	-0.003	1330379	0.10000	0.0998	
7 beta-BHC	5.536	5.539	-0.003	555555	0.10000	0.0999	
8 delta-BHC	5.879	5.880	-0.001	936788	0.10000	0.100	
9 Heptachlor	6.076	6.077	-0.001	1225249	0.10000	0.104	
10 Aldrin	6.558	6.559	-0.001	1138614	0.10000	0.100	
13 Heptachlor Epoxide	7.171	7.172	-0.001	1035958	0.10000	0.0997	
15 gamma-Chlordane	7.541	7.542	-0.001	1036841	0.10000	0.100	
17 alpha-Chlordane	7.654	7.655	-0.001	987471	0.10000	0.101	
19 4,4'-DDE	7.924	7.925	-0.001	1077504	0.10000	0.100	
20 Endosulfan I	7.724	7.725	-0.001	931761	0.10000	0.100	
21 Dieldrin	8.124	8.125	-0.001	1036868	0.10000	0.100	
23 Endrin	8.454	8.455	-0.001	820903	0.10000	0.100	
24 4,4'-DDD	8.679	8.682	-0.003	846891	0.10000	0.100	
26 Endosulfan II	8.781	8.782	-0.001	872883	0.10000	0.100	
27 4,4'-DDT	9.138	9.139	-0.001	877032	0.10000	0.104	
28 Endrin Aldehyde	8.971	8.972	-0.001	712523	0.10000	0.0993	
29 Methoxychlor	9.853	9.854	-0.001	419361	0.10000	0.1000(M)	M9
32 Endosulfan sulfate	9.314	9.315	-0.001	608421	0.10000	0.100	
33 Endrin Ketone	10.013	10.014	-0.001	765448	0.10000	0.0997	
$ 34 Decachlorobiphenyl	12.538	12.539	-0.001	478583	0.10000	0.0996	

CB 3/16/11

Data File: \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00327.D
Report Date: 16-Mar-2011 10:16

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00327.D
Lab Smp Id: INDAB 0.25
Inj Date : 14-MAR-2011 18:21
Operator : CB Inst ID: gc01.i
Smp Info : INDAB 0.25
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m
Meth Date : 15-Mar-2011 13:58 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 22:08 Cal File: 1EC00340.D
Als bottle: 12 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICAL.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

						AMOUNTS		
	Compounds	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)	REVIEW CODE
$	4 Tetrachloro-m-Xylene	3.990	3.989	0.001	1795013	0.25000	0.250	
	5 alpha-BHC	4.737	4.737	0.000	2785307	0.25000	0.250	
	6 gamma-BHC	5.244	5.244	0.000	2599412	0.25000	0.250	
	7 beta-BHC	5.659	5.659	0.000	1093080	0.25000	0.250	
	8 delta-BHC	6.042	6.042	0.000	1870768	0.25000	0.250	
	9 Heptachlor	5.792	5.790	0.002	2168393	0.25000	0.250	
	10 Aldrin	6.239	6.237	0.002	2144801	0.25000	0.250	
	13 Heptachlor Epoxide	7.007	7.007	0.000	1967238	0.25000	0.250	
	15 gamma-Chlordane	7.389	7.389	0.000	1999791	0.25000	0.250	
	17 alpha-Chlordane	7.492	7.494	-0.002	1870515	0.25000	0.250	
	19 4,4'-DDE	7.765	7.764	0.001	2053035	0.25000	0.250	
	20 Endosulfan I	7.589	7.587	0.002	1746264	0.25000	0.250	
	21 Dieldrin	7.995	7.995	0.000	1942539	0.25000	0.250	
	23 Endrin	8.425	8.425	0.000	1460485	0.25000	0.250	
	24 4,4'-DDD	8.615	8.614	0.001	1645367	0.25000	0.250	
	26 Endosulfan II	8.862	8.862	0.000	1653966	0.25000	0.250	
	27 4,4'-DDT	9.010	9.009	0.001	1688111	0.25000	0.250	
	28 Endrin Aldehyde	9.137	9.137	0.000	1330234	0.25000	0.250	
	29 Methoxychlor	9.887	9.887	0.000	793599	0.25000	0.250	
	32 Endosulfan sulfate	9.475	9.474	0.001	1129407	0.25000	0.250	
	33 Endrin Ketone	10.279	10.277	0.002	1336901	0.25000	0.250	
$	34 Decachlorobiphenyl	12.450	12.447	0.003	941366	0.25000	0.250	

Data File: 1EC00327.D
Report Date: 16-Mar-2011 10:17

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\GC01EC14.b\1EC00327.D
Lab Smp Id: INDAB 0.25
Inj Date : 14-MAR-2011 18:21
Operator : CB Inst ID: gc01.i
Smp Info : INDAB 0.25
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m\PEST061.m
Meth Date : 15-Mar-2011 15:49 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 22:08 Cal File: 1EC00340.D
Als bottle: 12 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICAL.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	REVIEW CODE
$ 4	Tetrachloro-m-Xylene	4.220	4.219	0.001	2386826	0.25000	0.250	
5	alpha-BHC	4.814	4.814	0.000	3571107	0.25000	0.250	
6	gamma-BHC	5.264	5.264	0.000	3326476	0.25000	0.250(A)	
7	beta-BHC	5.537	5.539	-0.002	1404782	0.25000	0.250	
8	delta-BHC	5.880	5.880	0.000	2392058	0.25000	0.250	
9	Heptachlor	6.077	6.077	0.000	2969591	0.25000	0.250	
10	Aldrin	6.559	6.559	0.000	2747443	0.25000	0.250	
13	Heptachlor Epoxide	7.172	7.172	0.000	2528899	0.25000	0.250	
15	gamma-Chlordane	7.542	7.542	0.000	2549546	0.25000	0.250	
17	alpha-Chlordane	7.655	7.655	0.000	2382278	0.25000	0.250	
19	4,4'-DDE	7.925	7.925	0.000	2573001	0.25000	0.250	
20	Endosulfan I	7.725	7.725	0.000	2242300	0.25000	0.250	
21	Dieldrin	8.125	8.125	0.000	2532837	0.25000	0.250	
23	Endrin	8.454	8.455	-0.001	2032845	0.25000	0.250	
24	4,4'-DDD	8.680	8.682	-0.002	2106135	0.25000	0.250	
26	Endosulfan II	8.782	8.782	0.000	2148674	0.25000	0.250	
27	4,4'-DDT	9.137	9.139	-0.002	2137974	0.25000	0.250	
28	Endrin Aldehyde	8.972	8.972	0.000	1744616	0.25000	0.250	
29	Methoxychlor	9.852	9.854	-0.002	1030809	0.25000	0.250	
32	Endosulfan sulfate	9.314	9.315	-0.001	1561899	0.25000	0.250	
33	Endrin Ketone	10.014	10.014	0.000	1855311	0.25000	0.250	
$ 34	Decachlorobiphenyl	12.537	12.539	-0.002	1180709	0.25000	0.250	

Data File: \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00328.D
Report Date: 16-Mar-2011 10:17

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00328.D
Lab Smp Id: IND 0.05
Inj Date : 14-MAR-2011 18:38
Operator : CB Inst ID: gc01.i
Smp Info : IND 0.05
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m
Meth Date : 15-Mar-2011 13:58 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 22:08 Cal File: 1EC00340.D
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: IND.sub
Target Version: 4.12
Processing Host: V200T5

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
Compounds	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)	REVIEW CODE
5 alpha-BHC	4.732	4.737	-0.005	548366	0.05000	0.0476	
6 gamma-BHC	5.239	5.244	-0.005	505010	0.05000	0.0470(a)	
7 beta-BHC	5.656	5.659	-0.003	229172	0.05000	0.0524	
8 delta-BHC	6.039	6.042	-0.003	345724	0.05000	0.0483	
9 Heptachlor	5.789	5.790	-0.001	418653	0.05000	0.0474	
10 Aldrin	6.234	6.237	-0.003	427281	0.05000	0.0475	
13 Heptachlor Epoxide	7.004	7.007	-0.003	390614	0.05000	0.0476	
15 gamma-Chlordane	7.386	7.389	-0.003	388740	0.05000	0.0488	
17 alpha-Chlordane	7.491	7.494	-0.003	375725	0.05000	0.0488	
19 4,4'-DDE	7.762	7.764	-0.002	408784	0.05000	0.0488	
20 Endosulfan I	7.586	7.587	-0.001	345381	0.05000	0.0476	
21 Dieldrin	7.994	7.995	-0.001	383752	0.05000	0.0489	
23 Endrin	8.424	8.425	-0.001	261055	0.05000	0.0456	
24 4,4'-DDD	8.614	8.614	0.000	308922	0.05000	0.0478	
26 Endosulfan II	8.861	8.862	-0.001	305773	0.05000	0.0458	
27 4,4'-DDT	9.007	9.009	-0.002	324035	0.05000	0.0492	
28 Endrin Aldehyde	9.136	9.137	-0.001	233010	0.05000	0.0442	
29 Methoxychlor	9.886	9.887	-0.001	160527	0.05000	0.0507	
32 Endosulfan sulfate	9.472	9.474	-0.002	202811	0.05000	0.0465	
33 Endrin Ketone	10.276	10.277	-0.001	250533	0.05000	0.0460	

Data File: 1EC00328.D
Report Date: 16-Mar-2011 10:17

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\GC01EC14.b\1EC00328.D
Lab Smp Id: IND 0.05
Inj Date : 14-MAR-2011 18:38
Operator : CB Inst ID: gc01.i
Smp Info : IND 0.05
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m\PEST061.m
Meth Date : 15-Mar-2011 15:49 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 22:08 Cal File: 1EC00340.D
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: IND.sub
Target Version: 4.12
Processing Host: V200T5

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	REVIEW CODE
5 alpha-BHC	4.811	4.814	-0.003	711285	0.05000	0.0492	
6 gamma-BHC	5.259	5.264	-0.005	636438	0.05000	0.0480(a)	
7 beta-BHC	5.534	5.539	-0.005	296844	0.05000	0.0537	
8 delta-BHC	5.877	5.880	-0.003	455126	0.05000	0.0504	
9 Heptachlor	6.074	6.077	-0.003	619393	0.05000	0.0503	
10 Aldrin	6.556	6.559	-0.003	548656	0.05000	0.0484	
13 Heptachlor Epoxide	7.169	7.172	-0.003	514967	0.05000	0.0494	
15 gamma-Chlordane	7.539	7.542	-0.003	516334	0.05000	0.0500	
17 alpha-Chlordane	7.652	7.655	-0.003	483918	0.05000	0.0492	
19 4,4'-DDE	7.922	7.925	-0.003	539546	0.05000	0.0497	
20 Endosulfan I	7.721	7.725	-0.004	461454	0.05000	0.0495	
21 Dieldrin	8.122	8.125	-0.003	504938	0.05000	0.0488	
23 Endrin	8.452	8.455	-0.003	397279	0.05000	0.0487	
24 4,4'-DDD	8.677	8.682	-0.005	413246	0.05000	0.0494	
26 Endosulfan II	8.779	8.782	-0.003	416386	0.05000	0.0478	
27 4,4'-DDT	9.134	9.139	-0.005	423282	0.05000	0.0485	
28 Endrin Aldehyde	8.969	8.972	-0.003	316911	0.05000	0.0448	
29 Methoxychlor	9.851	9.854	-0.003	213598	0.05000	0.0508	
32 Endosulfan sulfate	9.312	9.315	-0.003	286120	0.05000	0.0481	
33 Endrin Ketone	10.009	10.014	-0.005	362769	0.05000	0.0470	

Data File: \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00329.D
Report Date: 16-Mar-2011 10:22

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00329.D
Lab Smp Id: TOX 1.0
Inj Date : 14-MAR-2011 18:56
Operator : CB Inst ID: gc01.i
Smp Info : TOX 1.0
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m
Meth Date : 16-Mar-2011 10:21 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 20:40 Cal File: 1EC00335.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Tox.sub
Target Version: 4.12 Sample Matrix: WATER

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/mL)	(ug/mL)	TARGET RANGE	RATIO	REVIEW CODE
18 Toxaphene					CAS #: 8001-35-2			
7.919	7.918	0.001	69336	1.00000	0.994	80.00- 120.00	100.00	
8.668	8.666	0.002	76647	1.00000	0.977	89.71- 134.56	110.54	
8.866	8.864	0.002	146316	1.00000	0.973	176.82- 265.24	211.02	
8.983	8.981	0.002	102429	1.00000	0.997	123.13- 184.69	147.73	
9.196	9.193	0.003	92516	1.00000	0.967	110.66- 165.99	133.43	
9.314	9.311	0.003	234154	1.00000	0.995	274.73- 412.09	337.71	
9.598	9.598	0.000	85000	1.00000	0.977	99.58- 149.37	122.59	
9.736	9.734	0.002	112208	1.00000	0.982	129.71- 194.57	161.83	
9.904	9.901	0.003	134396	1.00000	0.982	161.14- 241.71	193.83	
10.616	10.613	0.003	95642	1.00000	1.00	112.00- 168.00	137.94	
		Average of Peak Amounts =			0.98440			

Data File: 1EC00329.D
Report Date: 16-Mar-2011 10:23

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\GC01EC14.b\1EC00329.D
Lab Smp Id: TOX 1.0
Inj Date : 14-MAR-2011 18:56
Operator : CB Inst ID: gc01.i
Smp Info : TOX 1.0
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m\PEST061.m
Meth Date : 16-Mar-2011 10:21 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 18:56 Cal File: 1EC00329.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Tox.sub
Target Version: 4.12 Sample Matrix: WATER

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/mL)	(ug/mL)	TARGET RANGE	RATIO	REVIEW CODE
18 Toxaphene					CAS #: 8001-35-2			
8.371	8.371	0.000	140130	1.00000	0.993	80.00- 120.00	100.00	
8.728	8.726	0.002	121223	1.00000	0.991	68.27- 102.41	86.51	
8.798	8.796	0.002	214395	1.00000	0.980	120.98- 181.46	153.00	
8.868	8.866	0.002	206283	1.00000	1.02	113.74- 170.61	147.21	
9.166	9.166	0.000	310476	1.00000	1.01	172.37- 258.56	221.56	
9.298	9.298	0.000	228028	1.00000	1.01	127.37- 191.05	162.73	
9.433	9.433	0.000	153780	1.00000	0.986	88.63- 132.94	109.74	
9.909	9.909	0.000	366332	1.00000	0.986	213.66- 320.49	261.42	
9.961	9.961	0.000	244940	1.00000	0.990	139.13- 208.70	174.79	
10.459	10.459	0.000	141697	1.00000	1.00	79.74- 119.62	101.12	
Average of Peak Amounts =					0.99660			

Data File: \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00335.D
Report Date: 16-Mar-2011 10:23

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\1EC00335.D
Lab Smp Id: TC 0.5
Inj Date : 14-MAR-2011 20:40
Operator : CB Inst ID: gc01.i
Smp Info : TC 0.5
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m
Meth Date : 16-Mar-2011 10:21 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 20:40 Cal File: 1EC00335.D
Als bottle: 20 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TC.sub
Target Version: 4.12 Sample Matrix: WATER

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/mL)	(ug/mL)	TARGET RANGE	RATIO	REVIEW CODE
14 Chlordane					CAS #: 12789-03-6			
7.391	7.391	0.000	427307	0.50000	0.507	80.00- 120.00	100.00	
7.494	7.494	0.000	354303	0.50000	0.507	66.60- 99.90	82.92	
		Average of Peak Amounts =			0.50700			

Data File: 1EC00335.D
Report Date: 16-Mar-2011 10:24

Katahdin Analytical Services

Data file : \\Target_server\gg\chem\gc01.i\GC01EC14.b\GC01EC14.b\1EC00335.D
Lab Smp Id: TC 0.5
Inj Date : 14-MAR-2011 20:40
Operator : CB Inst ID: gc01.i
Smp Info : TC 0.5
Misc Info :
Comment :
Method : \\Target_server\gg\chem\gc01.i\GC01EC14.b\PEST061.m\PEST061.m
Meth Date : 16-Mar-2011 10:21 cbyrne Quant Type: ESTD
Cal Date : 14-MAR-2011 20:40 Cal File: 1EC00335.D
Als bottle: 20 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TC.sub
Target Version: 4.12 Sample Matrix: WATER

Concentration Formula: Amt * DF * 1000*(Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/mL)	(ug/mL)	TARGET RANGE	RATIO	REVIEW CODE
14 Chlordane					CAS #: 12789-03-6			
7.543	7.543	0.000	705812	0.50000	0.515	80.00- 120.00	100.00	
7.658	7.658	0.000	689842	0.50000	0.508	79.34- 119.00	97.74	
		Average of Peak Amounts =			0.51150			

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **A. BERNHARDT** **DATE:** **JULY 15, 2011**

FROM: **TERRI L. SOLOMON** **COPIES:** **DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – SELECT METALS, TOTAL SOLIDS**
CTO – WE55 NSB NEW LONDON
SAMPLE DELIVERY GROUP (SDG) – WE55-2

SAMPLES: 13/Sediments/

2W-SD-SD116-0001	2W-SD-SD117-0001	2W-SD-SD122-0001
2W-SD-SD123-0001	2W-SD-SD127-0001	2W-SD-SD130-0001
2W-SD-SD135-0001	2W-SD-SD140-0001	2W-SD-SD142-0001
2W-SD-SD144-0001	2W-SD-SD146-0001	FD-040511
FD-040511-02		

Overview

The sample set for NSB New London, CTO WE55, SDG WE55-2, consists of thirteen (13) sediment environmental samples. Two (2) field duplicate pairs (SW-SD-SD127-0001 / FD-040511-01 and 2W-SD-SD122-0001 / FD-040511-02) were included within this SDG.

All samples were analyzed for total solids and select metals including arsenic, cadmium, chromium, copper, lead, nickel and zinc. The samples were collected by Tetra Tech NUS on April 5 and 6, 2011 and analyzed by Katahdin Analytical Services under Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. Metals analyses were conducted using SW-846 method 6010. Total solids analyses were conducted using Standard Method 2540G.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Verification Results
• Laboratory Method/Preparation Blank Analyses
* • ICP Interference Check Sample Results
• Matrix Spike Results
* • Laboratory Duplicate Results
* • Laboratory Control Sample Results
* • ICP Serial Dilution Results
* • Field Duplicate Results
* • Detection Limits
* • Sample Quantitation

* - All quality control criteria were met for this parameter.

Matrix Spike Results

The matrix spike percent recoveries for copper and zinc were below the quality control limit for sample 2W-SD-SD127-0001. The positive results reported for copper and zinc in the affected sample were qualified as estimated, "J".

Notes

The percent solids were < 30% for samples 2W-SD-SD116-0001, 2W-SD-SD117-0001, SW-SD-SD122-0001, SW-SD-SD123-0001, 2W-SD-SD130-0001, 2W-SD-SD135-0001, 2W-SD-SD140-0001, 2W-SD-SD144-0001, 2W-SD-SD146-0001 and FD-040511-01. The positive and nondetected results reported for the metals analyses in the affected samples were qualified as estimated, "J" and "UJ", respectively.

Positive results reported below the limit of quantitation (LOQ) but above the method detection limit (MDL) were qualified as estimated, "J".

Nondetected results were reported to the limit of detection (LOD).

The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Chromium[(1)]	0.038 mg/kg	0.19 mg/kg
Chromium[(2)]	0.034 mg/kg	0.17 mg/kg
Copper[(3)]	0.550 ug/L	0.275 mg/kg
Copper[(4)]	0.576 ug/L	0.288 mg/kg

(1) Maximum concentration present in a preparation blank affecting batch BD14ICS0 (2W-SD-SD146-0001, 2W-SD-SD144-0001, 2W-SD-SD140-0001, 2W-SD-SD127-0001, 2W-SD-SD122-0001, 2W-SD-SD130-0001, FD-040511-01, FD-040511-02 and 2W-SD-SD135-0001).

(2) Maximum concentration present in a preparation blank affecting batch BD14ICS0 (2W-SD-SD123-0001, 2W-SD-SD142-0001, 2W-SD-SD116-0001 and 2W-SD-SD117-0001).

(3) Maximum concentration present in a method blank affecting all samples except 2W-SD-SD146-0001

(4) Maximum concentration present in a method blank affecting sample 2W-SD-SD146-0001.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot, dilution factors and percent solids, if applicable, were taken into consideration when evaluating for blank contamination. No validation actions were required as all sample results were greater than the action level.

Executive Summary

Laboratory Performance: None.

Other Factors Affecting Data Quality: The matrix spike percent recoveries for copper and zinc were below the quality control limit for sample 2W-SD-SD127-0001. Positive results reported below the LOQ but above the MDL were qualified as estimated. The percent solids for several samples were < 30%.

The data for these analyses were reviewed with reference to the EPA Region I, "National Functional Guidelines for Inorganic Review", November 2008 and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009.

The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech NUS
Terri L. Solomon
Environmental Scientist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C – Regional Worksheets
4. Appendix D – Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS-GFAA MSA's r < 0.995 / ICP PDS Recovery Noncompliance
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O - Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DOT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 02625	NSAMPLE	2W-SD-SD116-0001			2W-SD-SD117-0001			2W-SD-SD122-0001			2W-SD-SD123-0001		
SDG: WE55-2	LAB_ID	SE1778-020			SE1778-022			SE1778-008			SE1778-013		
FRACTION: M	SAMP_DATE	4/6/2011			4/6/2011			4/5/2011			4/6/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	7.1			23.1			23.5			13.7		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ARSENIC		21.4	J	Y	7.3	J	Y	11.7	J	Y	10.7	J	Y
CADMIUM		1.6	UJ	Y	1	UJ	Y	0.79	J	PY	3	J	PY
CHROMIUM		38.1	J	Y	23	J	Y	58.1	J	Y	51.4	J	Y
COPPER		74.1	J	Y	72.8	J	Y	92.8	J	Y	316	J	Y
LEAD		57.7	J	Y	31.8	J	Y	74.1	J	Y	174	J	Y
NICKEL		23	J	Y	16	J	Y	26	J	Y	53.8	J	Y
ZINC		71.3	J	Y	23.7	J	Y	180	J	Y	778	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD127-0001			2W-SD-SD130-0001			2W-SD-SD135-0001			2W-SD-SD140-0001		
SDG: WE55-2	LAB_ID	SE1778-007			SE1778-009			SE1778-016			SE1778-004		
FRACTION: M	SAMP_DATE	4/5/2011			4/5/2011			4/6/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	58.2			13.5			20.0			14.4		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ARSENIC		6.9			13	J	Y	7.4	J	Y	9.4	J	Y
CADMIUM		0.52	U		2.4	J	PY	2	J	Y	0.3	J	PY
CHROMIUM		4.5			15.7	J	PY	37.4	J	Y	18.1	J	Y
COPPER		30.5	J	D	157	J	Y	75.6	J	Y	95.8	J	Y
LEAD		12.8			75.3	J	Y	59.2	J	Y	48	J	Y
NICKEL		6.2	J	P	72.2	J	Y	27.5	J	Y	37.9	J	Y
ZINC		139	J	D	1350	J	Y	325	J	Y	954	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD142-0001			2W-SD-SD144-0001			2W-SD-SD146-0001			FD-040511-01		
SDG: WE55-2	LAB_ID	SE1778-018			SE1778-003			SE1778-002			SE1778-010		
FRACTION: M	SAMP_DATE	4/6/2011			4/5/2011			4/5/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	30.7			22.7			17.2			59.0		
	DUP_OF										2W-SD-SD127-0001		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ARSENIC		20.6			14.8	J	Y	9.2	J	PY	6		
CADMIUM		0.8	J	P	1.3	UJ	Y	3.6	UJ	Y	0.41	U	
CHROMIUM		36			18.1	J	Y	9.4	J	PY	3.5		
COPPER		69.7			35.5	J	Y	37.3	J	Y	27.4		
LEAD		72			38.7	J	Y	24.7	J	Y	11.6		
NICKEL		30.4			19	J	Y	33	J	PY	5.6		
ZINC		320			298	J	Y	1200	J	Y	119		

PROJ_NO: 02625	NSAMPLE	FD-040511-02		
SDG: WE55-2	LAB_ID	SE1778-011		
FRACTION: M	SAMP_DATE	4/5/2011		
MEDIA: SOIL	QC_TYPE	NM		
	UNITS	MG/KG		
	PCT_SOLIDS	22.6		
	DUP_OF	2W-SD-SD122-0001		
PARAMETER		RESULT	VQL	QLCD
ARSENIC		10.9	J	Y
CADMIUM		0.81	J	PY
CHROMIUM		55	J	Y
COPPER		89.6	J	Y
LEAD		70.4	J	Y
NICKEL		25.7	J	Y
ZINC		182	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD116-0001			2W-SD-SD117-0001			2W-SD-SD122-0001			2W-SD-SD123-0001		
SDG: WE55-2	LAB_ID	SE1778-20			SE1778-22			SE1778-8			SE1778-13		
FRACTION: MISC	SAMP_DATE	4/6/2011			4/6/2011			4/5/2011			4/6/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS	7.1			23.1			23.4			13.7		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		7.1			23			23			14		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD127-0001			2W-SD-SD130-0001			2W-SD-SD135-0001			2W-SD-SD140-0001		
SDG: WE55-2	LAB_ID	SE1778-7			SE1778-9			SE1778-16			SE1778-4		
FRACTION: MISC	SAMP_DATE	4/5/2011			4/5/2011			4/6/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS	58.2			13.5			20.0			14.4		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		58			14			20			14		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD142-0001			2W-SD-SD144-0001			2W-SD-SD146-0001			FD-040511-01		
SDG: WE55-2	LAB_ID	SE1778-18			SE1778-3			SE1778-2			SE1778-10		
FRACTION: MISC	SAMP_DATE	4/6/2011			4/5/2011			4/5/2011			4/5/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS	30.7			22.7			17.2			59.0		
	DUP_OF										2W-SD-SD127-0001		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		31			23			17			59		

PROJ_NO: 02625	NSAMPLE	FD-040511-02		
SDG: WE55-2	LAB_ID	SE1778-11		
FRACTION: MISC	SAMP_DATE	4/5/2011		
MEDIA: SOIL	QC_TYPE	NM		
	UNITS	%		
	PCT_SOLIDS	22.6		
	DUP_OF	2W-SD-SD122-0001		
PARAMETER		RESULT	VQL	QLCD
TOTAL SOLIDS		22		

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD116-0001

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 7.10 **Lab Sample ID:** SE1778-020

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	21.4			P	2	4.3	0.37	2.7
7440-43-9	CADMIUM, TOTAL	1.6	U		P	2	5.4	0.04	1.6
7440-47-3	CHROMIUM, TOTAL	38.1			P	2	8.1	0.14	2.2
7440-50-8	COPPER, TOTAL	74.1			P	2	13	0.84	5.4
7439-92-1	LEAD, TOTAL	57.7			P	2	2.7	0.47	2.2
7440-02-0	NICKEL, TOTAL	23.0			P	2	22	0.24	2.2
7440-66-6	ZINC, TOTAL	71.3			P	2	13	0.91	5.4

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD117-0001

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 23.1 **Lab Sample ID:** SE1778-022

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	7.3			P	2	2.8	0.24	1.7
7440-43-9	CADMIUM, TOTAL	1.0	U		P	2	3.5	0.03	1.0
7440-47-3	CHROMIUM, TOTAL	23.0			P	2	5.2	0.09	1.4
7440-50-8	COPPER, TOTAL	72.8			P	2	8.6	0.54	3.5
7439-92-1	LEAD, TOTAL	31.8			P	2	1.7	0.30	1.4
7440-02-0	NICKEL, TOTAL	16.0			P	2	14	0.15	1.4
7440-66-6	ZINC, TOTAL	23.7			P	2	8.6	0.58	3.5

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD122-0001

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 23.4 **Lab Sample ID:** SE1778-008

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	11.7			P	2	1.4	0.12	0.87
7440-43-9	CADMIUM, TOTAL	0.79	J		P	2	1.7	0.01	0.52
7440-47-3	CHROMIUM, TOTAL	58.1			P	2	2.6	0.05	0.70
7440-50-8	COPPER, TOTAL	92.8		N	P	2	4.4	0.27	1.7
7439-92-1	LEAD, TOTAL	74.1			P	2	0.87	0.15	0.70
7440-02-0	NICKEL, TOTAL	26.0			P	2	7.0	0.08	0.70
7440-66-6	ZINC, TOTAL	180		N	P	2	4.4	0.29	1.7

Bottle ID: B

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD123-0001

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 13.7 **Lab Sample ID:** SE1778-013

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	10.7			P	2	2.6	0.22	1.6
7440-43-9	CADMIUM, TOTAL	3.0	J		P	2	3.3	0.03	0.98
7440-47-3	CHROMIUM, TOTAL	51.4			P	2	4.9	0.08	1.3
7440-50-8	COPPER, TOTAL	316			P	2	8.2	0.51	3.3
7439-92-1	LEAD, TOTAL	174			P	2	1.6	0.28	1.3
7440-02-0	NICKEL, TOTAL	53.8			P	2	13	0.14	1.3
7440-66-6	ZINC, TOTAL	778			P	2	8.2	0.55	3.3

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD127-0001

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 58.2 **Lab Sample ID:** SE1778-007

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	6.9			P	2	1.4	0.12	0.86
7440-43-9	CADMIUM, TOTAL	0.52	U		P	2	1.7	0.01	0.52
7440-47-3	CHROMIUM, TOTAL	4.5			P	2	2.6	0.04	0.69
7440-50-8	COPPER, TOTAL	30.5		N	P	2	4.3	0.27	1.7
7439-92-1	LEAD, TOTAL	12.8			P	2	0.86	0.15	0.69
7440-02-0	NICKEL, TOTAL	6.2	J		P	2	6.9	0.08	0.69
7440-66-6	ZINC, TOTAL	139		N	P	2	4.3	0.29	1.7

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD130-0001

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 13.5 **Lab Sample ID:** SE1778-009

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	13.0			P	10	11	0.97	7.1
7440-43-9	CADMIUM, TOTAL	2.4	J		P	10	14	0.11	4.3
7440-47-3	CHROMIUM, TOTAL	15.7	J		P	10	21	0.37	5.7
7440-50-8	COPPER, TOTAL	157		N	P	10	36	2.23	14
7439-92-1	LEAD, TOTAL	75.3			P	10	7.1	1.24	5.7
7440-02-0	NICKEL, TOTAL	72.2			P	10	57	0.63	5.7
7440-66-6	ZINC, TOTAL	1350		N	P	10	36	2.40	14

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD135-0001

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 20.0 **Lab Sample ID:** SE1778-016

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	7.4			P	2	1.5	0.13	0.94
7440-43-9	CADMIUM, TOTAL	2.0			P	2	1.9	0.02	0.57
7440-47-3	CHROMIUM, TOTAL	37.4			P	2	2.8	0.05	0.76
7440-50-8	COPPER, TOTAL	75.6		N	P	2	4.7	0.29	1.9
7439-92-1	LEAD, TOTAL	59.2			P	2	0.94	0.16	0.76
7440-02-0	NICKEL, TOTAL	27.5			P	2	7.6	0.08	0.76
7440-66-6	ZINC, TOTAL	325		N	P	2	4.7	0.32	1.9

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD140-0001

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 14.4 **Lab Sample ID:** SE1778-004

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	9.4			P	5	5.8	0.49	3.6
7440-43-9	CADMIUM, TOTAL	0.30	J		P	5	7.2	0.06	2.2
7440-47-3	CHROMIUM, TOTAL	18.1			P	5	11	0.19	2.9
7440-50-8	COPPER, TOTAL	95.8		N	P	5	18	1.13	7.2
7439-92-1	LEAD, TOTAL	48.0			P	5	3.6	0.63	2.9
7440-02-0	NICKEL, TOTAL	37.9			P	5	29	0.32	2.9
7440-66-6	ZINC, TOTAL	954		N	P	5	18	1.22	7.2

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD142-0001

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 30.7 **Lab Sample ID:** SE1778-018

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	20.6			P	2	1.6	0.14	1.0
7440-43-9	CADMIUM, TOTAL	0.80	J		P	2	2.0	0.02	0.60
7440-47-3	CHROMIUM, TOTAL	36.0			P	2	3.0	0.05	0.80
7440-50-8	COPPER, TOTAL	69.7			P	2	5.0	0.31	2.0
7439-92-1	LEAD, TOTAL	72.0			P	2	1.0	0.17	0.80
7440-02-0	NICKEL, TOTAL	30.4			P	2	8.0	0.09	0.80
7440-66-6	ZINC, TOTAL	320			P	2	5.0	0.34	2.0

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD144-0001

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 22.7 **Lab Sample ID:** SE1778-003

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	14.8			P	5	3.5	0.30	2.2
7440-43-9	CADMIUM, TOTAL	1.3	U		P	5	4.4	0.03	1.3
7440-47-3	CHROMIUM, TOTAL	18.1			P	5	6.5	0.11	1.7
7440-50-8	COPPER, TOTAL	35.5		N	P	5	11	0.68	4.4
7439-92-1	LEAD, TOTAL	38.7			P	5	2.2	0.38	1.7
7440-02-0	NICKEL, TOTAL	19.0			P	5	17	0.19	1.7
7440-66-6	ZINC, TOTAL	298		N	P	5	11	0.73	4.4

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD146-0001

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 17.2 **Lab Sample ID:** SE1778-002

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	9.2	J		P	10	9.6	0.82	6.0
7440-43-9	CADMIUM, TOTAL	3.6	U		P	10	12	0.10	3.6
7440-47-3	CHROMIUM, TOTAL	9.4	J		P	10	18	0.31	4.8
7440-50-8	COPPER, TOTAL	37.3		N	P	10	30	1.87	12
7439-92-1	LEAD, TOTAL	24.7			P	10	6.0	1.05	4.8
7440-02-0	NICKEL, TOTAL	33.0	J		P	10	48	0.53	4.8
7440-66-6	ZINC, TOTAL	1200		N	P	5	15	1.01	6.0

Bottle ID: B

Comments:

I

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** FD-040511-01

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 59.0 **Lab Sample ID:** SE1778-010

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	6.0			P	2	1.1	0.09	0.68
7440-43-9	CADMIUM, TOTAL	0.41	U		P	2	1.4	0.01	0.41
7440-47-3	CHROMIUM, TOTAL	3.5			P	2	2.0	0.04	0.54
7440-50-8	COPPER, TOTAL	27.4		N	P	2	3.4	0.21	1.4
7439-92-1	LEAD, TOTAL	11.6			P	2	0.68	0.12	0.54
7440-02-0	NICKEL, TOTAL	5.6			P	2	5.4	0.06	0.54
7440-66-6	ZINC, TOTAL	119		N	P	2	3.4	0.23	1.4

Bottle ID: B

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** FD-040511-02

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 22.6 **Lab Sample ID:** SE1778-011

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	10.9			P	2	1.5	0.13	0.97
7440-43-9	CADMIUM, TOTAL	0.81	J		P	2	1.9	0.02	0.58
7440-47-3	CHROMIUM, TOTAL	55.0			P	2	2.9	0.05	0.77
7440-50-8	COPPER, TOTAL	89.6		N	P	2	4.8	0.30	1.9
7439-92-1	LEAD, TOTAL	70.4			P	2	0.97	0.17	0.77
7440-02-0	NICKEL, TOTAL	25.7			P	2	7.7	0.09	0.77
7440-66-6	ZINC, TOTAL	182		N	P	2	4.8	0.33	1.9

Bottle ID: B

Comments:

FORM I - IN

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1778-20
Report Date: 25-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-2

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD116-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	7.1 %	1	N/A	SM2540G	WG90128	13-APR-11 07:36:00	ASTM D2216	12-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1778-22
Report Date: 25-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-2

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD117-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	23. %	1	N/A	SM2540G	WG90128	13-APR-11 07:37:00	ASTM D2216	12-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1778-8
Report Date: 25-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-2

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD122-0001	SL	05-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	23. %	1	N/A	SM2540G	WG90128	13-APR-11 07:28:00	ASTM D2216	12-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1778-13
Report Date: 25-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-2

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD123-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	14. %	1	N/A	SM2540G	WG90128	13-APR-11 07:32:00	ASTM D2216	12-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1778-7
Report Date: 25-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-2

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD127-0001	SL	05-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	58. %	1	N/A	SM2540G	WG90128	13-APR-11 07:26:00	ASTM D2216	12-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1778-9
Report Date: 25-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-2

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD130-0001	SL	05-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	14. %	1	N/A	SM2540G	WG90128	13-APR-11 07:29:00	ASTM D2216	12-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1778-16
Report Date: 25-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-2

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD135-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	20. %	1	N/A	SM2540G	WG90128	13-APR-11 07:34:00	ASTM D2216	12-APR-11	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1778-4
Report Date: 25-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-2

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD140-0001	SL	05-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	14. %	1	N/A	SM2540G	WG90128	13-APR-11 07:24:00	ASTM D2216	12-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1778-18
Report Date: 25-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-2

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD142-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	31. %	1	N/A	SM2540G	WG90128	13-APR-11 07:35:00	ASTM D2216	12-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1778-3
Report Date: 25-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-2

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD144-0001	SL	05-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	23. %	1	N/A	SM2540G	WG90128	13-APR-11 07:23:00	ASTM D2216	12-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1778-2
Report Date: 25-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-2

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD146-0001	SL	05-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	17. %	1	N/A	SM2540G	WG90128	13-APR-11 07:22:00	ASTM D2216	12-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1778-10
Report Date: 25-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-2

Sample Description	Matrix	Date Sampled	Date Received
FD-040511-01	SL	05-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	59. %	1	N/A	SM2540G	WG90128	13-APR-11 07:30:00	ASTM D2216	12-APR-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE1778-11
Report Date: 25-APR-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-2

Sample Description	Matrix	Date Sampled	Date Received
FD-040511-02	SL	05-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	22. %	1	N/A	SM2540G	WG90128	13-APR-11 07:31:00	ASTM D2216	12-APR-11	

APPENDIX C
REGION I WORKSHEETS

EPA-NE
Data Validation Worksheet Cover Page - Page 1

Site Name New London
Reference No. _____

REGION I INORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name Katahdin
Case/Project No. _____
SDG No. We55-2
No. of Samples/Matrix 13 sediments

SOW/Method No. _____
Sampling Date(s) _____
Shipping Date(s) _____
Date Rec'd by lab _____

Traffic Report Sample Nos. see validation letter

Equipment Blank No. _____
Bottle Blank No. _____
Field Duplicate Nos. _____
PES Nos. _____

The Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision _____ was used to evaluate the data and/or approved modifications to the EPA-NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attach modified criteria from EPA approved QAPP or amendment to QAPP).

A Tier II or Tier III evaluation was used to validate the data (circle one). If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc., that received partial Tier III validation.

The data were evaluated based upon the following parameters:

- Overall Evaluation of Data
- Data Completeness (CSF Audit - Tier I)
- Preservation and Technical Holding Times
- ICP-MS Tune
- Calibrations
- Blanks
- ICP-AES Interference Check Sample (ICS)
- ICP-MS Interference Check Sample (ICS)
- ICP-MS Internal Standards
- Matrix Spikes
- Laboratory Duplicate Samples
- Field Duplicates
- ICP Serial Dilutions
- Sensitivity Check
- Performance Evaluation Samples/Accuracy Check
- Analyte Quantitation and Reported Quantitation Limits
- System Performance

Region I Definitions and Qualifiers:

A - Acceptable Data
J - Numerical value associated with analyte is an estimated quantity.
R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.
U - Analyte not detected at that numerical sample quantitation limit.
UJ - The sample quantitation limit is an estimated quantity.
BB, EB - Analyte detected in aqueous bottle blank or aqueous equipment blank associated with soil/sediment samples.

Validator's Name Terri Solomon Company Name Tetratech Phone Number _____

Date Validation Started 6-8-2011 Date Validation Completed 6-8-2011

see validation letter

REGION I, EPA-NE INORGANIC REGIONAL DATA ASSESSMENT (IRDA)*

CASE #:_____ SITE NAME:_____

LAB NAME:_____ # OF SAMPLES/MATRIX:_____

SDG #:_____ VALIDATION CONTRACTOR:_____

SOW #/CONTRACT #:_____ VALIDATOR'S NAME:_____

EPA-NE DV TIER LEVEL:_____ DATE DP REC'D BY EPA-NE:_____

PO: **ACTION_____ FYI_____ DV COMPLETION DATE:_____

ANALYTICAL DATA QUALITY SUMMARY

		ICP-AES	ICP- MS	HG	CN
I.	Preservation and Technical Holding Times				
II.	ICP-MS Tune				
III.	Calibrations				
IV.	Blanks				
V.	ICP-AES Interference Check Sample (ICS)				
VI.	ICP-MS Interference Check Sample (ICS)				
VII.	ICP-MS Internal Standards				
VIII.	Matrix Spikes				
IX.	Laboratory Duplicate Samples				
X.	Field Duplicates				
XI.	ICP Serial Dilutions				
XII.	Sensitivity Check				
XIII.	Performance Evaluation Samples/Accuracy Check				
XIV.	Analyte Quantitation and Reported Quantitation Limits				
XV.	System Performance				
XVI.	Overall Evaluation of Data				

o = Data had no problems or were qualified due to minor contractual problems.
m = Data were qualified due to major contractual problems.
z = Data were rejected as unusable due to major contractual problems.

ACTION ITEMS: (z items) _____

AREAS OF CONCERN: (m items) _____

COMMENTS: _____

* This form assesses the analytical data quality in terms of contractual compliance only. It does not assess sampling errors and/or non-contractual analytical issues that affect data quality.

** Check "ACTION" only if contractual defects resulted in reduced payment/data rejection recommendations.

Validator:_____ Date:_____

INSTRUCTIONS ON REVERSE SIDE

DRAFT 11/08

GUIDANCE FOR COMPLETING THE IRDA

The IRDA form provides the laboratory's CLP PO and other contract management personnel with an overview of the contractual analysis and reporting deficiencies found in an analytical data package and identifies those contractual deficiencies that resulted in reduced payment/data rejection recommendations/actions. The IRDA form is used to summarize analytical data quality only in terms of contractual compliance. Sampling errors and non-contractual analytical errors that affect data quality are not summarized on this form, but rather are documented in the Tier I Validation Cover Letter and Tier II/III Data Validation Reports. For instance, if the sampler did not ship the samples until after the holding time had expired, a notation would not be made on the IRDA form since the laboratory is not responsible for the sampler's actions.

The IRDA form should be completed as follows:

1. Fill in all the header information (with the exception of the PO Action/FYI field): Case Number, Site Name, Laboratory Name, number and matrix of samples in the data package, SDG number, Validation Contractor, SOW#/Contract#, Data Validator's Name, EPA-NE Data Validation Tier Level (i.e., I, II, III or partial II/III), Date the Data Package was received by EPA-NE, and the Data Validation Completion Date.

2. Summarize the contractual problems discovered during data validation by fraction and by evaluation criteria in the "Analytical Data Summary" table, and in the "Action Items" and "Areas of Concern" sections as described in items 3 through 6 below. Use the Data Validation Memoranda as a guide when completing the IRDA form.

3. The following qualifiers must be utilized to document contractual problems on the IRDA forms.

o	=	Data had no problems or were qualified due to minor contractual problems
m	=	Data were qualified due to major contractual problems
z	=	Data were rejected as unusable due to major contractual problems

4. If the data were acceptable, or were qualified due to minor contractual problems, enter the qualifier "o" into the appropriate column (fraction) and row (evaluation criteria). No further documentation is necessary on the IRDA form. An example of a minor problem would be an inorganic analyte that slightly exceeded the SOW-specified %R continuing calibration criterion.

5. If the data were qualified due to major contractual problems, enter the qualifier "m" into the appropriate column (fraction) and row (evaluation criteria). Use different superscripts (m^1, m^2, etc.) for each major contractual problem identified and provide a brief description of each major problem in the "Areas of Concern" section. An example of a major contractual problem resulting in data qualification would be an ICP-MS internal standard that had an extremely low % relative intensity (below the lower limit of the SOW-specified acceptance criteria) and reanalysis was not performed.

6. If the data were rejected as unusable due to major contractual problems, enter the qualifier "z" in the appropriate column (method/parameter) and row (evaluation criteria). Use a different superscript (z^1, z^2, etc.) for each major contractual problem identified and provide a brief description of each major problem in the "Action Items" section. An example of a major contractual problem resulting in data rejection would be contractual holding time criteria that were exceeded for cyanide.

7. Complete the PO Action/FYI field using the information contained in the "Action Items" and "Areas of Concern" sections. PO Action should be indicated with a check mark (√) in the space following "Action" only if the contractual defects resulted in reduced payment or data rejection. If no PO Actions are indicated, then a check mark (√) should be placed in the space following "FYI".

8. The validator who completed the IRDA form must sign his/her name in the "Validator" field and enter the IRDA completion date in the "Date" field.

see validation letter

EPA-NE
Data Validation Worksheet Cover Page - Page 2

Check if all criteria are met and no hard copy worksheet is provided. Indicate NA if worksheet is not applicable to the analytical method. Note: there is no standard worksheet for System Performance; however, the validator must document all system performance issues in the Data Validation Memorandum.

INORG Worksheets:

INORG	COMPLETE SDG FILE (CSF) AUDIT	
INORG-I	PRESERVATION AND TECHNICAL HOLDING TIMES	
INORG-II	ICP-MS TUNE	
INORG-III-A/B	CALIBRATIONS	
INORG-IV-A/B	BLANKS	
INORG-IV-C.1	BLANKS	
INORG-IV-C.2	BLANKS	
INORG-V-A	ICP-AES INTERFERENCE CHECK SAMPLE - ICSAB	
INORG-V-B.1	ICP-AES INTERFERENCE CHECK SAMPLE - ICSA	
INORG-V-B.2	ICP-AES INTERFERENCE CHECK SAMPLE - ICSA	
INORG-VI-A	ICP-MS INTERFERENCE CHECK SAMPLE - ICSAB	
INORG-VI-B	ICP-MS INTERFERENCE CHECK SAMPLE - ICSA	
INORG-VII	ICP-MS INTERNAL STANDARDS	
INORG-VIII	MATRIX SPIKES	
INORG-IX	LABORATORY DUPLICATE SAMPLES	
INORG-X	FIELD DUPLICATES	
INORG-XI	ICP SERIAL DILUTIONS	
INORG-XII-A/B	SENSITIVITY CHECK	
INORG-XIII-A	PE SAMPLES/ACCURACY CHECK- LCS	
INORG-XIII-B	PE SAMPLES/ACCURACY CHECK- PE RESULTS	
INORG-XIV	ANALYTE QUANTITATION AND REPORTED QUANTITATION LIMITS	
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	

I certify that all criteria were met for the worksheets checked above.

Signature: Terri Solomon

Name: Terri Solomon

Date: 6-8-11

The data validator generates a Data Validation Report, applicable to Data Validation Tiers II and III, that consists of the following components in the order specified below: (Refer to Part I - Data Validation Manual, Section 11 for a description of each of the Data Validation Report components).

1. Organic Regional Data Assessment/Inorganic Regional Data Assessment (ORDA/IRDA) Form
2. Data Validation Memorandum
   a. Narrative
   b. Table I-Qualifier Recommendation Summary Table
   c. Table II-Overall Evaluation of Data
   d. Data Summary Tables
3. Standard Data Validation Worksheets
   a. Manual
   b. Automated Data Review Reports
4. Support Documentation
   a. Copy of non-CLP analytical method, e.g., DAS methods, modified EPA methods
   b. Copies of PES Score Reports/Vendor PES QC Acceptance Limits
   c. Copies of Telephone Logs/Communication Forms for:
      - RSCC communications
      - Requests for laboratory data resubmissions/clarifications
      - Communications with samplers resolving sampling problems
      - Communications with PO/DV Chemist/Lead Chemist to report contractually-deficient data for rejection/reduced payment
      - Communications with EPA Site Manager concerning possible data rejection
      - EPA Site Manager authorization for alternate DV tier
   d. Copies of data supporting recommendations for reduced payment resulting from CSF Audit and/or PE sample result evaluation
   e. Original data to support recommendations for data rejection/non-payment identified from Tier II or Tier III data validation
   f. Copies of field sampling notes and/or field report supplied by field sampler
   g. Copies of EPA-approved amendments to QAPP and/or SAP describing modified criteria to be used for validating site data
5. CSF Completeness Evidence Audit
6. DQO Summary Form

The data validator is responsible for implementing all corrective actions required by the contractor Lead Chemist in response to EPA-NE data validation oversight findings.

EPA-NE - Data Validation Worksheet

Overall Evaluation of Data - Data Validation Memorandum - Table II

see validation letter

Site:_____ Case:_____ SDG:_____

INORGANICS					
DQO (List all DQOs)	Sampling and/or Analytical Method Appropriate? (Yes or No)	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: _____

Date: 6-8-11

EPA-NE - Data Validation Worksheet
INORG

see validation letter

COMPLETE SDG FILE (CSF) AUDIT

Inorganic Parameters: _____

Missing Information	Date Lab Contacted	Date Received

Validator: Helen Solomon

Date: 6-8-11

EPA-NE - Data Validation Worksheet
INORG-I

see validation letter

I. PRESERVATION AND HOLDING TIMES

Circle sample numbers with exceeded technical holding times or omitted preservation.
Circle all exceeded technical holding times.

Sample No.	Matrix	Pres. Code		Date Sampled	Metals		Hg		CN		Action
		Metals	CN		Date Analyzed	# of Days from Samp. to Analysis	Date Analyzed	# of Days from Samp. to Analysis	Date Analyzed	# of Days from Samp. to Analysis	

Preservation Code:
1. Cool (≤ 6°C)
2. pH < 2 with HNO_3
3. pH > 12 with NaOH
4. Room Temperature
5. Freeze
6. Reducing agent (for oxidants)
7. Treated for sulfides
8. Other - _____

Action Code:
J - Estimate (J) Detected Values
UJ - Estimate (UJ) Non-Detected Values
R - Reject (R) Non-Detected Values

Sampler:_____ Company:_____ Contacted: Y N Date:_____

Validator: Jean Solomon

Date: 6-8-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-II

II. ICP-MS TUNE

N/A

List all Tunes that are outside method QC acceptance criteria.

Method:_____

Method QC acceptance criteria for mass calibration:_____

Method QC acceptance criteria for resolution check/peak width:_____ at_____% peak height.

Method QC acceptance criteria for % RSD:_____

Analysis Date and Time	Analyte	Mass Calibration			Mass Resolution		% RSD of Absolute Signals	Analyte/Samples Affected	Action
		True Mass (amu)	Measured Mass (amu)	Absolute Difference of Masses (amu)	Peak Width (amu)	% Peak Height			

Comments:

Validator: Anne Solomon

Date: 6-8-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-III-A/B/C

see validation letter

III. CALIBRATIONS

A. Instrument Calibration - List all calibration correlation coefficients that are outside the method QC acceptance criteria.
Calibration correlation QC acceptance criteria: _____ Calibration Type: _____

Date/Time	Instr.	Analyte	Corr. Coef.	Samples Affected	Action

B. Initial and Continuing Calibration Verifications - List all ICV and CCV analyte recoveries that are outside the method QC acceptance criteria.
ICV method QC acceptance criteria: _____ CCV method QC acceptance criteria: _____

Date	Instr.	Analyte	ICV/CCV #	% R	Samples Affected	Action

C. Quantitation Limit Check Standard - List all QL Check Standard analytes that are outside method QC acceptance criteria.
QL Check Standard method QC acceptance criteria: _____

Date	Instr.	Analyte	QL Check Std. #	% R	Affected Range	Samples Affected	Action

Comments: _____

Validator: Ann Solomon

Date: 6-8-11

EPA-NE - Data Validation Worksheet
INORG-IV-A/B

See validation letter

IV. BLANKS - List the blank contamination and negative blank results below.

Sampler: _____ Company: _____ Contacted: Y N Date: _____

A. Laboratory: Preparation (Method) and Calibration (Instrument) Blanks

Date Prepared	Date Analyzed	Blank Type (ICB/CCB#/Prep Blank)	Matrix	Instrument	Analyte	Conc. (units)

B. Field: Equipment (Rinsate) and Bottle Blanks

Date Sampled	Date Analyzed	Sample No. (Blank Type)	Matrix	Instrument	Analyte	Conc. (units)

Were the proper number of blanks analyzed at the proper frequency? Y N

For ICP MS - Are internal standard responses in all blanks within method QC acceptance criteria? Y N

Comments: _____

Validator: Helen Solomon Date: 6-8-11

EPA-NE - Data Validation Worksheet
INORG-IV-C.1
IV. BLANKS

C.1 Blank Contamination Worksheet

see validation letter

Circle the highest concentration of each contaminant.

Analyte	Date Analyzed	ICB	CCB							PBW	PBS	EB	BB	Max. Conc.	Action Level
			1	2	3	4	5	6	7						
Aluminum															
Antimony															
Arsenic															
Barium															
Beryllium															
Cadmium															
Calcium															
Chromium															
Cobalt															
Copper															
Iron															
Lead															
Magnesium															
Manganese															
Mercury															
Nickel															
Potassium															
Selenium															
Silver															
Sodium															
Thallium															
Vanadium															
Zinc															
Cyanide															

Validator: Kenn Solomon

Date: 6-8-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-IV-C.2

see validation letter

IV. BLANKS

C.2 Blank Actions - List the maximum concentrations of each analyte among all blanks associated with each sample.

Analyte	Type of Blank	Date Blank Originated	Max. Conc. (units)	Blank Action Level (units)	Sample QL	Samples Affected	Action

Comments:

Validator: Helen Silverman

Date: 6-8-11

EPA NE - Data Validation Worksheet
INORG-V-A

See validation letter

V. A. ICP-AES INTERFERENCE CHECK SAMPLE - ICSAB

1. List all analytes in the ICSAB that are outside ICSAB percent recovery criteria.

Date	Analyte	%R	Conc. of Interferents Observed in ICSAB (ug/L)				Samples Affected	Action
			Al	Ca	Fe	Mg		
Comments:								

Validator: Ann Silmon

Date: 6-8-11

DRAFT 11/08

EPA NE - Data Validation Worksheet
INORG-V-B.1

see validation letter

V. B.1 ICP-AES INTERFERENCE CHECK SAMPLE - ICSA

1. List all analytes in the ICSA that are outside ICSA criteria.

Date	Analyte	MDL (ug/L)	ICSA Observed Conc. (ug/L)	ICSA True Value (ug/L)	Criteria: 80-120% R or TV±2xMDL	Conc. of Interferents Observed in ICSA (ug/L)				Associated Samples
						Al	Ca	Fe	Mg	

Comments:

Validator: Andrew Sulcoman

Date: 6-9-11

EPA NE - Data Validation Worksheet
INORG-V-B.2

see validation letter

V. B.2 ICP-AES INTERFERENCE CHECK SAMPLE - ICSA

2. List all affected sample results.

Affected Sample	Interferent	Conc. in Sample (ug/L)	Analyte	Conc. in Sample (ug/L)	Estimated Interference in Sample (ug/L)	Action

Comments:

Validator: Heidi Solomon

Date: 6-8-11

EPA NE - Data Validation Worksheet
INORG-VI-A

See validation letter

VI. A. ICP-MS INTERFERENCE CHECK SAMPLE - ICSAB

List all analytes that are outside ICSAB criteria of 80-120% R.

Date	Analyte	%R	Samples Affected	Action
Comments:				

Validator: Laura Schuman

Date: 6-8-11

DRAFT 11/08

EPA NE - Data Validation Worksheet
INORG-VI-B

N/A

VI. B. ICP-MS INTERFERENCE CHECK SAMPLE - ICSA

List all analytes that are outside ICSA criteria.

Date	Analyte	MDL (ug/L)	ICSA Observed Conc. (ug/L)	ICSA True Value (ug/L)	Criteria: 80-120% R or TV ± 2xMDL	Samples Affected	Action
Comments:							

Validator: Kim Solomon

Date: 6-8-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-VII

N/A

VII. ICP-MS INTERNAL STANDARDS

List all internal standards that are outside method QC acceptance criteria.

IS method QC acceptance criteria: _____

Sample Number	Date and Time Analyzed	IS, amu	% RI	Analytes Affected (amu)	Action
Comments:					

Validator: Nina Solomon

Date: 6-8-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-VIII

see validation letter

VIII. MATRIX SPIKES - List all matrix spike analytes that are outside method QC acceptance criteria.

Use a separate worksheet for each matrix spike sample.

Sample No.: _____ Matrix: _____

Method	Analyte	Spiked Sample Result	Sample Result	Amount of Spike Added	MS % Recovery	Method QC Limits % Recovery	Post-Digest Spike % Recovery	Action
Comments:								

Validator: Kevin Sullivan

Date: 6-8-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-IX

See validation letter

IX. LABORATORY DUPLICATE SAMPLES - List all analytes that are outside method QC acceptance criteria for the specific matrix.

Use a separate worksheet for each laboratory duplicate sample.

Sample No.:_____ Duplicate Sample No.:_____ Matrix:_____

Laboratory duplicate sample method QC acceptance criteria:_____

Method	Analyte	Sample Conc.	Sample		Duplicate Conc.	Duplicate		RPD or Abs. Diff.	QC Acceptance Criteria (RPD or Abs. Diff.)	Action
			SQL	5xSQL		SQL	5xSQL			

Do the field duplicate sample data indicate acceptable field precision? Y N

Comments:_____

Validator: Lori Sulaman

Date: 6-8-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-X

See validation letter

X. FIELD DUPLICATES - List all field duplicate analytes that are outside criteria.

Use a separate worksheet for each field duplicate pair.

Sample No.:_____ Duplicate Sample No.:_____ Matrix:_____

Method	Analyte	Sample Conc.	Sample		Duplicate Conc.	Duplicate		RPD or Abs. Diff.	QC Acceptance Criteria (RPD or Abs. Diff.)	Action
			SQL	5xSQL		SQL	5xSQL			

Do the laboratory duplicate sample data indicate acceptable laboratory precision? Y N

Comments: _____

_____

Sampler Name: _____ Contractor Name: _____ Date Contacted: _____

Reason for contact and resolution obtained: _____

Validator: Laura Solomon

Date: 6-8-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-XI

see validation letter

XI. ICP SERIAL DILUTIONS

Use a separate worksheet for each serial dilution sample.

Sample No.:_____ Matrix:_____ Method:_____

List all serial dilution analytes that are outside method QC acceptance criteria.

% Difference method QC acceptance criteria: _____
Minimum concentration required to apply the % D criteria (e.g., 50x MDL): _____

Analyte	MDL	Min. Conc. Required	Sample Result	Serial Dilution Sample Result (corrected for dilution)	% D	Action
Comments:						

Validator: Pam Solomon

Date: 6-8-11

EPA-NE - Data Validation Worksheet
INORG-XII-A/B

N/A

XII. SENSITIVITY CHECK

A. Method Detection Limit Study - List all analytes that are outside the MDL criteria.

- Has an appropriate MDL study been submitted with seven replicates for each analyte and matrix of interest? **Y N**
- Were samples analyzed within one year of the MDL study and on the same instrument? **Y N**

Matrix	Analyte	MDL	MDL > QL	Samples Affected	Action

If an MDL study has not been submitted, use only the LFB results to evaluate data.

B. Laboratory Fortified Blank - List all LFB analytes that are outside the LFB criteria.

- Has an appropriate and complete LFB been submitted at the proper frequency? **Y N**
- Does the LFB contain all target analytes at their QLs? **Y N**

Matrix	Method	Analyte	% R	Method QC Limits % R	Samples Affected	Action

Comments: _____

Validator: Kevin Solomon Date: 6-8-11

EPA-NE - Data Validation Worksheet
INORG-XIII-A

N/A

XIII. PERFORMANCE EVALUATION SAMPLES/ACCURACY CHECK

A. Laboratory Control Samples - List all analytes that are outside criteria.

SDG No.:_____ Case:_____

Are more than one-half of the LCS analytes within criteria for each parameter and method? Y N

Date Prepared	Date Analyzed	Parameter/ Method	Matrix	Analyte	% Recovery (or Observed Conc.)	Method QC Acceptance Criteria	Samples Affected	Action

Comments:

Validator: Helen Solomon

Date: 6-8-11

EPA-NE - Data Validation Worksheet
INORG-XIII-B

XIII. PERFORMANCE EVALUATION SAMPLES/ACCURACY CHECK

N/A

B. Performance Evaluation Results - List all analytes that are outside criteria.

SDG No.:_____ Case:_____

Indicate the source of the PES: Region 1 EPA PES Non-EPA PES

Are more than one-half of the PES analytes within criteria for each parameter and method? **Y** **N**

PE Sample Number	Ampule Number	Parameter/ Method	Type of PES	Matrix	Analyte	Conc.	PES Score*	Samples Affected	Action

* For Region I PESs indicate the Region I PES Score Report Result: Action High, Action Low, Analyte Missed, Contaminant.
For Non-EPA PESs indicate the Non-EPA PES Score: PES Analyte Missed; PES Analyte Contaminant; PES Analyte Hit (% Recovery Limits).

Comments:_____

Validator: John Solomon

Date: 6-8-11

EPA-NE - Data Validation Worksheet
INORG-XIV

See validation letter

XIV. ANALYTE QUANTITATION AND REPORTED QUANTITATION LIMITS

Recalculate, from the raw data, the concentrations for one positive detect and one reported sample quantitation limit for a non-detect in a diluted sample or soil sample per analytical method. (Note: Although Section XIV, C.2.a, requires that one calculation for each method in each sample be performed, the validator is only required to reproduce an example, for each method, of one positive detect and one sample quantitation limit calculation on this worksheet.)

Do all soil/sediment samples have % solids greater than 30%? Y (N)

- If no, were any steps employed to address the high moisture content? _____
- Indicate the action and list the affected sample nos.: _____

Method		Calculation
ICP-AES		
Sample No.:		
Reported Analyte:		
Reported Value:		
Non-Detected Analyte:		
Reported Quantitation Limit:		
ICP-MS		
Sample No.:		
Reported Analyte:		
Reported Value:		
Non-Detected Analyte:		
Reported Quantitation Limit:		
Mercury		
Sample No.:		
Reported Value:		
Sample No.:		
Reported Quantitation Limit:		
Cyanide		
Sample No.:		
Reported Value:		
Sample No.:		
Reported Quantitation Limit:		

Validator: Lara Solomon

Date: 6-6-11

APPENDIX D
SUPPORT DOCUMENTATION

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO-WE55 NEW LONDON, CT
SDG: WE55-2
SE1778

Sample Receipt

The following samples were received on April 8, 2011 and were logged in under Katahdin Analytical Services work order number SE1778 for a hardcopy due date of April 26, 2011.

KATAHDIN Sample No.	TTNUS Sample Identification
SE1778-1	2W-SD-SD150-0001
SE1778-2	2W-SD-SD146-0001
SE1778-3	2W-SD-SD144-0001
SE1778-4	2W-SD-SD140-0001
SE1778-5	2W-SD-SD133-0001
SE1778-6	2W-SD-SD131-0001
SE1778-7	2W-SD-SD127-0001
SE1778-8	2W-SD-SD122-0001
SE1778-9	2W-SD-SD130-0001
SE1778-10	FD-040511-01
SE1778-11	FD-040511-02
SE1778-12	2W-SD-SD129-0001
SE1778-13	2W-SD-SD123-0001
SE1778-14	2W-SD-SD143-0001
SE1778-15	2W-SD-SD145-0001
SE1778-16	2W-SD-SD135-0001
SE1778-17	2W-SD-SD132-0001
SE1778-18	2W-SD-SD142-0001
SE1778-19	2W-SD-SD139-0001
SE1778-20	2W-SD-SD116-0001
SE1778-21	2W-SD-SD114-0001
SE1778-22	2W-SD-SD117-0001
SE1778-23	2W-SD-SD115-0001

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

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

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

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

Organics Analysis

The samples of SDG WE55-2 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, and III 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, for the specific methods listed below or on the Report of Analysis.

Samples SE1778-4, 7, and 13 were used for the matrix spike (MS) and matrix spike duplicate (MSD) samples, per client request.

8270C SIM Analysis

All soil samples and associated QC were subjected to the GPC sample clean-up process.

Surrogate recoveries for all samples and QC were evaluated using laboratory established acceptance limits.

Samples SE1778-2, 2DL, 3, 3DL, 4, 7, 8, 9, 10, 11, 13, 16, 16DL, 18DL, 20 and 22 were manually integrated for the analytes acenaphthylene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, the internal standard chrysene-d12 and/or the surrogates fluorene-d10 and pyrene-d10. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Sample SE1778-18DL had no recovery for the surrogate fluorene-d10, which is due to the dilution of the sample. Since the surrogate recoveries in the analysis of the undiluted sample were acceptable, no further action was taken.

Sample SE1778-18 had a low response for the internal standard perylene-d12 that resulted in a %D which was outside the DoD QSM 4.1 acceptance limit of -50% to +100% of the responses of the internal standards of the midpoint initial calibration standard. Since the sample was reanalyzed at a dilution and had acceptable internal standard responses, no further action was taken.

The MS's WG90177-4 and WG90177-8 had low responses for the internal standard perylene-d12 that resulted in %D's which were outside the DoD QSM 4.1 acceptance limit of -50% to +100% of the responses of the internal standards of the midpoint initial calibration standard.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are nominal acceptance limits. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS

that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long the LCS is acceptable. Nominal limits are used for the LCS/LCSD until enough data is collected to generate statistically based acceptance limits.

The independent check standard (file N0225), associated with the initial calibration on the N instrument on 04/23/11 had low concentrations for the target analytes benzo(k)fluoranthene and indeno(1,2,3-cd)pyrene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The MS WG90177-4 and MSD WG90177-5 had several spiked target analytes with recoveries that were non-calculable and reported as 0% recovery due to the concentration in the native sample being higher than in the MS and MSD. This is likely due to a non-homogeneous sample.

8081 Analysis

Surrogate recoveries for all samples and QC were evaluated using laboratory established acceptance limits.

All soil samples and associated QC were subjected to the GPC sample clean-up process.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) were evaluated using DOD QSM 4.1 acceptance limits for the full list of target analytes and laboratory nominal acceptance limit for the analyte toxaphene. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

Samples SE1778-2, 2DL, 3, 3DL, 4, 7, 8, 9, 9DL, 10, 11, 13, 13DL, 16, 18, 20, 20DL, and 22 were manually integrated for TCX, DCB, 4,4'-DDE, 4.4'-DDD, and/or 4,4'-DDT. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

The target analytes 4,4'-DDT and 4,4'-DDE were detected below ½ the reporting limit in the method blank WG90237-1. The target analyte 4,4'-DDD was detected at a concentration greater than the reporting limit. According to the DoD QSM section D.1.1.1, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit and is greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). The target analyte 4,4'-DDT was detected at a concentration greater than 10 times the concentration in the method blank for all samples except SE1778-7 and 10. This analyte was flagged with a "B" qualifier indicating that the analyte was detected in the method blank analyzed concurrently with samples SE1778-7 and 10.

Samples SE1778-3, 7, 9, 13, and 16 had high recoveries for the surrogate DCB on channel A, which were outside the laboratory established acceptance limits. Since the recoveries were acceptable on channel B, the samples were not reextracted.

Sample SE1778-4 had a high recovery for the surrogate DCB on channel A and a low recovery for DCB on channel B, which were outside the laboratory established acceptance limits. Since the recoveries for TCX were acceptable and there seems to be matrix interference, the sample was not reextracted.

Sample SE1778-22 had low recoveries for the extraction surrogate DCB on both channels and a high recovery for the extraction surrogate TCX on channel A, which were outside of the laboratory established acceptance limits. Since the recoveries for TCX were within the acceptance limits on channel B, the sample was not reextracted.

Note: The Form VII has a column for %D that is set to 15%. The DoD QSM criterion for a CV is 20%D. All of the compounds in the CV's were evaluated to 20% criteria.

The closing CV (file 1ED00286) had low responses 4,4'-DDE and 4,4'-DDT on both channels, a high response for DCB on channel A and a low response for DCB on channel B. These responses resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. The low responses are likely due to interference from samples that were analyzed preceding these CV's. All of the affected samples were put through the GPC, but the sample matrices still caused interference on the instrument. After the failing CV, maintenance was performed on the instrument and the subsequent CV was acceptable. For these reasons, the samples were not reanalyzed.

The closing CV (file 1ED00310) had a low response for 4,4'-DDT on channel A and a low response for DCB on channel B. These responses resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since the responses were acceptable on the confirmation channels, the associated samples were not reanalyzed.

The opening/closing CV's (files 1EE00174, 1EE00177, 1EE00184 and 1EE00188) had low responses for 4,4'-DDT on channel A, which resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since the responses were acceptable on the confirmation channel, the associated samples were not reanalyzed.

Samples SE1778-2, 4, 8, 9, 11, 13, and 16 had RPD's for 4,4'-DDT and/or 4,4'-DDD that were outside of the method acceptance limits of 40%. These analytes are flagged with a "J" qualifier on the report of analysis (ROA).

8082 Analysis

Surrogate recoveries for all samples and QC, as well as spike recoveries for the LCS/LCSD and MS/MSD, were evaluated using nominal acceptance limits.

All soil samples and associated QC were subjected to the GPC sample clean-up process.

Samples SE1778-2, 3, 4, 8, 10, 18, and 22 had low recoveries for the extraction surrogates TCX and DCB on both channels, which were outside the laboratory established acceptance limits.

Most of the samples had a final volume of 2mL, additional sample weight extracted, and they were all put through the GPC. The acceptance limits were established on extractions with a final volume of 10mL and without a GPC cleanup. For these reasons, no further action was taken.

Samples, SE1778-11, 16, and 20, and the method blank, WG90238-1, had low recoveries for TCX on both channels and for DCB on channel A, which were outside the laboratory established acceptance limits. Since the recoveries of DCB were acceptable on channel B, no further action was taken.

Sample SE1778-13 had low recoveries for TCX and DCB on channel A, which were outside the laboratory established acceptance limits. Since the recoveries were acceptable on channel B, no further action was taken.

The opening calibration verification standard (CV) (files 7ED593) had low responses for DCB on channel A and Aroclor 1260 on channel B, which resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since the responses were acceptable on the confirmation channel, the associated samples were not reanalyzed.

The closing CV (file 7ED608) had a high response for TCX on channel A, which resulted in a %D that was outside of the DoD QSM acceptance limits of 20%. Since the response was acceptable on channel B, the associated samples were not reanalyzed.

The closing CV (file 7ED654) had a low response for Aroclor 1260 on channel B, which resulted in a %D that was outside of the DoD QSM acceptance limits of 20%. Since the response was acceptable on channel A, the associated samples were not reanalyzed.

The MS/MSD, WG90238-8 and 9, had high recoveries for Aroclor 1260 that were outside of laboratory established acceptance limits. Since the associated LCS/LCSD had acceptable recoveries, no further action was taken.

Samples SE1778-4 and 9 had RPDs for Aroclor 1260 that were outside of the method acceptance limits of 40%. This analyte is flagged with a "J" qualifier on the reports of analysis (ROAs).

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

Metals Analysis

The samples of Katahdin SDG WE55-2 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Solid-matrix Katahdin Sample Numbers SE1778-(2R, 3R, 4R, 7, 8R, 9R, 10, 11, and 16) were digested for ICP analysis on 04/14/11 (QC Batch BD14ICS0) in accordance with USEPA Method 3050B. Katahdin Sample Numbers SE1778- 4 and 7 were prepared in duplicate and with a

matrix-spiked aliquot. A number of these samples are redigested portions using additional sample volume due to high percent moisture in the samples. The samples are listed throughout the data package with the suffix "R" (eg. SE1778-004R).

Solid-matrix Katahdin Sample Numbers SE1778-(13, 18, 20, and 22) were digested for ICP analysis on 04/15/11 (QC Batch BD15ICS1) in accordance with USEPA Method 3050B. Katahdin Sample Number SE1778-13 was prepared in duplicate and with a matrix-spiked aliquot.

ICP analyses of Katahdin SDG WE55-2 sample digestates was performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010. All samples were analyzed within holding times and all analytical run QC criteria were met. Some samples were diluted to reduce spectral interferences cause by high iron concentrations in the samples.

Matrix QC Summary

The measured recoveries of copper and zinc in the matrix-spiked aliquot of Katahdin Sample Number SE1778-7 are outside the project acceptance criteria (80% - 120% recovery of the added element, if the native concentration is less than four times the amount added).

The measured recoveries of all elements in the matrix-spiked aliquot of Katahdin Sample Numbers SE1778-4 and 13 are within the project acceptance criteria (80% - 120% recovery of the added element, if the native concentration is less than four times the amount added).

The duplicate analysis of Katahdin Sample Numbers SE1778- 4, 7, and 13 are within the laboratory's acceptance limit (<20% relative difference between duplicate aliquots) for all elements.

The serial dilution analysis of Katahdin Sample Numbers SE1778-4, 7, and 13 are within the laboratory's acceptance limit (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOQ) for all elements.

Reporting of Metals Results

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

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

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

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

Wet Chemistry Analysis

The samples of SDG WE55-2 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Annual Book of ASTM Standards", Method D2216-98 "Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass".

All analyses were performed within analytical holding times. All quality control criteria were met.

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

Leslie Dimond
05/31/11

Leslie Dimond
Quality Assurance Officer

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4189 | PAGE 1 OF 1

PROJECT NO: 112602625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Terry Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB# 8747 4934 2822		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE1778

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)									COMMENTS
									G	G								
									4°C	4°C								
									PAHs & SELECT	PESTICIDES & SELECT PCBs	METALS							
4/05	1630	2W-SD-SD150-0001	SD 150	0	4"	SD	G	2	*1	**1								
4/05	1635	2W-SD-SD146-0001	SD 146	0	4	SD	G	2	1	(1)								
4/05	1641	2W-SD-SD144-0001	SD 144	0	4	SD	G	2	1	(1)								
4/05	1651	2W-SD-SD140-0001	SD 140	0	4	SD	G	3	2	(1)								RUN MS/MSD
4/05	1700	2W-SD-SD133-0001	SD 133	0	4	SD	G	2	*1	**1								
4/05	1705	2W-SD-SD131-0001	SD 131	0	4	SD	G	2	*1	**1								
4/05	1710	2W-SD-SD127-0001	SD 127	0	4	SD	G	3	2	(1)								RUN MS/MSD
4/05	1715	2W-SD-SD122-0001	SD 122	0	4	SD	G	2	1	(1)								
4/05	1725	2W-SD-SD130-0001	SD 130	0	4	SD	G	2	1	(1)								
4/05	0000	FD-040511-01	QC	0	4	SD	G	2	1	(1)								
4/05	0000	FD-040511-02	QC	0	4	SD	G	2	1	(1)								
4/06	0835	2W-SD-SD129-0001	SD 129	0	4	SD	G	2	*1	**1								
4/06	0910	2W-SD-SD123-0001	SD 123	0	4	SD	G	3	2	(1)								RUN MS/MSD

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Terry Rojahn	4-07-11	1700	1. RECEIVED BY FED EX	4-07-11	1700
2. RELINQUISHED BY			2. RECEIVED BY	4-8-11	10:00
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD " " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4190 | PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112G02625	NSB NEW LONDON	A. BERNHARDT	412 921 8433	KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
Terry Rojahn		T. ROJAHN	412 921 8857	600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX AB# 8747 4934 2822		SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE1778

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS: PAHs	TYPE OF ANALYSIS: Pesticides w/ SELECT	TYPE OF ANALYSIS: PCBs	TYPE OF ANALYSIS: METALS w/ SELECT	COMMENTS
									G	4°C					
4/06	0925	2W-SD-SD143-0001	SD 143	0	4"	SD	G	2			*1	**1			
4/06	0945	2W-SD-SD145-0001	SD 145	0	4	SD	G	2			*1	**1			
4/06	1015	2W-SD-SD135-0001	SD 135	0	4	SD	G	2			1	(1)			
4/06	1030	2W-SD-SD132-0001	SD 132	0	4	SD	G	2			*1	**1			
4/06	1050	2W-SD-SD142-0001	SD 142	0	4	SD	G	2			1	(1)			
4/06	1100	2W-SD-SD139-0001	SD 139	0	4	SD	G	2			*1	**1			
4/06	1155	2W-SD-SD116-0001	SD 116	0	4	SD	G	2			1	(1)			
4/06	1215	2W-SD-SD114-0001	SD 114	0	4	SD	G	2			*1	**1			
4/06	1230	2W-SD-SD117-0001	SD 117	0	4	SD	G	2			1	(1)			
4/06	1240	2W-SD-SD115-0001	SD 115	0	4	SD	G	2			*1	**1			

1. RELINQUISHED BY: Terry Rojahn	DATE: 4-07-11	TIME: 1700	1. RECEIVED BY: FED EX	DATE: 4-07-11	TIME: 1700
2. RELINQUISHED BY:	DATE:	TIME:	2. RECEIVED BY:	DATE: 4-8-11	TIME: 10:00
3. RELINQUISHED BY:	DATE:	TIME:	3. RECEIVED BY:	DATE:	TIME:

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD " " " .

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

9100000

HOLDTIME

SDG WE55-2

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	MG/KG	2W-SD-SD146-0001	SE1778-002	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD118-0001	SE1685-022	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD119-0001	SE1685-023	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD120-0001	SE1685-024	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD121-0001	SE1685-026	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD122-0001	SE1778-008	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD123-0001	SE1778-013	NM	04/06/2011	04/15/2011	04/21/2011	9	6	15
M	MG/KG	2W-SD-SD127-0001	SE1778-007	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD130-0001	SE1778-009	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD134-0001	SE1685-029	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD135-0001	SE1778-016	NM	04/06/2011	04/14/2011	04/21/2011	8	7	15
M	MG/KG	2W-SD-SD136-0001	SE1685-028	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD117-0001	SE1778-022	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
M	MG/KG	2W-SD-SD144-0001	SE1778-003	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD138-0001	SE1685-017	NM	04/05/2011	04/13/2011	04/20/2011	8	7	15

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	MG/KG	2W-SD-SD146-0001	SE1778-002	NM	04/05/2011	04/14/2011	04/22/2011	9	8	17
M	MG/KG	2W-SD-SD147-0001	SE1685-001	NM	04/04/2011	04/13/2011	04/20/2011	9	7	16
M	MG/KG	2W-SD-SD149-0001	SE1685-003	NM	04/04/2011	04/13/2011	04/20/2011	9	7	16
M	MG/KG	2W-SD-SD152-0001	SE1685-004	NM	04/04/2011	04/14/2011	04/21/2011	10	7	17
M	MG/KG	2W-SD-SD154-0001	SE1685-007	NM	04/04/2011	04/14/2011	04/21/2011	10	7	17
M	MG/KG	2W-SD-SD158-0001	SE1685-010	NM	04/04/2011	04/13/2011	04/20/2011	9	7	16
M	MG/KG	2W-SD-SD159-0001	SE1685-009	NM	04/04/2011	04/14/2011	04/21/2011	10	7	17
M	MG/KG	2W-SD-SD161-0001	SE1685-008	NM	04/04/2011	04/13/2011	04/20/2011	9	7	16
M	MG/KG	FD-040411-1	SE1685-016	NM	04/04/2011	04/13/2011	04/20/2011	9	7	16
M	MG/KG	FD-040511-01	SE1778-010	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	FD-040511-02	SE1778-011	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD116-0001	SE1778-020	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
M	MG/KG	2W-SD-SD140-0001	SE1778-004	NM	04/05/2011	04/14/2011	04/21/2011	9	7	16
M	MG/KG	2W-SD-SD142-0001	SE1778-018	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
TS	%	2W-SD-SD95-0001	SE1779-10	NM	04/07/2011	04/12/2011	04/13/2011	5	1	6
TS	%	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/08/2011	04/11/2011	4	3	7
TS	%	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/08/2011	04/11/2011	4	3	7
TS	%	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/08/2011	04/11/2011	4	3	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TS	%	2W-SD-SD154-0001	SE1685-7	NM	04/04/2011	04/08/2011	04/11/2011	4	3	7
TS	%	2W-SD-SD158-0001	SE1685-10	NM	04/04/2011	04/08/2011	04/11/2011	4	3	7
TS	%	2W-SD-SD159-0001	SE1685-9	NM	04/04/2011	04/08/2011	04/11/2011	4	3	7
TS	%	2W-SD-SD161-0001	SE1685-8	NM	04/04/2011	04/08/2011	04/11/2011	4	3	7
TS	%	2W-SD-SD87-0001	SE1779-14	NM	04/07/2011	04/12/2011	04/13/2011	5	1	6
TS	%	2W-SD-SD88-0001	SE1779-12	NM	04/07/2011	04/12/2011	04/13/2011	5	1	6
TS	%	2W-SD-SD89-0001	SE1779-15	NM	04/07/2011	04/12/2011	04/13/2011	5	1	6
TS	%	2W-SD-SD146-0001	SE1778-2	NM	04/05/2011	04/12/2011	04/13/2011	7	1	8
TS	%	2W-SD-SD94-0001	SE1779-5	NM	04/07/2011	04/12/2011	04/13/2011	5	1	6
TS	%	FD-040511-01	SE1778-10	NM	04/05/2011	04/12/2011	04/13/2011	7	1	8
TS	%	2W-SD-SD96-0001	SE1779-7	NM	04/07/2011	04/12/2011	04/13/2011	5	1	6
TS	%	2W-SD-SD97-0001	SE1779-8	NM	04/07/2011	04/12/2011	04/13/2011	5	1	6
TS	%	2W-SD-SD98-0001	SE1779-9	NM	04/07/2011	04/12/2011	04/13/2011	5	1	6
TS	%	2W-SD-SD99-0001	SE1779-2	NM	04/07/2011	04/12/2011	04/13/2011	5	1	6
TS	%	FD-040411-1	SE1685-16	NM	04/04/2011	04/08/2011	04/11/2011	4	3	7
TS	%	2W-SD-SD135-0001	SE1778-16	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7
TS	%	FD-040511-02	SE1778-11	NM	04/05/2011	04/12/2011	04/13/2011	7	1	8
TS	%	FD040611-01	SE1779-1	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TS	%	FD040711-01	SE1779-18	NM	04/07/2011	04/12/2011	04/13/2011	5	1	6
TS	%	2W-SD-SD90-0001	SE1779-4	NM	04/07/2011	04/12/2011	04/13/2011	5	1	6
TS	%	2W-SD-SD126-0001	SE1685-25	NM	04/05/2011	04/11/2011	04/12/2011	6	1	7
TS	%	2W-SD-SD144-0001	SE1778-3	NM	04/05/2011	04/12/2011	04/13/2011	7	1	8
TS	%	2W-SD-SD134-0001	SE1685-29	NM	04/05/2011	04/11/2011	04/12/2011	6	1	7
TS	%	2W-SD-SD130-0001	SE1778-9	NM	04/05/2011	04/12/2011	04/13/2011	7	1	8
TS	%	2W-SD-SD127-0001	SE1778-7	NM	04/05/2011	04/12/2011	04/13/2011	7	1	8
TS	%	2W-SD-SD123-0001	SE1778-13	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7
TS	%	2W-SD-SD122-0001	SE1778-8	NM	04/05/2011	04/12/2011	04/13/2011	7	1	8
TS	%	2W-SD-SD121-0001	SE1685-26	NM	04/05/2011	04/11/2011	04/12/2011	6	1	7
TS	%	2W-SD-SD120-0001	SE1685-24	NM	04/05/2011	04/11/2011	04/12/2011	6	1	7
TS	%	2W-SD-SD119-0001	SE1685-23	NM	04/05/2011	04/11/2011	04/12/2011	6	1	7
TS	%	2W-SD-SD118-0001	SE1685-22	NM	04/05/2011	04/08/2011	04/11/2011	3	3	6
TS	%	2W-SD-SD117-0001	SE1778-22	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7
TS	%	2W-SD-SD116-0001	SE1778-20	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7
TS	%	2W-SD-SD136-0001	SE1685-28	NM	04/05/2011	04/11/2011	04/12/2011	6	1	7
TS	%	2W-SD-SD110-0001	SE1779-24	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7
TS	%	2W-SD-SD108-0001	SE1779-26	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TS	%	2W-SD-SD107-0001	SE1779-28	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7
TS	%	2W-SD-SD105-0001	SE1779-22	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7
TS	%	2W-SD-SD103-0001	SE1779-21	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7
TS	%	2W-SD-SD100-0001	SE1779-17	NM	04/07/2011	04/12/2011	04/13/2011	5	1	6
TS	%	2W-SD-SD140-0001	SE1778-4	NM	04/05/2011	04/12/2011	04/13/2011	7	1	8
TS	%	2W-SD-SD142-0001	SE1778-18	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7
TS	%	2W-SD-SD112-0001	SE1779-31	NM	04/06/2011	04/12/2011	04/13/2011	6	1	7
TS	%	2W-SD-SD138-0001	SE1685-17	NM	04/05/2011	04/08/2011	04/11/2011	3	3	6
SIM	%	2W-SD-SD89-0001	SE1779-15	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	%	2W-SD-SD88-0001	SE1779-12	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	%	2W-SD-SD87-0001	SE1779-14	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	%	2W-SD-SD161-0001	SE1685-8	NM	04/04/2011	04/22/2011	04/22/2011	18	0	18
SIM	%	2W-SD-SD159-0001	SE1685-9DL	NM	04/04/2011	04/13/2011	04/25/2011	9	12	21
SIM	%	2W-SD-SD158-0001	SE1685-10	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	%	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	%	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/13/2011	04/21/2011	9	8	17
SIM	%	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	%	2W-SD-SD146-0001	SE1778-2	NM	04/05/2011	04/14/2011	04/23/2011	9	9	18

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: WE55-2 **SOW No.** SW846

Client Field ID	Lab Sample ID
2W-SD-SD116-0001	SE1778-020
2W-SD-SD117-0001	SE1778-022
2W-SD-SD122-0001	SE1778-008
2W-SD-SD123-0001	SE1778-013
2W-SD-SD123-0001	SE1778-013A
2W-SD-SD123-0001	SE1778-013D
2W-SD-SD123-0001	SE1778-013S
2W-SD-SD127-0001	SE1778-007
2W-SD-SD127-0001	SE1778-007A
2W-SD-SD127-0001	SE1778-007D
2W-SD-SD127-0001	SE1778-007S
2W-SD-SD130-0001	SE1778-009
2W-SD-SD135-0001	SE1778-016
2W-SD-SD140-0001	SE1778-004
2W-SD-SD140-0001	SE1778-004A
2W-SD-SD140-0001	SE1778-004D
2W-SD-SD140-0001	SE1778-004S
2W-SD-SD142-0001	SE1778-018
2W-SD-SD144-0001	SE1778-003
2W-SD-SD146-0001	SE1778-002
FD-040511-01	SE1778-010
FD-040511-02	SE1778-011

Were ICP interelement corrections applied ?	Yes
Were ICP background corrections applied ?	Yes
If yes - were raw data generated before application of background corrections ?	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Heather Henningsen Name: Heather Henningsen

Date: 4-26-11 Title: Analyst 1

NSB NEW LONDON
SOIL DATA
WE55-2

FRACTION	CHEMICAL	2W-SD-SD127-0001	UNITS	FD-040511-01	RPD	D
M	ARSENIC	6.9	MG/KG	6	13.95	0.90
M	CHROMIUM	4.5	MG/KG	3.5	25.00	1.00
M	COPPER	30.5 J	MG/KG	27.4	10.71	3.10
M	LEAD	12.8	MG/KG	11.6	9.84	1.20
M	NICKEL	6.2 J	MG/KG	5.6	10.17	0.60
M	ZINC	139 J	MG/KG	119	15.50	20.00
MISC	TOTAL SOLIDS	58	%	59	1.71	1.00

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NSB NEW LONDON
SOIL DATA
WE55-2

FRACTION	CHEMICAL	2W-SD-SD122-0001	UNITS	FD-040511-02	RPD	D
M	ARSENIC	11.7 J	MG/KG	10.9 J	7.08	0.80
M	CADMIUM	0.79 J	MG/KG	0.81 J	2.50	0.02
M	CHROMIUM	58.1 J	MG/KG	55 J	5.48	3.10
M	COPPER	92.8 J	MG/KG	89.6 J	3.51	3.20
M	LEAD	74.1 J	MG/KG	70.4 J	5.12	3.70
M	NICKEL	26 J	MG/KG	25.7 J	1.16	0.30
M	ZINC	180 J	MG/KG	182 J	1.10	2.00
MISC	TOTAL SOLIDS	23	%	22	4.44	1.00

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-2

Concentration Units: ug/L

SAMPLE: ICV

File: IBD21B Apr 21, 2011 21:22

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	9771.00	97.7
ARSENIC	400.0	385.20	96.3
CADMIUM	400.0	395.00	98.8
CALCIUM	10000.0	9576.00	95.8
CHROMIUM	400.0	394.80	98.7
COPPER	400.0	393.20	98.3
IRON	10000.0	10020.00	100.2
LEAD	400.0	401.60	100.4
MAGNESIUM	10000.0	10060.00	100.6
NICKEL	400.0	393.50	98.4
ZINC	400.0	396.50	99.1

SAMPLE: CCV

File: IBD21B Apr 21, 2011 21:45

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12730.00	101.8
ARSENIC	500.0	497.00	99.4
CADMIUM	500.0	502.80	100.6
CALCIUM	12500.0	12440.00	99.5
CHROMIUM	500.0	506.80	101.4
COPPER	500.0	506.00	101.2
IRON	12500.0	12840.00	102.7
LEAD	500.0	510.90	102.2
MAGNESIUM	12500.0	12770.00	102.2
NICKEL	500.0	506.10	101.2
ZINC	500.0	503.90	100.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-2

Concentration Units: ug/L

SAMPLE: CCV

File: IBD21B Apr 21, 2011 22:40

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12680.00	101.4
ARSENIC	500.0	496.00	99.2
CADMIUM	500.0	501.90	100.4
CALCIUM	12500.0	12480.00	99.8
CHROMIUM	500.0	505.00	101.0
COPPER	500.0	502.40	100.5
IRON	12500.0	12770.00	102.2
LEAD	500.0	510.50	102.1
MAGNESIUM	12500.0	12740.00	101.9
NICKEL	500.0	505.30	101.1
ZINC	500.0	504.10	100.8

SAMPLE: CCV

File: IBD21B Apr 21, 2011 23:35

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12630.00	101.0
ARSENIC	500.0	496.30	99.3
CADMIUM	500.0	502.70	100.5
CALCIUM	12500.0	12520.00	100.2
CHROMIUM	500.0	503.50	100.7
COPPER	500.0	500.00	100.0
IRON	12500.0	12690.00	101.5
LEAD	500.0	511.00	102.2
MAGNESIUM	12500.0	12760.00	102.1
NICKEL	500.0	506.30	101.3
ZINC	500.0	504.60	100.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-2

Concentration Units: ug/L

SAMPLE: CCV

File: IBD21B Apr 22, 2011 0:30

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12610.00	100.9
ARSENIC	500.0	492.70	98.5
CADMIUM	500.0	497.50	99.5
CALCIUM	12500.0	12200.00	97.6
CHROMIUM	500.0	501.80	100.4
COPPER	500.0	499.50	99.9
IRON	12500.0	12710.00	101.7
LEAD	500.0	506.60	101.3
MAGNESIUM	12500.0	12630.00	101.0
NICKEL	500.0	501.70	100.3
ZINC	500.0	501.50	100.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-2

Concentration Units: ug/L

SAMPLE: ICV

File: IBD22A Apr 22, 2011 14:34

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	9684.00	96.8
ARSENIC	400.0	383.60	95.9
CADMIUM	400.0	397.50	99.4
CALCIUM	10000.0	9826.00	98.3
CHROMIUM	400.0	393.50	98.4
COPPER	400.0	390.70	97.7
IRON	10000.0	9883.00	98.8
LEAD	400.0	398.20	99.5
MAGNESIUM	10000.0	10120.00	101.2
NICKEL	400.0	393.70	98.4

SAMPLE: CCV

File: IBD22A Apr 22, 2011 14:58

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12570.00	100.6
ARSENIC	500.0	498.10	99.6
CADMIUM	500.0	515.10	103.0
CALCIUM	12500.0	12710.00	101.7
CHROMIUM	500.0	509.70	101.9
COPPER	500.0	505.10	101.0
IRON	12500.0	12540.00	100.3
LEAD	500.0	506.10	101.2
MAGNESIUM	12500.0	12870.00	103.0
NICKEL	500.0	511.30	102.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-2

Concentration Units: ug/L

SAMPLE: CCV

File: IBD22A Apr 22, 2011 15:52

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12560.00	100.5
ARSENIC	500.0	503.10	100.6
CADMIUM	500.0	517.60	103.5
CALCIUM	12500.0	12860.00	102.9
CHROMIUM	500.0	508.90	101.8
COPPER	500.0	501.70	100.3
IRON	12500.0	12550.00	100.4
LEAD	500.0	506.70	101.3
MAGNESIUM	12500.0	12940.00	103.5
NICKEL	500.0	514.90	103.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-2

Concentration Units: ug/L

SAMPLE: PQL

File: IBD21B Apr 21, 2011 21:31

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	308.50	102.8
ARSENIC	8.0	7.67	95.9
CADMIUM	5.0	5.05	101.0
CALCIUM	100.0	101.70	101.7
CHROMIUM	10.0	10.12	101.3
COPPER	25.0	25.33	101.3
IRON	100.0	104.50	104.5
LEAD	5.0	4.91	98.2
MAGNESIUM	100.0	108.70	108.7
NICKEL	10.0	10.81	108.0
ZINC	20.0	20.17	100.9

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-2

Concentration Units: ug/L

SAMPLE: PQL

File: IBD22A Apr 22, 2011 14:43

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	310.50	103.5
ARSENIC	8.0	8.65	108.1
CADMIUM	5.0	5.07	101.4
CALCIUM	100.0	105.30	105.3
CHROMIUM	10.0	9.87	98.7
COPPER	25.0	25.14	100.6
IRON	100.0	101.00	101.0
LEAD	5.0	4.97	99.4
MAGNESIUM	100.0	106.40	106.4
NICKEL	10.0	10.62	106.0

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-2

Concentration Units: ug/L

SAMPLE: ICB

File: IBD21B Apr 21, 2011 21:27

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	11.970	J
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.380	U

SAMPLE: CCB

File: IBD21B Apr 21, 2011 21:50

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	11.520	J
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	3.454	J
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.380	U

SAMPLE: CCB

File: IBD21B Apr 21, 2011 22:45

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.170	J
CHROMIUM	0.670	U
COPPER	0.550	J
IRON	4.464	J
LEAD	1.630	U
MAGNESIUM	4.996	J
NICKEL	0.640	U
ZINC	0.380	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-2

Concentration Units: ug/L

SAMPLE: CCB

File: IBD21B Apr 21, 2011 23:39

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.600	J
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	5.502	J
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.380	U

SAMPLE: CCB

File: IBD21B Apr 22, 2011 0:35

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	11.380	J
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	6.512	J
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.380	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-2

Concentration Units: ug/L

SAMPLE: ICB
File: IBD22A Apr 22, 2011 14:39

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.060	U
CHROMIUM	0.670	U
COPPER	0.576	J
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U

SAMPLE: CCB
File: IBD22A Apr 22, 2011 15:02

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.060	U
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U

SAMPLE: CCB
File: IBD22A Apr 22, 2011 15:57

Analyte	Result	C
ALUMINUM	11.320	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.060	U
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSBD14ICS0

Matrix: SOIL **SDG Name:** WE55-2

QC Batch ID: BD14ICS0

Concentration Units : mg/Kgdrywt

Analyte	RESULT	C
ARSENIC	0.50	U
CADMIUM	0.30	U
CHROMIUM	0.038	J
COPPER	1.0	U
LEAD	0.40	U
NICKEL	0.40	U
ZINC	1.0	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSBD15ICS1

Matrix: SOIL **SDG Name:** WE55-2

QC Batch ID: BD15ICS1

Concentration Units : mg/Kgdrywt

Analyte	RESULT	C
ARSENIC	0.50	U
CADMIUM	0.30	U
CHROMIUM	0.034	J
COPPER	1.0	U
LEAD	0.40	U
NICKEL	0.40	U
ZINC	1.0	U

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-2

Concentration Units: ug/L

SAMPLE: ICSA

File: IBD21B Apr 21, 2011 21:36

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	508400	101.7
ARSENIC	0	-1	
CADMIUM	0	0	
CALCIUM	500000	459000	91.8
CHROMIUM	3	6	
COPPER	0	6	
IRON	200000	188600	94.3
LEAD	0	3	
MAGNESIUM	500000	450200	90.0
NICKEL	0	3	
ZINC	0	4	

SAMPLE: ICSAB

File: IBD21B Apr 21, 2011 21:41

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	508700	101.7
ARSENIC	100	99	99.0
CADMIUM	1000	921	92.1
CALCIUM	500000	467300	93.5
CHROMIUM	500	489	97.8
COPPER	500	534	106.8
IRON	200000	191300	95.7
LEAD	50	44	88.0
MAGNESIUM	500000	451300	90.3
NICKEL	1000	890	89.0
ZINC	1000	920	92.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-2

Concentration Units: ug/L

SAMPLE: ICSA

File: IBD22A Apr 22, 2011 14:48

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	507500	101.5
ARSENIC	0	0	
CADMIUM	0	2	
CALCIUM	500000	476300	95.3
CHROMIUM	3	5	
COPPER	0	5	
IRON	200000	185500	92.8
LEAD	0	3	
MAGNESIUM	500000	453400	90.7
NICKEL	0	2	

SAMPLE: ICSAB

File: IBD22A Apr 22, 2011 14:53

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	499500	99.9
ARSENIC	100	104	104.0
CADMIUM	1000	931	93.1
CALCIUM	500000	479800	96.0
CHROMIUM	500	484	96.8
COPPER	500	530	106.0
IRON	200000	186700	93.3
LEAD	50	45	90.0
MAGNESIUM	500000	452900	90.6
NICKEL	1000	889	88.9

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD140-0001S

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 14.4 **Lab Sample ID:** SE1778-004S

Concentration Units : mg/Kgdrywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, TOTAL	24.2325		9.3749		14.7	101.1		80	120	P
CADMIUM, TOTAL	35.3047		0.3020	J	36.76	95.2		80	120	P
CHROMIUM, TOTAL	47.4797		18.0977		29.41	99.9		80	120	P
COPPER, TOTAL	129.9260		95.7916		36.76	92.9		80	120	P
LEAD, TOTAL	60.3165		47.9900		14.7	83.9		80	120	P
NICKEL, TOTAL	108.9285		37.9486		73.52	96.5		80	120	P
ZINC, TOTAL	1000.9125		954.4385		73.52	63.2	DL	80	120	P

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services

Client Field ID: 2W-SD-SD127-0001S

Matrix: SOIL

SDG Name: WE55-2

Percent Solids: 58.2

Lab Sample ID: SE1778-007S

Concentration Units : mg/Kgdrywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, TOTAL	14.5642		6.9157		8.46	90.4		80	120	P
CADMIUM, TOTAL	19.5826		-0.0855	U	21.16	92.5		80	120	P
CHROMIUM, TOTAL	20.5135		4.5054		16.93	94.6		80	120	P
COPPER, TOTAL	46.1976		30.5340		21.16	74.0	N	80	120	P
LEAD, TOTAL	20.0311		12.8455		8.46	84.9		80	120	P
NICKEL, TOTAL	44.8097		6.2285	J	42.31	91.2		80	120	P
ZINC, TOTAL	170.9455		139.3326		42.31	74.7	N	80	120	P

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services

Client Field ID: 2W-SD-SD123-0001S

Matrix: SOIL

SDG Name: WE55-2

Percent Solids: 13.7

Lab Sample ID: SE1778-013S

Concentration Units : mg/Kgdrywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, TOTAL	26.9370		10.6610		16.17	100.7		80	120	P
CADMIUM, TOTAL	40.6480		3.0050	J	40.42	93.1		80	120	P
CHROMIUM, TOTAL	86.5024		51.3881		32.34	108.6		80	120	P
COPPER, TOTAL	371.8794		316.3223		40.42	137.4	OL	80	120	P
LEAD, TOTAL	194.1857		173.7407		16.17	126.4	OL	80	120	P
NICKEL, TOTAL	129.7859		53.8188		80.84	94.0		80	120	P
ZINC, TOTAL	901.7268		778.3258		80.84	152.6	OL	80	120	P

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD140-0001S

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 14.4 **Lab Sample ID:** SE1778-004A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, TOTAL	510.6000		12.9400		500	99.5		75	125	P
CADMIUM, TOTAL	498.6000		0.4168	J	500	99.6		75	125	P
CHROMIUM, TOTAL	526.2000		24.9800		500	100.2		75	125	P
COPPER, TOTAL	635.2000		132.2200		500	100.6		75	125	P
LEAD, TOTAL	565.8000		66.2400		500	99.9		75	125	P
NICKEL, TOTAL	548.0000		52.3800		500	99.1		75	125	P
ZINC, TOTAL	1788.8000		1317.4000		500	94.3		75	125	P

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD127-0001S

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 58.2 **Lab Sample ID:** SE1778-007A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, TOTAL	526.5000		40.0550		500	97.3		75	125	P
CADMIUM, TOTAL	489.3500		-0.4953	U	500	97.9		75	125	P
CHROMIUM, TOTAL	517.5000		26.0950		500	98.3		75	125	P
COPPER, TOTAL	669.5000		176.8500		500	98.5		75	125	P
LEAD, TOTAL	560.5000		74.4000		500	97.2		75	125	P
NICKEL, TOTAL	521.5000		36.0750	J	500	97.1		75	125	P
ZINC, TOTAL	1283.0000		807.0000		500	95.2		75	125	P

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD123-0001S

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 13.7 **Lab Sample ID:** SE1778-013A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, TOTAL	511.5000		32.6750		500	95.8		75	125	P
CADMIUM, TOTAL	481.0500		9.2100	J	500	94.4		75	125	P
CHROMIUM, TOTAL	637.5000		157.5000		500	96.0		75	125	P
COPPER, TOTAL	1436.0000		969.5000		500	93.3		75	125	P
LEAD, TOTAL	995.5000		532.5000		500	92.6		75	125	P
NICKEL, TOTAL	631.0000		164.9500		500	93.2		75	125	P
ZINC, TOTAL	2807.0000		2385.5000		500	84.3		75	125	P

Comments:

DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD140-0001D

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 14.4 **Lab Sample ID:** SE1778-004D

Concentration Units : mg/Kgdrywt

Analyte	Control Limits	Sample Result	C	Duplicate Result	C	RPD	Q	M
ARSENIC, TOTAL	5.9	9.3749		9.0549		3.5		P
CADMIUM, TOTAL		0.3020	J	0.4240	J	33.6		P
CHROMIUM, TOTAL	11	18.0977		16.0411		12.0		P
COPPER, TOTAL	18	95.7916		88.2554		8.2		P
LEAD, TOTAL		47.9900		42.6183		11.9		P
NICKEL, TOTAL	30	37.9486		35.9000		5.5		P
ZINC, TOTAL		954.4385		910.5223		4.7		P

Comments:

DUPLICATES

Lab Name: Katahdin Analytical Services
Client Field ID: 2W-SD-SD127-0001D
Matrix: SOIL
SDG Name: WE55-2
Percent Solids: 58.2
Lab Sample ID: SE1778-007D

Concentration Units : mg/Kgdrywt

Analyte	Control Limits	Sample Result	C	Duplicate Result	C	RPD	Q	M
ARSENIC, TOTAL	1.4	6.9157		7.0741		2.3		P
CADMIUM, TOTAL		-0.0855	U	-0.1771	U			P
CHROMIUM, TOTAL	2.6	4.5054		5.0381		11.2		P
COPPER, TOTAL		30.5340		28.9855		5.2		P
LEAD, TOTAL		12.8455		12.3585		3.9		P
NICKEL, TOTAL		6.2285	J	6.1047	J	2.0		P
ZINC, TOTAL		139.3326		135.7681		2.6		P

Comments:

DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD123-0001D

Matrix: SOIL **SDG Name:** WE55-2

Percent Solids: 13.7 **Lab Sample ID:** SE1778-013D

Concentration Units : mg/Kgdrywt

Analyte	Control Limits	Sample Result	C	Duplicate Result	C	RPD	Q	M
ARSENIC, TOTAL	2.6	10.6610		12.1851		13.3		P
CADMIUM, TOTAL		3.0050	J	3.1443	J	4.5		P
CHROMIUM, TOTAL		51.3881		54.4483		5.8		P
COPPER, TOTAL		316.3223		332.6587		5.0		P
LEAD, TOTAL		173.7407		182.9462		5.2		P
NICKEL, TOTAL	13	53.8188		55.6582		3.4		P
ZINC, TOTAL		778.3258		822.6125		5.5		P

Comments:

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSOBD14ICS0

Matrix: SOIL **SDG Name:** WE55-2

QC Batch ID: BD14ICS0

Concentration Units : mg/Kgdrywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ARSENIC	10.0	9.81	98.1	80	120
CADMIUM	25.0	25.06	100.2	80	120
CHROMIUM	20.0	20.30	101.5	80	120
COPPER	25.0	25.39	101.6	80	120
LEAD	10.0	10.23	102.3	80	120
NICKEL	50.0	50.64	101.3	80	120
ZINC	50.0	50.79	101.6	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSOBD15ICS1

Matrix: SOIL **SDG Name:** WE55-2

QC Batch ID: BD15ICS1

Concentration Units : mg/Kgdrywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ARSENIC	10.0	9.97	99.7	80	120
CADMIUM	25.0	25.29	101.2	80	120
CHROMIUM	20.0	20.56	102.8	80	120
COPPER	25.0	25.57	102.3	80	120
LEAD	10.0	10.39	103.9	80	120
NICKEL	50.0	51.03	102.1	80	120
ZINC	50.0	51.34	102.7	80	120

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD140-0001L

Matrix: SOIL **SDG Name:** WE55-2

Lab Sample ID: SE1778-004L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ARSENIC, TOTAL	12.94		10.92	J	15.6		P
CADMIUM, TOTAL	0.42	J	-1.71	U	100.0		P
CHROMIUM, TOTAL	24.98		26.18	J	4.8		P
COPPER, TOTAL	132.22		135.56		2.5		P
LEAD, TOTAL	66.24		71.12		7.4		P
NICKEL, TOTAL	52.38		52.12	J	0.5		P
ZINC, TOTAL	1317.40		1352.40		2.7		P

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD127-0001L

Matrix: SOIL **SDG Name:** WE55-2

Lab Sample ID: SE1778-007L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ARSENIC, TOTAL	40.06		46.52		16.1		P
CADMIUM, TOTAL	-0.50	U	-1.17	U			P
CHROMIUM, TOTAL	26.09		27.94	J	7.1		P
COPPER, TOTAL	176.85		192.75		9.0		P
LEAD, TOTAL	74.40		81.10		9.0		P
NICKEL, TOTAL	36.08	J	38.85	J	7.7		P
ZINC, TOTAL	807.00		885.00		9.7		P

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD123-0001L

Matrix: SOIL **SDG Name:** WE55-2

Lab Sample ID: SE1778-013L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ARSENIC, TOTAL	32.67		38.74	J	18.6		P
CADMIUM, TOTAL	9.21	J	9.07	J	1.5		P
CHROMIUM, TOTAL	157.50		163.90		4.1		P
COPPER, TOTAL	969.50		997.50		2.9		P
LEAD, TOTAL	532.50		586.00		10.0		P
NICKEL, TOTAL	164.95		174.30	J	5.7		P
ZINC, TOTAL	2385.50		2547.50		6.8		P

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 2/17/2011

Concentration Units: ug/L

Analyte	CRDL	IDL	M
ALUMINUM	300	11.32	P
ARSENIC	8.0	2.55	P
CADMIUM	10	0.25	P
CALCIUM	100	10.06	P
CHROMIUM	15	0.67	P
COPPER	25	0.53	P
IRON	100	2.62	P
LEAD	5.0	1.63	P
MAGNESIUM	100	4.33	P
NICKEL	40	0.64	P
ZINC	25	0.38	P

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/20/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ARSENIC	0.50	mg/Kg	P	SW846 3050B / 6010/200.7
CADMIUM	0.30	mg/Kg	P	SW846 3050B / 6010/200.7
CHROMIUM	0.40	mg/Kg	P	SW846 3050B / 6010/200.7
COPPER	1.00	mg/Kg	P	SW846 3050B / 6010/200.7
LEAD	0.40	mg/Kg	P	SW846 3050B / 6010/200.7
NICKEL	0.40	mg/Kg	P	SW846 3050B / 6010/200.7
ZINC	1.00	mg/Kg	P	SW846 3050B / 6010/200.7

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/21/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ARSENIC	5.0	ug/L	P	SW846 3050B / 6010/200.7
CADMIUM	3.0	ug/L	P	SW846 3050B / 6010/200.7
CHROMIUM	4.0	ug/L	P	SW846 3050B / 6010/200.7
COPPER	10.0	ug/L	P	SW846 3050B / 6010/200.7
LEAD	4.0	ug/L	P	SW846 3050B / 6010/200.7
NICKEL	4.0	ug/L	P	SW846 3050B / 6010/200.7
ZINC	10.0	ug/L	P	SW846 3050B / 6010/200.7

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/20/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ARSENIC	0.07	mg/Kg	P	SW846 3050B / SW846 6010B
CADMIUM	0.008	mg/Kg	P	SW846 3050B / SW846 6010B
CHROMIUM	0.03	mg/Kg	P	SW846 3050B / SW846 6010B
COPPER	0.16	mg/Kg	P	SW846 3050B / SW846 6010B
LEAD	0.09	mg/Kg	P	SW846 3050B / SW846 6010B
NICKEL	0.04	mg/Kg	P	SW846 3050B / SW846 6010B
ZINC	0.17	mg/Kg	P	SW846 3050B / SW846 6010B

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/21/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ARSENIC	1.43	ug/L	P	SW846 3050B / SW846 6010B
CADMIUM	0.05	ug/L	P	SW846 3050B / SW846 6010B
CHROMIUM	0.36	ug/L	P	SW846 3050B / SW846 6010B
COPPER	0.63	ug/L	P	SW846 3050B / SW846 6010B
LEAD	1.07	ug/L	P	SW846 3050B / SW846 6010B
NICKEL	2.81	ug/L	P	SW846 3050B / SW846 6010B
ZINC	0.73	ug/L	P	SW846 3050B / SW846 6010B

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** BD15ICS1

Matrix: SOIL **SDG Name:** WE55-2

Method: P **Prep Date:** 04/15/2011

Client ID	Lab Sample ID	Initial (g)	Final (L)
LCSOBD15ICS1	LCSOBD15ICS1	1	0.1
PBSBD15ICS1	PBSBD15ICS1	1	0.1
2W-SD-SD123-0001	SE1778-013	4.46	0.1
2W-SD-SD123-0001D	SE1778-013D	4.51	0.1
2W-SD-SD123-0001S	SE1778-013S	4.5	0.1
2W-SD-SD142-0001	SE1778-018	3.25	0.1
2W-SD-SD116-0001	SE1778-020	5.23	0.1
2W-SD-SD117-0001	SE1778-022	2.5	0.1

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** BD14ICS0

Matrix: SOIL **SDG Name:** WE55-2

Method: P **Prep Date:** 04/14/2011

Client ID	Lab Sample ID	Initial (g)	Final (L)
LCSOBD14ICS0	LCSOBD14ICS0	1	0.1
PBSBD14ICS0	PBSBD14ICS0	1	0.1
2W-SD-SD146-0001	SE1778-002R	4.83	0.1
2W-SD-SD144-0001	SE1778-003R	5.06	0.1
2W-SD-SD140-0001	SE1778-004R	4.8	0.1
2W-SD-SD140-0001D	SE1778-004RD	4.7	0.1
2W-SD-SD140-0001S	SE1778-004RS	4.73	0.1
2W-SD-SD127-0001	SE1778-007	1.99	0.1
2W-SD-SD127-0001D	SE1778-007D	1.96	0.1
2W-SD-SD127-0001S	SE1778-007S	2.03	0.1
2W-SD-SD122-0001	SE1778-008R	4.9	0.1
2W-SD-SD130-0001	SE1778-009R	5.18	0.1
FD-040511-01	SE1778-010	2.5	0.1
FD-040511-02	SE1778-011	4.58	0.1
2W-SD-SD135-0001	SE1778-016	5.28	0.1

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-2

Instrument ID: THERMO ICAP 6500 **File Name:** IBD21B

Date: 4/21/2011 **Method:** P

Lab Sample ID	Client ID	D.F.	Time		Elements							
Blank		1	21:13	AL	AS	CD	CA	CR	CU FE PB MG		NI	ZN
Std 1		1	21:18	AL	AS	CD	CA	CR	CU FE PB MG		NI	ZN
ICV		1	21:22	AL	AS	CD	CA	CR	CU FE PB MG		NI	ZN
ICB		1	21:27	AL	AS	CD	CA	CR	CU FE PB MG		NI	ZN
PQL		1	21:31	AL	AS	CD	CA	CR	CU FE PB MG		NI	ZN
ICSA		1	21:36	AL	AS	CD	CA	CR	CU FE PB MG		NI	ZN
ICSAB		1	21:41	AL	AS	CD	CA	CR	CU FE PB MG		NI	ZN
CCV		1	21:45	AL	AS	CD	CA	CR	CU FE PB MG		NI	ZN
CCB		1	21:50	AL	AS	CD	CA	CR	CU FE PB MG		NI	ZN
PBSBD14ICS0		1	21:54		AS	CD		CR	CU	PB	NI	ZN
LCSOBD14ICS0		1	21:59		AS	CD		CR	CU	PB	NI	ZN
SE1778-002R	2W-SD-SD146-0001R	5	22:03									ZN
SE1778-003R	2W-SD-SD144-0001R	5	22:08		AS	CD		CR	CU	PB	NI	ZN
SE1778-004R	2W-SD-SD140-0001R	5	22:13		AS	CD		CR	CU	PB	NI	ZN
SE1778-004RL	2W-SD-SD140-0001RL	25	22:17		AS	CD		CR	CU	PB	NI	ZN
SE1778-004RA	2W-SD-SD140-0001RA	5	22:22		AS	CD		CR	CU	PB	NI	ZN
SE1778-004RS	2W-SD-SD140-0001RS	5	22:26		AS	CD		CR	CU	PB	NI	ZN
SE1778-004RD	2W-SD-SD140-0001RD	5	22:31		AS	CD		CR	CU	PB	NI	ZN
SE1778-007	2W-SD-SD127-0001	2	22:36		AS	CD		CR	CU	PB	NI	ZN
CCV		1	22:40	AL	AS	CD	CA	CR	CU FE PB MG		NI	ZN
CCB		1	22:45	AL	AS	CD	CA	CR	CU FE PB MG		NI	ZN
SE1778-007L	2W-SD-SD127-0001L	10	22:49		AS	CD		CR	CU	PB	NI	ZN
SE1778-007A	2W-SD-SD127-0001A	2	22:54		AS	CD		CR	CU	PB	NI	ZN
SE1778-007D	2W-SD-SD127-0001S	2	22:58		AS	CD		CR	CU	PB	NI	ZN
SE1778-007S	2W-SD-SD127-0001D	2	23:03		AS	CD		CR	CU	PB	NI	
SE1778-008R	2W-SD-SD122-0001R	2	23:08		AS	CD		CR	CU	PB	NI	ZN
SE1778-009R	2W-SD-SD130-0001R	10	23:12		AS	CD		CR	CU	PB	NI	ZN
SE1778-010	FD-040511-01	2	23:17		AS	CD		CR	CU	PB	NI	ZN
SE1778-011	FD-040511-02	2	23:21		AS	CD		CR	CU	PB	NI	ZN
SE1778-016	2W-SD-SD135-0001	2	23:26		AS	CD		CR	CU	PB	NI	ZN
PBSBD15ICS1		1	23:30		AS	CD		CR	CU	PB	NI	ZN
CCV		1	23:35	AL	AS	CD	CA	CR	CU FE PB MG		NI	ZN
CCB		1	23:39	AL	AS	CD	CA	CR	CU FE PB MG		NI	ZN
LCSOBD15ICS1		1	23:44		AS	CD		CR	CU	PB	NI	ZN
SE1778-013	2W-SD-SD123-0001	2	23:49		AS	CD		CR	CU	PB	NI	ZN
SE1778-013L	2W-SD-SD123-0001L	10	23:53		AS	CD		CR	CU	PB	NI	ZN
SE1778-013A	2W-SD-SD123-0001A	2	23:58		AS	CD		CR	CU	PB	NI	ZN
SE1778-013S	2W-SD-SD123-0001S	2	0:02		AS	CD		CR	CU	PB	NI	ZN
SE1778-013D	2W-SD-SD123-0001D	2	0:07		AS	CD		CR	CU	PB	NI	ZN
SE1778-018	2W-SD-SD142-0001	2	0:11		AS	CD		CR	CU	PB	NI	ZN
SE1778-020	2W-SD-SD116-0001	2	0:16		AS	CD		CR	CU	PB	NI	ZN
SE1778-022	2W-SD-SD117-0001	2	0:21		AS	CD		CR	CU	PB	NI	ZN
ZZZZZZ		1	0:25									
CCV		1	0:30	AL	AS	CD	CA	CR	CU FE PB MG		NI	ZN
CCB		1	0:35	AL	AS	CD	CA	CR	CU FE PB MG		NI	ZN

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-2

Instrument ID: THERMO ICAP 6500 **File Name:** IBD22A

Date: 4/22/2011 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
Blank		1	14:26	AL AS CD CA CR CU FE PB MG NI
Std 1		1	14:30	AL AS CD CA CR CU FE PB MG NI
ICV		1	14:34	AL AS CD CA CR CU FE PB MG NI
ICB		1	14:39	AL AS CD CA CR CU FE PB MG NI
PQL		1	14:43	AL AS CD CA CR CU FE PB MG NI
ICSA		1	14:48	AL AS CD CA CR CU FE PB MG NI
ICSAB		1	14:53	AL AS CD CA CR CU FE PB MG NI
CCV		1	14:58	AL AS CD CA CR CU FE PB MG NI
CCB		1	15:02	AL AS CD CA CR CU FE PB MG NI
ZZZZZZ		1	15:07	
ZZZZZZ		1	15:11	
ZZZZZZ		1	15:16	
SE1778-002R	2W-SD-SD146-0001R	10	15:20	AS CD CR CU PB NI
ZZZZZZ		10	15:25	
ZZZZZZ		1	15:29	
ZZZZZZ		1	15:34	
ZZZZZZ		1	15:39	
ZZZZZZ		1	15:43	
ZZZZZZ		1	15:48	
CCV		1	15:52	AL AS CD CA CR CU FE PB MG NI
CCB		1	15:57	AL AS CD CA CR CU FE PB MG NI

SE1778-002R

Method Name: K6010-2010+Pd
Method Revision: 114
Analyst Name: DWM
Acquire Date: 21/04/2011 22:03:53
Sample Type: Unknown

Elem	Avg	Units	Stddev	%RSD	Intensity Ratio
Mo2020_A	71.71	ug/L	0.2411	0.3362	24.68
Na5895_R	35700.	ug/L	133.9112	0.3751	18,403.76
Ni2316_A	288.4	ug/L	1.1681	0.4050	47.86
Pb2203_A	205.4	ug/L	8.2020	3.9936	31.69
Sb2068_A	19.24	ug/L	3.7379	19.4327	0.89
Se1960_A	-21.44	ug/L	3.6136	16.8555	1.73
Si2516_R	5586.	ug/L	56.8526	1.0178	513.68
Sn1899_A	43.31	ug/L	6.1124	14.1131	3.24
Sr4215_R	381.2	ug/L	1.0735	0.2816	6,818.90
Ti3349_A	5208.	ug/L	9.0721	0.1742	26,519.60
Tl1908_A	-5.662	ug/L	3.3624	59.3822	-1.84
V_2924_A	220.6	ug/L	2.3423	1.0619	535.86
Zn2062_A	10030.	ug/L	42.6337	0.4252	3,471.79
Pd3404	-66.53	ppb	3.3233	4.9954	-214.16
Y_3600_R	32097.	Cts/S	96.2842	0.3000	32,096.70
Y_2243_A	5218.6	Cts/S	5.5347	0.1061	5,218.55
Y_3600_A	218390.	Cts/S	121.1812	0.0555	218,393.26

SE1778-003R

2W-SD-50144-0001 arsenic 14.8 mg/kg

$\left(\frac{170.2\text{ug}}{\text{L}}\right)\left(\frac{0.1\text{ L}}{5.06\text{g}}\right)\left(\frac{1\text{mg}}{1000\text{ug}}\right)\left(\frac{1000\text{g}}{1\text{Kg}}\right)\left(\frac{1}{.227}\right) = 14.8\ \text{mg/kg}$

Method Name: K6010-2010+Pd
Method Revision: 114
Analyst Name: DWM
Acquire Date: 21/04/2011 22:08:31
Sample Type: Unknown

Elem	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	25.30	ug/L	0.7021	2.7757	-758.10
Al3961_R	147400.	ug/L	195.5353	0.1326	36,529.19
As1891_A	170.2	ug/L	2.9340	1.7235	6.16
Au2427_A	-26.40	ug/L	1.6642	6.3046	29.30
B_2089_A	104.9	ug/L	1.6627	1.5856	18.88
Ba4554_R	2082.	ug/L	4.9775	0.2391	34,095.96
Be3130_R	5.817	ug/L	0.1863	3.2036	-5.16
Ca3158_R	34040.	ug/L	44.1892	0.1298	3,121.29
Cd2265_A	-1.691	ug/L	0.5797	34.2809	181.42
Co2286_A	49.03	ug/L	2.4952	5.0890	41.20
Cr2677_A	208.5	ug/L	0.8684	0.4164	351.46
Cu3273_A	408.1	ug/L	2.4833	0.6085	951.52
Fe2599_R	761900.	ug/L	42.1803	0.0055	343,965.18
K_7664_R	13320.	ug/L	49.5017	0.3715	2,363.93
Li6707_R	195.1	ug/L	2.3810	1.2206	557.30
Mg2025_A	34230.	ug/L	108.0701	0.3157	979.11
Mn2576_R	2740.	ug/L	0.5003	0.0183	5,610.25
Mo2020_A	24.05	ug/L	1.0862	4.5162	8.66
Na5895_R	25860.	ug/L	64.3149	0.2487	13,508.37
Ni2316_A	217.9	ug/L	0.9911	0.4549	42.18
Pb2203_A	444.9	ug/L	0.4804	0.1080	56.90
Sb2068_A	9.386	ug/L	1.1923	12.7019	0.41
Se1960_A	.2427	ug/L	18.3757	7,570.8962	1.85
Si2516_R	3643.	ug/L	0.4716	0.0129	344.53
Sn1899_A	40.93	ug/L	4.1857	10.2257	3.16
Sr4215_R	286.2	ug/L	1.4988	0.5238	5,156.08
Ti3349_A	10490.	ug/L	25.7439	0.2453	54,224.19
Tl1908_A	-7.242	ug/L	5.7253	79.0597	-1.81
V_2924_A	401.5	ug/L	0.7463	0.1859	951.37
Zn2062_A	3431.	ug/L	17.3591	0.5060	1,210.70
Pd3404	-41.14	ppb	1.5243	3.7049	-111.24
Y_3600_R	32434.	Cts/S	61.0583	0.1883	32,434.28
Y_2243_A	5317.5	Cts/S	15.3499	0.2887	5,317.47
Y_3600_A	221570.	Cts/S	264.6156	0.1194	221,565.15

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG90128	ASTM D2216	13-APR-11	12-APR-11	U 1 %	1 %	N/A

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG90128-2	LCS	WG90128	13-APR-11	12-APR-11	%	90	90.	100	80-120	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Duplicate Sample Summary Report

Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG90128-3	SE1778-4	WG90128	13-APR-11	%	14.	18.	24*	20
WG90128-4	SE1778-7	WG90128	13-APR-11	%	58.	56.	4	20
WG90128-5	SE1778-13	WG90128	13-APR-11	%	14.	13.	3	20

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Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **A. BERNHARDT** **DATE: JULY 14 , 2011**

FROM: **A. COGNETTI** **COPIES: DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – PAH**
NSB NEW LONDON, CTO WE55
SAMPLE DELIVERY GROUP (SDG) – WE55-3

SAMPLES: 19/Sediment /PAH

2W-SD-SD100-0001	2W-SD-SD103-0001	2W-SD-SD105-0001
2W-SD-SD107-0001	2W-SD-SD108-0001	2W-SD-SD110-0001
2W-SD-SD112-0001	2W-SD-SD87-0001	2W-SD-SD88-0001
2W-SD-SD89-0001	2W-SD-SD90-0001	2W-SD-SD94-0001
2W-SD-SD95-0001	2W-SD-SD96-0001	2W-SD-SD97-0001
2W-SD-SD98-0001	2W-SD-SD99-0001	FD040611-01
FD040711-01		

Overview

The sample set for NSB New London, CTO WE55, SDG WE55-3 consisted of nineteen (19) sediment environmental samples. All samples were analyzed for polynuclear aromatic hydrocarbons (PAH). There are two (2) field duplicate pairs associated with this SDG: 2W-SD-SD112-0001/FD040611-01 and 2W-SD-SD96-0001/FD040711-01.

The samples were collected by Tetra Tech NUS on April 6 and 7, 2011 and analyzed by Katahdin Analytical Services. All of the samples were analyzed in accordance with USEPA SW-846 Method 8270C SIM analytical method.

Data were evaluated based on the following parameters:

*	• Data Completeness
*	• Holding Times
*	• GC/MS Instrument Tuning and System Performance
*	• Blank Results
	• Initial and Continuing Calibration
	• Surrogate Spike Recoveries
	• Internal Standard Recoveries
	• Matrix Spike / Matrix Spike Duplicate Results
*	• Laboratory Control Sample Recoveries
*	• Field Duplicate Precision
	• Detection Limits
*	• Compound Identification and Quantification

The asterisk (*) indicates that all quality control criteria were met for this parameter. Qualified (if applicable) analytical results are summarized in Appendix A. Results as reported by the laboratory are presented in Appendix B. Appendix C contains Region I worksheets, and Appendix D contains the documentation to support the findings as discussed in this data validation report. An EPA Region 1 tier III

validation was performed on the data in this SDG. The text of this report has been formulated to address only those problem areas affecting data quality.

INITIAL AND CONTINUING CALIBRATION

The continuing calibration percent differences (%Ds) for several PAHs were greater than the 20% quality control limit on April 28, 2011 @ 12:46 on instrument GCMS-N. The PAHs were pyrene, chrysene, benzo(k)fluoranthene and indeno (1,2,3-cd)pyrene. The positive results of the aforementioned PAHs were qualified as estimated (J) in the affected samples 2W-SD-SD105-0001, 2W-SD-SD112-0001, 2W-SD-SD97-0001, 2W-SD-SD98-0001, 2W-SD-SD95-0001, 2W-SD-SD88-0001, 2W-SD-SD87-0001, 2W-SD-SD89-0001, 2W-SD-SD100-0001, FD040711-01, 2W-SD-SD103-0001, 2W-SD-SD110-0001 and 2W-SD-SD108-0001.

The continuing calibration %Ds for benzo(k)fluoranthene and indeno(1,2,3-cd)pyrene were greater than the 20% quality control limit on May 3, 2011 @ 10:00 on instrument GCMS-N affecting the dilutions of samples 2W-SD-SD88-0001, 2W-SD-SD87-0001, 2W-SD-SD89-0001, 2W-SD-SD100-0001, FD040711-01, 2W-SD-SD103-0001, 2W-SD-SD105-0001, 2W-SD-SD110-0001, 2W-SD-SD108-0001, 2W-SD-SD107-0001 and 2W-SD-SD112-0001. The positive benzo(k)fluoranthene and indeno(1,2,3-cd)pyrene results in the aforementioned samples were qualified as estimated (J).

SURROGATE SPIKE RECOVERIES AND INTERNAL STANDARD RECOVERIES

The following table summarizes the noncompliant surrogate spike recoveries and internal standard performances:

Samples	Surrogate Recoveries	Internal Standard Performances	Validated	Qualifications
2W-SD-SD99-0001	+ (1)	1 (L) 2 (L)	No	
2W-SD-SD99-0001-DL	Diluted out	Ok	No	
2W-SD-SD96-0001	+ (1)	1 (L) 2 (L)	Yes	J (1 compound)
2W-SD-SD96-0001-DL	Diluted out	1 (L)	Yes	J (2 compounds)
2W-SD-SD98-0001	+ (1)	1 (L) 2 (L)	Yes	J (1 compound)
2W-SD-SD98-0001-DL	Diluted out	1 (L) 2 (L)	Yes	J (6 compounds)
2W-SD-SD100-0001	+ (1)	1 (L) 2 (L)	Yes	J (3 compounds)
2W-SD-SD100-0001-DL	Diluted out	Ok	No	
FD040711-01	+ (1)	1 (L) 2 (L)	Yes	J (1 compound)
FD040711-01	Diluted out	1 (L) 2 (L)	Yes	J (6 compounds)
2W-SD-SD90-0001	Ok	1 (L)	Yes	J (1 compound)
2W-SD-SD90-0001-DL	0% (1)	1 (L)	Yes	J (8 surr., 2 IS)

TO: A. Bernhardt
FROM: A. Cognetti
SDG: WE55-3
DATE: July 14, 2011

Samples	Surrogate Recoveries	Internal Standard Performances	Validated	Qualifications
2W-SD-SD105-0001	Ok	1 (L)	Yes	J (3 compounds)
2W-SD-SD105-0001-DL	0% (1)	1 (L) 2 (L)	Yes	J (5 compounds)
2W-SD-SD108-0001	Ok	1 (L) 2 (L)	Yes	J (7 compounds)
2W-SD-SD108-0001-DL	0% (1)	Ok	Yes	J (1 compound)
2W-SD-SD112-0001	Ok	1 (L)	Yes	J (3 compounds)
2W-SD-SD112-0001-DL	X (1)	1 (L)	No	
2W-SD-SD94-0001	Ok	1 (L) 2 (L)	Yes	J (1 compound)
2W-SD-SD94-0001-DL	Ok	1 (L)	Yes	J (2 compounds)
2W-SD-SD97-0001	Ok	1 (L) 2 (L)	Yes	J (1 compound)
2W-SD-SD97-0001-DL	Ok	1 (L) 2 (L)	Yes	J (6 compounds)
2W-SD-SD95-0001	Ok	1 (L) 2 (L)	Yes	J (1 compound)
2W-SD-SD95-0001-DL	Ok	1 (L) 2 (L)	Yes	J (6 compounds)
2W-SD-SD88-0001	Ok	1 (L) 2 (L)	Yes	J (1 compound)
2W-SD-SD88-0001-DL	Ok	1 (L) 2 (L)	Yes	J (6 compounds)
2W-SD-SD87-0001	Ok	1 (L) 2 (L)	Yes	J (4 compounds)
2W-SD-SD87-0001-DL	Ok	1 (L)	Yes	J (3 compounds)
2W-SD-SD89-0001	Ok	1 (L) 2 (L)	Yes	J (1 compound)
2W-SD-SD89-0001-DL	Ok	Ok	No	
2W-SD-SD103-0001	Ok	1 (L) 2 (L)	Yes	J (1 compound)
2W-SD-SD103-0001-DL	Ok	1 (L) 2 (L)	Yes	J (6 compounds)
2W-SD-SD107-0001	Ok	1 (L)	Yes	J (3 compounds)
2W-SD-SD107-0001-DL	Ok	1 (L)	No	
FD040611-01	Ok	1 (L)	Yes	J (3 compounds)
FD040611-01-DL	Ok	1 (L)	No	

Samples	Surrogate Recoveries	Internal Standard Performances	Validated	Qualifications
2W-SD-SD110-0001	Sample Not Spiked	1 (L) 2 (L)	No	
2W-SD-SD110-0001-DL	Diluted out	Ok	No	
2W-SD-SD110-0001RE	Ok	Ok	No	

Surrogate Recoveries: + Recovery greater than upper limit
X Recovery less than lower limit

Number of noncompliant surrogate recoveries noted in ( ).

Internal Standards: 1 – perylene-d12
2 – chrysene-d12

(L) indicates a low area response
(H) indicates a low area response

Several samples had internal standards areas less than the lower quality control limit for chrysene-d12 and/or perylene-d12. Copies of the continuing calibration standards for the dates when the above samples were analyzed are included in Appendix C as reference.

MATRIX SPIKE (MS) / MATRIX SPIKE DUPLICATE (MSD)

The matrix spike %R of benzo(b)fluoranthene was less than the lower quality control limit and the MSD %R was greater than the upper quality control limit in spiked sample 2W-SD-SD112-0001. The positive benzo(b)fluoranthene result in sample 2W-SD-SD112-0001 was qualified as estimated (J).

PERCENT SOLIDS

The following samples contained less than 30% solids; 2W-SD-SD103-0001, 2W-SD-SD105-0001, 2W-SD-SD107-0001, 2W-SD-SD108-0001, 2W-SD-SD87-0001, 2W-SD-SD88-0001, 2W-SD-SD89-0001 and 2W-SD-SD90-0001. The positive and nondetected results in these samples were qualified as estimated (J) and (UJ), respectively.

NOTES

The MSD %Rs of phenanthrene, fluoranthene, pyrene, benzo(a)anthracene and chrysene were greater than the upper quality control limit in spiked sample 2W-SD-SD112-0001. No action was taken on the phenanthrene, fluoranthene, pyrene, benzo(a)anthracene and chrysene results because the %Rs in the MS and RPD for each of these compounds were within quality control limits.

The MSD %R of dibenzo(a,h)anthracene was less than the lower quality control limit in spiked sample 2W-SD-SD112-0001. No action was taken on the dibenzo(a,h)anthracene result because the %R in the MS and the RPD were within quality control limits.

Some samples were analyzed at a dilution due to high PAH concentrations exceeding the instrument calibration range. Results from the diluted analyses for target compounds exceeding calibration range were combined with the results of target compounds in the undiluted sample in the Appendix A reported sample results.

Sample	Dilution	Number of PAHs Exceeding Instrument Calibration Limits
2W-SD-SD100-0001	10X	8
2W-SD-SD103-0001	20X	10
2W-SD-SD105-0001	6X	5
2W-SD-SD108-0001	3X	1
2W-SD-SD110-0001	15X	18
2W-SD-SD112-0001	3X	1
2W-SD-SD87-0001	10X	6
2W-SD-SD88-0001	10X	10
2W-SD-SD89-0001	20X	10
2W-SD-SD90-0001	9X	8
2W-SD-SD94-0001	15X	10
2W-SD-SD95-0001	10X	10
2W-SD-SD96-0001	20X	10
2W-SD-SD97-0001	15X	10
2W-SD-SD98-0001	20X	10
2W-SD-SD99-0001	30X	11
FD040611-01	3X	1
FD040711-01	25X	10

Positive results reported below the limit of quantitation (LOQ) but above the method detection limit (MDL) for the organic analyses were qualified as estimated, (J).

Nondetected results were reported to the limit of detection (LOD).

EXECUTIVE SUMMARY

Laboratory Performance: Continuing calibration %Ds for several PAHs exceeded quality control limit resulting in the qualification of data. Several samples had surrogate spike and internal standard noncompliances.

Other Factors Affecting Data Quality: Eight samples contained less than 30% solids. The MS/SD %R of benzo(b)fluoranthene was outside quality control limits in spiked sample 2W-SD-SD112-0001.

The data for these analyses were reviewed with reference to the criteria for SW-846 8270D SIM listed in the project specific SAP, the "USEPA Region 1 Laboratory Data Validation Functional Guidelines – Part II" (12/96), and the (DOD) QSM document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

Ann Cognetti

Tetra Tech NUS
Ann Cognetti
Chemist/ Data Validator

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C – Regional Worksheets
4. Appendix D - Support Documentation

APPENDIX A

QUALIFIED LABORATORY RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can be any number of issues; e.g. poor chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 02625	NSAMPLE	2W-SD-SD100-0001			2W-SD-SD100-0001DL			2W-SD-SD103-0001			2W-SD-SD103-0001DL		
SDG: WE55-3	LAB_ID	SE1779-17			SE1779-17DL			SE1779-21			SE1779-21DL		
FRACTION: PAH	SAMP_DATE	4/7/2011			4/7/2011			4/6/2011			4/6/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	74.6			74.6			19.4			19.4		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		13	U					6.3	J	PY			
2-METHYLNAPHTHALENE		13	U					28	UJ	Y			
ACENAPHTHENE		8.9	J	P				29	J	PY			
ACENAPHTHYLENE		6.5	J	P				17	J	PY			
ANTHRACENE		49						88	J	Y			
BENZO(A)ANTHRACENE					610						1100	J	PY
BENZO(A)PYRENE					620						2200	J	NY
BENZO(B)FLUORANTHENE					1000						3800	J	NY
BENZO(G,H,I)PERYLENE		300	J	N							2000	J	NY
BENZO(K)FLUORANTHENE					360	J	C				1700	J	CNY
CHRYSENE					690						2300	J	NY
DIBENZO(A,H)ANTHRACENE		88	J	N				400	J	NY			
FLUORANTHENE					1300						3500	J	Y
FLUORENE		15	J	P				42	J	PY			
INDENO(1,2,3-CD)PYRENE		350	J	CN							2400	J	CNY
NAPHTHALENE		13	U					8.3	J	PY			
PHENANTHRENE					540						1300		
PYRENE					1400						4500		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD105-0001			2W-SD-SD105-0001DL			2W-SD-SD107-0001			2W-SD-SD108-0001		
SDG: WE55-3	LAB_ID	SE1779-22			SE1779-22DL			SE1779-28			SE1779-26		
FRACTION: PAH	SAMP_DATE	4/6/2011			4/6/2011			4/6/2011			4/6/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	13.1			13.1			13.9			10.4		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		44	UJ	Y				40	UJ	Y	21	J	PY
2-METHYLNAPHTHALENE		44	UJ	Y				40	UJ	Y	53	UJ	Y
ACENAPHTHENE		19	J	PY				6.2	J	PY	16	J	PY
ACENAPHTHYLENE		7.5	J	PY				40	UJ	Y	43	J	PY
ANTHRACENE		51	J	PY				15	J	PY	68	J	PY
BENZO(A)ANTHRACENE		850	J	Y				250	J	Y	580	J	Y
BENZO(A)PYRENE					1500	J	NY	380	J	Y	570	J	NY
BENZO(B)FLUORANTHENE					2600	J	NY	810	J	Y	1200	J	NY
BENZO(G,H,I)PERYLENE		880	J	NY				280	J	NY	360	J	NY
BENZO(K)FLUORANTHENE		960	J	CY				230	J	Y	340	J	CNY
CHRYSENE					1600	J	NY	470	J	Y	900	J	CNY
DIBENZO(A,H)ANTHRACENE		210	J	NY				65	J	NPY	99	J	NPY
FLUORANTHENE					2100	J	Y	480	J	Y	620	J	Y
FLUORENE		25	J	PY				40	UJ	Y	35	J	PY
INDENO(1,2,3-CD)PYRENE		1100	J	CNY				380	J	NY	460	J	CNY
NAPHTHALENE		44	UJ	Y				40	UJ	Y	27	J	PY
PHENANTHRENE		850	J	Y				250	J	Y	500	J	Y
PYRENE					3000	J	Y	790	J	Y			

PROJ_NO: 02625	NSAMPLE	2W-SD-SD108-0001DL			2W-SD-SD110-0001DL			2W-SD-SD112-0001			2W-SD-SD112-0001DL		
SDG: WE55-3	LAB_ID	SE1779-26DL			SE1779-24DL			SE1779-31			SE1779-31DL		
FRACTION: PAH	SAMP_DATE	4/6/2011			4/6/2011			4/6/2011			4/6/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	10.4			40.7			34.7			34.7		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE					2000			27	U				
2-METHYLNAPHTHALENE					2300			27	U				
ACENAPHTHENE					2300			11	J	P			
ACENAPHTHYLENE					2200			6.1	J	P			
ANTHRACENE					2800			30	J	P			
BENZO(A)ANTHRACENE					2600			280					
BENZO(A)PYRENE					3100			330					
BENZO(B)FLUORANTHENE					3000			650	J	D			
BENZO(G,H,I)PERYLENE					2400			200	J	N			
BENZO(K)FLUORANTHENE					3000	J	C	210	J	C			
CHRYSENE					3100			430	J	C			
DIBENZO(A,H)ANTHRACENE					2700			55	J	N			
FLUORANTHENE					2500			510					
FLUORENE					2300			13	J	P			
INDENO(1,2,3-CD)PYRENE					2100	J	C	240	J	CN			
NAPHTHALENE					2200			27	U				
PHENANTHRENE					2800			260					
PYRENE		1100	J	RY	3000						550		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD87-0001			2W-SD-SD87-0001DL			2W-SD-SD88-0001			2W-SD-SD88-0001DL		
SDG: WE55-3	LAB_ID	SE1779-14			SE1779-14DL			SE1779-12			SE1779-12DL		
FRACTION: PAH	SAMP_DATE	4/7/2011			4/7/2011			4/7/2011			4/7/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	29.5			29.5			25.0			25.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		19	UJ	Y				24	UJ	Y			
2-METHYLNAPHTHALENE		19	UJ	Y				24	UJ	Y			
ACENAPHTHENE		5.7	J	PY				18	J	PY			
ACENAPHTHYLENE		6.4	J	PY				5.5	J	PY			
ANTHRACENE		17	J	PY				68	J	Y			
BENZO(A)ANTHRACENE					1000	J	Y				900	J	Y
BENZO(A)PYRENE					1200	J	NY				1400	J	NY
BENZO(B)FLUORANTHENE					1700	J	NY				2100	J	NY
BENZO(G,H,I)PERYLENE		360	J	NY							1100	J	NY
BENZO(K)FLUORANTHENE		360	J	CNY							900	J	CNY
CHRYSENE					900	J	NY				1400	J	NY
DIBENZO(A,H)ANTHRACENE		97	J	NY				200	J	NY			
FLUORANTHENE					1400	J	Y				2200	J	Y
FLUORENE		6.5	J	PY				24	J	PY			
INDENO(1,2,3-CD)PYRENE		420	J	CNY							1300	J	CNY
NAPHTHALENE		19	UJ	Y				24	UJ	Y			
PHENANTHRENE		160	J	Y							860	J	Y
PYRENE					2200	J	Y				2900	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD89-0001			2W-SD-SD89-0001DL			2W-SD-SD90-0001			2W-SD-SD90-0001DL		
SDG: WE55-3	LAB_ID	SE1779-15			SE1779-15DL			SE1779-4			SE1779-4DL		
FRACTION: PAH	SAMP_DATE	4/7/2011			4/7/2011			4/7/2011			4/7/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	20.8			20.8			21.4			21.4		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		25	UJ	Y				28	UJ	Y			
2-METHYLNAPHTHALENE		25	UJ	Y				28	UJ	Y			
ACENAPHTHENE		22	J	PY				15	J	PY			
ACENAPHTHYLENE		8.4	J	PY				7.7	J	PY			
ANTHRACENE		78	J	Y				50	J	PY			
BENZO(A)ANTHRACENE					1600	J	Y				800	J	RY
BENZO(A)PYRENE					2300	J	Y				1200	J	RY
BENZO(B)FLUORANTHENE					3400	J	Y				2100	J	RY
BENZO(G,H,I)PERYLENE					1400	J	Y				830	J	NRY
BENZO(K)FLUORANTHENE					1200	J	CY	660	J	Y			
CHRYSENE					1800	J	Y				1000	J	RY
DIBENZO(A,H)ANTHRACENE		300	J	NY				190	J	NY			
FLUORANTHENE					3300	J	Y				1800	J	RY
FLUORENE		24	J	PY				18	J	PY			
INDENO(1,2,3-CD)PYRENE					1900	J	CY				1100	J	NRY
NAPHTHALENE		25	UJ	Y				28	UJ	Y			
PHENANTHRENE					800	J	PY	510	J	Y			
PYRENE					3800	J	Y				1900	J	RY

PROJ_NO: 02625	NSAMPLE	2W-SD-SD94-0001			2W-SD-SD94-0001DL			2W-SD-SD95-0001			2W-SD-SD95-0001DL		
SDG: WE55-3	LAB_ID	SE1779-5			SE1779-5DL			SE1779-10			SE1779-10DL		
FRACTION: PAH	SAMP_DATE	4/7/2011			4/7/2011			4/7/2011			4/7/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	36.7			36.7			52.9			52.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		4.4	J	P				4	J	P			
2-METHYLNAPHTHALENE		25	U					17	U				
ACENAPHTHENE		32	J	P				20	J	P			
ACENAPHTHYLENE		11	J	P				10	J	P			
ANTHRACENE		120						73					
BENZO(A)ANTHRACENE					1700						930		
BENZO(A)PYRENE					2600						1300	J	N
BENZO(B)FLUORANTHENE					4500						2300	J	N
BENZO(G,H,I)PERYLENE					1600	J	N				680	J	N
BENZO(K)FLUORANTHENE					1500						800	J	N
CHRYSENE					2300						1200	J	N
DIBENZO(A,H)ANTHRACENE		360	J	N				200	J	N			
FLUORANTHENE					3800						1900		
FLUORENE		41	J	P				26	J	P			
INDENO(1,2,3-CD)PYRENE					2200	J	N				960	J	N
NAPHTHALENE		25	U					5.4	J	P			
PHENANTHRENE					1400						750		
PYRENE					4400						2300		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD96-0001	2W-SD-SD96-0001DL	2W-SD-SD97-0001	2W-SD-SD97-0001DL
SDG: WE55-3	LAB_ID	SE1779-7	SE1779-7DL	SE1779-8	SE1779-8DL
FRACTION: PAH	SAMP_DATE	4/7/2011	4/7/2011	4/7/2011	4/7/2011
MEDIA: SOIL	QC_TYPE	NM	NM	NM	NM
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG
	PCT_SOLIDS	46.1	46.1	50.7	50.7
	DUP_OF				

PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE	4.7	J	P				3.4	J	P			
2-METHYLNAPHTHALENE	21	U					19	U				
ACENAPHTHENE	34	J	P				28	J	P			
ACENAPHTHYLENE	13	J	P				6.6	J	P			
ANTHRACENE	130						89					
BENZO(A)ANTHRACENE				2300						1300		
BENZO(A)PYRENE				3300						2000	J	N
BENZO(B)FLUORANTHENE				5700						3700	J	N
BENZO(G,H,I)PERYLENE				2400	J	N				1200	J	N
BENZO(K)FLUORANTHENE				1800						1300	J	N
CHRYSENE				2900						1900	J	N
DIBENZO(A,H)ANTHRACENE	480	J	N				260	J	N			
FLUORANTHENE				4800						3200		
FLUORENE	45						33	J	P			
INDENO(1,2,3-CD)PYRENE				3200	J	N				1700	J	N
NAPHTHALENE	6.8	J	P				19	U				
PHENANTHRENE				1600						1200		
PYRENE				5400						3600		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD98-0001			2W-SD-SD98-0001DL			2W-SD-SD99-0001			2W-SD-SD99-0001DL		
SDG: WE55-3	LAB_ID	SE1779-9			SE1779-9DL			SE1779-2			SE1779-2DL		
FRACTION: PAH	SAMP_DATE	4/7/2011			4/7/2011			4/7/2011			4/7/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	55.8			55.8			53.6			53.6		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		17	U					7.3	J	P			
2-METHYLNAPHTHALENE		17	U					18	U				
ACENAPHTHENE		19	J	P				59					
ACENAPHTHYLENE		12	J	P				23	J	P			
ANTHRACENE		130						210					
BENZO(A)ANTHRACENE					1700						3200		
BENZO(A)PYRENE					2200	J	N				5100		
BENZO(B)FLUORANTHENE					3800	J	N				9000		
BENZO(G,H,I)PERYLENE					1100	J	N				3000		
BENZO(K)FLUORANTHENE					1400	J	N				3400		
CHRYSENE					2100	J	N				5000		
DIBENZO(A,H)ANTHRACENE		280	J	N							720	J	P
FLUORANTHENE					3600						8600		
FLUORENE		34	J	P				85					
INDENO(1,2,3-CD)PYRENE					1600	J	N				4200		
NAPHTHALENE		17	U					10	J	P			
PHENANTHRENE					1200						3100		
PYRENE					4200						8100		

PROJ_NO: 02625	NSAMPLE	FD040611-01			FD040611-01DL			FD040711-01			FD040711-01DL		
SDG: WE55-3	LAB_ID	SE1779-1			SE1779-1DL			SE1779-18			SE1779-18DL		
FRACTION: PAH	SAMP_DATE	4/6/2011			4/6/2011			4/7/2011			4/7/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	35.6			35.6			50.7			50.7		
	DUP_OF	2W-SD-SD112-0001			2W-SD-SD112-0001			2W-SD-SD96-0001			2W-SD-SD96-0001		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		27	U					4.1	J	P			
2-METHYLNAPHTHALENE		27	U					18	U				
ACENAPHTHENE		28	J	P				31	J	P			
ACENAPHTHYLENE		8.2	J	P				9.3	J	P			
ANTHRACENE		71						120					
BENZO(A)ANTHRACENE		370									1700		
BENZO(A)PYRENE		370									2800	J	N
BENZO(B)FLUORANTHENE		600									4000	J	N
BENZO(G,H,I)PERYLENE		240	J	N							2300	J	N
BENZO(K)FLUORANTHENE		230									1800	J	CN
CHRYSENE		470									2600	J	N
DIBENZO(A,H)ANTHRACENE		67	J	N				380	J	N			
FLUORANTHENE		660									4000		
FLUORENE		28	J	P				39					
INDENO(1,2,3-CD)PYRENE		300	J	N							2800	J	CN
NAPHTHALENE		27	U					5.7	J	P			
PHENANTHRENE		400									1400		
PYRENE					780						5200		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD100-0001			2W-SD-SD103-0001			2W-SD-SD105-0001			2W-SD-SD107-0001		
SDG: WE55-3	LAB_ID	SE1779-17			SE1779-21			SE1779-22			SE1779-28		
FRACTION: MISC	SAMP_DATE	4/7/2011			4/6/2011			4/6/2011			4/6/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS	74.6			19.4			13.1			13.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		75			19			13			14		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD108-0001			2W-SD-SD110-0001			2W-SD-SD112-0001			2W-SD-SD87-0001		
SDG: WE55-3	LAB_ID	SE1779-26			SE1779-24			SE1779-31			SE1779-14		
FRACTION: MISC	SAMP_DATE	4/6/2011			4/6/2011			4/6/2011			4/7/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS	10.4			40.7			34.7			29.5		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		10			41			35			30		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD88-0001			2W-SD-SD89-0001			2W-SD-SD90-0001			2W-SD-SD94-0001		
SDG: WE55-3	LAB_ID	SE1779-12			SE1779-15			SE1779-4			SE1779-5		
FRACTION: MISC	SAMP_DATE	4/7/2011			4/7/2011			4/7/2011			4/7/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS	25.0			20.8			21.4			36.7		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		25			21			21			37		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD95-0001			2W-SD-SD96-0001			2W-SD-SD97-0001			2W-SD-SD98-0001		
SDG: WE55-3	LAB_ID	SE1779-10			SE1779-7			SE1779-8			SE1779-9		
FRACTION: MISC	SAMP_DATE	4/7/2011			4/7/2011			4/7/2011			4/7/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS	52.9			46.1			50.7			55.8		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		53			46			51			56		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD99-0001			FD040611-01			FD040711-01		
SDG: WE55-3	LAB_ID	SE1779-2			SE1779-1			SE1779-18		
FRACTION: MISC	SAMP_DATE	4/7/2011			4/6/2011			4/7/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM		
	UNITS	%			%			%		
	PCT_SOLIDS	53.6			35.6			50.7		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		54			36			51		

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-17
Client ID: 2W-SD-SD100-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 28-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 75.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	13.	ug/Kgdrywt	1	20	26.	3.4	13.
2-Methylnaphthalene	U	13.	ug/Kgdrywt	1	20	26.	2.9	13.
1-Methylnaphthalene	U	13.	ug/Kgdrywt	1	20	26.	2.2	13.
Acenaphthylene	J	6.5	ug/Kgdrywt	1	20	26.	1.6	13.
Acenaphthene	J	8.9	ug/Kgdrywt	1	20	26.	2.0	13.
Fluorene	J	15.	ug/Kgdrywt	1	20	26.	4.2	13.
Phenanthrene	E	450	ug/Kgdrywt	1	20	26.	2.4	13.
Anthracene		49.	ug/Kgdrywt	1	20	26.	1.6	13.
Fluoranthene	E	610	ug/Kgdrywt	1	20	26.	2.4	13.
Pyrene	E	2400	ug/Kgdrywt	1	20	26.	2.8	13.
Benzo (a) anthracene	E	610	ug/Kgdrywt	1	20	26.	2.5	13.
Chrysene	E	780	ug/Kgdrywt	1	20	26.	2.2	13.
Benzo (b) Fluoranthene	E	1000	ug/Kgdrywt	1	20	26.	3.2	13.
Benzo(k)fluoranthene	E	360	ug/Kgdrywt	1	20	26.	4.1	13.
Benzo(a)pyrene	E	550	ug/Kgdrywt	1	20	26.	4.4	13.
Indeno (1,2,3-cd) pyrene		350	ug/Kgdrywt	1	20	26.	2.5	13.
Dibenzo (a,h) anthracene		88.	ug/Kgdrywt	1	20	26.	2.4	13.
Benzo(g,h,i)perylene		300	ug/Kgdrywt	1	20	26.	2.6	13.
2-Methylnaphthalene-D10		64.8	%					
Fluorene-D10		50.2	%					
Pyrene-D10	*	154.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-17DL
Client ID: 2W-SD-SD100-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 75.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	130	ug/Kgdrywt	10	20	260	34.	130
2-Methylnaphthalene	U	130	ug/Kgdrywt	10	20	260	29.	130
1-Methylnaphthalene	U	130	ug/Kgdrywt	10	20	260	22.	130
Acenaphthylene	U	130	ug/Kgdrywt	10	20	260	16.	130
Acenaphthene	U	130	ug/Kgdrywt	10	20	260	20.	130
Fluorene	U	130	ug/Kgdrywt	10	20	260	42.	130
Phenanthrene		540	ug/Kgdrywt	10	20	260	24.	130
Anthracene	J	52.	ug/Kgdrywt	10	20	260	16.	130
Fluoranthene		1300	ug/Kgdrywt	10	20	260	24.	130
Pyrene		1400	ug/Kgdrywt	10	20	260	28.	130
Benzo (a) anthracene		610	ug/Kgdrywt	10	20	260	25.	130
Chrysene		690	ug/Kgdrywt	10	20	260	22.	130
Benzo (b) Fluoranthene		1000	ug/Kgdrywt	10	20	260	32.	130
Benzo(k)fluoranthene		360	ug/Kgdrywt	10	20	260	41.	130
Benzo(a)pyrene		620	ug/Kgdrywt	10	20	260	44.	130
Indeno (1,2,3-cd) pyrene		450	ug/Kgdrywt	10	20	260	25.	130
Dibenzo (a,h) anthracene	J	57.	ug/Kgdrywt	10	20	260	24.	130
Benzo(g,h,i)perylene		340	ug/Kgdrywt	10	20	260	26.	130
2-Methylnaphthalene-D10	D	57.5	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	87.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-21
Client ID: 2W-SD-SD103-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 28-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 19.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	8.3	ug/Kgdrywt	1	20	57.	7.4	28.
2-Methylnaphthalene	U	28.	ug/Kgdrywt	1	20	57.	6.3	28.
1-Methylnaphthalene	J	6.3	ug/Kgdrywt	1	20	57.	4.8	28.
Acenaphthylene	J	17.	ug/Kgdrywt	1	20	57.	3.4	28.
Acenaphthene	J	29.	ug/Kgdrywt	1	20	57.	4.3	28.
Fluorene	J	42.	ug/Kgdrywt	1	20	57.	9.1	28.
Phenanthrene	E	1200	ug/Kgdrywt	1	20	57.	5.1	28.
Anthracene		88.	ug/Kgdrywt	1	20	57.	3.4	28.
Fluoranthene	E	2000	ug/Kgdrywt	1	20	57.	5.1	28.
Pyrene	E	7900	ug/Kgdrywt	1	20	57.	6.0	28.
Benzo (a) anthracene	E	1400	ug/Kgdrywt	1	20	57.	5.4	28.
Chrysene	E	2600	ug/Kgdrywt	1	20	57.	4.8	28.
Benzo (b) Fluoranthene	E	4300	ug/Kgdrywt	1	20	57.	6.8	28.
Benzo(k)fluoranthene	E	1400	ug/Kgdrywt	1	20	57.	8.8	28.
Benzo(a)pyrene	E	2000	ug/Kgdrywt	1	20	57.	9.4	28.
Indeno (1,2,3-cd) pyrene	E	2000	ug/Kgdrywt	1	20	57.	5.4	28.
Dibenzo (a,h) anthracene		400	ug/Kgdrywt	1	20	57.	5.1	28.
Benzo(g,h,i)perylene	E	1700	ug/Kgdrywt	1	20	57.	5.7	28.
2-Methylnaphthalene-D10		34.9	%					
Fluorene-D10		38.9	%					
Pyrene-D10		126.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-21DL
Client ID: 2W-SD-SD103-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 19.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	570	ug/Kgdrywt	20	20	1100	150	570
2-Methylnaphthalene	U	570	ug/Kgdrywt	20	20	1100	120	570
1-Methylnaphthalene	U	570	ug/Kgdrywt	20	20	1100	97.	570
Acenaphthylene	U	570	ug/Kgdrywt	20	20	1100	68.	570
Acenaphthene	U	570	ug/Kgdrywt	20	20	1100	86.	570
Fluorene	U	570	ug/Kgdrywt	20	20	1100	180	570
Phenanthrene		1300	ug/Kgdrywt	20	20	1100	100	570
Anthracene	U	570	ug/Kgdrywt	20	20	1100	68.	570
Fluoranthene		3500	ug/Kgdrywt	20	20	1100	100	570
Pyrene		4500	ug/Kgdrywt	20	20	1100	120	570
Benzo (a) anthracene	J	1100	ug/Kgdrywt	20	20	1100	110	570
Chrysene		2300	ug/Kgdrywt	20	20	1100	97.	570
Benzo (b) Fluoranthene		3800	ug/Kgdrywt	20	20	1100	140	570
Benzo(k)fluoranthene		1700	ug/Kgdrywt	20	20	1100	180	570
Benzo(a)pyrene		2200	ug/Kgdrywt	20	20	1100	190	570
Indeno (1,2,3-cd) pyrene		2400	ug/Kgdrywt	20	20	1100	110	570
Dibenzo (a,h) anthracene	J	240	ug/Kgdrywt	20	20	1100	100	570
Benzo(g,h,i)perylene		2000	ug/Kgdrywt	20	20	1100	110	570
2-Methylnaphthalene-D10	D	31.1	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	78.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-22
Client ID: 2W-SD-SD105-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 28-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 13.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	44.	ug/Kgdrywt	1	20	88.	11.	44.
2-Methylnaphthalene	U	44.	ug/Kgdrywt	1	20	88.	9.7	44.
1-Methylnaphthalene	U	44.	ug/Kgdrywt	1	20	88.	7.5	44.
Acenaphthylene	J	7.5	ug/Kgdrywt	1	20	88.	5.3	44.
Acenaphthene	J	19.	ug/Kgdrywt	1	20	88.	6.6	44.
Fluorene	J	25.	ug/Kgdrywt	1	20	88.	14.	44.
Phenanthrene		850	ug/Kgdrywt	1	20	88.	7.9	44.
Anthracene	J	51.	ug/Kgdrywt	1	20	88.	5.3	44.
Fluoranthene	E	1400	ug/Kgdrywt	1	20	88.	7.9	44.
Pyrene	E	3600	ug/Kgdrywt	1	20	88.	9.2	44.
Benzo (a) anthracene		850	ug/Kgdrywt	1	20	88.	8.4	44.
Chrysene	E	1700	ug/Kgdrywt	1	20	88.	7.5	44.
Benzo (b) Fluoranthene	E	2600	ug/Kgdrywt	1	20	88.	10.	44.
Benzo(k)fluoranthene		960	ug/Kgdrywt	1	20	88.	14.	44.
Benzo(a)pyrene	E	1300	ug/Kgdrywt	1	20	88.	14.	44.
Indeno (1,2,3-cd) pyrene		1100	ug/Kgdrywt	1	20	88.	8.4	44.
Dibenzo (a,h) anthracene		210	ug/Kgdrywt	1	20	88.	7.9	44.
Benzo(g,h,i)perylene		880	ug/Kgdrywt	1	20	88.	8.8	44.
2-Methylnaphthalene-D10		37.8	%					
Fluorene-D10		31.8	%					
Pyrene-D10		81.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-22DL
Client ID: 2W-SD-SD105-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 13.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	260	ug/Kgdrywt	6	20	530	69.	260
2-Methylnaphthalene	U	260	ug/Kgdrywt	6	20	530	58.	260
1-Methylnaphthalene	U	260	ug/Kgdrywt	6	20	530	45.	260
Acenaphthylene	U	260	ug/Kgdrywt	6	20	530	32.	260
Acenaphthene	U	260	ug/Kgdrywt	6	20	530	40.	260
Fluorene	U	260	ug/Kgdrywt	6	20	530	84.	260
Phenanthrene		960	ug/Kgdrywt	6	20	530	48.	260
Anthracene	J	58.	ug/Kgdrywt	6	20	530	32.	260
Fluoranthene		2100	ug/Kgdrywt	6	20	530	48.	260
Pyrene		3000	ug/Kgdrywt	6	20	530	56.	260
Benzo (a) anthracene		790	ug/Kgdrywt	6	20	530	50.	260
Chrysene		1600	ug/Kgdrywt	6	20	530	45.	260
Benzo (b) Fluoranthene		2600	ug/Kgdrywt	6	20	530	63.	260
Benzo(k)fluoranthene		1000	ug/Kgdrywt	6	20	530	82.	260
Benzo(a)pyrene		1500	ug/Kgdrywt	6	20	530	87.	260
Indeno (1,2,3-cd) pyrene		1700	ug/Kgdrywt	6	20	530	50.	260
Dibenzo (a,h) anthracene	J	160	ug/Kgdrywt	6	20	530	48.	260
Benzo(g,h,i)perylene		1400	ug/Kgdrywt	6	20	530	53.	260
2-Methylnaphthalene-D10		40.1	%					
Fluorene-D10	*	0.00	%					
Pyrene-D10		70.7	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-28
Client ID: 2W-SD-SD107-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 05-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 14.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	40.	ug/Kgdrywt	1	20	81.	10.	40.
2-Methylnaphthalene	U	40.	ug/Kgdrywt	1	20	81.	8.9	40.
1-Methylnaphthalene	U	40.	ug/Kgdrywt	1	20	81.	6.9	40.
Acenaphthylene	U	40.	ug/Kgdrywt	1	20	81.	4.9	40.
Acenaphthene	J	6.2	ug/Kgdrywt	1	20	81.	6.1	40.
Fluorene	U	40.	ug/Kgdrywt	1	20	81.	13.	40.
Phenanthrene		250	ug/Kgdrywt	1	20	81.	7.3	40.
Anthracene	J	15.	ug/Kgdrywt	1	20	81.	4.9	40.
Fluoranthene		480	ug/Kgdrywt	1	20	81.	7.3	40.
Pyrene		790	ug/Kgdrywt	1	20	81.	8.5	40.
Benzo (a) anthracene		250	ug/Kgdrywt	1	20	81.	7.7	40.
Chrysene		470	ug/Kgdrywt	1	20	81.	6.9	40.
Benzo (b) Fluoranthene		810	ug/Kgdrywt	1	20	81.	9.7	40.
Benzo(k)fluoranthene		230	ug/Kgdrywt	1	20	81.	12.	40.
Benzo(a)pyrene		380	ug/Kgdrywt	1	20	81.	13.	40.
Indeno (1,2,3-cd) pyrene		380	ug/Kgdrywt	1	20	81.	7.7	40.
Dibenzo (a,h) anthracene	J	65.	ug/Kgdrywt	1	20	81.	7.3	40.
Benzo(g,h,i)perylene		280	ug/Kgdrywt	1	20	81.	8.1	40.
2-Methylnaphthalene-D10		39.2	%					
Fluorene-D10		35.1	%					
Pyrene-D10		79.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-28DL
Client ID: 2W-SD-SD107-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 14.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	81.	ug/Kgdrywt	2	20	160	21.	81.
2-Methylnaphthalene	U	81.	ug/Kgdrywt	2	20	160	18.	81.
1-Methylnaphthalene	U	81.	ug/Kgdrywt	2	20	160	14.	81.
Acenaphthylene	U	81.	ug/Kgdrywt	2	20	160	9.7	81.
Acenaphthene	U	81.	ug/Kgdrywt	2	20	160	12.	81.
Fluorene	U	81.	ug/Kgdrywt	2	20	160	26.	81.
Phenanthrene		240	ug/Kgdrywt	2	20	160	14.	81.
Anthracene	J	18.	ug/Kgdrywt	2	20	160	9.7	81.
Fluoranthene		630	ug/Kgdrywt	2	20	160	14.	81.
Pyrene		600	ug/Kgdrywt	2	20	160	17.	81.
Benzo (a) anthracene		220	ug/Kgdrywt	2	20	160	15.	81.
Chrysene		400	ug/Kgdrywt	2	20	160	14.	81.
Benzo (b) Fluoranthene		700	ug/Kgdrywt	2	20	160	19.	81.
Benzo(k)fluoranthene		270	ug/Kgdrywt	2	20	160	25.	81.
Benzo(a)pyrene		380	ug/Kgdrywt	2	20	160	27.	81.
Indeno (1,2,3-cd) pyrene		430	ug/Kgdrywt	2	20	160	15.	81.
Dibenzo (a,h) anthracene	J	75.	ug/Kgdrywt	2	20	160	14.	81.
Benzo(g,h,i)perylene		320	ug/Kgdrywt	2	20	160	16.	81.
2-Methylnaphthalene-D10		35.6	%					
Fluorene-D10		22.3	%					
Pyrene-D10		60.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-26
Client ID: 2W-SD-SD108-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 28-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 10.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	27.	ug/Kgdrywt	1	20	110	14.	53.
2-Methylnaphthalene	U	53.	ug/Kgdrywt	1	20	110	12.	53.
1-Methylnaphthalene	J	21.	ug/Kgdrywt	1	20	110	9.0	53.
Acenaphthylene	J	43.	ug/Kgdrywt	1	20	110	6.4	53.
Acenaphthene	J	16.	ug/Kgdrywt	1	20	110	8.0	53.
Fluorene	J	35.	ug/Kgdrywt	1	20	110	17.	53.
Phenanthrene		500	ug/Kgdrywt	1	20	110	9.6	53.
Anthracene	J	68.	ug/Kgdrywt	1	20	110	6.4	53.
Fluoranthene		620	ug/Kgdrywt	1	20	110	9.6	53.
Pyrene	E	2600	ug/Kgdrywt	1	20	110	11.	53.
Benzo (a) anthracene		580	ug/Kgdrywt	1	20	110	10.	53.
Chrysene		900	ug/Kgdrywt	1	20	110	9.0	53.
Benzo (b) Fluoranthene		1200	ug/Kgdrywt	1	20	110	13.	53.
Benzo(k)fluoranthene		340	ug/Kgdrywt	1	20	110	16.	53.
Benzo(a)pyrene		570	ug/Kgdrywt	1	20	110	18.	53.
Indeno (1,2,3-cd) pyrene		460	ug/Kgdrywt	1	20	110	10.	53.
Dibenzo (a,h) anthracene	J	99.	ug/Kgdrywt	1	20	110	9.6	53.
Benzo(g,h,i)perylene		360	ug/Kgdrywt	1	20	110	11.	53.
2-Methylnaphthalene-D10		34.5	%					
Fluorene-D10		28.5	%					
Pyrene-D10		90.7	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-26DL
Client ID: 2W-SD-SD108-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 10.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	160	ug/Kgdrywt	3	20	320	41.	160
2-Methylnaphthalene	U	160	ug/Kgdrywt	3	20	320	35.	160
1-Methylnaphthalene	U	160	ug/Kgdrywt	3	20	320	27.	160
Acenaphthylene	J	43.	ug/Kgdrywt	3	20	320	19.	160
Acenaphthene	U	160	ug/Kgdrywt	3	20	320	24.	160
Fluorene	U	160	ug/Kgdrywt	3	20	320	51.	160
Phenanthrene		510	ug/Kgdrywt	3	20	320	29.	160
Anthracene	J	68.	ug/Kgdrywt	3	20	320	19.	160
Fluoranthene		820	ug/Kgdrywt	3	20	320	29.	160
Pyrene		1100	ug/Kgdrywt	3	20	320	33.	160
Benzo (a) anthracene		510	ug/Kgdrywt	3	20	320	30.	160
Chrysene		750	ug/Kgdrywt	3	20	320	27.	160
Benzo (b) Fluoranthene		1000	ug/Kgdrywt	3	20	320	38.	160
Benzo(k)fluoranthene		430	ug/Kgdrywt	3	20	320	49.	160
Benzo(a)pyrene		640	ug/Kgdrywt	3	20	320	52.	160
Indeno (1,2,3-cd) pyrene		620	ug/Kgdrywt	3	20	320	30.	160
Dibenzo (a,h) anthracene	J	110	ug/Kgdrywt	3	20	320	29.	160
Benzo(g,h,i)perylene		480	ug/Kgdrywt	3	20	320	32.	160
2-Methylnaphthalene-D10		34.5	%					
Fluorene-D10	*	0.00	%					
Pyrene-D10		45.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-24
Client ID: 2W-SD-SD110-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 28-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 41.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	E	1300	ug/Kgdrywt	1	20	44.	5.7	22.
2-Methylnaphthalene	E	3100	ug/Kgdrywt	1	20	44.	4.8	22.
1-Methylnaphthalene	E	1400	ug/Kgdrywt	1	20	44.	3.7	22.
Acenaphthylene	E	1400	ug/Kgdrywt	1	20	44.	2.6	22.
Acenaphthene	E	1600	ug/Kgdrywt	1	20	44.	3.3	22.
Fluorene	E	1400	ug/Kgdrywt	1	20	44.	7.0	22.
Phenanthrene	E	1800	ug/Kgdrywt	1	20	44.	3.9	22.
Anthracene	E	1800	ug/Kgdrywt	1	20	44.	2.6	22.
Fluoranthene	E	1500	ug/Kgdrywt	1	20	44.	3.9	22.
Pyrene	E	4700	ug/Kgdrywt	1	20	44.	4.6	22.
Benzo (a) anthracene	E	2600	ug/Kgdrywt	1	20	44.	4.2	22.
Chrysene	E	2700	ug/Kgdrywt	1	20	44.	3.7	22.
Benzo (b) Fluoranthene	E	3200	ug/Kgdrywt	1	20	44.	5.3	22.
Benzo(k)fluoranthene	E	3000	ug/Kgdrywt	1	20	44.	6.8	22.
Benzo(a)pyrene	E	2700	ug/Kgdrywt	1	20	44.	7.2	22.
Indeno (1,2,3-cd) pyrene	E	2200	ug/Kgdrywt	1	20	44.	4.2	22.
Dibenzo (a,h) anthracene	E	2600	ug/Kgdrywt	1	20	44.	3.9	22.
Benzo(g,h,i)perylene	E	2300	ug/Kgdrywt	1	20	44.	4.4	22.
2-Methylnaphthalene-D10	*	0.00	%					
Fluorene-D10	*	0.00	%					
Pyrene-D10	*	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-24DL
Client ID: 2W-SD-SD110-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 41.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		2200	ug/Kgdrywt	15	20	660	86.	330
2-Methylnaphthalene		2300	ug/Kgdrywt	15	20	660	72.	330
1-Methylnaphthalene		2000	ug/Kgdrywt	15	20	660	56.	330
Acenaphthylene		2200	ug/Kgdrywt	15	20	660	39.	330
Acenaphthene		2300	ug/Kgdrywt	15	20	660	49.	330
Fluorene		2300	ug/Kgdrywt	15	20	660	100	330
Phenanthrene		2800	ug/Kgdrywt	15	20	660	59.	330
Anthracene		2800	ug/Kgdrywt	15	20	660	39.	330
Fluoranthene		2500	ug/Kgdrywt	15	20	660	59.	330
Pyrene		3000	ug/Kgdrywt	15	20	660	69.	330
Benzo (a) anthracene		2600	ug/Kgdrywt	15	20	660	62.	330
Chrysene		3100	ug/Kgdrywt	15	20	660	56.	330
Benzo (b) Fluoranthene		3000	ug/Kgdrywt	15	20	660	79.	330
Benzo(k)fluoranthene		3000	ug/Kgdrywt	15	20	660	100	330
Benzo(a)pyrene		3100	ug/Kgdrywt	15	20	660	110	330
Indeno (1,2,3-cd) pyrene		2100	ug/Kgdrywt	15	20	660	62.	330
Dibenzo (a,h) anthracene		2700	ug/Kgdrywt	15	20	660	59.	330
Benzo(g,h,i)perylene		2400	ug/Kgdrywt	15	20	660	66.	330
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	12.3	%					
Pyrene-D10	D	99.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-24RE
Client ID: 2W-SD-SD110-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 29-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90858

Analysis Date: 02-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 41.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	8.2	ug/Kgdrywt	1	20	40.	5.2	20.
2-Methylnaphthalene	U	20.	ug/Kgdrywt	1	20	40.	4.4	20.
1-Methylnaphthalene	J	4.8	ug/Kgdrywt	1	20	40.	3.4	20.
Acenaphthylene	J	21.	ug/Kgdrywt	1	20	40.	2.4	20.
Acenaphthene	J	5.4	ug/Kgdrywt	1	20	40.	3.0	20.
Fluorene	J	12.	ug/Kgdrywt	1	20	40.	6.4	20.
Phenanthrene		160	ug/Kgdrywt	1	20	40.	3.6	20.
Anthracene	J	23.	ug/Kgdrywt	1	20	40.	2.4	20.
Fluoranthene		220	ug/Kgdrywt	1	20	40.	3.6	20.
Pyrene		400	ug/Kgdrywt	1	20	40.	4.2	20.
Benzo (a) anthracene		200	ug/Kgdrywt	1	20	40.	3.8	20.
Chrysene		280	ug/Kgdrywt	1	20	40.	3.4	20.
Benzo (b) Fluoranthene		470	ug/Kgdrywt	1	20	40.	4.8	20.
Benzo(k)fluoranthene		130	ug/Kgdrywt	1	20	40.	6.2	20.
Benzo(a)pyrene		250	ug/Kgdrywt	1	20	40.	6.6	20.
Indeno (1,2,3-cd) pyrene		160	ug/Kgdrywt	1	20	40.	3.8	20.
Dibenzo (a,h) anthracene	J	35.	ug/Kgdrywt	1	20	40.	3.6	20.
Benzo(g,h,i)perylene		120	ug/Kgdrywt	1	20	40.	4.0	20.
2-Methylnaphthalene-D10		28.9	%					
Fluorene-D10		20.8	%					
Pyrene-D10		45.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-31
Client ID: 2W-SD-SD112-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 28-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 35.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	27.	ug/Kgdrywt	1	20	54.	7.1	27.
2-Methylnaphthalene	U	27.	ug/Kgdrywt	1	20	54.	6.0	27.
1-Methylnaphthalene	U	27.	ug/Kgdrywt	1	20	54.	4.6	27.
Acenaphthylene	J	6.1	ug/Kgdrywt	1	20	54.	3.3	27.
Acenaphthene	J	11.	ug/Kgdrywt	1	20	54.	4.1	27.
Fluorene	J	13.	ug/Kgdrywt	1	20	54.	8.7	27.
Phenanthrene		260	ug/Kgdrywt	1	20	54.	4.9	27.
Anthracene	J	30.	ug/Kgdrywt	1	20	54.	3.3	27.
Fluoranthene		510	ug/Kgdrywt	1	20	54.	4.9	27.
Pyrene	E	1000	ug/Kgdrywt	1	20	54.	5.7	27.
Benzo (a) anthracene		280	ug/Kgdrywt	1	20	54.	5.2	27.
Chrysene		430	ug/Kgdrywt	1	20	54.	4.6	27.
Benzo (b) Fluoranthene		650	ug/Kgdrywt	1	20	54.	6.6	27.
Benzo(k)fluoranthene		210	ug/Kgdrywt	1	20	54.	8.5	27.
Benzo(a)pyrene		330	ug/Kgdrywt	1	20	54.	9.0	27.
Indeno (1,2,3-cd) pyrene		240	ug/Kgdrywt	1	20	54.	5.2	27.
Dibenzo (a,h) anthracene		55.	ug/Kgdrywt	1	20	54.	4.9	27.
Benzo(g,h,i)perylene		200	ug/Kgdrywt	1	20	54.	5.4	27.
2-Methylnaphthalene-D10		57.1	%					
Fluorene-D10		45.0	%					
Pyrene-D10		99.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-31DL
Client ID: 2W-SD-SD112-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 35.
Report Date: 10-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	82.	ug/Kgdrywt	3	20	160	21.	82.
2-Methylnaphthalene	U	82.	ug/Kgdrywt	3	20	160	18.	82.
1-Methylnaphthalene	U	82.	ug/Kgdrywt	3	20	160	14.	82.
Acenaphthylene	U	82.	ug/Kgdrywt	3	20	160	9.8	82.
Acenaphthene	U	82.	ug/Kgdrywt	3	20	160	12.	82.
Fluorene	U	82.	ug/Kgdrywt	3	20	160	26.	82.
Phenanthrene		250	ug/Kgdrywt	3	20	160	15.	82.
Anthracene	J	31.	ug/Kgdrywt	3	20	160	9.8	82.
Fluoranthene		520	ug/Kgdrywt	3	20	160	15.	82.
Pyrene		550	ug/Kgdrywt	3	20	160	17.	82.
Benzo (a) anthracene		260	ug/Kgdrywt	3	20	160	16.	82.
Chrysene		350	ug/Kgdrywt	3	20	160	14.	82.
Benzo (b) Fluoranthene		520	ug/Kgdrywt	3	20	160	20.	82.
Benzo(k)fluoranthene		210	ug/Kgdrywt	3	20	160	25.	82.
Benzo(a)pyrene		330	ug/Kgdrywt	3	20	160	27.	82.
Indeno (1,2,3-cd) pyrene		280	ug/Kgdrywt	3	20	160	16.	82.
Dibenzo (a,h) anthracene	J	57.	ug/Kgdrywt	3	20	160	15.	82.
Benzo(g,h,i)perylene		220	ug/Kgdrywt	3	20	160	16.	82.
2-Methylnaphthalene-D10		52.7	%					
Fluorene-D10	*	17.2	%					
Pyrene-D10		63.7	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-14
Client ID: 2W-SD-SD87-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 28-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 30.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	19.	ug/Kgdrywt	1	20	38.	4.9	19.
2-Methylnaphthalene	U	19.	ug/Kgdrywt	1	20	38.	4.1	19.
1-Methylnaphthalene	U	19.	ug/Kgdrywt	1	20	38.	3.2	19.
Acenaphthylene	J	6.4	ug/Kgdrywt	1	20	38.	2.2	19.
Acenaphthene	J	5.7	ug/Kgdrywt	1	20	38.	2.8	19.
Fluorene	J	6.5	ug/Kgdrywt	1	20	38.	6.0	19.
Phenanthrene		160	ug/Kgdrywt	1	20	38.	3.4	19.
Anthracene	J	17.	ug/Kgdrywt	1	20	38.	2.2	19.
Fluoranthene	E	700	ug/Kgdrywt	1	20	38.	3.4	19.
Pyrene	E	1600	ug/Kgdrywt	1	20	38.	3.9	19.
Benzo (a) anthracene	E	610	ug/Kgdrywt	1	20	38.	3.6	19.
Chrysene	E	560	ug/Kgdrywt	1	20	38.	3.2	19.
Benzo (b) Fluoranthene	E	1200	ug/Kgdrywt	1	20	38.	4.5	19.
Benzo(k)fluoranthene		360	ug/Kgdrywt	1	20	38.	5.8	19.
Benzo(a)pyrene	E	700	ug/Kgdrywt	1	20	38.	6.2	19.
Indeno (1,2,3-cd) pyrene		420	ug/Kgdrywt	1	20	38.	3.6	19.
Dibenzo (a,h) anthracene		97.	ug/Kgdrywt	1	20	38.	3.4	19.
Benzo(g,h,i)perylene		360	ug/Kgdrywt	1	20	38.	3.8	19.
2-Methylnaphthalene-D10		40.2	%					
Fluorene-D10		32.4	%					
Pyrene-D10		80.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-14DL
Client ID: 2W-SD-SD87-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 30.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	190	ug/Kgdrywt	10	20	380	49.	190
2-Methylnaphthalene	U	190	ug/Kgdrywt	10	20	380	41.	190
1-Methylnaphthalene	U	190	ug/Kgdrywt	10	20	380	32.	190
Acenaphthylene	U	190	ug/Kgdrywt	10	20	380	22.	190
Acenaphthene	U	190	ug/Kgdrywt	10	20	380	28.	190
Fluorene	U	190	ug/Kgdrywt	10	20	380	60.	190
Phenanthrene	J	290	ug/Kgdrywt	10	20	380	34.	190
Anthracene	J	31.	ug/Kgdrywt	10	20	380	22.	190
Fluoranthene		1400	ug/Kgdrywt	10	20	380	34.	190
Pyrene		2200	ug/Kgdrywt	10	20	380	39.	190
Benzo (a) anthracene		1000	ug/Kgdrywt	10	20	380	36.	190
Chrysene		900	ug/Kgdrywt	10	20	380	32.	190
Benzo (b) Fluoranthene		1700	ug/Kgdrywt	10	20	380	45.	190
Benzo(k)fluoranthene		580	ug/Kgdrywt	10	20	380	58.	190
Benzo(a)pyrene		1200	ug/Kgdrywt	10	20	380	62.	190
Indeno (1,2,3-cd) pyrene		1000	ug/Kgdrywt	10	20	380	36.	190
Dibenzo (a,h) anthracene	J	190	ug/Kgdrywt	10	20	380	34.	190
Benzo(g,h,i)perylene		800	ug/Kgdrywt	10	20	380	38.	190
2-Methylnaphthalene-D10		68.7	%					
Fluorene-D10	*	0.00	%					
Pyrene-D10	*	129.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-12
Client ID: 2W-SD-SD88-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 28-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 25.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	24.	ug/Kgdrywt	1	20	48.	6.2	24.
2-Methylnaphthalene	U	24.	ug/Kgdrywt	1	20	48.	5.2	24.
1-Methylnaphthalene	U	24.	ug/Kgdrywt	1	20	48.	4.0	24.
Acenaphthylene	J	5.5	ug/Kgdrywt	1	20	48.	2.9	24.
Acenaphthene	J	18.	ug/Kgdrywt	1	20	48.	3.6	24.
Fluorene	J	24.	ug/Kgdrywt	1	20	48.	7.6	24.
Phenanthrene	E	790	ug/Kgdrywt	1	20	48.	4.3	24.
Anthracene		68.	ug/Kgdrywt	1	20	48.	2.9	24.
Fluoranthene	E	1400	ug/Kgdrywt	1	20	48.	4.3	24.
Pyrene	E	4000	ug/Kgdrywt	1	20	48.	5.0	24.
Benzo (a) anthracene	E	940	ug/Kgdrywt	1	20	48.	4.5	24.
Chrysene	E	1500	ug/Kgdrywt	1	20	48.	4.0	24.
Benzo (b) Fluoranthene	E	2400	ug/Kgdrywt	1	20	48.	5.7	24.
Benzo(k)fluoranthene	E	690	ug/Kgdrywt	1	20	48.	7.4	24.
Benzo(a)pyrene	E	1200	ug/Kgdrywt	1	20	48.	7.9	24.
Indeno (1,2,3-cd) pyrene	E	940	ug/Kgdrywt	1	20	48.	4.5	24.
Dibenzo (a,h) anthracene		200	ug/Kgdrywt	1	20	48.	4.3	24.
Benzo(g,h,i)perylene	E	790	ug/Kgdrywt	1	20	48.	4.8	24.
2-Methylnaphthalene-D10		37.7	%					
Fluorene-D10		25.8	%					
Pyrene-D10		79.9	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-12DL
Client ID: 2W-SD-SD88-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 25.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	240	ug/Kgdrywt	10	20	480	62.	240
2-Methylnaphthalene	U	240	ug/Kgdrywt	10	20	480	52.	240
1-Methylnaphthalene	U	240	ug/Kgdrywt	10	20	480	40.	240
Acenaphthylene	U	240	ug/Kgdrywt	10	20	480	29.	240
Acenaphthene	U	240	ug/Kgdrywt	10	20	480	36.	240
Fluorene	U	240	ug/Kgdrywt	10	20	480	76.	240
Phenanthrene		860	ug/Kgdrywt	10	20	480	43.	240
Anthracene	J	77.	ug/Kgdrywt	10	20	480	29.	240
Fluoranthene		2200	ug/Kgdrywt	10	20	480	43.	240
Pyrene		2900	ug/Kgdrywt	10	20	480	50.	240
Benzo (a) anthracene		900	ug/Kgdrywt	10	20	480	45.	240
Chrysene		1400	ug/Kgdrywt	10	20	480	40.	240
Benzo (b) Fluoranthene		2100	ug/Kgdrywt	10	20	480	57.	240
Benzo(k)fluoranthene		900	ug/Kgdrywt	10	20	480	74.	240
Benzo(a)pyrene		1400	ug/Kgdrywt	10	20	480	79.	240
Indeno (1,2,3-cd) pyrene		1300	ug/Kgdrywt	10	20	480	45.	240
Dibenzo (a,h) anthracene	J	140	ug/Kgdrywt	10	20	480	43.	240
Benzo(g,h,i)perylene		1100	ug/Kgdrywt	10	20	480	48.	240
2-Methylnaphthalene-D10	D	33.1	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	61.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-15
Client ID: 2W-SD-SD89-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 28-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 21.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	25.	ug/Kgdrywt	1	20	51.	6.6	25.
2-Methylnaphthalene	U	25.	ug/Kgdrywt	1	20	51.	5.6	25.
1-Methylnaphthalene	U	25.	ug/Kgdrywt	1	20	51.	4.3	25.
Acenaphthylene	J	8.4	ug/Kgdrywt	1	20	51.	3.0	25.
Acenaphthene	J	22.	ug/Kgdrywt	1	20	51.	3.8	25.
Fluorene	J	24.	ug/Kgdrywt	1	20	51.	8.1	25.
Phenanthrene	E	790	ug/Kgdrywt	1	20	51.	4.6	25.
Anthracene		78.	ug/Kgdrywt	1	20	51.	3.0	25.
Fluoranthene	E	2000	ug/Kgdrywt	1	20	51.	4.6	25.
Pyrene	E	6400	ug/Kgdrywt	1	20	51.	5.3	25.
Benzo (a) anthracene	E	1800	ug/Kgdrywt	1	20	51.	4.8	25.
Chrysene	E	2200	ug/Kgdrywt	1	20	51.	4.3	25.
Benzo (b) Fluoranthene	E	3600	ug/Kgdrywt	1	20	51.	6.1	25.
Benzo(k)fluoranthene	E	1200	ug/Kgdrywt	1	20	51.	7.9	25.
Benzo(a)pyrene	E	2000	ug/Kgdrywt	1	20	51.	8.4	25.
Indeno (1,2,3-cd) pyrene	E	1300	ug/Kgdrywt	1	20	51.	4.8	25.
Dibenzo (a,h) anthracene		300	ug/Kgdrywt	1	20	51.	4.6	25.
Benzo(g,h,i)perylene	E	1100	ug/Kgdrywt	1	20	51.	5.1	25.
2-Methylnaphthalene-D10		41.8	%					
Fluorene-D10		32.0	%					
Pyrene-D10		112.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-15DL
Client ID: 2W-SD-SD89-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 21.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	510	ug/Kgdrywt	20	20	1000	130	510
2-Methylnaphthalene	U	510	ug/Kgdrywt	20	20	1000	110	510
1-Methylnaphthalene	U	510	ug/Kgdrywt	20	20	1000	86.	510
Acenaphthylene	U	510	ug/Kgdrywt	20	20	1000	61.	510
Acenaphthene	U	510	ug/Kgdrywt	20	20	1000	76.	510
Fluorene	U	510	ug/Kgdrywt	20	20	1000	160	510
Phenanthrene	J	800	ug/Kgdrywt	20	20	1000	92.	510
Anthracene	J	83.	ug/Kgdrywt	20	20	1000	61.	510
Fluoranthene		3300	ug/Kgdrywt	20	20	1000	92.	510
Pyrene		3800	ug/Kgdrywt	20	20	1000	110	510
Benzo (a) anthracene		1600	ug/Kgdrywt	20	20	1000	97.	510
Chrysene		1800	ug/Kgdrywt	20	20	1000	86.	510
Benzo (b) Fluoranthene		3400	ug/Kgdrywt	20	20	1000	120	510
Benzo(k)fluoranthene		1200	ug/Kgdrywt	20	20	1000	160	510
Benzo(a)pyrene		2300	ug/Kgdrywt	20	20	1000	170	510
Indeno (1,2,3-cd) pyrene		1900	ug/Kgdrywt	20	20	1000	97.	510
Dibenzo (a,h) anthracene	J	330	ug/Kgdrywt	20	20	1000	92.	510
Benzo(g,h,i)perylene		1400	ug/Kgdrywt	20	20	1000	100	510
2-Methylnaphthalene-D10	D	29.4	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	62.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-4
Client ID: 2W-SD-SD90-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 27-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 21.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	28.	ug/Kgdrywt	1	20	55.	7.2	28.
2-Methylnaphthalene	U	28.	ug/Kgdrywt	1	20	55.	6.0	28.
1-Methylnaphthalene	U	28.	ug/Kgdrywt	1	20	55.	4.7	28.
Acenaphthylene	J	7.7	ug/Kgdrywt	1	20	55.	3.3	28.
Acenaphthene	J	15.	ug/Kgdrywt	1	20	55.	4.1	28.
Fluorene	J	18.	ug/Kgdrywt	1	20	55.	8.8	28.
Phenanthrene		510	ug/Kgdrywt	1	20	55.	5.0	28.
Anthracene	J	50.	ug/Kgdrywt	1	20	55.	3.3	28.
Fluoranthene	E	1000	ug/Kgdrywt	1	20	55.	5.0	28.
Pyrene	E	2700	ug/Kgdrywt	1	20	55.	5.8	28.
Benzo (a) anthracene	E	770	ug/Kgdrywt	1	20	55.	5.2	28.
Chrysene	E	1100	ug/Kgdrywt	1	20	55.	4.7	28.
Benzo (b) Fluoranthene	E	2000	ug/Kgdrywt	1	20	55.	6.6	28.
Benzo(k)fluoranthene		660	ug/Kgdrywt	1	20	55.	8.5	28.
Benzo(a)pyrene	E	1100	ug/Kgdrywt	1	20	55.	9.1	28.
Indeno (1,2,3-cd) pyrene	E	930	ug/Kgdrywt	1	20	55.	5.2	28.
Dibenzo (a,h) anthracene		190	ug/Kgdrywt	1	20	55.	5.0	28.
Benzo(g,h,i)perylene	E	790	ug/Kgdrywt	1	20	55.	5.5	28.
2-Methylnaphthalene-D10		39.9	%					
Fluorene-D10		36.6	%					
Pyrene-D10		89.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-4DL
Client ID: 2W-SD-SD90-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 02-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 21.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	250	ug/Kgdrywt	9	20	500	64.	250
2-Methylnaphthalene	U	250	ug/Kgdrywt	9	20	500	54.	250
1-Methylnaphthalene	U	250	ug/Kgdrywt	9	20	500	42.	250
Acenaphthylene	U	250	ug/Kgdrywt	9	20	500	30.	250
Acenaphthene	U	250	ug/Kgdrywt	9	20	500	37.	250
Fluorene	U	250	ug/Kgdrywt	9	20	500	79.	250
Phenanthrene		580	ug/Kgdrywt	9	20	500	44.	250
Anthracene	J	83.	ug/Kgdrywt	9	20	500	30.	250
Fluoranthene		1800	ug/Kgdrywt	9	20	500	44.	250
Pyrene		1900	ug/Kgdrywt	9	20	500	52.	250
Benzo (a) anthracene		800	ug/Kgdrywt	9	20	500	47.	250
Chrysene		1000	ug/Kgdrywt	9	20	500	42.	250
Benzo (b) Fluoranthene		2100	ug/Kgdrywt	9	20	500	59.	250
Benzo(k)fluoranthene		740	ug/Kgdrywt	9	20	500	77.	250
Benzo(a)pyrene		1200	ug/Kgdrywt	9	20	500	82.	250
Indeno (1,2,3-cd) pyrene		1100	ug/Kgdrywt	9	20	500	47.	250
Dibenzo (a,h) anthracene	J	190	ug/Kgdrywt	9	20	500	44.	250
Benzo(g,h,i)perylene		830	ug/Kgdrywt	9	20	500	50.	250
2-Methylnaphthalene-D10		44.5	%					
Fluorene-D10	*	0.00	%					
Pyrene-D10		66.7	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-5
Client ID: 2W-SD-SD94-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 27-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 37.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	25.	ug/Kgdrywt	1	20	50.	6.6	25.
2-Methylnaphthalene	U	25.	ug/Kgdrywt	1	20	50.	5.6	25.
1-Methylnaphthalene	J	4.4	ug/Kgdrywt	1	20	50.	4.3	25.
Acenaphthylene	J	11.	ug/Kgdrywt	1	20	50.	3.0	25.
Acenaphthene	J	32.	ug/Kgdrywt	1	20	50.	3.8	25.
Fluorene	J	41.	ug/Kgdrywt	1	20	50.	8.1	25.
Phenanthrene	E	1100	ug/Kgdrywt	1	20	50.	4.5	25.
Anthracene		120	ug/Kgdrywt	1	20	50.	3.0	25.
Fluoranthene	E	1800	ug/Kgdrywt	1	20	50.	4.5	25.
Pyrene	E	5800	ug/Kgdrywt	1	20	50.	5.3	25.
Benzo (a) anthracene	E	1700	ug/Kgdrywt	1	20	50.	4.8	25.
Chrysene	E	2500	ug/Kgdrywt	1	20	50.	4.3	25.
Benzo (b) Fluoranthene	E	4200	ug/Kgdrywt	1	20	50.	6.1	25.
Benzo(k)fluoranthene	E	1400	ug/Kgdrywt	1	20	50.	7.8	25.
Benzo(a)pyrene	E	2200	ug/Kgdrywt	1	20	50.	8.3	25.
Indeno (1,2,3-cd) pyrene	E	1700	ug/Kgdrywt	1	20	50.	4.8	25.
Dibenzo (a,h) anthracene		360	ug/Kgdrywt	1	20	50.	4.5	25.
Benzo(g,h,i)perylene	E	1400	ug/Kgdrywt	1	20	50.	5.0	25.
2-Methylnaphthalene-D10		56.6	%					
Fluorene-D10		47.0	%					
Pyrene-D10		127.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-5DL
Client ID: 2W-SD-SD94-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 37.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	380	ug/Kgdrywt	15	20	760	98.	380
2-Methylnaphthalene	U	380	ug/Kgdrywt	15	20	760	83.	380
1-Methylnaphthalene	U	380	ug/Kgdrywt	15	20	760	64.	380
Acenaphthylene	U	380	ug/Kgdrywt	15	20	760	45.	380
Acenaphthene	U	380	ug/Kgdrywt	15	20	760	57.	380
Fluorene	U	380	ug/Kgdrywt	15	20	760	120	380
Phenanthrene		1400	ug/Kgdrywt	15	20	760	68.	380
Anthracene	J	130	ug/Kgdrywt	15	20	760	45.	380
Fluoranthene		3800	ug/Kgdrywt	15	20	760	68.	380
Pyrene		4400	ug/Kgdrywt	15	20	760	80.	380
Benzo (a) anthracene		1700	ug/Kgdrywt	15	20	760	72.	380
Chrysene		2300	ug/Kgdrywt	15	20	760	64.	380
Benzo (b) Fluoranthene		4500	ug/Kgdrywt	15	20	760	91.	380
Benzo(k)fluoranthene		1500	ug/Kgdrywt	15	20	760	120	380
Benzo(a)pyrene		2600	ug/Kgdrywt	15	20	760	120	380
Indeno (1,2,3-cd) pyrene		2200	ug/Kgdrywt	15	20	760	72.	380
Dibenzo (a,h) anthracene	J	240	ug/Kgdrywt	15	20	760	68.	380
Benzo(g,h,i)perylene		1600	ug/Kgdrywt	15	20	760	76.	380
2-Methylnaphthalene-D10	D	54.2	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	82.7	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-10
Client ID: 2W-SD-SD95-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 28-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 53.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	5.4	ug/Kgdrywt	1	20	34.	4.4	17.
2-Methylnaphthalene	U	17.	ug/Kgdrywt	1	20	34.	3.7	17.
1-Methylnaphthalene	J	4.0	ug/Kgdrywt	1	20	34.	2.9	17.
Acenaphthylene	J	10.	ug/Kgdrywt	1	20	34.	2.0	17.
Acenaphthene	J	20.	ug/Kgdrywt	1	20	34.	2.5	17.
Fluorene	J	26.	ug/Kgdrywt	1	20	34.	5.4	17.
Phenanthrene	E	670	ug/Kgdrywt	1	20	34.	3.0	17.
Anthracene		73.	ug/Kgdrywt	1	20	34.	2.0	17.
Fluoranthene	E	1400	ug/Kgdrywt	1	20	34.	3.0	17.
Pyrene	E	2800	ug/Kgdrywt	1	20	34.	3.6	17.
Benzo (a) anthracene	E	880	ug/Kgdrywt	1	20	34.	3.2	17.
Chrysene	E	1300	ug/Kgdrywt	1	20	34.	2.9	17.
Benzo (b) Fluoranthene	E	2100	ug/Kgdrywt	1	20	34.	4.1	17.
Benzo(k)fluoranthene	E	600	ug/Kgdrywt	1	20	34.	5.2	17.
Benzo(a)pyrene	E	1100	ug/Kgdrywt	1	20	34.	5.6	17.
Indeno (1,2,3-cd) pyrene	E	940	ug/Kgdrywt	1	20	34.	3.2	17.
Dibenzo (a,h) anthracene		200	ug/Kgdrywt	1	20	34.	3.0	17.
Benzo(g,h,i)perylene	E	800	ug/Kgdrywt	1	20	34.	3.4	17.
2-Methylnaphthalene-D10		56.2	%					
Fluorene-D10		45.1	%					
Pyrene-D10		103.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-10DL
Client ID: 2W-SD-SD95-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 53.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	170	ug/Kgdrywt	10	20	340	44.	170
2-Methylnaphthalene	U	170	ug/Kgdrywt	10	20	340	37.	170
1-Methylnaphthalene	U	170	ug/Kgdrywt	10	20	340	29.	170
Acenaphthylene	U	170	ug/Kgdrywt	10	20	340	20.	170
Acenaphthene	U	170	ug/Kgdrywt	10	20	340	25.	170
Fluorene	U	170	ug/Kgdrywt	10	20	340	54.	170
Phenanthrene		750	ug/Kgdrywt	10	20	340	30.	170
Anthracene	J	100	ug/Kgdrywt	10	20	340	20.	170
Fluoranthene		1900	ug/Kgdrywt	10	20	340	30.	170
Pyrene		2300	ug/Kgdrywt	10	20	340	36.	170
Benzo (a) anthracene		930	ug/Kgdrywt	10	20	340	32.	170
Chrysene		1200	ug/Kgdrywt	10	20	340	29.	170
Benzo (b) Fluoranthene		2300	ug/Kgdrywt	10	20	340	41.	170
Benzo(k)fluoranthene		800	ug/Kgdrywt	10	20	340	52.	170
Benzo(a)pyrene		1300	ug/Kgdrywt	10	20	340	56.	170
Indeno (1,2,3-cd) pyrene		960	ug/Kgdrywt	10	20	340	32.	170
Dibenzo (a,h) anthracene	J	110	ug/Kgdrywt	10	20	340	30.	170
Benzo(g,h,i)perylene		680	ug/Kgdrywt	10	20	340	34.	170
2-Methylnaphthalene-D10	D	54.4	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	91.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-7
Client ID: 2W-SD-SD96-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 27-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 46.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	6.8	ug/Kgdrywt	1	20	43.	5.6	21.
2-Methylnaphthalene	U	21.	ug/Kgdrywt	1	20	43.	4.7	21.
1-Methylnaphthalene	J	4.7	ug/Kgdrywt	1	20	43.	3.6	21.
Acenaphthylene	J	13.	ug/Kgdrywt	1	20	43.	2.6	21.
Acenaphthene	J	34.	ug/Kgdrywt	1	20	43.	3.2	21.
Fluorene		45.	ug/Kgdrywt	1	20	43.	6.9	21.
Phenanthrene	E	1100	ug/Kgdrywt	1	20	43.	3.9	21.
Anthracene		130	ug/Kgdrywt	1	20	43.	2.6	21.
Fluoranthene	E	1800	ug/Kgdrywt	1	20	43.	3.9	21.
Pyrene	E	5800	ug/Kgdrywt	1	20	43.	4.5	21.
Benzo (a) anthracene	E	2000	ug/Kgdrywt	1	20	43.	4.1	21.
Chrysene	E	2900	ug/Kgdrywt	1	20	43.	3.6	21.
Benzo (b) Fluoranthene	E	4400	ug/Kgdrywt	1	20	43.	5.2	21.
Benzo(k)fluoranthene	E	1800	ug/Kgdrywt	1	20	43.	6.7	21.
Benzo(a)pyrene	E	2600	ug/Kgdrywt	1	20	43.	7.1	21.
Indeno (1,2,3-cd) pyrene	E	2300	ug/Kgdrywt	1	20	43.	4.1	21.
Dibenzo (a,h) anthracene		480	ug/Kgdrywt	1	20	43.	3.9	21.
Benzo(g,h,i)perylene	E	2000	ug/Kgdrywt	1	20	43.	4.3	21.
2-Methylnaphthalene-D10		56.1	%					
Fluorene-D10		52.4	%					
Pyrene-D10	*	129.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-7DL
Client ID: 2W-SD-SD96-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 46.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	430	ug/Kgdrywt	20	20	860	110	430
2-Methylnaphthalene	U	430	ug/Kgdrywt	20	20	860	94.	430
1-Methylnaphthalene	U	430	ug/Kgdrywt	20	20	860	73.	430
Acenaphthylene	U	430	ug/Kgdrywt	20	20	860	52.	430
Acenaphthene	U	430	ug/Kgdrywt	20	20	860	64.	430
Fluorene	U	430	ug/Kgdrywt	20	20	860	140	430
Phenanthrene		1600	ug/Kgdrywt	20	20	860	77.	430
Anthracene	J	230	ug/Kgdrywt	20	20	860	52.	430
Fluoranthene		4800	ug/Kgdrywt	20	20	860	77.	430
Pyrene		5400	ug/Kgdrywt	20	20	860	90.	430
Benzo (a) anthracene		2300	ug/Kgdrywt	20	20	860	82.	430
Chrysene		2900	ug/Kgdrywt	20	20	860	73.	430
Benzo (b) Fluoranthene		5700	ug/Kgdrywt	20	20	860	100	430
Benzo(k)fluoranthene		1800	ug/Kgdrywt	20	20	860	130	430
Benzo(a)pyrene		3300	ug/Kgdrywt	20	20	860	140	430
Indeno (1,2,3-cd) pyrene		3200	ug/Kgdrywt	20	20	860	82.	430
Dibenzo (a,h) anthracene	J	590	ug/Kgdrywt	20	20	860	77.	430
Benzo(g,h,i)perylene		2400	ug/Kgdrywt	20	20	860	86.	430
2-Methylnaphthalene-D10	D	56.2	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	90.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-8
Client ID: 2W-SD-SD97-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 28-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 51.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	19.	ug/Kgdrywt	1	20	38.	4.9	19.
2-Methylnaphthalene	U	19.	ug/Kgdrywt	1	20	38.	4.2	19.
1-Methylnaphthalene	J	3.4	ug/Kgdrywt	1	20	38.	3.2	19.
Acenaphthylene	J	6.6	ug/Kgdrywt	1	20	38.	2.3	19.
Acenaphthene	J	28.	ug/Kgdrywt	1	20	38.	2.8	19.
Fluorene	J	33.	ug/Kgdrywt	1	20	38.	6.0	19.
Phenanthrene	E	970	ug/Kgdrywt	1	20	38.	3.4	19.
Anthracene		89.	ug/Kgdrywt	1	20	38.	2.3	19.
Fluoranthene	E	1800	ug/Kgdrywt	1	20	38.	3.4	19.
Pyrene	E	4500	ug/Kgdrywt	1	20	38.	4.0	19.
Benzo (a) anthracene	E	1300	ug/Kgdrywt	1	20	38.	3.6	19.
Chrysene	E	2000	ug/Kgdrywt	1	20	38.	3.2	19.
Benzo (b) Fluoranthene	E	3300	ug/Kgdrywt	1	20	38.	4.5	19.
Benzo(k)fluoranthene	E	1300	ug/Kgdrywt	1	20	38.	5.8	19.
Benzo(a)pyrene	E	1700	ug/Kgdrywt	1	20	38.	6.2	19.
Indeno (1,2,3-cd) pyrene	E	1200	ug/Kgdrywt	1	20	38.	3.6	19.
Dibenzo (a,h) anthracene		260	ug/Kgdrywt	1	20	38.	3.4	19.
Benzo(g,h,i)perylene	E	1000	ug/Kgdrywt	1	20	38.	3.8	19.
2-Methylnaphthalene-D10		53.2	%					
Fluorene-D10		45.2	%					
Pyrene-D10		117.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-8DL
Client ID: 2W-SD-SD97-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 51.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	280	ug/Kgdrywt	15	20	570	74.	280
2-Methylnaphthalene	U	280	ug/Kgdrywt	15	20	570	62.	280
1-Methylnaphthalene	U	280	ug/Kgdrywt	15	20	570	48.	280
Acenaphthylene	U	280	ug/Kgdrywt	15	20	570	34.	280
Acenaphthene	U	280	ug/Kgdrywt	15	20	570	42.	280
Fluorene	U	280	ug/Kgdrywt	15	20	570	91.	280
Phenanthrene		1200	ug/Kgdrywt	15	20	570	51.	280
Anthracene	J	150	ug/Kgdrywt	15	20	570	34.	280
Fluoranthene		3200	ug/Kgdrywt	15	20	570	51.	280
Pyrene		3600	ug/Kgdrywt	15	20	570	60.	280
Benzo (a) anthracene		1300	ug/Kgdrywt	15	20	570	54.	280
Chrysene		1900	ug/Kgdrywt	15	20	570	48.	280
Benzo (b) Fluoranthene		3700	ug/Kgdrywt	15	20	570	68.	280
Benzo(k)fluoranthene		1300	ug/Kgdrywt	15	20	570	88.	280
Benzo(a)pyrene		2000	ug/Kgdrywt	15	20	570	94.	280
Indeno (1,2,3-cd) pyrene		1700	ug/Kgdrywt	15	20	570	54.	280
Dibenzo (a,h) anthracene	J	280	ug/Kgdrywt	15	20	570	51.	280
Benzo(g,h,i)perylene		1200	ug/Kgdrywt	15	20	570	57.	280
2-Methylnaphthalene-D10	D	56.7	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	84.1	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-9
Client ID: 2W-SD-SD98-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 28-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 56.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	17.	ug/Kgdrywt	1	20	34.	4.4	17.
2-Methylnaphthalene	U	17.	ug/Kgdrywt	1	20	34.	3.7	17.
1-Methylnaphthalene	U	17.	ug/Kgdrywt	1	20	34.	2.9	17.
Acenaphthylene	J	12.	ug/Kgdrywt	1	20	34.	2.0	17.
Acenaphthene	J	19.	ug/Kgdrywt	1	20	34.	2.5	17.
Fluorene	J	34.	ug/Kgdrywt	1	20	34.	5.4	17.
Phenanthrene	E	990	ug/Kgdrywt	1	20	34.	3.0	17.
Anthracene		130	ug/Kgdrywt	1	20	34.	2.0	17.
Fluoranthene	E	1800	ug/Kgdrywt	1	20	34.	3.0	17.
Pyrene	E	4900	ug/Kgdrywt	1	20	34.	3.6	17.
Benzo (a) anthracene	E	1600	ug/Kgdrywt	1	20	34.	3.2	17.
Chrysene	E	2300	ug/Kgdrywt	1	20	34.	2.9	17.
Benzo (b) Fluoranthene	E	3200	ug/Kgdrywt	1	20	34.	4.1	17.
Benzo(k)fluoranthene	E	1300	ug/Kgdrywt	1	20	34.	5.2	17.
Benzo(a)pyrene	E	1800	ug/Kgdrywt	1	20	34.	5.6	17.
Indeno (1,2,3-cd) pyrene	E	1300	ug/Kgdrywt	1	20	34.	3.2	17.
Dibenzo (a,h) anthracene		280	ug/Kgdrywt	1	20	34.	3.0	17.
Benzo(g,h,i)perylene	E	1000	ug/Kgdrywt	1	20	34.	3.4	17.
2-Methylnaphthalene-D10		66.5	%					
Fluorene-D10		54.1	%					
Pyrene-D10	*	134.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-9DL
Client ID: 2W-SD-SD98-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 56.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	340	ug/Kgdrywt	20	20	680	88.	340
2-Methylnaphthalene	U	340	ug/Kgdrywt	20	20	680	74.	340
1-Methylnaphthalene	U	340	ug/Kgdrywt	20	20	680	58.	340
Acenaphthylene	U	340	ug/Kgdrywt	20	20	680	41.	340
Acenaphthene	U	340	ug/Kgdrywt	20	20	680	51.	340
Fluorene	U	340	ug/Kgdrywt	20	20	680	110	340
Phenanthrene		1200	ug/Kgdrywt	20	20	680	61.	340
Anthracene	J	220	ug/Kgdrywt	20	20	680	41.	340
Fluoranthene		3600	ug/Kgdrywt	20	20	680	61.	340
Pyrene		4200	ug/Kgdrywt	20	20	680	71.	340
Benzo (a) anthracene		1700	ug/Kgdrywt	20	20	680	64.	340
Chrysene		2100	ug/Kgdrywt	20	20	680	58.	340
Benzo (b) Fluoranthene		3800	ug/Kgdrywt	20	20	680	81.	340
Benzo(k)fluoranthene		1400	ug/Kgdrywt	20	20	680	100	340
Benzo(a)pyrene		2200	ug/Kgdrywt	20	20	680	110	340
Indeno (1,2,3-cd) pyrene		1600	ug/Kgdrywt	20	20	680	64.	340
Dibenzo (a,h) anthracene	J	180	ug/Kgdrywt	20	20	680	61.	340
Benzo(g,h,i)perylene		1100	ug/Kgdrywt	20	20	680	68.	340
2-Methylnaphthalene-D10	D	55.2	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	91.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-2
Client ID: 2W-SD-SD99-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 27-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 54.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	10.	ug/Kgdrywt	1	20	36.	4.7	18.
2-Methylnaphthalene	U	18.	ug/Kgdrywt	1	20	36.	4.0	18.
1-Methylnaphthalene	J	7.3	ug/Kgdrywt	1	20	36.	3.1	18.
Acenaphthylene	J	23.	ug/Kgdrywt	1	20	36.	2.2	18.
Acenaphthene		59.	ug/Kgdrywt	1	20	36.	2.7	18.
Fluorene		85.	ug/Kgdrywt	1	20	36.	5.8	18.
Phenanthrene	E	1600	ug/Kgdrywt	1	20	36.	3.3	18.
Anthracene		210	ug/Kgdrywt	1	20	36.	2.2	18.
Fluoranthene	E	2700	ug/Kgdrywt	1	20	36.	3.3	18.
Pyrene	E	7300	ug/Kgdrywt	1	20	36.	3.8	18.
Benzo (a) anthracene	E	2800	ug/Kgdrywt	1	20	36.	3.4	18.
Chrysene	E	4200	ug/Kgdrywt	1	20	36.	3.1	18.
Benzo (b) Fluoranthene	E	6900	ug/Kgdrywt	1	20	36.	4.4	18.
Benzo(k)fluoranthene	E	2200	ug/Kgdrywt	1	20	36.	5.6	18.
Benzo(a)pyrene	E	3700	ug/Kgdrywt	1	20	36.	6.0	18.
Indeno (1,2,3-cd) pyrene	E	3700	ug/Kgdrywt	1	20	36.	3.4	18.
Dibenzo (a,h) anthracene	E	740	ug/Kgdrywt	1	20	36.	3.3	18.
Benzo(g,h,i)perylene	E	3100	ug/Kgdrywt	1	20	36.	3.6	18.
2-Methylnaphthalene-D10		58.1	%					
Fluorene-D10		57.7	%					
Pyrene-D10	*	135.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-2DL
Client ID: 2W-SD-SD99-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 02-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 54.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	540	ug/Kgdrywt	30	20	1100	140	540
2-Methylnaphthalene	U	540	ug/Kgdrywt	30	20	1100	120	540
1-Methylnaphthalene	U	540	ug/Kgdrywt	30	20	1100	93.	540
Acenaphthylene	U	540	ug/Kgdrywt	30	20	1100	65.	540
Acenaphthene	U	540	ug/Kgdrywt	30	20	1100	82.	540
Fluorene	U	540	ug/Kgdrywt	30	20	1100	170	540
Phenanthrene		3100	ug/Kgdrywt	30	20	1100	98.	540
Anthracene	J	230	ug/Kgdrywt	30	20	1100	65.	540
Fluoranthene		8600	ug/Kgdrywt	30	20	1100	98.	540
Pyrene		8100	ug/Kgdrywt	30	20	1100	110	540
Benzo (a) anthracene		3200	ug/Kgdrywt	30	20	1100	100	540
Chrysene		5000	ug/Kgdrywt	30	20	1100	93.	540
Benzo (b) Fluoranthene		9000	ug/Kgdrywt	30	20	1100	130	540
Benzo(k)fluoranthene		3400	ug/Kgdrywt	30	20	1100	170	540
Benzo(a)pyrene		5100	ug/Kgdrywt	30	20	1100	180	540
Indeno (1,2,3-cd) pyrene		4200	ug/Kgdrywt	30	20	1100	100	540
Dibenzo (a,h) anthracene	J	720	ug/Kgdrywt	30	20	1100	98.	540
Benzo(g,h,i)perylene		3000	ug/Kgdrywt	30	20	1100	110	540
2-Methylnaphthalene-D10	D	71.4	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	95.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-1
Client ID: FD040611-01
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 27-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 36.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	27.	ug/Kgdrywt	1	20	54.	7.0	27.
2-Methylnaphthalene	U	27.	ug/Kgdrywt	1	20	54.	5.9	27.
1-Methylnaphthalene	U	27.	ug/Kgdrywt	1	20	54.	4.6	27.
Acenaphthylene	J	8.2	ug/Kgdrywt	1	20	54.	3.2	27.
Acenaphthene	J	28.	ug/Kgdrywt	1	20	54.	4.0	27.
Fluorene	J	28.	ug/Kgdrywt	1	20	54.	8.6	27.
Phenanthrene		400	ug/Kgdrywt	1	20	54.	4.9	27.
Anthracene		71.	ug/Kgdrywt	1	20	54.	3.2	27.
Fluoranthene		660	ug/Kgdrywt	1	20	54.	4.9	27.
Pyrene	E	1200	ug/Kgdrywt	1	20	54.	5.7	27.
Benzo (a) anthracene		370	ug/Kgdrywt	1	20	54.	5.1	27.
Chrysene		470	ug/Kgdrywt	1	20	54.	4.6	27.
Benzo (b) Fluoranthene		600	ug/Kgdrywt	1	20	54.	6.5	27.
Benzo(k)fluoranthene		230	ug/Kgdrywt	1	20	54.	8.4	27.
Benzo(a)pyrene		370	ug/Kgdrywt	1	20	54.	8.9	27.
Indeno (1,2,3-cd) pyrene		300	ug/Kgdrywt	1	20	54.	5.1	27.
Dibenzo (a,h) anthracene		67.	ug/Kgdrywt	1	20	54.	4.9	27.
Benzo(g,h,i)perylene		240	ug/Kgdrywt	1	20	54.	5.4	27.
2-Methylnaphthalene-D10		52.2	%					
Fluorene-D10		47.6	%					
Pyrene-D10		97.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-1DL
Client ID: FD040611-01
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 02-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 36.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	81.	ug/Kgdrywt	3	20	160	21.	81.
2-Methylnaphthalene	U	81.	ug/Kgdrywt	3	20	160	18.	81.
1-Methylnaphthalene	U	81.	ug/Kgdrywt	3	20	160	14.	81.
Acenaphthylene	U	81.	ug/Kgdrywt	3	20	160	9.7	81.
Acenaphthene	J	28.	ug/Kgdrywt	3	20	160	12.	81.
Fluorene	J	29.	ug/Kgdrywt	3	20	160	26.	81.
Phenanthrene		410	ug/Kgdrywt	3	20	160	14.	81.
Anthracene	J	68.	ug/Kgdrywt	3	20	160	9.7	81.
Fluoranthene		760	ug/Kgdrywt	3	20	160	14.	81.
Pyrene		780	ug/Kgdrywt	3	20	160	17.	81.
Benzo (a) anthracene		340	ug/Kgdrywt	3	20	160	15.	81.
Chrysene		380	ug/Kgdrywt	3	20	160	14.	81.
Benzo (b) Fluoranthene		660	ug/Kgdrywt	3	20	160	19.	81.
Benzo(k)fluoranthene		220	ug/Kgdrywt	3	20	160	25.	81.
Benzo(a)pyrene		380	ug/Kgdrywt	3	20	160	27.	81.
Indeno (1,2,3-cd) pyrene		270	ug/Kgdrywt	3	20	160	15.	81.
Dibenzo (a,h) anthracene	J	55.	ug/Kgdrywt	3	20	160	14.	81.
Benzo(g,h,i)perylene		200	ug/Kgdrywt	3	20	160	16.	81.
2-Methylnaphthalene-D10		48.1	%					
Fluorene-D10		20.3	%					
Pyrene-D10		71.7	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-18
Client ID: FD040711-01
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 28-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 51.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	5.7	ug/Kgdrywt	1	20	35.	4.6	18.
2-Methylnaphthalene	U	18.	ug/Kgdrywt	1	20	35.	3.9	18.
1-Methylnaphthalene	J	4.1	ug/Kgdrywt	1	20	35.	3.0	18.
Acenaphthylene	J	9.3	ug/Kgdrywt	1	20	35.	2.1	18.
Acenaphthene	J	31.	ug/Kgdrywt	1	20	35.	2.6	18.
Fluorene		39.	ug/Kgdrywt	1	20	35.	5.6	18.
Phenanthrene	E	1100	ug/Kgdrywt	1	20	35.	3.2	18.
Anthracene		120	ug/Kgdrywt	1	20	35.	2.1	18.
Fluoranthene	E	2100	ug/Kgdrywt	1	20	35.	3.2	18.
Pyrene	E	5800	ug/Kgdrywt	1	20	35.	3.7	18.
Benzo (a) anthracene	E	1800	ug/Kgdrywt	1	20	35.	3.4	18.
Chrysene	E	2600	ug/Kgdrywt	1	20	35.	3.0	18.
Benzo (b) Fluoranthene	E	4700	ug/Kgdrywt	1	20	35.	4.2	18.
Benzo(k)fluoranthene	E	1500	ug/Kgdrywt	1	20	35.	5.5	18.
Benzo(a)pyrene	E	2400	ug/Kgdrywt	1	20	35.	5.8	18.
Indeno (1,2,3-cd) pyrene	E	1800	ug/Kgdrywt	1	20	35.	3.4	18.
Dibenzo (a,h) anthracene		380	ug/Kgdrywt	1	20	35.	3.2	18.
Benzo(g,h,i)perylene	E	1600	ug/Kgdrywt	1	20	35.	3.5	18.
2-Methylnaphthalene-D10		62.5	%					
Fluorene-D10		47.0	%					
Pyrene-D10	*	130.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-18DL
Client ID: FD040711-01
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 03-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 51.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	440	ug/Kgdrywt	25	20	880	110	440
2-Methylnaphthalene	U	440	ug/Kgdrywt	25	20	880	97.	440
1-Methylnaphthalene	U	440	ug/Kgdrywt	25	20	880	75.	440
Acenaphthylene	U	440	ug/Kgdrywt	25	20	880	53.	440
Acenaphthene	U	440	ug/Kgdrywt	25	20	880	66.	440
Fluorene	U	440	ug/Kgdrywt	25	20	880	140	440
Phenanthrene		1400	ug/Kgdrywt	25	20	880	79.	440
Anthracene	J	140	ug/Kgdrywt	25	20	880	53.	440
Fluoranthene		4000	ug/Kgdrywt	25	20	880	79.	440
Pyrene		5200	ug/Kgdrywt	25	20	880	93.	440
Benzo (a) anthracene		1700	ug/Kgdrywt	25	20	880	84.	440
Chrysene		2600	ug/Kgdrywt	25	20	880	75.	440
Benzo (b) Fluoranthene		4000	ug/Kgdrywt	25	20	880	100	440
Benzo(k)fluoranthene		1800	ug/Kgdrywt	25	20	880	140	440
Benzo(a)pyrene		2800	ug/Kgdrywt	25	20	880	140	440
Indeno (1,2,3-cd) pyrene		2800	ug/Kgdrywt	25	20	880	84.	440
Dibenzo (a,h) anthracene	J	280	ug/Kgdrywt	25	20	880	79.	440
Benzo(g,h,i)perylene		2300	ug/Kgdrywt	25	20	880	88.	440
2-Methylnaphthalene-D10	D	50.0	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	101.	%					

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APPENDIX C

REGIONAL WORKSHEETS

EPA-NE
Data Validation Worksheet Cover Page - Page 1

Site Name NSB New London
Reference No. _____

REGION I ORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name Katahdin
Case/Project No. 02625
SDG No. WE55-3
No. of Samples/Matrix 19/Sediment

SOW/Method No. 8270C SIM
Sampling Date(s) April 6&7, 2011
Shipping Date(s) _____
Date Rec'd by lab April 8, 2011

Traffic Report Sample Nos. _____

Trip Blank No. _____
Equipment Blank No. _____
Bottle Blank No. _____
Field Duplicate Nos. FD040611-01 and FD040711-01

PES Nos. _____

The Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision _____ was used to evaluate the data and/or approved modifications to the EPA-NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attach modified criteria from EPA approved QAPjP or amendment to QAPjP).

A Tier II or Tier III evaluation was used to validate the data (circle one). If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc. that received partial Tier III validation

_____

The data were evaluated based upon the following parameters:

- Overall Evaluation of Data
- Data Completeness (CSF Audit - Tier I)
- Preservation & Technical Holding Times
- GC/MS & GC/ECD Instrument Performance Check
- Initial & Continuing Calibrations
- Blanks
- Surrogate Compounds
- Internal Standards
- Matrix Spike/Matrix Spike Duplicate
- Field Duplicates
- Sensitivity Check
- PE Samples/Accuracy Check
- Target Compound Identification
- Compound Quantitation and Reported Quantitation Limits
- TICs
- Semivolatile and Pesticide/PCB Cleanup
- System Performance

Region I Definitions and Qualifiers:

A - Acceptable Data
J - Numerical value associated with compound is an estimated quantity.
R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.
U - Compound not detected at that numerical sample quantitation limit.
UJ - The sample quantitation limit is an estimated quantity.
TB, BB, EB - Compound detected in aqueous trip blank, aqueous bottle blank, or aqueous equipment blank associated with soil/sediment samples.

Validator's Name Ann Cognetti Company Name TetraTech Phone Number (412) 921-8862

Date Validation Started 5-19-11 Date Validation Completed 5-23-11

EPA-NE
Data Validation Worksheet Cover Page - Page 2

Check if all criteria are met and no hard copy worksheet provided. Indicate NA if worksheet is not applicable to analytical method. Note: there is no standard worksheet for System Performance, however, the validator must document all system performance issues in the Data Validation Memorandum.

VOA/SV worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	✓
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	✓
VOA/SV-II	GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)	✓
VOA/SV-III	INITIAL CALIBRATION	✓
VOA/SV-IV	CONTINUING CALIBRATION	✓
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	✓
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	
VOA-VI	VOA SURROGATE SPIKE RECOVERIES	
SV-VI	SV SURROGATE SPIKE RECOVERIES	✓
VOA/SV-VII	INTERNAL STANDARD PERFORMANCE	✓
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	✓
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	✓
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	
VOA/SV-Pest/PCB-XII	TARGET COMPOUND IDENTIFICATION	✓
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	✓
VOA/SV-XIV	TENTATIVELY IDENTIFIED COMPOUNDS	
VOA/SV-XV	SEMIVOLATILE CLEANUP	
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	✓

Pest/PCB worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	
Pest/PCB-IIA	GC/ECD INSTRUMENT PERFORMANCE CHECK-RESOLUTION	
Pest/PCB-IIB	GC/ECD INSTRUMENT PERFORMANCE CHECK-RETENTION TIMES	
Pest/PCB-IIC	GC/ECD INSTRUMENT PERFORMANCE CHECK-ACCURACY CHECK OF INITIAL CALIBRATION	
Pest/PCB-IID	GC/ECD INSTRUMENT PERFORMANCE CHECK-PESTICIDE DEGRADATION	
Pest/PCB-III	INITIAL CALIBRATION	
Pest/PCB-IV	CONTINUING CALIBRATION	
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	
Pest/PCB-VI	SURROGATE COMPOUNDS: SPIKE RECOVERIES AND RETENTION TIME SHIFT	
Pest/PCB-VII	PESTICIDE CLEANUP	
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	
Pest/PCB-XII	COMPOUND IDENTIFICATION	
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	

I certify that all criteria were met for the worksheets checked above.

Signature: Ann Cognetti Name: Ann Cognetti

Date: May 23, 2011

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

VOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		
		NA			

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: Ann Cognetti

Date: May 23, 2011

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

SEMIVOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		
	See data validation report				

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: Ann Cognetti

Date: May 23, 2011

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB

COMPLETE SDG FILE (CSF) AUDIT

Organic Fractions: PAH

Missing Information	Date Lab Contacted	Date Received

Validator: Ann Cognetti Date: 5/23/11

EPA-NE - Data Validation
VOA/SV - Pest/PCB-I

12/96

Sampler: Terry Rojahn Company: TetraTech Contacted: Yes (No) Date: _____

I. PRESERVATION AND HOLDING TIMES - Circle sample numbers with exceeded technical holding times or omitted preservation.
List all required preservation codes and circle omitted preservation codes.
Circle all exceeded technical holding times.
Identify extraction technique after "# of Days"/(*Extraction Code).

Sample No. (TR No.)	Matrix	Pres. Code	Date Sampled	VOA			BNA					PEST/PCB				
				Date Analyzed	# of Days from Samp. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action

Preservation Code:
1. Cool @ 4°C (± 2°)
2. Preserve with HCl to at least pH 2
3. Protect from light
4. Freeze
5. Room Temperature (Avoid excessive heat)

(*Extraction Code:)
L/L - Liquid/Liquid
SON - Sonication
SEP - Separatory Funnel
SOX - Soxhlet
SPE - Solid Phase Extraction

Action Code:
J - Estimate (J) Detected Values
UJ - Estimate (UJ) Non-Detected Values
R - Reject (R) Non-Detected Values

Validator: Ann Cognetti Date: May 23, 2011

II. GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)

List all Instrument Performance Checks that are outside method QC tuning acceptance criteria.

Volatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action

Comments: NA

Semivolatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action

Comments: See data validation report.

If tuning compounds and criteria are different from those specified in CLP SOW OLM03.1, then the validator should include a copy of the method-specific tuning criteria with this worksheet.

Validator: Ann Cognetti

Date: 5-23-11

EPA-NE - Data Validation Worksheet
VOA/SV-III

III. INITIAL CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Instrument	Parameter	Matrix	Compound	% RSD	$\overline{RRF}$	Samples Affected	Action

Comments:

See data validation report

Validator: Ann Cognetti

Date: May 23, 2011

EPA-NE - Data Validation Worksheet

VOA/SV-IV

IV. CONTINUING CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Date of CCAL	Instrument	Parameter	Matrix	Compound	%D	RRF	Samples Affected	Action

Comments:

See data validation report

Validator: Ann Cognetti

Date: May 23, 2011

EPA-NE - Data Validation Worksheet

VOA/SV - Pest/PCB-V-A

V. BLANK ANALYSIS

List the blank contamination below.

Concentration Level:_____

Sampler: Terry Rojahn Company: Tetra Tech

Contacted: Yes (No) Date:_____

1. Laboratory: Method, Storage and Instrument Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)
		see data validation report				

2. Field: Equipment (Rinsate), Trip and Bottle Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)
		NA				

Validator: Lynn Cognetta Date: May 23, 2011

3. **Blank Actions** - List the maximum concentrations of blank compounds.

Compound	Type of Blank	Date Blank Sampled/Originated	Max. Conc. (units)	Action Level (units)	Sample QL	Samples Affected	Action

Comments: See data validation report

Validator: Ann Cognetti

Date: May 23, 2011

EPA-NE - Data Validation Worksheet
VOA-VI

VI. VOA SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Volatile Method QC Acceptance Criteria				
	Toluene-d_8	BFB	DCE-d_4	Other:	
OLM03.2	Water 88-110 Soil 84-138	Water 86-115 Soil 59-113	Water 76-114 Soil 70-121		
OLC02.1	NA	80-120	NA		
Other:					
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**
	NA				

Validator: Ann Cognetti

Date: May 23, 2011

VI. SV SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Base/Neutral Method QC Acceptance Criteria					
	NBZ-d_5	2-FBP	TPH-d_{14}	1,2-DCB-d_4*	Other:	
OLM03.2	Water Soil 35-114 23-120	Water Soil 43-116 30-115	Water Soil 33-141 18-137	Water Soil 16-110 20-130		
OLC02.1	40-110	30-110	20-140	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

See data validation report

Method	Acid Method QC Acceptance Criteria					
	Phenol-d_5	2-FP	2,4,6-TBP	2-CP-d_4*	Other:	
OLM03.2	Water Soil 10-110 24-113	Water Soil 21-110 25-121	Water Soil 10-123 19-122	Water Soil 33-110 20-130		
OLC02.1	15-115	15-110	15-130	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

* Advisory Surrogates - OLM03.2

Validator: Lynn Cognetta

Date: May 23, 2011

EPA-NE - Data Validation Worksheet
VOA/SV-VII

VII. INTERNAL STANDARD PERFORMANCE

List the internal standards that are outside the area count and retention time method QC acceptance criteria.
IS Area Count method QC acceptance criteria: _____
IS Retention Time method QC acceptance criteria: _____

Sample Number (TR#)	Date and Time Analyzed	Instrument	Parameter	IS Outside Area Count and/or RT Criteria	__IS Area	RT Shift	Acceptable Range (IS area or RT shift)	Action
	See Data Validation Report							

Validator: Ann Cognetti

Date: May 23, 2011

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-VIII

VIII. MATRIX SPIKE/MATRIX SPIKE DUPLICATE - List all MS/MSD analytes that are outside method QC acceptance criteria.

Use a separate worksheet for each MS/MSD pair.

Sample # _____ Matrix _____ Concentration Level _____

Parameter	Compound	MS %Rec	MSD %Rec	RPD	Method QC Limits		Concentration			% RSD	Action
					% Rec	RPD	Unspiked Sample	MS	MSD		
	See data validation report										

Validator: John Cognetti

Date: May 23, 2011

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-IX

IX. FIELD DUPLICATE PRECISION - List all field duplicate analytes that are outside criteria.

Use a separate worksheet for each field duplicate pair.

Sample Number _____ Duplicate Sample Number _____ Matrix _____

Parameter	Compound	Sample Conc.	Sample QL		Duplicate Conc.	Duplicate QL		RPD	QC Acceptance Criteria RPD or NA*	Action
			SQL	2xSQL		SQL	2xSQL			

* For instances where one duplicate result is ND (or reported less than the sample QL).

Does the MS/MSD data indicate acceptable laboratory precision? Y N

Comments: See data validation report

Sampler Name: _____ Contractor Name: _____ Date Contacted: _____

Reason for Contact and resolution obtained: _____

Validator: Ann Cognetti Date: May 23, 2011

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-X

X. SENSITIVITY CHECK (Method Detection Limit Study)

List all compounds, surrogates, and internal standards that are outside the MDL criteria.

- Has an appropriate MDL study been submitted with seven replicates for each compound and matrix of interest? **Y N**
- Date of Preparation/Analysis: _____ Within 1 year? **Y N**
- Instrument I.D.: _____ Same as samples? **Y N**
- Column I.D.: _____ Same as samples? **Y N**

Matrix	Compound	MDL > QL	Method QC Limits < 80% or > 120%	IS Outside Area Count and/or RT Criteria	RSD > 20%	Samples Affected	Action

If an MDL study has not been submitted, use only the LFB results to evaluate data.

(Laboratory Fortified Blank) - List all LFB compounds, surrogates and internal standards that are outside criteria.

- Has an appropriate and complete LFB been submitted at the proper frequency? **Y N**
- Does it contain all target compounds at the method-required QLs? **Y N**
- Was the LFB spiked with a standard from a source (vendor) independent of the calibration standard? **Y N**

Matrix	Compound	Method QC Limits < 60% or > 140% Other:	IS Outside Area Count and/or RT Criteria	Samples Affected	Action

Validator: Ann Cognetta

Date: May 23, 2011

XI. ACCURACY CHECK (Performance Evaluation Results) - List all analytes that are outside criteria.

SDG No: _____ CASE: _____

Are more than one-half of the PES analytes within criteria for each parameter. **Y N**

PE Sample Number	Ampule Number	Parameter	Type of PES	Matrix	Analyte	Conc.	Region I EPA PES Scores*	Non-EPA PES Scores**	Samples Affected	Action

* For Region I PESs indicate the Region I PES Score Report Result: Action High; Action Low; TCL MISS; TCL CONTAMINANT; TIC HIT; TIC MISS; TIC CONTAMINANT

** For Non-EPA PESs indicate the Non-EPA PES Score: PES COMPOUND MISS; PES COMPOUND CONTAMINANT; PES COMPOUND HIT (% Recovery Limits)

Validator: Ann Cognetti Date: May 23, 2011

XII. TARGET COMPOUND IDENTIFICATION - List the analytes that are outside the acceptance criteria.

Sample Number	Compound	___MS Ions	____RRT	Action

Validator: Ann Cognetti

Date: May 23, 2011

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XIII

XIII. SAMPLE QUANTITATION

Recalculate, from the raw data, the concentrations for one positive detect and one reported sample quantitation limit for a non-detect in a diluted sample or soil sample per fraction. (Note: Although Section XIII, C.1.a, requires that one calculation for each fraction in each sample be performed, the validator is only required to reproduce an example, for each fraction, of one positive detect and one sample quantitation limit calculation on this worksheet.)

Do all soil/sediment samples have % solids greater than 30%? No Y N
If no, list sample numbers See dv report

Fraction		Calculation
VOA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
BNA		See data validation
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
Pesticide/PCB		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		

Validator: Ann Cognetti

Date: May 23, 2011

XIV. TENTATIVELY IDENTIFIED COMPOUNDS (TICs)

List the 5 TICs having the highest concentration for each sample parameter.

Sample Number	Parameter	Compound	RRT	Est. Conc.	Action

Validator: Ann Cognetta

Date: May 23, 2011

EPA-NE - Data Validation Worksheet
VOA/SV-XV

XV. SEMIVOLATILE CLEANUP - List all analytes that are outside method cleanup QC criteria.

Cleanup Procedure	Instrument # or Lot #	Date/Time GPC Calibrated or Check Solution Analyzed	Compound	% Rec	QC Limits	Samples Affected	Action

Did the GPC column meet; resolution requirements? Y or N
peak shape requirements? Y or N
retention time shift requirements? Y or N

Was the GPC calibration, Silica Gel cleanup checked at the method required frequency with correct compounds and concentrations? Y or N

Were all compounds less than QL for the GPC/Silica Gel/Acid-Partition blank? Y or N

Did the blank surrogate recoveries and IS area counts and RTs (if added) meet method QC acceptance criteria? Y or N

Comments: _____

Validator: Ann Cognetti Date: May 23, 2011

APPENDIX D

SUPPORT DOCUMENTATION

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO-WE55 NEW LONDON, CT
SDG: WE55-3
SE1779

Sample Receipt

The following samples were received on April 8, 2011 and were logged in under Katahdin Analytical Services work order number SE1779 for a hardcopy due date of April 26, 2011.

KATAHDIN Sample No.	TTNUS Sample Identification
SE1779-1	FD040611-01
SE1779-2	2W-SD-SD99-0001
SE1779-3	2W-SD-SD92-0001
SE1779-4	2W-SD-SD90-0001
SE1779-5	2W-SD-SD94-0001
SE1779-6	2W-SD-SD93-0001
SE1779-7	2W-SD-SD96-0001
SE1779-8	2W-SD-SD97-0001
SE1779-9	2W-SD-SD98-0001
SE1779-10	2W-SD-SD95-0001
SE1779-11	2W-SD-SD85-0001
SE1779-12	2W-SD-SD88-0001
SE1779-13	2W-SD-SD86-0001
SE1779-14	2W-SD-SD87-0001
SE1779-15	2W-SD-SD89-0001
SE1779-16	2W-SD-SD91-0001
SE1779-17	2W-SD-SD100-0001
SE1779-18	FD040711-01
SE1779-19	2W-SD-SD104-0001
SE1779-20	2W-SD-SD102-0001
SE1779-21	2W-SD-SD103-0001
SE1779-22	2W-SD-SD105-0001
SE1779-23	2W-SD-SD109-0001
SE1779-24	2W-SD-SD110-0001
SE1779-25	2W-SD-SD106-0001
SE1779-26	2W-SD-SD108-0001
SE1779-27	2W-SD-SD101-0001
SE1779-28	2W-SD-SD107-0001
SE1779-29	2W-SD-SD111-0001
SE1779-30	2W-SD-SD113-0001
SE1779-31	2W-SD-SD112-0001

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

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

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

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

Organics Analysis

The samples of SDG WE55-3 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, and III 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, for the specific methods listed below or on the Report of Analysis.

8270C SIM Analysis

Sample SE1779-31 was used for the matrix spike (MS) and matrix spike duplicate (MSD), as requested by the client.

Surrogate recoveries for all samples and QC were evaluated using laboratory established acceptance limits.

All soil samples and associated QC, with the exception of SE1779-24RE and WG90858-1 and 2, were subjected to the GPC sample clean-up process.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are nominal acceptance limits. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long the LCS is acceptable. Nominal limits are used for the LCS/LCSD until enough data is collected to generate statistically based acceptance limits.

Samples SE1779-1, 1DL, 2DL, 4, 4DL, 5, 5DL, 7, 7DL, 8, 8DL, 9, 9DL, 10, 10DL, 12, 12DL, 14, 14DL, 15, 15DL, 17, 17DL, 18, 18DL, 21, 21DL, 22, 22DL, 24DL, 24RE, 26, 26DL, 28, 28DL, 31 and 31DL were manually integrated for the analytes benzo(b)fluoranthene, benzo(k)fluoranthene, the internal standard chrysene-d12 and/or indeno(1,2,3-cd)pyrene. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Due to a laboratory error, sample SE1779-24 was not spiked with surrogates. Consequently, there are no recoveries for all surrogates. The concentrations of all of the target analytes were outside of the calibration range, and the sample was reanalyzed at a dilution. This sample was reextracted nine days out of hold time and analyzed. The concentrations of the reextracted sample are much lower than the concentrations from the initial extraction. The results from all three analyses are reported.

Samples SE1779-2, 7, 9, 17 and 18 had high recoveries for the surrogate pyrene-d12, which were outside the laboratory established acceptance limits. Since these samples required further analyses at dilutions, the samples were not reanalyzed undiluted.

Samples SE1779-4DL, 22DL, 26DL and 31DL had low or no recoveries for the surrogate fluorene-d10, which were outside the laboratory established acceptance limits. Since the undiluted analyses of these samples had acceptable surrogate recoveries, no further action was taken.

The undiluted analyses of all samples had low responses for the internal standards chyrsene-d12 and/or pyrene-d12 that resulted in %D's which were outside the DoD QSM 4.1 acceptance limit of -50% to +100% of the responses of the internal standards of the midpoint initial calibration standard. All of the samples were reanalyzed at a dilution and many of the diluted samples also had low responses for one or two internal standards. Therefore, the samples were not reanalyzed undiluted.

The independent check standard (file N0337), associated with the initial calibration on 05/02/11 had a low concentration for the target analyte indeno(1,2,3-cd)pyrene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The Form 7 for the CV (file N0297) had high responses for four target analytes and two surrogates. The CV (file N0355) had a low response for benzo(k)fluoranthene and a high response for indeno(1,2,3-cd)pyrene. These responses resulted in %D's that were greater than the acceptance limit of 20% from DoD QSM Version 4.1.

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

Wet Chemistry Analysis

The samples of SDG WE55-3 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Annual Book of ASTM Standards", Method D2216-98 "Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass".

All analyses were performed within analytical holding times. All quality control criteria were met.

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4093 | PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112602625	NSB NEW LONDON	A. BERNHARDT	412 921 8433	KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
Tony Rojahn		T. ROJAHN	412 9218857	600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX AB#	8747 4934 2822	SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G): G	PRESERVATIVE USED: 4°C	TYPE OF ANALYSIS: PAHs	COMMENTS
		SE 1779										
4/06	0000	FD 040611-01	QC	0	4"	SD	G	1	1			
4/07	0830	2W-SD-SD99-0001	SD_{99}	0	4	SD	G	1	1			
4/07	0835	2W-SD-SD92-0001	SD_{92}	0	4	SD	G	1	*1			
4/07	0840	2W-SD-SD90-0001	SD_{90}	0	4	SD	G	1	1			
4/07	0845	2W-SD-SD94-0001	SD_{94}	0	4	SD	G	1	1			
4/07	0850	2W-SD-SD93-0001	SD_{93}	0	4	SD	G	1	*1			
4/07	0855	2W-SD-SD96-0001	SD_{96}	0	4	SD	G	1	1			
4/07	1043	2W-SD-SD97-0001	SD_{97}	0	4	SD	G	1	1			
4/07	1050	2W-SD-SD98-0001	SD_{98}	0	4	SD	G	1	1			
4/07	1055	2W-SD-SD95-0001	SD_{95}	0	4	SD	G	1	1			
4/07	1100	2W-SD-SD85-0001	SD_{85}	0	4	SD	G	1	*1			
4/07	1105	2W-SD-SD88-0001	SD_{88}	0	4	SD	G	1	1			
4/07	1110	2W-SD-SD86-0001	SD_{86}	0	4	SD	G	1	*1			

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY: Tony Rojahn	4-07-11	1700	1. RECEIVED BY: FED EX	4-07-11	1700
2. RELINQUISHED BY:	DATE	TIME	2. RECEIVED BY:	4-8-11	1070
3. RELINQUISHED BY:	DATE	TIME	3. RECEIVED BY:	DATE	TIME

COMMENTS: *FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

00010

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4094 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Terry Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB # 8747 4934 2822		CITY, STATE SCARBOROUGH, ME 04074 (TR)

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE1779

DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT INCHES)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS PAHs								COMMENTS
									G	4°C									
4/07	1115	2W-SD-SD87-0001	SD87	0	4"	SD	G	1	1										
4/07	1120	2W-SD-SD89-0001	SD89	0	4	SD	G	1	1										
4/07	1125	2W-SD-SD91-0001	SD91	0	4	SD	G	1	*1										
4/07	1130	2W-SD-SD100-0001	SD100	0	4	SD	G	1	1										
4/07	0000	FD040711-01	QC	0	4	SD	G	1	1										

1. RELINQUISHED BY Terry Rojahn	DATE 4-07-11	TIME 1700	1. RECEIVED BY FED EX	DATE 4-07-11	TIME 1700
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-8-11	TIME 10:00
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4092 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433
SAMPLERS (SIGNATURE) Tony Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857
		CARRIER/WAYBILL NUMBER FED EX AB # 8747 4934 2822	
STANDARD TAT ☒ RUSH TAT ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day			

LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
ADDRESS: 600 TECHNOLOGY WAY
CITY, STATE: SCARBOROUGH, ME 04074

DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G): G	PRESERVATIVE USED: 4°C	TYPE OF ANALYSIS: PAHs	COMMENTS
4/06	1425	SE1778/9 2W-SD-SD104-0001	SD104	0	4"	SD	G	1			*1	
4/06	1440	2W-SD-SD102-0001	SD102	0	4	SD	G	1			*1	
4/06	1455	2W-SD-SD103-0001	SD103	0	4	SD	G	1			1	
4/06	1510	2W-SD-SD105-0001	SD105	0	4	SD	G	1			1	
4/06	1520	2W-SD-SD109-0001	SD109	0	4	SD	G	1			*1	
4/06	1530	2W-SD-SD110-0001	SD110	0	4	SD	G	1			1	
4/06	1540	2W-SD-SD106-0001	SD106	0	4	SD	G	1			*1	
4/06	1550	2W-SD-SD108-0001	SD108	0	4	SD	G	1			1	
4/06	1605	2W-SD-SD101-0001	SD101	0	4	SD	G	1			*1	
4/06	1610	2W-SD-SD107-0001	SD107	0	4	SD	G	1			1	
4/06	1615	2W-SD-SD111-0001	SD111	0	4	SD	G	1			*1	
4/06	1620	2W-SD-SD113-0001	SD113	0	4	SD	G	1			*1	
4/06	1630	2W-SD-SD112-0001	SD112	0	4	SD	G	2			2	RUN MS/MSD

1. RELINQUISHED BY Tony Rojahn	DATE 4-07-11	TIME 1700	1. RECEIVED BY FED EX	DATE 4-07-11	TIME 1700
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-8-11	TIME 10:00
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

Sample Receipt Condition Report

Client: Petra Tech	KAS PM: KAP	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: Fed-Ex
KAS Work Order#: SE1778 / SE1779	KIMS Review By:	Received By: GN
SDG #:	Cooler: 1 of 3	Date/Time Rec.: 4-8-11 / 10:00

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 1.4
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

Sample Receipt Condition Report

Client: Tetra Tech	KAS PM: KAP	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: Fed-Ex
KAS Work Order#: SE1778/SE1779	KIMS Review By:	Received By: GN
SDG #:	Cooler: 2 of 3	Date/Time Rec.: 4-8-11/10:00

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?			✓		in cooler 1
3. Chain of Custody signed by client?			✓		
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.		✓			Temp (°C): 2.2
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

0000008

Sample Receipt Condition Report

Client: Tetra Tech	KAS PM: KAP	Sampled By: Client
Project:	KIMS Entry By: GW	Delivered By: FedEx
KAS Work Order#: SE177	KIMS Review By:	Received By: GW
SDG #:	Cooler: 3 of 3	Date/Time Rec.: 4-8-11/10:00

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?			-		in cooler 1
3. Chain of Custody signed by client?			✓		
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 3.7
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

0000009

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	%	2W-SD-SD110-0001	SE1779-24	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	%	FD040711-01	SE1779-18	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD158-0001	SE1685-10	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	UG/KG	2W-SD-SD99-0001	SE1779-2DL	NM	04/07/2011	04/14/2011	05/02/2011	7	18	25
SIM	UG/KG	FD-040411-1	SE1685-16	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	UG/KG	FD-040511-01	SE1778-10	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	FD-040511-02	SE1778-11	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	FD040611-01	SE1779-1	NM	04/06/2011	04/14/2011	04/27/2011	8	13	21
SIM	UG/KG	FD040611-01	SE1779-1DL	NM	04/06/2011	04/14/2011	05/02/2011	8	18	26
SIM	UG/KG	FD040711-01	SE1779-18	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD146-0001	SE1778-2DL	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	2W-SD-SD159-0001	SE1685-9DL	NM	04/04/2011	04/13/2011	04/25/2011	9	12	21
SIM	UG/KG	2W-SD-SD98-0001	SE1779-9	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD154-0001	SE1685-7DL	NM	04/04/2011	04/25/2011	04/25/2011	21	0	21
SIM	UG/KG	2W-SD-SD154-0001	SE1685-7	NM	04/04/2011	04/23/2011	04/23/2011	19	0	19
SIM	UG/KG	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	UG/KG	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/13/2011	04/21/2011	9	8	17
SIM	UG/KG	2W-SD-SD147-0001	SE1685-1DL	NM	04/04/2011	04/13/2011	04/23/2011	9	10	19

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/KG	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/13/2011	04/22/2011	9	9	18
SIM	UG/KG	FD040711-01	SE1779-18DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD94-0001	SE1779-5DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD161-0001	SE1685-8	NM	04/04/2011	04/22/2011	04/22/2011	18	0	18
SIM	UG/KG	2W-SD-SD87-0001	SE1779-14	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD87-0001	SE1779-14DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD88-0001	SE1779-12	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD88-0001	SE1779-12DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD89-0001	SE1779-15	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD99-0001	SE1779-2	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	UG/KG	2W-SD-SD90-0001	SE1779-4DL	NM	04/07/2011	04/14/2011	05/02/2011	7	18	25
SIM	UG/KG	2W-SD-SD98-0001	SE1779-9DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD95-0001	SE1779-10	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD95-0001	SE1779-10DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD96-0001	SE1779-7	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	UG/KG	2W-SD-SD96-0001	SE1779-7DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD97-0001	SE1779-8	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD97-0001	SE1779-8DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/KG	2W-SD-SD94-0001	SE1779-5	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	UG/KG	2W-SD-SD89-0001	SE1779-15DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26
SIM	UG/KG	2W-SD-SD107-0001	SE1779-28	NM	04/06/2011	04/14/2011	05/05/2011	8	21	29
SIM	UG/KG	2W-SD-SD117-0001	SE1778-22	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	UG/KG	2W-SD-SD116-0001	SE1778-20	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	UG/KG	2W-SD-SD112-0001	SE1779-31DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD112-0001	SE1779-31	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	UG/KG	2W-SD-SD110-0001	SE1779-24DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD108-0001	SE1779-26DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD100-0001	SE1779-17	NM	04/07/2011	04/14/2011	04/28/2011	7	14	21
SIM	UG/KG	2W-SD-SD118-0001	SE1685-22	NM	04/05/2011	04/13/2011	04/22/2011	8	9	17
SIM	UG/KG	2W-SD-SD107-0001	SE1779-28DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD110-0001	SE1779-24RE	NM	04/06/2011	04/29/2011	05/02/2011	23	3	26
SIM	UG/KG	2W-SD-SD105-0001	SE1779-22DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD105-0001	SE1779-22	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	UG/KG	2W-SD-SD103-0001	SE1779-21DL	NM	04/06/2011	04/14/2011	05/03/2011	8	19	27
SIM	UG/KG	2W-SD-SD103-0001	SE1779-21	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	UG/KG	2W-SD-SD100-0001	SE1779-17DL	NM	04/07/2011	04/14/2011	05/03/2011	7	19	26

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/KG	2W-SD-SD146-0001	SE1778-2	NM	04/05/2011	04/14/2011	04/23/2011	9	9	18
SIM	UG/KG	2W-SD-SD90-0001	SE1779-4	NM	04/07/2011	04/14/2011	04/27/2011	7	13	20
SIM	UG/KG	2W-SD-SD108-0001	SE1779-26	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	UG/KG	2W-SD-SD138-0001	SE1685-17DL	NM	04/05/2011	04/13/2011	04/25/2011	8	12	20
SIM	UG/KG	2W-SD-SD144-0001	SE1778-3DL	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	2W-SD-SD144-0001	SE1778-3	NM	04/05/2011	04/14/2011	04/23/2011	9	9	18
SIM	UG/KG	2W-SD-SD142-0001	SE1778-18DL	NM	04/06/2011	04/14/2011	04/27/2011	8	13	21
SIM	UG/KG	2W-SD-SD110-0001	SE1779-24	NM	04/06/2011	04/14/2011	04/28/2011	8	14	22
SIM	UG/KG	2W-SD-SD140-0001	SE1778-4	NM	04/05/2011	04/14/2011	04/25/2011	9	11	20
SIM	UG/KG	2W-SD-SD119-0001	SE1685-23	NM	04/05/2011	04/13/2011	04/22/2011	8	9	17
SIM	UG/KG	2W-SD-SD138-0001	SE1685-17	NM	04/05/2011	04/13/2011	04/23/2011	8	10	18
SIM	UG/KG	2W-SD-SD136-0001	SE1685-28	NM	04/05/2011	04/13/2011	04/22/2011	8	9	17
SIM	UG/KG	2W-SD-SD135-0001	SE1778-16DL	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	UG/KG	2W-SD-SD135-0001	SE1778-16	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	UG/KG	2W-SD-SD130-0001	SE1778-9	NM	04/05/2011	04/14/2011	04/25/2011	9	11	20
SIM	UG/KG	2W-SD-SD127-0001	SE1778-7	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	2W-SD-SD120-0001	SE1685-24	NM	04/05/2011	04/14/2011	04/22/2011	9	8	17
SIM	UG/KG	2W-SD-SD126-0001	SE1685-25	NM	04/05/2011	04/14/2011	04/22/2011	9	8	17

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/KG	2W-SD-SD123-0001	SE1778-13	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
SIM	UG/KG	2W-SD-SD122-0001	SE1778-8	NM	04/05/2011	04/14/2011	04/26/2011	9	12	21
SIM	UG/KG	2W-SD-SD134-0001	SE1685-29	NM	04/05/2011	04/14/2011	04/22/2011	9	8	17
SIM	UG/KG	2W-SD-SD121-0001	SE1685-26	NM	04/05/2011	04/14/2011	04/25/2011	9	11	20
SIM	UG/KG	2W-SD-SD142-0001	SE1778-18	NM	04/06/2011	04/14/2011	04/26/2011	8	12	20
PCB	%	FD-040411-1	SE1685-16	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	%	2W-SD-SD144-0001	SE1778-3	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	%	2W-SD-SD146-0001	SE1778-2	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	%	2W-SD-SD147-0001	SE1685-1	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	%	2W-SD-SD149-0001	SE1685-3	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	%	2W-SD-SD152-0001	SE1685-4	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	%	2W-SD-SD154-0001	SE1685-7	NM	04/04/2011	04/14/2011	04/19/2011	10	5	15
PCB	%	2W-SD-SD158-0001	SE1685-10	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	%	2W-SD-SD161-0001	SE1685-8	NM	04/04/2011	04/14/2011	04/20/2011	10	6	16
PCB	%	FD-040511-01	SE1778-10	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17
PCB	%	2W-SD-SD130-0001	SE1778-9	NM	04/05/2011	04/15/2011	04/20/2011	10	5	15
PCB	%	2W-SD-SD142-0001	SE1778-18	NM	04/06/2011	04/15/2011	04/22/2011	9	7	16
PCB	%	FD-040511-02	SE1778-11	NM	04/05/2011	04/15/2011	04/22/2011	10	7	17

NSB NEW LONDON

SOIL DATA

WE55-3

FRACTION	CHEMICAL	2W-SD-SD112-0001	UNITS	FD040611-01	RPD	D
PAH	ACENAPHTHENE	11 J	UG/KG	28 J	**87.18**	17.00
PAH	ACENAPHTHYLENE	6.1 J	UG/KG	8.2 J	29.37	2.10
PAH	ANTHRACENE	30 J	UG/KG	71	**81.19**	41.00
PAH	BENZO(A)ANTHRACENE	280	UG/KG	370	27.69	90.00
PAH	BENZO(A)PYRENE	330	UG/KG	370	11.43	40.00
PAH	BENZO(B)FLUORANTHENE	650 J	UG/KG	600	8.00	50.00
PAH	BENZO(G,H,I)PERYLENE	200 J	UG/KG	240 J	18.18	40.00
PAH	BENZO(K)FLUORANTHENE	210 J	UG/KG	230	9.09	20.00
PAH	CHRYSENE	430 J	UG/KG	470	8.89	40.00
PAH	DIBENZO(A,H)ANTHRACENE	55 J	UG/KG	67 J	19.67	12.00
PAH	FLUORANTHENE	510	UG/KG	660	25.64	150.00
PAH	FLUORENE	13 J	UG/KG	28 J	**73.17**	15.00
PAH	INDENO(1,2,3-CD)PYRENE	240 J	UG/KG	300 J	22.22	60.00
PAH	PHENANTHRENE	260	UG/KG	400	42.42	140.00

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NSB NEW LONDON
SOIL DATA
WE55-3

FRACTION	CHEMICAL	2W-SD-SD112-0001DL	UNITS	FD040611-01DL	RPD	D
PAH	PYRENE	550	UG/KG	780	34.59	230.00

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NSB NEW LONDON
SOIL DATA
WE55-3

FRACTION	CHEMICAL	2W-SD-SD96-0001	UNITS	FD040711-01	RPD	D
PAH	1-METHYLNAPHTHALENE	4.7 J	UG/KG	4.1 J	13.64	0.60
PAH	ACENAPHTHENE	34 J	UG/KG	31 J	9.23	3.00
PAH	ACENAPHTHYLENE	13 J	UG/KG	9.3 J	33.18	3.70
PAH	ANTHRACENE	130 J	UG/KG	120 J	8.00	10.00
PAH	DIBENZO(A,H)ANTHRACENE	480 J	UG/KG	380 J	23.26	100.00
PAH	FLUORENE	45 J	UG/KG	39 J	14.29	6.00
PAH	NAPHTHALENE	6.8 J	UG/KG	5.7 J	17.60	1.10

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NSB NEW LONDON
SOIL DATA
WE55-3

FRACTION	CHEMICAL	2W-SD-SD96-0001DL	UNITS	FD040711-01DL	RPD	D
PAH	BENZO(A)ANTHRACENE	2300	UG/KG	1700	30.00	600.00
PAH	BENZO(A)PYRENE	3300	UG/KG	2800 J	16.39	500.00
PAH	BENZO(B)FLUORANTHENE	5700	UG/KG	4000 J	35.05	1700.00
PAH	BENZO(G,H,I)PERYLENE	2400 J	UG/KG	2300 J	4.26	100.00
PAH	BENZO(K)FLUORANTHENE	1800	UG/KG	1800 J	0.00	0.00
PAH	CHRYSENE	2900	UG/KG	2600 J	10.91	300.00
PAH	FLUORANTHENE	4800	UG/KG	4000	18.18	800.00
PAH	INDENO(1,2,3-CD)PYRENE	3200 J	UG/KG	2800 J	13.33	400.00
PAH	PHENANTHRENE	1600	UG/KG	1400	13.33	200.00
PAH	PYRENE	5400	UG/KG	5200	3.77	200.00

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID: ND022 DFTPP Injection Date: 04/27/11

Instrument ID: GCMS-N DFTPP Injection Time: 1020

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	41.0
68	Less than 2.0% of mass 69	0.5 (1.1)1
69	Less than 100.0% of mass 198	42.3
70	Less than 2.0% of mass 69	0.2 (0.6)1
127	40.0 - 60.0% of mass 198	56.2
197	Less than 1.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.5
275	10.0 - 30.0% of mass 198	22.2
365	1.0 - 100.0% of mass 198	2.8
441	0.0 - 100.0% of mass 443	11.1 (68.2)2
442	40.0 - 100.0% of mass 198	77.3
443	17.0 - 23.0% of mass 442	16.3 (21.1)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD8.00N0427	N0267	04/27/11	1124
02		SSTD5.00N0427	N0268	04/27/11	1205
03		SSTD2.00N0427	N0269	04/27/11	1247
04		SSTD1.00N0427	N0270	04/27/11	1328
05		SSTD0.50N0427	N0271	04/27/11	1409
06		SSTD0.20N0427	N0272	04/27/11	1450
07		SIM IND CHECK	N0273	04/27/11	1531
08	WG90178-BLANK	WG90178-1	N0274	04/27/11	1613
09	WG90178-LCS	WG90178-2	N0275	04/27/11	1654
10	WG90178-LCSD	WG90178-3	N0276	04/27/11	1735
11	FD040611-01	SE1779-1	N0278	04/27/11	1858
12	2W-SD-SD99-0001	SE1779-2	N0279	04/27/11	1939
13	2W-SD-SD90-0001	SE1779-4	N0280	04/27/11	2021
14	2W-SD-SD94-0001	SE1779-5	N0281	04/27/11	2102
15	2W-SD-SD96-0001	SE1779-7	N0282	04/27/11	2144
16					
17					
18					
19					
20					

Katahdin Analytical Services A0000053

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Instrument ID: GCMS-N Calibration Date(s): 04/27/11 04/27/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 1124 1450

LAB FILE ID: RF0.2: N0272 RF0.5: N0271 RF1: N0270
RF2: N0269 RF5: N0268 RF8: N0267

								COEFFICENTS			%RSD	MAX %RSD
COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	A0	A1	A2	OR R^2	OR R^2
1-Methylnaphthalene	0.717	0.672	0.619	0.578	0.528	0.484	AVRG		0.59976324		14.594	15.000
Naphthalene	0.969	1.027	0.973	0.891	0.786	0.721	AVRG		0.89455167		13.338	15.000
2-Methylnaphthalene	40153	85891	109020	182380	454030	626760	2ORDR	-0.1226858	1.34480121	0.12163870	0.99959	0.99000
Acenaphthylene	1.813	1.896	1.926	1.732	1.623	1.532	AVRG		1.75345750		8.851	15.000
Acenaphthene	1.163	1.163	1.179	1.061	1.027	0.994	AVRG		1.09787632		7.298	15.000
Fluorene	1.380	1.373	1.364	1.242	1.213	1.131	AVRG		1.28361382		8.079	15.000
Phenanthrene	1.119	1.205	1.197	1.052	1.013	0.955	AVRG		1.08998546		9.282	15.000
Anthracene	1.136	1.217	1.235	1.079	1.069	1.009	AVRG		1.12412374		7.916	15.000
Fluoranthene	1.083	1.115	1.123	1.008	1.029	0.953	AVRG		1.05173525		6.317	15.000
Pyrene	33237	83671	109230	232680	648280	806000	LINR	-0.2197102	0.81916551		0.99780	0.99000
Benzo(a)anthracene	0.859	1.004	1.026	0.943	0.959	0.938	AVRG		0.95480243		6.138	15.000
Chrysene	31072	75712	90685	187540	520190	655240	LINR	-0.2588826	1.01655161		0.99819	0.99000
Benzo(b)fluoranthene	0.947	1.118	1.196	1.076	1.071	1.057	AVRG		1.07766403		7.568	15.000
Benzo(k)fluoranthene	1.644	1.532	1.485	1.307	1.295	1.239	AVRG		1.41678046		11.293	15.000
Benzo(a)pyrene	0.994	1.078	1.108	0.999	1.039	1.022	AVRG		1.03994544		4.347	15.000
Indeno(1,2,3-cd)pyrene	13595	26822	36367	89768	289930	423020	LINR	0.15930412	1.24011988		0.99663	0.99000
Dibenzo(a,h)anthracene	0.665	0.751	0.766	0.704	0.752	0.812	AVRG		0.74180833		6.887	15.000
Benzo(g,h,i)perylene	0.950	0.936	0.926	0.822	0.834	0.878	AVRG		0.89096425		6.117	15.000
2-Methylnaphthalene-D10	1.199	1.139	1.221	1.018	0.982	0.976	AVRG		1.08919579		10.165	15.000
Fluorene-D10	23126	63934	81853	150010	381220	514840	LINR	-0.2510654	1.06942662		0.99771	0.99000
Pyrene-D10	1.020	0.973	0.947	0.853	0.811	0.787	AVRG		0.89862397		10.506	15.000

FORM VI SV

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG90178-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID: N0274 Lab Sample ID: WG90178-1

Instrument ID: GCMS-N Date Extracted: 04/14/11

Matrix: (soil/water) SOIL Date Analyzed: 04/27/11

Level: (low/med) LOW Time Analyzed: 1613

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG90178-LCS	WG90178-2	N0275	04/27/11	1654
02	WG90178-LCSD	WG90178-3	N0276	04/27/11	1735
03	FD040611-01	SE1779-1	N0278	04/27/11	1858
04	2W-SD-SD99-0001	SE1779-2	N0279	04/27/11	1939
05	2W-SD-SD90-0001	SE1779-4	N0280	04/27/11	2021
06	2W-SD-SD94-0001	SE1779-5	N0281	04/27/11	2102
07	2W-SD-SD96-0001	SE1779-7	N0282	04/27/11	2144
08	2W-SD-SD105-0001	SE1779-22	N0298	04/28/11	1331
09	2W-SD-SD112-0001	SE1779-31	N0299	04/28/11	1412
10	2W-SD-SD112-0001MS	WG90178-4	N0300	04/28/11	1454
11	2W-SD-SD112-0001MSD	WG90178-5	N0301	04/28/11	1535
12	2W-SD-SD97-0001	SE1779-8	N0302	04/28/11	1617
13	2W-SD-SD98-0001	SE1779-9	N0303	04/28/11	1658
14	2W-SD-SD95-0001	SE1779-10	N0304	04/28/11	1740
15	2W-SD-SD88-0001	SE1779-12	N0305	04/28/11	1821
16	2W-SD-SD87-0001	SE1779-14	N0306	04/28/11	1903
17	2W-SD-SD89-0001	SE1779-15	N0307	04/28/11	1944
18	2W-SD-SD100-0001	SE1779-17	N0308	04/28/11	2026
19	FD040711-01	SE1779-18	N0309	04/28/11	2108
20	2W-SD-SD103-0001	SE1779-21	N0310	04/28/11	2149
21	2W-SD-SD110-0001	SE1779-24	N0311	04/28/11	2230
22	2W-SD-SD108-0001	SE1779-26	N0312	04/28/11	2312
23	FD040611-01	SE1779-1DL	N0347	05/02/11	2225
24	2W-SD-SD99-0001	SE1779-2DL	N0348	05/02/11	2307
25	2W-SD-SD90-0001	SE1779-4DL	N0349	05/02/11	2348
26	2W-SD-SD94-0001	SE1779-5DL	N0350	05/03/11	0029
27	2W-SD-SD96-0001	SE1779-7DL	N0351	05/03/11	0110
28	2W-SD-SD97-0001	SE1779-8DL	N0352	05/03/11	0152
29	2W-SD-SD98-0001	SE1779-9DL	N0353	05/03/11	0233
30	2W-SD-SD95-0001	SE1779-10DL	N0354	05/03/11	0314

COMMENTS:

Katahdin Analytical Services A0000050

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

| WG90178-BLANK |

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID: N0274 Lab Sample ID: WG90178-1

Instrument ID: GCMS-N Date Extracted: 04/14/11

Matrix: (soil/water) SOIL Date Analyzed: 04/27/11

Level: (low/med) LOW Time Analyzed: 1613

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	2W-SD-SD88-0001	SE1779-12DL	N0360	05/03/11	1328
02	2W-SD-SD87-0001	SE1779-14DL	N0361	05/03/11	1409
03	2W-SD-SD89-0001	SE1779-15DL	N0362	05/03/11	1450
04	2W-SD-SD100-0001	SE1779-17DL	N0363	05/03/11	1531
05	FD040711-01	SE1779-18DL	N0364	05/03/11	1612
06	2W-SD-SD103-0001	SE1779-21DL	N0365	05/03/11	1653
07	2W-SD-SD105-0001	SE1779-22DL	N0366	05/03/11	1735
08	2W-SD-SD110-0001	SE1779-24DL	N0367	05/03/11	1816
09	2W-SD-SD108-0001	SE1779-26DL	N0368	05/03/11	1858
10	2W-SD-SD107-0001	SE1779-28DL	N0369	05/03/11	1939
11	2W-SD-SD112-0001	SE1779-31DL	N0370	05/03/11	2020
12	2W-SD-SD107-0001	SE1779-28	N0391	05/05/11	1331
13					
14					
15					
16					
17					
18					
19					
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21					
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23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IVSV

Katahdin Analytical Services A0000051

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG90178-1
Client ID: Method Blank Sample
Project:
SDG: WE55-3

Sample Date:
Received Date: 14-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 27-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.6	10.
2-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.2	10.
1-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Acenaphthylene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10.	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10.	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	U	10.	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo (a) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo (b) Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	U	10.	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno (1,2,3-cd) pyrene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo (a,h) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	U	10.	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene-D10		49.9	%					
Fluorene-D10		41.7	%					
Pyrene-D10		74.7	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID: ND023 DFTPP Injection Date: 04/28/11

Instrument ID: GCMS-N DFTPP Injection Time: 1140

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	41.3
68	Less than 2.0% of mass 69	0.6 (1.4)1
69	Less than 100.0% of mass 198	42.5
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	40.0 - 60.0% of mass 198	56.7
197	Less than 1.0% of mass 198	0.5
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.2
275	10.0 - 30.0% of mass 198	23.1
365	1.0 - 100.0% of mass 198	2.9
441	0.0 - 100.0% of mass 443	12.6 (74.1)2
442	40.0 - 100.0% of mass 198	84.7
443	17.0 - 23.0% of mass 442	17.1 (20.1)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00N0428	N0297	04/28/11	1246
02	2W-SD-SD105-0001	SE1779-22	N0298	04/28/11	1331
03	2W-SD-SD112-0001	SE1779-31	N0299	04/28/11	1412
04	2W-SD-SD112-0001MS	WG90178-4	N0300	04/28/11	1454
05	2W-SD-SD112-0001MSD	WG90178-5	N0301	04/28/11	1535
06	2W-SD-SD97-0001	SE1779-8	N0302	04/28/11	1617
07	2W-SD-SD98-0001	SE1779-9	N0303	04/28/11	1658
08	2W-SD-SD95-0001	SE1779-10	N0304	04/28/11	1740
09	2W-SD-SD88-0001	SE1779-12	N0305	04/28/11	1821
10	2W-SD-SD87-0001	SE1779-14	N0306	04/28/11	1903
11	2W-SD-SD89-0001	SE1779-15	N0307	04/28/11	1944
12	2W-SD-SD100-0001	SE1779-17	N0308	04/28/11	2026
13	FD040711-01	SE1779-18	N0309	04/28/11	2108
14	2W-SD-SD103-0001	SE1779-21	N0310	04/28/11	2149
15	2W-SD-SD110-0001	SE1779-24	N0311	04/28/11	2230
16	2W-SD-SD108-0001	SE1779-26	N0312	04/28/11	2312
17					
18					
19					
20					

Katahdin Analytical Services A0000054

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Instrument ID: GCMS-N Calibration Date: 04/28/11 Time: 1246

Lab File ID: N0297 Init. Calib. Date(s): 04/27/11 04/27/11

Init. Calib. Times: 1124 1450

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
1-Methylnaphthalene	0.6000000	0.5782900	0.5782900	0.01	-3.62	20.00	AVRG	
Naphthalene	0.8940000	0.9284500	0.9284500	0.01	3.85	20.00	AVRG	
2-Methylnaphthalene	1.1230000	1.0000000	0.8301400	0.01	12.30	20.00	2RDR	
Acenaphthylene	1.7540000	1.8618000	1.8618000	0.01	6.15	20.00	AVRG	
Acenaphthene	1.0980000	1.1328000	1.1328000	0.01	3.17	20.01	AVRG	
Fluorene	1.2840000	1.1566000	1.1566000	0.01	-9.92	20.00	AVRG	
Phenanthrene	1.0900000	1.0763000	1.0763000	0.01	-1.26	20.00	AVRG	
Anthracene	1.1240000	1.1545000	1.1545000	0.01	2.71	20.00	AVRG	
Fluoranthene	1.0520000	0.9105700	0.9105700	0.01	-13.44	20.01	AVRG	
Pyrene	1.3647000	1.0000000	1.8805000	0.01	36.47	20.00	LINR	<-
Benzo(a)anthracene	0.9550000	0.9319200	0.9319200	0.01	-2.42	20.00	AVRG	
Chrysene	1.3048000	1.0000000	1.4872000	0.01	30.48	20.00	LINR	<-
Benzo(b)fluoranthene	1.0780000	1.0850000	1.0850000	0.01	0.65	20.00	AVRG	
Benzo(k)fluoranthene	1.4170000	1.7222000	1.7222000	0.01	21.54	20.00	AVRG	<-
Benzo(a)pyrene	1.0400000	1.0666000	1.0666000	0.01	2.56	20.01	AVRG	
Indeno(1,2,3-cd)pyrene	1.2661000	1.0000000	0.9181600	0.01	26.61	20.00	LINR	<-
Dibenzo(a,h)anthracene	0.7420000	0.6573200	0.6573200	0.01	-11.41	20.00	AVRG	
Benzo(g,h,i)perylene	0.8910000	0.8102800	0.8102800	0.01	-9.06	20.00	AVRG	
2-Methylnaphthalene-D10	1.0890000	1.3650000	1.3650000	0.01	25.34	20.00	AVRG	<-
Fluorene-D10	0.9134700	1.0000000	1.0420000	0.01	-8.65	20.00	LINR	
Pyrene-D10	0.8980000	1.0830000	1.0830000	0.01	20.60	20.00	AVRG	<-

FORM VII PEST

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID: ND025 DFTPP Injection Date: 05/02/11

Instrument ID: GCMS-N DFTPP Injection Time: 1024

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	44.2
68	Less than 2.0% of mass 69	0.6 (1.3)1
69	Less than 100.0% of mass 198	46.0
70	Less than 2.0% of mass 69	0.1 (0.3)1
127	40.0 - 60.0% of mass 198	59.6
197	Less than 1.0% of mass 198	0.4
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	8.0
275	10.0 - 30.0% of mass 198	25.6
365	1.0 - 100.0% of mass 198	3.2
441	0.0 - 100.0% of mass 443	14.1 (70.1)2
442	40.0 - 100.0% of mass 198	88.1
443	17.0 - 23.0% of mass 442	20.1 (22.8)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00N0502	N0331	05/02/11	1043
02		SSTD8.00N0502	N0332	05/02/11	1128
03		SSTD5.00N0502	N0333	05/02/11	1209
04		SSTD2.00N0502	N0334	05/02/11	1251
05		SSTD0.50N0502	N0335	05/02/11	1332
06		SSTD0.20N0502	N0336	05/02/11	1413
07		SIM IND CHECK	N0337	05/02/11	1454
08					
09					
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20					

FORM V SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Instrument ID: GCMS-N Calibration Date(s): 05/02/11 05/02/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 1043 1413

LAB FILE ID: RF0.2: N0336 RF0.5: N0335 RF1: N0331
RF2: N0334 RF5: N0333 RF8: N0332

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
1-Methylnaphthalene	32333	78263	156950	239450	620530	910350	2ORDR	-9.8e-003	1.40960487	0.16186826	0.99986	0.99000
Naphthalene	0.970	0.958	0.970	0.932	0.792	0.677	AVRG		0.88311657		13.748	15.000
2-Methylnaphthalene	50845	115760	194070	287210	674270	967390	2ORDR	-7.27e-002	1.08667282	0.19599534	0.99984	0.99000
Acenaphthylene	1.799	1.857	1.858	1.788	1.632	1.476	AVRG		1.73499377		8.712	15.000
Acenaphthene	1.127	1.157	1.142	1.112	1.055	0.963	AVRG		1.09273636		6.624	15.000
Fluorene	1.318	1.369	1.345	1.318	1.217	1.096	AVRG		1.27715752		8.045	15.000
Phenanthrene	1.125	1.138	1.176	1.127	1.050	0.922	AVRG		1.08959668		8.437	15.000
Anthracene	1.161	1.107	1.200	1.156	1.101	0.980	AVRG		1.11739676		6.847	15.000
Fluoranthene	1.141	1.051	1.152	1.067	1.008	0.935	AVRG		1.05887660		7.731	15.000
Pyrene	1.840	1.771	1.610	1.557	1.429	1.221	AVRG		1.57146191		14.425	15.000
Benzo(a)anthracene	12082	47785	145340	220100	556860	928830	LINR	-6.09e-002	1.11544031		0.99826	0.99000
Chrysene	39352	85185	175180	274310	647310	1006100	2ORDR	-2.83e-002	0.70556489	3.487e-002	0.99931	0.99000
Benzo(b)fluoranthene	0.876	1.068	1.138	1.077	1.163	1.006	AVRG		1.05489796		9.807	15.000
Benzo(k)fluoranthene	1.724	1.530	1.512	1.500	1.294	1.235	AVRG		1.46579999		12.082	15.000
Benzo(a)pyrene	0.903	0.951	1.088	1.030	1.036	0.962	AVRG		0.99511827		6.838	15.000
Indeno(1,2,3-cd)pyrene	0.836	0.536	0.674	0.618	0.711	0.722	AVRG		0.68263308		14.888	15.000
Dibenzo(a,h)anthracene	0.538	0.663	0.740	0.721	0.772	0.743	AVRG		0.69615606		12.284	15.000
Benzo(g,h,i)perylene	0.871	0.871	0.852	0.860	0.879	0.823	AVRG		0.85935011		2.346	15.000
2-Methylnaphthalene-D10	1.114	1.110	1.143	1.089	1.033	0.934	AVRG		1.07071023		7.106	15.000
Fluorene-D10	26256	75374	150460	226080	530270	775620	LINR	-0.3111887	1.10354659		0.99506	0.99000
Pyrene-D10	1.017	1.034	0.938	0.913	0.878	0.767	AVRG		0.92443617		10.572	15.000

FORM VI SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID: ND026 DFTPP Injection Date: 05/02/11

Instrument ID: GCMS-N DFTPP Injection Time: 1552

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	45.1
68	Less than 2.0% of mass 69	0.7 (1.4)1
69	Less than 100.0% of mass 198	46.2
70	Less than 2.0% of mass 69	0.3 (0.7)1
127	40.0 - 60.0% of mass 198	60.0
197	Less than 1.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	8.6
275	10.0 - 30.0% of mass 198	26.0
365	1.0 - 100.0% of mass 198	3.3
441	0.0 - 100.0% of mass 443	13.7 (71.5)2
442	40.0 - 100.0% of mass 198	84.1
443	17.0 - 23.0% of mass 442	19.2 (22.8)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00N0502	N0338	05/02/11	1612
02	WG90858-BLANK	WG90858-1	N0343	05/02/11	1940
03	WG90858-LCS	WG90858-2	N0344	05/02/11	2021
04	2W-SD-SD1110-0001	SE1779-24RE	N0346	05/02/11	2144
05	FD040611-01	SE1779-1DL	N0347	05/02/11	2225
06	2W-SD-SD99-0001	SE1779-2DL	N0348	05/02/11	2307
07	2W-SD-SD90-0001	SE1779-4DL	N0349	05/02/11	2348
08	2W-SD-SD94-0001	SE1779-5DL	N0350	05/03/11	0029
09	2W-SD-SD96-0001	SE1779-7DL	N0351	05/03/11	0110
10	2W-SD-SD97-0001	SE1779-8DL	N0352	05/03/11	0152
11	2W-SD-SD98-0001	SE1779-9DL	N0353	05/03/11	0233
12	2W-SD-SD95-0001	SE1779-10DL	N0354	05/03/11	0314
13					
14					
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FORM V SV

Katahdin Analytical Services A0000056

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Instrument ID: GCMS-N Calibration Date: 05/02/11 Time: 1612

Lab File ID: N0338 Init. Calib. Date(s): 05/02/11 05/02/11

Init. Calib. Times: 1043 1413

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1-Methylnaphthalene	0.9556400	1.0000000	0.6270700	0.01	-4.44	20.00	2RDR
Naphthalene	0.8830000	0.9814300	0.9814300	0.01	11.15	20.00	AVRG
2-Methylnaphthalene	1.0090000	1.0000000	0.8276200	0.01	0.90	20.00	2RDR
Acenaphthylene	1.7350000	1.8545000	1.8545000	0.01	6.89	20.00	AVRG
Acenaphthene	1.0930000	1.1665000	1.1665000	0.01	6.72	20.01	AVRG
Fluorene	1.2770000	1.3642000	1.3642000	0.01	6.83	20.00	AVRG
Phenanthrene	1.0900000	1.1857000	1.1857000	0.01	8.78	20.00	AVRG
Anthracene	1.1180000	1.1788000	1.1788000	0.01	5.44	20.00	AVRG
Fluoranthene	1.0590000	1.0830000	1.0830000	0.01	2.27	20.01	AVRG
Pyrene	1.5710000	1.6379000	1.6379000	0.01	4.26	20.00	AVRG
Benzo(a)anthracene	1.0662000	1.0000000	0.9995300	0.01	6.62	20.00	LINR
Chrysene	0.9520300	1.0000000	1.2802000	0.01	-4.80	20.00	2RDR
Benzo(b)fluoranthene	1.0550000	1.0891000	1.0891000	0.01	3.23	20.00	AVRG
Benzo(k)fluoranthene	1.4660000	1.6233000	1.6233000	0.01	10.73	20.00	AVRG
Benzo(a)pyrene	0.9950000	1.0636000	1.0636000	0.01	6.89	20.01	AVRG
Indeno(1,2,3-cd)pyrene	0.6830000	0.5869600	0.5869600	0.01	-14.06	20.00	AVRG
Dibenzo(a,h)anthracene	0.6960000	0.7103500	0.7103500	0.01	2.06	20.00	AVRG
Benzo(g,h,i)perylene	0.8590000	0.8593000	0.8593000	0.01	0.03	20.00	AVRG
2-Methylnaphthalene-D10	1.0700000	1.1517000	1.1517000	0.01	7.64	20.00	AVRG
Fluorene-D10	1.1962000	1.0000000	1.3095000	0.01	19.62	20.00	LINR
Pyrene-D10	0.9240000	0.9927300	0.9927300	0.01	7.44	20.00	AVRG

FORM VII PEST

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG90858-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID: N0343 Lab Sample ID: WG90858-1

Instrument ID: GCMS-N Date Extracted:

Matrix: (soil/water) SOIL Date Analyzed: 05/02/11

Level:(low/med) LOW Time Analyzed: 1940

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG90858-LCS	WG90858-2	N0344	05/02/11	2021
02	2W-SD-SD1110-0001	SE1779-24RE	N0346	05/02/11	2144
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
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30					

COMMENTS:

FORM IVSV

Katahdin Analytical Services A0000052

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG90858-1
Client ID: Method Blank Sample
Project:
SDG: WE55-3

Sample Date:
Received Date: 29-APR-11
Extract Date: 29-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90858

Analysis Date: 02-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.6	10.
2-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.2	10.
1-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Acenaphthylene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10.	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10.	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	U	10.	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo (a) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo (b) Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	U	10.	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno (1,2,3-cd) pyrene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo (a,h) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	U	10.	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene-D10		73.9	%					
Fluorene-D10		56.5	%					
Pyrene-D10		94.3	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID: ND027 DFTPP Injection Date: 05/03/11

Instrument ID: GCMS-N DFTPP Injection Time: 0943

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	43.5
68	Less than 2.0% of mass 69	0.6 (1.3)1
69	Less than 100.0% of mass 198	45.2
70	Less than 2.0% of mass 69	0.3 (0.6)1
127	40.0 - 60.0% of mass 198	57.2
197	Less than 1.0% of mass 198	0.5
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.6
275	10.0 - 30.0% of mass 198	22.6
365	1.0 - 100.0% of mass 198	2.6
441	0.0 - 100.0% of mass 443	10.8 (75.4)2
442	40.0 - 100.0% of mass 198	73.0
443	17.0 - 23.0% of mass 442	14.3 (19.6)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00N0503	N0355	05/03/11	1000
02	2W-SD-SD88-0001	SE1779-12DL	N0360	05/03/11	1328
03	2W-SD-SD87-0001	SE1779-14DL	N0361	05/03/11	1409
04	2W-SD-SD89-0001	SE1779-15DL	N0362	05/03/11	1450
05	2W-SD-SD100-0001	SE1779-17DL	N0363	05/03/11	1531
06	FD040711-01	SE1779-18DL	N0364	05/03/11	1612
07	2W-SD-SD103-0001	SE1779-21DL	N0365	05/03/11	1653
08	2W-SD-SD105-0001	SE1779-22DL	N0366	05/03/11	1735
09	2W-SD-SD110-0001	SE1779-24DL	N0367	05/03/11	1816
10	2W-SD-SD108-0001	SE1779-26DL	N0368	05/03/11	1858
11	2W-SD-SD107-0001	SE1779-28DL	N0369	05/03/11	1939
12	2W-SD-SD112-0001	SE1779-31DL	N0370	05/03/11	2020
13					
14					
15					
16					
17					
18					
19					
20					

FORM V SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Instrument ID: GCMS-N Calibration Date: 05/03/11 Time: 1000

Lab File ID: N0355 Init. Calib. Date(s): 05/02/11 05/02/11

Init. Calib. Times: 1043 1413

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
1-Methylnaphthalene	0.9695200	1.0000000	0.6354000	0.01	-3.05	20.00	2RDR	
Naphthalene	0.8830000	0.9120300	0.9120300	0.01	3.29	20.00	AVRG	
2-Methylnaphthalene	1.0249000	1.0000000	0.8382400	0.01	2.49	20.00	2RDR	
Acenaphthylene	1.7350000	1.7721000	1.7721000	0.01	2.14	20.00	AVRG	
Acenaphthene	1.0930000	1.0728000	1.0728000	0.01	-1.85	20.01	AVRG	
Fluorene	1.2770000	1.2506000	1.2506000	0.01	-2.07	20.00	AVRG	
Phenanthrene	1.0900000	1.0953000	1.0953000	0.01	0.49	20.00	AVRG	
Anthracene	1.1180000	1.1222000	1.1222000	0.01	0.38	20.00	AVRG	
Fluoranthene	1.0590000	1.0644000	1.0644000	0.01	0.51	20.01	AVRG	
Pyrene	1.5710000	1.5489000	1.5489000	0.01	-1.41	20.00	AVRG	
Benzo(a)anthracene	1.0116000	1.0000000	0.9506000	0.01	1.16	20.00	LINR	
Chrysene	0.9906200	1.0000000	1.3273000	0.01	-0.94	20.00	2RDR	
Benzo(b)fluoranthene	1.0550000	1.1357000	1.1357000	0.01	7.65	20.00	AVRG	
Benzo(k)fluoranthene	1.4660000	1.1329000	1.1329000	0.01	-22.72	20.00	AVRG	<-
Benzo(a)pyrene	0.9950000	1.0267000	1.0267000	0.01	3.18	20.01	AVRG	
Indeno(1,2,3-cd)pyrene	0.6830000	0.8563200	0.8563200	0.01	25.38	20.00	AVRG	<-
Dibenzo(a,h)anthracene	0.6960000	0.6242200	0.6242200	0.01	-10.31	20.00	AVRG	
Benzo(g,h,i)perylene	0.8590000	0.7848400	0.7848400	0.01	-8.63	20.00	AVRG	
2-Methylnaphthalene-D10	1.0700000	1.1028000	1.1028000	0.01	3.06	20.00	AVRG	
Fluorene-D10	1.0657000	1.0000000	1.1913000	0.01	6.57	20.00	LINR	
Pyrene-D10	0.9240000	1.0008000	1.0008000	0.01	8.31	20.00	AVRG	

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID: ND029 DFTPP Injection Date: 05/05/11

Instrument ID: GCMS-N DFTPP Injection Time: 1026

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	39.2
68	Less than 2.0% of mass 69	0.8 (1.6)1
69	Less than 100.0% of mass 198	48.4
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	40.0 - 60.0% of mass 198	59.7
197	Less than 1.0% of mass 198	0.6
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.7
275	10.0 - 30.0% of mass 198	25.0
365	1.0 - 100.0% of mass 198	3.2
441	0.0 - 100.0% of mass 443	13.0 (70.1)2
442	40.0 - 100.0% of mass 198	88.8
443	17.0 - 23.0% of mass 442	18.5 (20.8)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00N0505	N0387	05/05/11	1043
02	2W-SD-SD107-0001	SE1779-28	N0391	05/05/11	1331
03					
04					
05					
06					
07					
08					
09					
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15					
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20					

FORM V SV

Katahdin Analytical Services A0000058

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Instrument ID: GCMS-N Calibration Date: 05/05/11 Time: 1043

Lab File ID: N0387 Init. Calib. Date(s): 05/02/11 05/02/11

Init. Calib. Times: 1043 1413

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1-Methylnaphthalene	0.8391300	1.0000000	0.5564100	0.01	-16.09	20.00	2RDR
Naphthalene	0.8830000	0.9066500	0.9066500	0.01	2.68	20.00	AVRG
2-Methylnaphthalene	1.0099000	1.0000000	0.8282000	0.01	0.99	20.00	2RDR
Acenaphthylene	1.7350000	1.7975000	1.7975000	0.01	3.60	20.00	AVRG
Acenaphthene	1.0930000	1.1916000	1.1916000	0.01	9.02	20.01	AVRG
Fluorene	1.2770000	1.2272000	1.2272000	0.01	-3.90	20.00	AVRG
Phenanthrene	1.0900000	1.1167000	1.1167000	0.01	2.45	20.00	AVRG
Anthracene	1.1180000	1.1059000	1.1059000	0.01	-1.08	20.00	AVRG
Fluoranthene	1.0590000	0.9587000	0.9587000	0.01	-9.47	20.01	AVRG
Pyrene	1.5710000	1.8108000	1.8108000	0.01	15.26	20.00	AVRG
Benzo(a)anthracene	0.9323200	1.0000000	0.8795000	0.01	-6.77	20.00	LINR
Chrysene	0.9850000	1.0000000	1.3204000	0.01	-1.50	20.00	2RDR
Benzo(b)fluoranthene	1.0550000	1.0694000	1.0694000	0.01	1.36	20.00	AVRG
Benzo(k)fluoranthene	1.4660000	1.4014000	1.4014000	0.01	-4.41	20.00	AVRG
Benzo(a)pyrene	0.9950000	0.9317900	0.9317900	0.01	-6.35	20.01	AVRG
Indeno(1,2,3-cd)pyrene	0.6830000	0.7839000	0.7839000	0.01	14.77	20.00	AVRG
Dibenzo(a,h)anthracene	0.6960000	0.5913800	0.5913800	0.01	-15.03	20.00	AVRG
Benzo(g,h,i)perylene	0.8590000	0.7285500	0.7285500	0.01	-15.19	20.00	AVRG
2-Methylnaphthalene-D10	1.0700000	1.1297000	1.1297000	0.01	5.58	20.00	AVRG
Fluorene-D10	1.0483000	1.0000000	1.1755000	0.01	4.83	20.00	LINR
Pyrene-D10	0.9240000	1.0578000	1.0578000	0.01	14.48	20.00	AVRG

FORM 2
SOIL SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Level: (low/med) LOW

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	WG90178-BLANK	WG90178-1	50	42	75						0
02	WG90178-LCS	WG90178-2	57	59	77						0
03	WG90178-LCSD	WG90178-3	58	61	72						0
04	FD040611-01	SE1779-1	52	48	97						0
05	2W-SD-SD99-0001	SE1779-2	58	58	134*						1
06	2W-SD-SD90-0001	SE1779-4	40	36	89						0
07	2W-SD-SD94-0001	SE1779-5	56	47	126						0
08	2W-SD-SD96-0001	SE1779-7	56	52	129*						1
09	2W-SD-SD105-0001	SE1779-22	38	32	82						0
10	2W-SD-SD112-0001	SE1779-31	57	45	100						0
11	2W-SD-SD112-0001MS	WG90178-4	57	46	75						0
12	2W-SD-SD112-0001MSD	WG90178-5	52	58	108						0
13	2W-SD-SD97-0001	SE1779-8	53	45	117						0
14	2W-SD-SD98-0001	SE1779-9	66	54	134*						1
15	2W-SD-SD95-0001	SE1779-10	56	45	103						0
16	2W-SD-SD88-0001	SE1779-12	38	26	80						0
17	2W-SD-SD87-0001	SE1779-14	40	32	81						0
18	2W-SD-SD89-0001	SE1779-15	42	32	112						0
19	2W-SD-SD100-0001	SE1779-17	65	50	154*						1
20	FD040711-01	SE1779-18	63	47	131*						1
21	2W-SD-SD103-0001	SE1779-21	35	39	125						0
22	2W-SD-SD110-0001	SE1779-24	0*	0*	0*	see case narrative					3
23	2W-SD-SD108-0001	SE1779-26	34	29	91						0
24	WG90858-BLANK	WG90858-1	74	56	94						0
25	WG90858-LCS	WG90858-2	64	66	79						0
26	2W-SD-SD1110-0001	SE1779-24RE	29	21	45						0
27	FD040611-01	SE1779-1DL	48	20	72						0
28	2W-SD-SD99-0001	SE1779-2DL	D	D	D						0

		QC LIMITS
S1	= 2-Methylnaphthalene-D1	(19- 94)
S2	= Fluorene-D10	(20- 96)
S3	= Pyrene-D10	(31-128)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

Katahdin Analytical Services A0000045

FORM 2
SOIL SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Level:(low/med) LOW

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	2W-SD-SD90-0001	SE1779-4DL	44	0*	67						1
02	2W-SD-SD94-0001	SE1779-5DL	D	D	D						0
03	2W-SD-SD96-0001	SE1779-7DL	D	D	D						0
04	2W-SD-SD97-0001	SE1779-8DL	D	D	D						0
05	2W-SD-SD98-0001	SE1779-9DL	D	D	D						0
06	2W-SD-SD95-0001	SE1779-10DL	D	D	D						0
07	2W-SD-SD88-0001	SE1779-12DL	D	D	D						0
08	2W-SD-SD87-0001	SE1779-14DL	D	D	D						0
09	2W-SD-SD89-0001	SE1779-15DL	D	D	D						0
10	2W-SD-SD100-0001	SE1779-17DL	D	D	D						0
11	FD040711-01	SE1779-18DL	D	D	D						0
12	2W-SD-SD103-0001	SE1779-21DL	D	D	D						0
13	2W-SD-SD105-0001	SE1779-22DL	40	0*	71						1
14	2W-SD-SD110-0001	SE1779-24DL	D	D	D						0
15	2W-SD-SD108-0001	SE1779-26DL	34	0*	46						1
16	2W-SD-SD107-0001	SE1779-28DL	36	22	60						0
17	2W-SD-SD112-0001	SE1779-31DL	53	17*	64						1
18	2W-SD-SD107-0001	SE1779-28	39	35	79						0
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											

		QC LIMITS
S1	= 2-Methylnaphthalene-D1	(19- 94)
S2	= Fluorene-D10	(20- 96)
S3	= Pyrene-D10	(31-128)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

Katahdin Analytical Services A0000046

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG90178-2
LCSD ID: WG90178-3
Project:
SDG: WE55-3
Report Date: 09-MAY-11

Received Date: 14-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 27-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Naphthalene	66.7	44.6	66.9	44.0	66.0	ug/Kgdrywt	1	50	40-100
2-Methylnaphthalene	66.7	40.9	61.3	40.9	61.3	ug/Kgdrywt	0	50	40-100
1-Methylnaphthalene	66.7	42.0	63.0	41.2	61.8	ug/Kgdrywt	2	50	40-100
Acenaphthylene	66.7	39.6	59.4	40.6	60.9	ug/Kgdrywt	2	50	40-100
Acenaphthene	66.7	41.4	62.1	42.5	63.7	ug/Kgdrywt	3	50	40-100
Fluorene	66.7	42.3	63.4	43.3	64.9	ug/Kgdrywt	2	50	40-100
Phenanthrene	66.7	47.4	71.1	48.2	72.3	ug/Kgdrywt	2	50	40-100
Anthracene	66.7	46.1	69.1	46.6	69.9	ug/Kgdrywt	1	50	40-100
Fluoranthene	66.7	50.2	75.3	51.0	76.5	ug/Kgdrywt	2	50	40-100
Pyrene	66.7	56.9	85.3	53.9	80.8	ug/Kgdrywt	5	50	40-100
Benzo (a) anthracene	66.7	51.0	76.5	49.6	74.4	ug/Kgdrywt	3	50	40-100
Chrysene	66.7	51.0	76.5	52.2	78.3	ug/Kgdrywt	2	50	40-100
Benzo (b) Fluoranthene	66.7	55.9	83.8	56.0	84.0	ug/Kgdrywt	0	50	40-100
Benzo(k)fluoranthene	66.7	48.6	72.9	49.9	74.8	ug/Kgdrywt	3	50	40-100
Benzo(a)pyrene	66.7	49.3	73.9	48.9	73.3	ug/Kgdrywt	1	50	40-100
Indeno (1,2,3-cd) pyrene	66.7	37.7	56.5	50.5	75.7	ug/Kgdrywt	29	50	40-100
Dibenzo (a,h) anthracene	66.7	41.0	61.5	40.7	61.0	ug/Kgdrywt	1	50	40-100
Benzo(g,h,i)perylene	66.7	36.7	55.0	35.7	53.5	ug/Kgdrywt	3	50	40-100
2-Methylnaphthalene-D10			57.1		57.5				19-94
Fluorene-D10			59.1		61.0				20-96
Pyrene-D10			77.0		72.1				31-128

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ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG90858-2
Client ID: LCS
Project:
SDG: WE55-3

Sample Date:
Received Date: 29-APR-11
Extract Date: 29-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90858

Analysis Date: 02-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 09-MAY-11

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Naphthalene	70.2	66.7	46.8	ug/Kgdrywt	40-100
2-Methylnaphthalene	62.7	66.7	41.8	ug/Kgdrywt	40-100
1-Methylnaphthalene	62.1	66.7	41.4	ug/Kgdrywt	40-100
Acenaphthylene	65.5	66.7	43.7	ug/Kgdrywt	40-100
Acenaphthene	67.0	66.7	44.7	ug/Kgdrywt	40-100
Fluorene	66.7	66.7	44.5	ug/Kgdrywt	40-100
Phenanthrene	76.0	66.7	50.7	ug/Kgdrywt	40-100
Anthracene	77.4	66.7	51.6	ug/Kgdrywt	40-100
Fluoranthene	82.4	66.7	55.0	ug/Kgdrywt	40-100
Pyrene	75.1	66.7	50.1	ug/Kgdrywt	40-100
Benzo (a) anthracene	82.0	66.7	54.7	ug/Kgdrywt	40-100
Chrysene	78.6	66.7	52.4	ug/Kgdrywt	40-100
Benzo (b) Fluoranthene	92.0	66.7	61.4	ug/Kgdrywt	40-100
Benzo(k)fluoranthene	84.4	66.7	56.3	ug/Kgdrywt	40-100
Benzo(a)pyrene	93.0	66.7	62.0	ug/Kgdrywt	40-100
Indeno (1,2,3-cd) pyrene	97.3	66.7	64.9	ug/Kgdrywt	40-100
Dibenzo (a,h) anthracene	76.5	66.7	51.0	ug/Kgdrywt	40-100
Benzo(g,h,i)perylene	70.6	66.7	47.1	ug/Kgdrywt	40-100
2-Methylnaphthalene-D10	64.1				19-94
Fluorene-D10	65.5				20-96
Pyrene-D10	78.8				31-128

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ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG90178-4
MSD ID: WG90178-5
Sample ID: SE1779-31
Client ID: 2W-SD-SD112-0001
Project:
SDG: WE55-3

Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178
Report Date: 09-MAY-11

Analysis Date: 28-APR-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 35.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Naphthalene	162.	188.	ug/Kgdrywt	U23.	95.	110	58.6	58.9	16	50	40-100
2-Methylnaphthalene	162.	188.	ug/Kgdrywt	U23.	91.	120	56.0	66.3	32	50	40-100
1-Methylnaphthalene	162.	188.	ug/Kgdrywt	U23.	82.	120	50.7	62.1	35	50	40-100
Acenaphthylene	162.	188.	ug/Kgdrywt	J5.1	95.	120	55.7	58.3	19	50	40-100
Acenaphthene	162.	188.	ug/Kgdrywt	J9.6	100	140	57.0	68.7	31	50	40-100
Fluorene	162.	188.	ug/Kgdrywt	J11.	97.	140	52.8	69.4	38	50	40-100
Phenanthrene	162.	188.	ug/Kgdrywt	220	340	480	71.6	140.*	36	50	40-100
Anthracene	162.	188.	ug/Kgdrywt	J26.	110	170	54.6	75.0	38	50	40-100
Fluoranthene	162.	188.	ug/Kgdrywt	430	590	770	98.7	181.*	27	50	40-100
Pyrene	162.	188.	ug/Kgdrywt	E860	940	1600	53.7	378.*	50	50	40-100
Benzo (a) anthracene	162.	188.	ug/Kgdrywt	230	350	490	72.8	135.*	32	50	40-100
Chrysene	162.	188.	ug/Kgdrywt	360	480	620	75.3	135.*	24	50	40-100
Benzo (b) Fluoranthene	162.	188.	ug/Kgdrywt	550	610	850	35.8*	158.*	33	50	40-100
Benzo(k)fluoranthene	162.	188.	ug/Kgdrywt	180	280	330	61.1	80.1	17	50	40-100
Benzo(a)pyrene	162.	188.	ug/Kgdrywt	280	390	460	66.6	97.1	18	50	40-100
Indeno (1,2,3-cd) pyrene	162.	188.	ug/Kgdrywt	210	340	330	84.6	65.8	4	50	40-100
Dibenzo (a,h) anthracene	162.	188.	ug/Kgdrywt	J46.	130	110	51.8	35.0*	15	50	40-100
Benzo(g,h,i)perylene	162.	188.	ug/Kgdrywt	170	280	260	67.9	46.2	9	50	40-100
2-Methylnaphthalene-D10							57.3	52.3			19-94
Fluorene-D10							45.9	58.0			20-96
Pyrene-D10							74.7	108.			31-128

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FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID (Standard): N0270 Date Analyzed: 04/27/11

Instrument ID: GCMS-N Time Analyzed: 1328

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
12 HOUR STD		30911		7.39		110565		10.13		51598		14.23	
UPPER LIMIT		61822		7.93		221130		10.67		103196		14.77	
LOWER LIMIT		15456		6.85		55283		9.59		25799		13.69	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	WG90178-BLANK	WG90178-1		38429		7.39		142105		10.14		74830		14.23	
02	WG90178-LCS	WG90178-2		40809		7.39		158041		10.13		83537		14.22	
03	WG90178-LCSD	WG90178-3		37087		7.39		137359		10.13		70637		14.22	
04	FD040611-01	SE1779-1		31990		7.39		117402		10.13		60405		14.23	
05	2W-SD-SD99-0001	SE1779-2		31470		7.39		113162		10.13		58985		14.22	
06	2W-SD-SD90-0001	SE1779-4		39649		7.39		151779		10.13		83040		14.22	
07	2W-SD-SD94-0001	SE1779-5		42789		7.40		153368		10.13		73124		14.22	
08	2W-SD-SD96-0001	SE1779-7		36873		7.39		139072		10.13		73515		14.22	
09		SSTD1.00N0428		35591		7.39		117838		10.13		42060		14.23	
10	2W-SD-SD105-0001	SE1779-22		44968		7.39		151862		10.13		73216		14.22	
11	2W-SD-SD112-0001	SE1779-31		40751		7.39		135474		10.13		60224		14.23	
12	2W-SD-SD112-0001MS	WG90178-4		37602		7.39		126052		10.13		52020		14.22	
13	2W-SD-SD112-0001MSD	WG90178-5		23470		7.39		76363		10.13		38839		14.23	
14	2W-SD-SD97-0001	SE1779-8		35678		7.39		127493		10.14		60214		14.23	
15	2W-SD-SD98-0001	SE1779-9		34713		7.39		134108		10.13		65212		14.23	
16	2W-SD-SD95-0001	SE1779-10		30388		7.39		98432		10.14		43999		14.23	
17	2W-SD-SD88-0001	SE1779-12		41748		7.39		140810		10.14		63300		14.23	
18	2W-SD-SD87-0001	SE1779-14		31715		7.39		118310		10.13		54769		14.22	
19	2W-SD-SD89-0001	SE1779-15		41218		7.39		139744		10.13		59164		14.23	
20	2W-SD-SD100-0001	SE1779-17		43901		7.39		148124		10.13		68133		14.23	

IS1 (DCB) = 1,4-Dichlorobenzene-D4
IS2 (NPT) = Naphthalene-D8
IS3 (ANT) = Acenaphthene-D10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000065

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID (Standard): N0270 Date Analyzed: 04/27/11

Instrument ID: GCMS-N Time Analyzed: 1328

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
12 HOUR STD		30911		7.39		110565		10.13		51598		14.23	
UPPER LIMIT		61822		7.93		221130		10.67		103196		14.77	
LOWER LIMIT		15456		6.85		55283		9.59		25799		13.69	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	FD040711-01	SE1779-18		34249		7.39		126883		10.13		59191		14.23	
02	2W-SD-SD103-0001	SE1779-21		23425		7.39		88361		10.13		50754		14.22	
03	2W-SD-SD110-0001	SE1779-24		36686		7.39		125390		10.13		57703		14.22	
04	2W-SD-SD108-0001	SE1779-26		28364		7.39		104241		10.13		55170		14.22	
05															
06															
07															
08															
09															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

IS1 (DCB) = 1,4-Dichlorobenzene-D4
IS2 (NPT) = Naphthalene-D8
IS3 (ANT) = Acenaphthene-D10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

Katahdin Analytical Services A0000066

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID (Standard): N0270 Date Analyzed: 04/27/11

Instrument ID: GCMS-N Time Analyzed: 1328

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD		71439	17.73	55478	24.03	44505	27.19
UPPER LIMIT		142878	18.27	110956	24.57	89010	27.73
LOWER LIMIT		35720	17.19	27739	23.49	22253	26.65
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01	WG90178-BLANK	WG90178-1	112764	17.75	71893	24.04	51439	27.19
02	WG90178-LCS	WG90178-2	127242	17.73	94613	24.02	62891	27.17
03	WG90178-LCSD	WG90178-3	109272	17.72	88360	24.02	57724	27.17
04	FD040611-01	SE1779-1	89656	17.72	35549	24.02	18865*	27.17
05	2W-SD-SD99-0001	SE1779-2	90474	17.72	25448*	24.03	13812*	27.16
06	2W-SD-SD90-0001	SE1779-4	120366	17.72	34496	24.02	15826*	27.16
07	2W-SD-SD94-0001	SE1779-5	96423	17.72	23023*	24.02	9281*	27.16
08	2W-SD-SD96-0001	SE1779-7	100074	17.72	23848*	24.02	11708*	27.16
09		SSTD1.00N0428	45170	17.76	23590*	24.05	15789*	27.20
10	2W-SD-SD105-0001	SE1779-22	92649	17.72	29381	24.02	15416*	27.17
11	2W-SD-SD112-0001	SE1779-31	74255	17.73	27869	24.02	11545*	27.17
12	2W-SD-SD112-0001MS	WG90178-4	65909	17.72	32007	24.02	16679*	27.17
13	2W-SD-SD112-0001MSD	WG90178-5	57282	17.73	21566*	24.03	8182*	27.17
14	2W-SD-SD97-0001	SE1779-8	75994	17.72	23294*	24.02	8114*	27.17
15	2W-SD-SD98-0001	SE1779-9	82163	17.72	23995*	24.02	9687*	27.17
16	2W-SD-SD95-0001	SE1779-10	52068	17.72	20211*	24.02	9725*	27.17
17	2W-SD-SD88-0001	SE1779-12	76801	17.73	19821*	24.02	8305*	27.17
18	2W-SD-SD87-0001	SE1779-14	72310	17.72	27302*	24.03	10181*	27.17
19	2W-SD-SD89-0001	SE1779-15	69883	17.73	16897*	24.03	5809*	27.17
20	2W-SD-SD100-0001	SE1779-17	82642	17.72	18127*	24.03	6888*	27.17

IS4 (PHN) = Phenanthrene-D10
IS5 (CRY) = Chrysene-D12
IS6 (PRY) = Perylene-D12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

Katahdin Analytical Services A0000067

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID (Standard): N0270 Date Analyzed: 04/27/11

Instrument ID: GCMS-N Time Analyzed: 1328

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
12 HOUR STD		71439		17.73		55478		24.03		44505		27.19	
UPPER LIMIT		142878		18.27		110956		24.57		89010		27.73	
LOWER LIMIT		35720		17.19		27739		23.49		22253		26.65	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	FD040711-01	SE1779-18		73165		17.72		20294*		24.03		6917*		27.17
02	2W-SD-SD103-0001	SE1779-21		74792		17.72		13970*		24.03		5459*		27.17
03	2W-SD-SD110-0001	SE1779-24		60950		17.73		16651*		24.03		5243*		27.20
04	2W-SD-SD108-0001	SE1779-26		73527		17.72		17628*		24.04		6880*		27.19
05													
06													
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18													
19													
20													

IS4 (PHN) = Phenanthrene-D10
IS5 (CRY) = Chrysene-D12
IS6 (PRY) = Perylene-D12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

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FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID (Standard): N0331 Date Analyzed: 05/02/11

Instrument ID: GCMS-N Time Analyzed: 1043

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD		50845	7.36	190733	10.10	93991	14.21
UPPER LIMIT		101690	7.90	381466	10.64	187982	14.75
LOWER LIMIT		25423	6.82	95367	9.56	46996	13.67
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01		SSTD1.00N0502	62773	7.36	223186	10.10	109404	14.21
02	WG90858-BLANK	WG90858-1	84602	7.38	287806	10.13	131445	14.22
03	WG90858-LCS	WG90858-2	63085	7.38	232707	10.12	117838	14.21
04	2W-SD-SD1110-0001	SE1779-24RE	75105	7.38	263772	10.12	140606	14.21
05	FD040611-01	SE1779-1DL	39934	7.38	147436	10.14	77925	14.22
06	2W-SD-SD99-0001	SE1779-2DL	40033	7.38	160025	10.18	79209	14.25
07	2W-SD-SD90-0001	SE1779-4DL	44665	7.38	151561	10.17	72923	14.24
08	2W-SD-SD94-0001	SE1779-5DL	52136	7.39	183686	10.18	85002	14.24
09	2W-SD-SD96-0001	SE1779-7DL	50099	7.39	175975	10.19	83164	14.25
10	2W-SD-SD97-0001	SE1779-8DL	45332	7.38	152387	10.19	72396	14.25
11	2W-SD-SD98-0001	SE1779-9DL	46730	7.38	162135	10.19	74689	14.25
12	2W-SD-SD95-0001	SE1779-10DL	48955	7.38	172372	10.18	77852	14.24
13		SSTD1.00N0503	54939	7.36	198684	10.10	96461	14.21
14	2W-SD-SD88-0001	SE1779-12DL	42904	7.38	149252	10.28	69663	14.27
15	2W-SD-SD87-0001	SE1779-14DL	58737	7.38	209248	10.17	98587	14.24
16	2W-SD-SD89-0001	SE1779-15DL	58555	7.38	199149	10.23	95375	14.26
17	2W-SD-SD100-0001	SE1779-17DL	49012	7.38	172810	10.23	86181	14.25
18	FD040711-01	SE1779-18DL	52499	7.39	171819	10.33	77562	14.28
19	2W-SD-SD103-0001	SE1779-21DL	44484	7.39	157471	10.29	78937	14.26
20	2W-SD-SD105-0001	SE1779-22DL	55873	7.38	182217	10.18	77798	14.24

IS1 (DCB) = 1,4-Dichlorobenzene-D4
IS2 (NPT) = Naphthalene-D8
IS3 (ANT) = Acenaphthene-D10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

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FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID (Standard): N0331 Date Analyzed: 05/02/11

Instrument ID: GCMS-N Time Analyzed: 1043

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
12 HOUR STD		50845		7.36		190733		10.10		93991		14.21	
UPPER LIMIT		101690		7.90		381466		10.64		187982		14.75	
LOWER LIMIT		25423		6.82		95367		9.56		46996		13.67	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	2W-SD-SD110-0001	SE1779-24DL		55767		7.36		199265		10.10		91402		14.21	
02	2W-SD-SD108-0001	SE1779-26DL		47392		7.38		167362		10.14		71179		14.22	
03	2W-SD-SD107-0001	SE1779-28DL		38643		7.38		138410		10.14		64557		14.23	
04	2W-SD-SD112-0001	SE1779-31DL		52003		7.36		182902		10.15		83616		14.23	
05		SSTD1.00N0505		92223		7.35		319853		10.10		129771		14.20	
06	2W-SD-SD107-0001	SE1779-28		89994		7.36		298628		10.12		122085		14.20	
07															
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18															
19															
20															

IS1 (DCB) = 1,4-Dichlorobenzene-D4
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FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID (Standard): N0331 Date Analyzed: 05/02/11

Instrument ID: GCMS-N Time Analyzed: 1043

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
12 HOUR STD		137836		17.72		109767		24.02		84118		27.16	
UPPER LIMIT		275672		18.26		219534		24.56		168236		27.70	
LOWER LIMIT		68918		17.18		54884		23.48		42059		26.62	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01		SSTD1.00N0502		161224		17.72		118292		24.02		83603		27.16	
02	WG90858-BLANK	WG90858-1		181197		17.74		115937		24.03		84446		27.19	
03	WG90858-LCS	WG90858-2		182844		17.71		147148		24.01		98876		27.16	
04	2W-SD-SD1110-0001	SE1779-24RE		197873		17.71		99285		24.01		46200		27.16	
05	FD040611-01	SE1779-1DL		122912		17.72		71849		24.01		36361*		27.16	
06	2W-SD-SD99-0001	SE1779-2DL		123252		17.74		76738		24.01		43965		27.16	
07	2W-SD-SD90-0001	SE1779-4DL		107338		17.74		56149		24.02		31969*		27.16	
08	2W-SD-SD94-0001	SE1779-5DL		117427		17.74		56365		24.02		28291*		27.16	
09	2W-SD-SD96-0001	SE1779-7DL		123300		17.74		63729		24.01		40343*		27.16	
10	2W-SD-SD97-0001	SE1779-8DL		102064		17.74		51887*		24.02		27636*		27.16	
11	2W-SD-SD98-0001	SE1779-9DL		105723		17.74		54614*		24.02		29112*		27.16	
12	2W-SD-SD95-0001	SE1779-10DL		108374		17.74		53285*		24.02		25393*		27.16	
13		SSTD1.00N0503		139742		17.72		102626		24.02		73260		27.17	
14	2W-SD-SD88-0001	SE1779-12DL		97047		17.75		42268*		24.02		29459*		27.17	
15	2W-SD-SD87-0001	SE1779-14DL		136421		17.74		55883		24.01		39106*		27.16	
16	2W-SD-SD89-0001	SE1779-15DL		139853		17.75		77459		24.02		50563		27.16	
17	2W-SD-SD100-0001	SE1779-17DL		131631		17.74		77457		24.01		50506		27.16	
18	FD040711-01	SE1779-18DL		102032		17.76		45129*		24.03		31901*		27.17	
19	2W-SD-SD103-0001	SE1779-21DL		117054		17.75		51634*		24.02		33706*		27.17	
20	2W-SD-SD105-0001	SE1779-22DL		95675		17.74		38129*		24.02		28227*		27.16	

IS4 (PHN) = Phenanthrene-D10
IS5 (CRY) = Chrysene-D12
IS6 (PRY) = Perylene-D12

AREA UPPER LIMIT = +100% of internal standard area
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FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Lab File ID (Standard): N0331 Date Analyzed: 05/02/11

Instrument ID: GCMS-N Time Analyzed: 1043

			IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
12 HOUR STD			137836		17.72		109767		24.02		84118		27.16	
UPPER LIMIT			275672		18.26		219534		24.56		168236		27.70	
LOWER LIMIT			68918		17.18		54884		23.48		42059		26.62	
	CLIENT SAMPLE ID	LAB SAMPLE ID												
01	2W-SD-SD110-0001	SE1779-24DL	122770		17.72		71060		24.02		43778		27.19	
02	2W-SD-SD108-0001	SE1779-26DL	94917		17.72		54529*		24.01		43453		27.16	
03	2W-SD-SD107-0001	SE1779-28DL	93793		17.72		56797		24.01		41772*		27.16	
04	2W-SD-SD112-0001	SE1779-31DL	101332		17.74		58174		24.01		40993*		27.15	
05		SSTD1.00N0505	168168		17.72		92723		24.02		66538		27.16	
06	2W-SD-SD107-0001	SE1779-28	153756		17.70		59343		24.00		39043*		27.14	
07														
08														
09														
10														
11														
12														
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14														
15														
16														
17														
18														
19														
20														

IS4 (PHN) = Phenanthrene-D10
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RT UPPER LIMIT = + 0.54 minutes of internal standard RT
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FORM VIII SV

Data File: \\target_server\GG\chem\gcms-n.i\N042711.b\N0267.D
Report Date: 27-Apr-2011 16:13

Katahdin Analytical Services

Data file : \\target_server\GG\chem\gcms-n.i\N042711.b\N0267.D
Lab Smp Id: SSTD8.00N0427
Inj Date : 27-APR-2011 11:24 MS Autotune Date: 20-SEP-2006 13:50
Operator : JCG Inst ID: gcms-n.i
Smp Info : SSTD8.00N0427
Misc Info : SW846 M8270C SIM
Comment :
Method : \\target_server\GG\chem\gcms-n.i\N042711.b\NSPSIM07.m
Meth Date : 27-Apr-2011 16:12 gcms-n.i Quant Type: ISTD
Cal Date : 27-APR-2011 11:24 Cal File: N0267.D
Als bottle: 3 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.614	2.669	(0.355)	116961	8.00000	6.85(M)	M6
	2 1,4-Dioxane	88	2.627	2.682	(0.356)	166067	8.00000	8.95(AM)	M3
	3 Benzaldehyde	77	6.512	6.591	(0.883)	215435	8.00000	8.83(A)	
	4 Phenol	94	6.825	6.891	(0.926)	391574	8.00000	7.92	
	5 Bis(2-Chloroethyl)ether	93	6.917	6.969	(0.938)	378574	8.00000	7.43(Q)	
	6 2-Chlorophenol	128	6.969	7.008	(0.945)	369638	8.00000	8.48(A)	
*	7 1,4-Dichlorobenzene-D4	152	7.373	7.399	(1.000)	29131	0.80000	(aQ)	
	8 2,2'-Oxybis(1-chloropropane)	45	8.039	8.053	(1.090)	448031	8.00000	7.68(Q)	
	9 2-Methylphenol	108	8.052	8.094	(1.092)	328435	8.00000	8.46(A)	
	10 Acetophenone	105	8.261	8.331	(0.816)	446863	8.00000	7.84	
	11 N-Nitroso-di-n-propylamine	70	8.317	8.358	(1.128)	229512	8.00000	7.83(QM)	M6
	12 Hexachloroethane	117	8.400	8.400	(1.139)	134004	8.00000	7.86	
	13 3&4-Methylphenol	108	8.414	8.511	(1.141)	338462	8.00000	9.01(A)	
	14 Nitrobenzene	77	8.595	8.650	(0.849)	310171	8.00000	7.88	
	15 Isophorone	82	9.160	9.210	(0.905)	572217	8.00000	7.74	
	16 2-Nitrophenol	139	9.309	9.359	(0.919)	183343	8.00000	8.50(A)	
	17 2,4-Dimethylphenol	107	9.557	9.631	(0.944)	307988	8.00000	7.86	
	18 bis(2-Chloroethoxy)methane	93	9.731	9.855	(0.961)	376529	8.00000	7.85	
	19 2,4-Dichlorophenol	162	9.917	10.078	(0.979)	274121	8.00000	8.04(A)	
*	20 Naphthalene-D8	136	10.127	10.127	(1.000)	121625	0.80000	(a)	
	21 Naphthalene	128	10.164	10.177	(1.004)	876639	8.00000	6.44	

Data File: \\target_server\GG\chem\gcms-n.i\N042711.b\N0267.D
Report Date: 27-Apr-2011 16:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	22 4-Chloroaniline	127	10.412	10.598	(1.028)	387211	8.00000	7.83	
	23 Hexachlorobutadiene	225	10.524	10.524	(1.039)	151711	8.00000	6.78	
	24 Caprolactam	113	11.297	11.663	(1.116)	101044	8.00000	7.94(Q)	
	25 4-Chloro-3-Methylphenol	107	11.678	11.785	(1.153)	256464	8.00000	7.74(Q)	
$	26 2-Methylnaphthalene-D10	152	11.724	11.754	(0.825)	532865	8.00000	7.17	
	27 2-Methylnaphthalene	142	11.785	11.831	(1.164)	626755	8.00000	8.03(AQ)	
	28 1-Methylnaphthalene	142	12.014	12.029	(1.186)	588923	8.00000	6.46	
	29 Hexachlorocyclopentadiene	237	12.181	12.197	(0.857)	144746	8.00000	8.16(A)	
$	30 2,4-Dibromophenol	252	12.486	12.623	(1.693)	154522	8.00000	7.98	
	31 2,4,6-Trichlorophenol	196	12.547	12.608	(0.883)	183772	8.00000	8.70(A)	
	32 2,4,5-Trichlorophenol	196	12.669	12.776	(0.891)	205765	8.00000	7.73	
	33 2-Chloronaphthalene	164	12.913	12.974	(0.908)	176352	8.00000	7.37(Q)	
	34 1,1'-Biphenyl	154	12.928	12.989	(0.909)	704587	8.00000	7.09	
	35 2-Nitroaniline	65	13.263	13.416	(0.933)	144026	8.00000	8.78(A)	
	36 Dimethyl Phthalate	163	13.781	13.826	(0.969)	599524	8.00000	7.86	
	37 Acenaphthylene	152	13.870	13.892	(0.976)	836264	8.00000	6.99	
	38 2,6-Dinitrotoluene	165	13.881	13.948	(0.977)	147053	8.00000	8.18(A)	
*	39 Acenaphthene-D10	164	14.215	14.237	(1.000)	54605	0.80000	(a)	
	40 Acenaphthene	153	14.293	14.304	(1.005)	542937	8.00000	7.24	
	41 3-Nitroaniline	138	13.263	13.431	(0.933)	190834	8.00000	9.06(A)	
	42 2,4-Dinitrophenol	184	14.549	14.749	(1.023)	60139	8.00000	12.3(A)	
	43 Dibenzofuran	168	14.716	14.761	(1.035)	721367	8.00000	7.04	
	44 2,4-Dinitrotoluene	165	14.838	14.950	(1.044)	177881	8.00000	8.87(A)	
	45 4-Nitrophenol	139	14.961	15.295	(1.052)	103115	8.00000	10.7(AQ)	
	46 2,3,4,6-Tetrachlorophenol	232	15.094	15.161	(1.062)	147846	8.00000	8.53(A)	
$	47 Fluorene-D10	176	15.455	15.498	(1.087)	514843	8.00000	7.86	
	48 Diethylphthalate	149	15.487	15.509	(1.089)	589630	8.00000	7.75(Q)	
	49 Fluorene	166	15.530	15.562	(1.092)	617377	8.00000	7.05	
	50 4-Chlorophenyl-phenyl ether	204	15.626	15.658	(1.099)	279560	8.00000	7.45	
	51 4,6-Dinitro-2-Methylphenol	198	15.797	15.893	(0.891)	90574	8.00000	11.2(A)	
	52 N-Nitrosodiphenylamine	169	15.936	15.989	(0.899)	497757	8.00000	7.46	
	53 4-Nitroaniline	138	15.733	16.021	(1.107)	106293	8.00000	8.28(AQ)	
	54 4-Bromophenyl-phenylether	248	16.764	16.800	(0.946)	157566	8.00000	7.44	
	55 Hexachlorobenzene	284	16.812	16.836	(0.949)	190121	8.00000	7.31	
	56 Atrazine	200	17.339	17.387	(0.978)	160003	8.00000	7.14	
	57 Pentachlorophenol	266	17.375	17.447	(0.980)	106872	8.00000	9.17(A)	
	58 Dibenzothiophene	184	17.471	17.507	(0.986)	717756	8.00000	6.97	
*	59 Phenanthrene-D10	188	17.722	17.758	(1.000)	79712	0.80000	(a)	
	60 Phenanthrene	178	17.782	17.806	(1.003)	761178	8.00000	7.01	
	61 Anthracene	178	17.902	17.950	(1.010)	804029	8.00000	7.18	
	62 Carbazole	167	18.381	18.489	(1.037)	763497	8.00000	7.48	
	63 Di-n-butylphthalate	149	19.420	19.433	(1.096)	955788	8.00000	7.84	
	64 Fluoranthene	202	20.596	20.648	(1.162)	760013	8.00000	7.25	
$	65 Pyrene-D10	212	21.066	21.106	(0.877)	519030	8.00000	7.01	
	66 Pyrene	202	21.119	21.145	(0.879)	805998	8.00000	7.84	
	67 Butylbenzylphthalate	149	22.963	22.974	(0.956)	432329	8.00000	7.98	
	68 Benzo(a)anthracene	228	23.996	24.042	(0.999)	617959	8.00000	7.86	
*	69 Chrysene-D12	240	24.019	24.053	(1.000)	65913	0.80000	(a)	
	70 Chrysene	228	24.076	24.110	(1.002)	655241	8.00000	7.88	
	71 3,3'-Dichlorobenzidine	252	24.099	24.190	(1.003)	202988	8.00000	8.89(AQ)	
	72 bis(2-Ethylhexyl)phthalate	149	24.439	24.451	(1.017)	619631	8.00000	7.93	
	73 Di-n-octylphthalate	149	25.917	25.931	(0.954)	990523	8.00000	7.94	
	74 Benzo(b)fluoranthene	252	26.386	26.427	(0.972)	550542	8.00000	7.85	
	75 Benzo(k)fluoranthene	252	26.441	26.496	(0.974)	645243	8.00000	7.00(H)	

Data File: \\target_server\GG\chem\gcms-n.i\N042711.b\N0267.D
Report Date: 27-Apr-2011 16:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76 Benzo(a)pyrene	252	27.034	27.089	(0.995)	532011	8.00000	7.86	
*	77 Perylene-D12	264	27.158	27.185	(1.000)	52075	0.80000	(a)	
	78 Perylene	252	27.213	27.241	(1.002)	563479	8.00000	7.25	
	79 Indeno(1,2,3-cd)pyrene	276	29.262	29.358	(1.077)	423017	8.00000	8.19(A)	
	80 Dibenzo(a,h)anthracene	278	29.344	29.454	(1.081)	422892	8.00000	8.76(A)	
	81 Benzo(g,h,i)perylene	276	29.852	29.920	(1.099)	457022	8.00000	7.88	
M	82 Total PAHs	100				11524040	136.000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\target_server\GG\chem\gcms-n.i\N050211.b\N0331.D
Report Date: 02-May-2011 14:59

Katahdin Analytical Services

Data file : \\target_server\GG\chem\gcms-n.i\N050211.b\N0331.D
Lab Smp Id: SSTD1.00N0502
Inj Date : 02-MAY-2011 10:43 MS Autotune Date: 20-SEP-2006 13:50
Operator : JCG Inst ID: gcms-n.i
Smp Info : SSTD1.00N0502
Misc Info : SW846 M8270C SIM
Comment :
Method : \\target_server\GG\chem\gcms-n.i\N050211.b\NSPSIM08.m
Meth Date : 02-May-2011 14:58 gcms-n.i Quant Type: ISTD
Cal Date : 27-APR-2011 14:50 Cal File: N0272.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.574	2.602	(0.350)	33775	1.00000	0.826(aQ)	
	2 1,4-Dioxane	88	2.602	2.615	(0.353)	32761	1.00000	1.01(QM)	M3
	3 Benzaldehyde	77	6.501	6.605	(0.883)	45979	1.00000	1.07(Q)	
	4 Phenol	94	6.827	6.918	(0.927)	283677	3.00000	3.30	
	5 Bis(2-Chloroethyl)ether	93	6.892	6.957	(0.936)	97377	1.00000	1.05(Q)	
	6 2-Chlorophenol	128	6.958	7.023	(0.945)	231391	3.00000	3.09	
*	7 1,4-Dichlorobenzene-D4	152	7.362	7.375	(1.000)	50845	0.80000	(a)	
	8 2,2'-Oxybis(1-chloropropane)	45	8.027	8.054	(1.090)	110847	1.00000	1.07(Q)	
	9 2-Methylphenol	108	8.054	8.110	(1.094)	212756	3.00000	3.20	
	10 Acetophenone	105	8.263	8.374	(0.818)	100443	1.00000	1.10	
	11 N-Nitroso-di-n-propylamine	70	8.305	8.402	(1.128)	56429	1.00000	1.10	
	12 Hexachloroethane	117	8.374	8.374	(1.137)	32390	1.00000	1.05	
	13 3&4-Methylphenol	108	8.430	8.568	(1.145)	199881	3.00000	3.16	
	14 Nitrobenzene	77	8.596	8.666	(0.851)	79076	1.00000	0.989	
	15 Isophorone	82	9.162	9.236	(0.907)	129231	1.00000	1.11	
	16 2-Nitrophenol	139	9.311	9.398	(0.921)	112185	3.00000	3.46	
	17 2,4-Dimethylphenol	107	9.571	9.670	(0.947)	199391	3.00000	3.26	
	18 bis(2-Chloroethoxy)methane	93	9.745	9.955	(0.964)	86378	1.00000	1.13(Q)	
	19 2,4-Dichlorophenol	162	9.956	10.154	(0.985)	174651	3.00000	3.32	
*	20 Naphthalene-D8	136	10.104	10.129	(1.000)	190733	0.80000	(a)	
	21 Naphthalene	128	10.154	10.179	(1.005)	231209	1.00000	1.10	

Data File: \\target_server\GG\chem\gcms-n.i\N050211.b\N0331.D
Report Date: 02-May-2011 14:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	22 4-Chloroaniline	127	10.464	10.687	(1.036)	74355	1.00000	0.997	
	23 Hexachlorobutadiene	225	10.501	10.513	(1.039)	37567	1.00000	1.08	
	24 Caprolactam	113	11.421	11.710	(1.130)	20252	1.00000	1.10	(QH)
	25 4-Chloro-3-Methylphenol	107	11.710	11.832	(1.159)	169687	3.00000	3.27	(Q)
$	26 2-Methylnaphthalene-D10	152	11.710	11.787	(0.824)	134295	1.00000	1.07	
	27 2-Methylnaphthalene	142	11.787	11.848	(1.166)	194071	1.00000	0.989	(Q)
	28 1-Methylnaphthalene	142	12.000	12.046	(1.188)	156948	1.00000	1.01	
	29 Hexachlorocyclopentadiene	237	12.168	12.183	(0.857)	28825	1.00000	1.12	
$	30 2,4-Dibromophenol	252	12.534	12.671	(1.702)	33753	1.00000	1.06	
	31 2,4,6-Trichlorophenol	196	12.549	12.640	(0.883)	118393	3.00000	3.22	
	32 2,4,5-Trichlorophenol	196	12.701	12.823	(0.894)	144746	3.00000	3.22	
	33 2-Chloronaphthalene	164	12.915	12.991	(0.909)	45226	1.00000	1.06	
	34 1,1'-Biphenyl	154	12.930	12.991	(0.910)	184145	1.00000	1.07	
	35 2-Nitroaniline	65	13.296	13.479	(0.936)	29012	1.00000	1.01	
	36 Dimethyl Phthalate	163	13.783	13.827	(0.970)	418304	3.00000	3.07	
	37 Acenaphthylene	152	13.861	13.894	(0.976)	218253	1.00000	1.07	
	38 2,6-Dinitrotoluene	165	13.894	13.972	(0.978)	32851	1.00000	1.03	
*	39 Acenaphthene-D10	164	14.206	14.228	(1.000)	93991	0.80000	(a)	
	40 Acenaphthene	153	14.284	14.306	(1.005)	134144	1.00000	1.04	
	41 3-Nitroaniline	138	13.296	13.479	(0.936)	37699	1.00000	1.01	
	42 2,4-Dinitrophenol	184	14.606	14.840	(1.028)	27430	3.00000	4.00	
	43 Dibenzofuran	168	14.718	14.773	(1.036)	189143	1.00000	1.07	
	44 2,4-Dinitrotoluene	165	14.862	14.996	(1.046)	35028	1.00000	0.983	
	45 4-Nitrophenol	139	15.074	15.425	(1.061)	53639	3.00000	3.76	(Q)
	46 2,3,4,6-Tetrachlorophenol	232	15.107	15.185	(1.063)	95093	3.00000	3.20	
$	47 Fluorene-D10	176	15.457	15.500	(1.088)	150455	1.00000	1.16	
	48 Diethylphthalate	149	15.468	15.510	(1.089)	412644	3.00000	3.06	
	49 Fluorene	166	15.521	15.564	(1.093)	157988	1.00000	1.05	
	50 4-Chlorophenyl-phenyl ether	204	15.617	15.660	(1.099)	68823	1.00000	1.07	
	51 4,6-Dinitro-2-Methylphenol	198	15.820	15.959	(0.893)	43869	3.00000	3.63	
	52 N-Nitrosodiphenylamine	169	15.937	16.001	(0.899)	123012	1.00000	1.08	
	53 4-Nitroaniline	138	15.809	16.087	(1.113)	21375	1.00000	1.12	(Q)
	54 4-Bromophenyl-phenylether	248	16.754	16.802	(0.945)	37360	1.00000	1.06	
	55 Hexachlorobenzene	284	16.802	16.826	(0.948)	47777	1.00000	1.02	
	56 Atrazine	200	17.329	17.401	(0.978)	30455	1.00000	0.934	(Q)
	57 Pentachlorophenol	266	17.377	17.449	(0.980)	77645	3.00000	3.89	
	58 Dibenzothiophene	184	17.473	17.508	(0.986)	189014	1.00000	1.06	
*	59 Phenanthrene-D10	188	17.724	17.760	(1.000)	137836	0.80000	(a)	
	60 Phenanthrene	178	17.772	17.808	(1.003)	202706	1.00000	1.08	
	61 Anthracene	178	17.904	17.963	(1.010)	206704	1.00000	1.07	
	62 Carbazole	167	18.395	18.514	(1.038)	175612	1.00000	1.02	
	63 Di-n-butylphthalate	149	19.410	19.435	(1.095)	689194	3.00000	3.23	
	64 Fluoranthene	202	20.599	20.650	(1.162)	198438	1.00000	1.09	
$	65 Pyrene-D10	212	21.069	21.107	(0.877)	128641	1.00000	1.01	
	66 Pyrene	202	21.108	21.146	(0.879)	220864	1.00000	1.02	
	67 Butylbenzylphthalate	149	22.953	22.963	(0.956)	302373	3.00000	3.25	
	68 Benzo(a)anthracene	228	23.998	24.042	(0.999)	145340	1.00000	1.13	
*	69 Chrysene-D12	240	24.020	24.053	(1.000)	109767	0.80000	(a)	
	70 Chrysene	228	24.077	24.110	(1.002)	175180	1.00000	0.949	
	71 3,3'-Dichlorobenzidine	252	24.111	24.201	(1.004)	35403	1.00000	1.07	
	72 bis(2-Ethylhexyl)phthalate	149	24.429	24.428	(1.017)	433175	3.00000	3.33	
	73 Di-n-octylphthalate	149	25.905	25.917	(0.954)	696158	3.00000	3.42	
	74 Benzo(b)fluoranthene	252	26.387	26.427	(0.972)	119700	1.00000	1.08	
	75 Benzo(k)fluoranthene	252	26.442	26.496	(0.974)	159034	1.00000	1.03	(H)

Data File: \\target_server\GG\chem\gcms-n.i\N050211.b\N0331.D
Report Date: 02-May-2011 14:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	76 Benzo(a)pyrene	252	27.035	27.103	(0.995)	114427	1.00000	1.09	
*	77 Perylene-D12	264	27.159	27.185	(1.000)	84118	0.80000	(a)	
	78 Perylene	252	27.214	27.240	(1.002)	130847	1.00000	1.04	
	79 Indeno(1,2,3-cd)pyrene	276	29.277	29.372	(1.078)	70896	1.00000	0.988(MH)	M3
	80 Dibenzo(a,h)anthracene	278	29.359	29.468	(1.081)	77822	1.00000	1.06	
	81 Benzo(g,h,i)perylene	276	29.853	29.934	(1.099)	89568	1.00000	0.991	
M	82 Total PAHs	100				2873292	17.0000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

TETRA TECH NUS, INC. **CALCULATION WORKSHEET** PAGE 1 OF 1

CLIENT		JOB NUMBER	
NSB New London		SDG WE55-3	
SUBJECT: Sample Calculation			
BASED ON		DRAWING NUMBER	
BY: Ann Cognetti	CHECKED BY	APPROVED BY	DATE: May 20, 2011

Sample ZW-SD-SD99-0001; Benzo(b)fluoranthene

$$\frac{286415}{43965} * 30 * \frac{0.001L}{0.0308Kg * 1L} * \frac{1}{0.536} * \frac{0.800 ug/mL}{1.05489796} * 1000 \frac{mL}{L} = 8977.9 ug/kg$$

Sample Calculation

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE1779-2DL
Client ID: 2W-SD-SD99-0001
Project: CTO-WE55 New London, CT
SDG: WE55-3

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 14-APR-11
Extracted By: WS
Extraction Method: SW846 3550
Lab Prep Batch: WG90178

Analysis Date: 02-MAY-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 54.
Report Date: 09-MAY-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	540	ug/Kgdrywt	30	20	1100	140	540
2-Methylnaphthalene	U	540	ug/Kgdrywt	30	20	1100	120	540
1-Methylnaphthalene	U	540	ug/Kgdrywt	30	20	1100	93.	540
Acenaphthylene	U	540	ug/Kgdrywt	30	20	1100	65.	540
Acenaphthene	U	540	ug/Kgdrywt	30	20	1100	82.	540
Fluorene	U	540	ug/Kgdrywt	30	20	1100	170	540
Phenanthrene		3100	ug/Kgdrywt	30	20	1100	98.	540
Anthracene	J	230	ug/Kgdrywt	30	20	1100	65.	540
Fluoranthene		8600	ug/Kgdrywt	30	20	1100	98.	540
Pyrene		8100	ug/Kgdrywt	30	20	1100	110	540
Benzo (a) anthracene		3200	ug/Kgdrywt	30	20	1100	100	540
Chrysene		5000	ug/Kgdrywt	30	20	1100	93.	540
Benzo (b) Fluoranthene		9000	ug/Kgdrywt	30	20	1100	130	540
Benzo(k)fluoranthene		3400	ug/Kgdrywt	30	20	1100	170	540
Benzo(a)pyrene		5100	ug/Kgdrywt	30	20	1100	180	540
Indeno (1,2,3-cd) pyrene		4200	ug/Kgdrywt	30	20	1100	100	540
Dibenzo (a,h) anthracene	J	720	ug/Kgdrywt	30	20	1100	98.	540
Benzo(g,h,i)perylene		3000	ug/Kgdrywt	30	20	1100	110	540
2-Methylnaphthalene-D10	D	71.4	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	95.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Sample Calculation

Data File: \\target_server\GG\chem\gcms-n.i\N050211B.b\N0348.D
Report Date: 06-May-2011 15:43

Katahdin Analytical Services

Data file : \\target_server\GG\chem\gcms-n.i\N050211B.b\N0348.D
Lab Smp Id: SE1779-2DL Client Smp ID: 2W-SD-SD99-0001
Inj Date : 02-MAY-2011 23:07 MS Autotune Date: 20-SEP-2006 13:50
Operator : JCG Inst ID: gcms-n.i
Smp Info : SE1779-2DL
Misc Info : WG91150,WG90178,N0331
Comment :
Method : \\target_server\GG\chem\gcms-n.i\N050211B.b\NSPSIM08.m
Meth Date : 06-May-2011 15:39 gcms-n.i Quant Type: ISTD
Cal Date : 02-MAY-2011 14:13 Cal File: N0336.D
Als bottle: 12
Dil Factor: 30.00000
Integrator: HP RTE Compound Sublist: ttnl-we55.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariabl

Name	Value	Description
DF	30.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03080	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	46.434	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kgdrywt)	REVIEW
*	7 1,4-Dichlorobenzene-D4	152	7.375	7.362	(1.000)	40033	0.80000		
*	20 Naphthalene-D8	136	10.179	10.104	(1.000)	160025	0.80000		
$	26 2-Methylnaphthalene-D10	152	11.909	11.710	(0.836)	5035	0.04749	86.4	
*	39 Acenaphthene-D10	164	14.250	14.206	(1.000)	79209	0.80000		
*	59 Phenanthrene-D10	188	17.736	17.724	(1.000)	123252	0.80000		
	60 Phenanthrene	178	17.784	17.772	(1.003)	282115	1.68057	3060	
	61 Anthracene	178	17.928	17.903	(1.011)	22185	0.12887	234(a)	
	64 Fluoranthene	202	20.586	20.599	(1.161)	772572	4.73576	8610	
$	65 Pyrene-D10	212	21.056	21.069	(0.877)	5624	0.06342	115	
	66 Pyrene	202	21.095	21.108	(0.879)	671571	4.45520	8100	
	68 Benzo(a)anthracene	228	23.986	23.997	(0.999)	155168	1.75566	3190	
*	69 Chrysene-D12	240	24.009	24.020	(1.000)	76738	0.80000		
	70 Chrysene	228	24.066	24.077	(1.002)	312789	2.74150	4980	
	74 Benzo(b)fluoranthene	252	26.387	26.387	(0.972)	286415	4.94047	8980	
	75 Benzo(k)fluoranthene	252	26.442	26.456	(0.974)	150066	1.86290	3390(M)	M6
	76 Benzo(a)pyrene	252	27.035	27.048	(0.995)	154031	2.81654	5120	
*	77 Perylene-D12	264	27.159	27.159	(1.000)	43965	0.80000		
	79 Indeno(1,2,3-cd)pyrene	276	29.263	29.277	(1.077)	87055	2.32054	4220(H)	
	80 Dibenzo(a,h)anthracene	278	29.346	29.373	(1.081)	15194	0.39714	722(a)	
	81 Benzo(g,h,i)perylene	276	29.839	29.866	(1.099)	76720	1.62451	2950	

Sample Calculation

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-3

Instrument ID: GCMS-N Calibration Date(s): 05/02/11 05/02/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 1043 1413

LAB FILE ID: RF0.2: N0336 RF0.5: N0335 RF1: N0331
RF2: N0334 RF5: N0333 RF8: N0332

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
1-Methylnaphthalene	32333	78263	156950	239450	620530	910350	2ORDR	-9.8e-003	1.40960487	0.16186826	0.99986	0.99000
Naphthalene	0.970	0.958	0.970	0.932	0.792	0.677	AVRG		0.88311657		13.748	15.000
2-Methylnaphthalene	50845	115760	194070	287210	674270	967390	2ORDR	-7.27e-002	1.08667282	0.19599534	0.99984	0.99000
Acenaphthylene	1.799	1.857	1.858	1.788	1.632	1.476	AVRG		1.73499377		8.712	15.000
Acenaphthene	1.127	1.157	1.142	1.112	1.055	0.963	AVRG		1.09273636		6.624	15.000
Fluorene	1.318	1.369	1.345	1.318	1.217	1.096	AVRG		1.27715752		8.045	15.000
Phenanthrene	1.125	1.138	1.176	1.127	1.050	0.922	AVRG		1.08959668		8.437	15.000
Anthracene	1.161	1.107	1.200	1.156	1.101	0.980	AVRG		1.11739676		6.847	15.000
Fluoranthene	1.141	1.051	1.152	1.067	1.008	0.935	AVRG		1.05887660		7.731	15.000
Pyrene	1.840	1.771	1.610	1.557	1.429	1.221	AVRG		1.57146191		14.425	15.000
Benzo(a)anthracene	12082	47785	145340	220100	556860	928830	LINR	-6.09e-002	1.11544031		0.99826	0.99000
Chrysene	39352	85185	175180	274310	647310	1006100	2ORDR	-2.83e-002	0.70556489	3.487e-002	0.99931	0.99000
Benzo(b)fluoranthene	0.876	1.068	1.138	1.077	1.163	1.006	AVRG		1.05489796		9.807	15.000
Benzo(k)fluoranthene	1.724	1.530	1.512	1.500	1.294	1.235	AVRG		1.46579999		12.082	15.000
Benzo(a)pyrene	0.903	0.951	1.088	1.030	1.036	0.962	AVRG		0.99511827		6.838	15.000
Indeno(1,2,3-cd)pyrene	0.836	0.536	0.674	0.618	0.711	0.722	AVRG		0.68263308		14.888	15.000
Dibenzo(a,h)anthracene	0.538	0.663	0.740	0.721	0.772	0.743	AVRG		0.69615606		12.284	15.000
Benzo(g,h,i)perylene	0.871	0.871	0.852	0.860	0.879	0.823	AVRG		0.85935011		2.346	15.000
2-Methylnaphthalene-D10	1.114	1.110	1.143	1.089	1.033	0.934	AVRG		1.07071023		7.106	15.000
Fluorene-D10	26256	75374	150460	226080	530270	775620	LINR	-0.3111887	1.10354659		0.99506	0.99000
Pyrene-D10	1.017	1.034	0.938	0.913	0.878	0.767	AVRG		0.92443617		10.572	15.000

FORM VI SV

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **A. BERNHARDT** **DATE:** **JULY 13, 2011**

FROM: **A. COGNETTI** **COPIES:** **DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – SELECT METALS, TOTAL SOLIDS**
CTO – WE55 NSB NEW LONDON
SAMPLE DELIVERY GROUP (SDG) – WE55-4

SAMPLES: 18/Sediment/Metals

2W-SD-SD114-0001	2W-SD-SD124-0001	2W-SD-SD125-0001
2W-SD-SD128-0001	2W-SD-SD129-0001	2W-SD-SD131-0001
2W-SD-SD132-0001	2W-SD-SD133-0001	2W-SD-SD137-0001
2W-SD-SD139-0001	2W-SD-SD141-0001	2W-SD-SD143-0001
2W-SD-SD145-0001	2W-SD-SD153-0001	2W-SD-SD155-0001
2W-SD-SD156-0001	2W-SD-SD157-0001	2W-SD-SD160-0001

30/Sediment/Total Solids

2W-SD-SD101-0001	2W-SD-SD102-0001	2W-SD-SD104-0001
2W-SD-SD106-0001	2W-SD-SD109-0001	2W-SD-SD111-0001
2W-SD-SD113-0001	2W-SD-SD114-0001	2W-SD-SD124-0001
2W-SD-SD125-0001	2W-SD-SD128-0001	2W-SD-SD129-0001
2W-SD-SD131-0001	2W-SD-SD132-0001	2W-SD-SD133-0001
2W-SD-SD137-0001	2W-SD-SD139-0001	2W-SD-SD141-0001
2W-SD-SD143-0001	2W-SD-SD145-0001	2W-SD-SD153-0001
2W-SD-SD155-0001	2W-SD-SD156-0001	2W-SD-SD157-0001
2W-SD-SD160-0001	2W-SD-SD85-0001	2W-SD-SD86-0001
2W-SD-SD91-0001	2W-SD-SD92-0001	2W-SD-SD93-0001

Overview

The sample set for NSB New London, CTO WE55, SDG WE55-4, consists of eighteen (18) sediment environmental samples analyzed for select metals including arsenic, cadmium, chromium, copper, lead, nickel and zinc. Thirty (30) sediment environmental samples were analyzed for total solids.

The samples were collected by Tetra Tech NUS on April 4-7, 2011 and analyzed by Katahdin Analytical Services under Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. Metals analyses were conducted using SW-846 method 6010. Total solids analyses were conducted using Standard Method 2540G. A Tier 3 data validation was performed on the referenced samples.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Verification Results
• Laboratory Method/Preparation Blank Analyses
* • ICP Interference Check Sample Results
* • Matrix Spike Results
* • Laboratory Duplicate Results
* • Laboratory Control Sample Results
* • ICP Serial Dilution Results
• Detection Limits
* • Sample Quantitation

The asterisk (*) indicates that all quality control criteria were met for this parameter. Qualified (if applicable) analytical results are summarized in Appendix A. Results as reported by the laboratory are presented in Appendix B. Appendix C contains Region I worksheets, and Appendix D contains the documentation to support the findings as discussed in this data validation report.

PERCENT SOLIDS

The percent solids were less than 30% for samples 2W-SD-SD114-0001, 2W-SD-SD125-0001, 2W-SD-SD129-0001, 2W-SD-SD131-0001, 2W-SD-SD132-0001, 2W-SD-SD133-0001, 2W-SD-SD139-0001, 2W-SD-SD141-0001, 2W-SD-SD143-0001, 2W-SD-SD145-0001, 2W-SD-SD153-0001, 2W-SD-SD155-0001, 2W-SD-SD156-0001, 2W-SD-SD157-0001 and 2W-SD-SD160-0001. Positive and nondetected metal results were qualified as estimated (J) and (UJ), respectively.

NOTES

The following contaminant was detected in the preparation blanks at the following maximum concentration:

Analyte	Maximum Concentration (mg/kg)	Action Level (mg/kg)
Chromium	0.081	0.405

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot, dilution factors and percent solids, if applicable, were taken into consideration when evaluating for blank contamination. No validation actions were required as all sample results were greater than the action level.

Positive results reported below the limit of quantitation (LOQ) but above the method detection limit (MDL) were qualified as estimated (J).

Nondetected results were reported to the limit of detection (LOD).

EXECUTIVE SUMMARY

Laboratory Performance: None.

Other Factors Affecting Data Quality: Positive results reported below the LOQ but above the MDL were qualified as estimated. The percent solids for several samples were less than 30%. The nondetected cadmium result in sample 2W-SD-SD141-0001 was rejected because the percent solids was less than 10%.

The data for these analyses were reviewed with reference to the EPA Region I, "National Functional Guidelines for Inorganic Review", November 2008 and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009.

The text of this report has been formulated to address only those problem areas affecting data quality.

Ann Cognetti

Tetra Tech NUS
Ann Cognetti
Chemist/ Data Validator

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C – Regional Worksheets
4. Appendix D – Support Documentation

APPENDIX A

QUALIFIED LABORATORY RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can be any number of issues; e.g. poor chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 02625	NSAMPLE	2W-SD-SD114-0001			2W-SD-SD124-0001			2W-SD-SD125-0001			2W-SD-SD128-0001		
SDG: WE55-4	LAB_ID	SE2829-031			SE2829-009			SE2829-010			SE2829-008		
FRACTION: M	SAMP_DATE	4/6/2011			4/5/2011			4/5/2011			4/5/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	11.4			41.5			29.6			36.1		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ARSENIC		15.7	J	Y	9.8			5.8	J	Y	12.2		
CADMIUM		1.6	UJ	Y	3.8			0.14	J	PY	1.1	J	P
CHROMIUM		53.4	J	Y	40			75.6	J	Y	84.4		
COPPER		77.8	J	Y	37			61.2	J	Y	87.2		
LEAD		77.9	J	Y	23.4			67	J	Y	53.9		
NICKEL		24.7	J	Y	45.1			25.7	J	Y	35.9		
ZINC		79.6	J	Y	569			151	J	Y	95.9		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD129-0001			2W-SD-SD131-0001			2W-SD-SD132-0001			2W-SD-SD133-0001		
SDG: WE55-4	LAB_ID	SE2829-026			SE2829-025			SE2829-029			SE2829-024		
FRACTION: M	SAMP_DATE	4/6/2011			4/5/2011			4/6/2011			4/5/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	22.5			16.1			24.0			25.8		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ARSENIC		11.9	J	Y	30.1	J	Y	10.9	J	Y	6.7	J	Y
CADMIUM		0.52	J	PY	7.2	J	PY	1.6	J	PY	0.22	J	PY
CHROMIUM		83	J	Y	13.6	J	Y	60.5	J	Y	28.4	J	Y
COPPER		84.5	J	Y	320	J	Y	139	J	Y	176	J	Y
LEAD		90.3	J	Y	114	J	Y	142	J	Y	98	J	Y
NICKEL		28.8	J	Y	57	J	Y	28.6	J	Y	38	J	Y
ZINC		159	J	Y	1870	J	Y	264	J	Y	372	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD137-0001			2W-SD-SD139-0001			2W-SD-SD141-0001			2W-SD-SD143-0001		
SDG: WE55-4	LAB_ID	SE2829-007			SE2829-030			SE2829-011			SE2829-027		
FRACTION: M	SAMP_DATE	4/5/2011			4/6/2011			4/5/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	39.0			18.8			9.5			11.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ARSENIC		11.6			18.6	J	Y	3.2	J	PY	10.2	J	Y
CADMIUM		2			2.1	J	PY	2.4	UJ	Y	1.6	J	PY
CHROMIUM		93.3			83.2	J	Y	15.9	J	Y	47.5	J	Y
COPPER		58.9			155	J	Y	53.9	J	Y	85.7	J	Y
LEAD		71.9			121	J	Y	40	J	Y	67.5	J	Y
NICKEL		31			45.9	J	Y	17.7	J	PY	28.3	J	Y
ZINC		166			473	J	Y	192	J	Y	338	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD145-0001			2W-SD-SD153-0001			2W-SD-SD155-0001			2W-SD-SD156-0001		
SDG: WE55-4	LAB_ID	SE2829-028			SE2829-001			SE2829-003			SE2829-002		
FRACTION: M	SAMP_DATE	4/6/2011			4/4/2011			4/4/2011			4/4/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	28.0			17.2			26.4			18.2		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ARSENIC		12.8	J	Y	12.4	J	Y	7	J	Y	13.3	J	Y
CADMIUM		1.1	J	PY	3.7	UJ	Y	0.82	UJ	Y	1.6	UJ	Y
CHROMIUM		68	J	Y	21.1	J	Y	59	J	Y	64.1	J	Y
COPPER		69.6	J	Y	41.4	J	Y	72.3	J	Y	82.2	J	Y
LEAD		63.1	J	Y	28.9	J	Y	76.8	J	Y	78.1	J	Y
NICKEL		30.4	J	Y	17.2	J	PY	19.6	J	Y	50.5	J	Y
ZINC		204	J	Y	396	J	Y	245	J	Y	298	J	Y

PROJ_NO: 02625 SDG: WE55-4 FRACTION: M MEDIA: SEDIMENT	NSAMPLE	2W-SD-SD157-0001			2W-SD-SD160-0001		
	LAB_ID	SE2829-004			SE2829-005		
	SAMP_DATE	4/4/2011			4/4/2011		
	QC_TYPE	NM			NM		
	UNITS	MG/KG			MG/KG		
	PCT_SOLIDS	20.6			13.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
ARSENIC		5	J	Y	26.3	J	Y
CADMIUM		0.89	UJ	Y	2.1	UJ	Y
CHROMIUM		9.6	J	Y	218	J	Y
COPPER		33.6	J	Y	842	J	Y
LEAD		15.2	J	Y	355	J	Y
NICKEL		12.8	J	Y	93.2	J	Y
ZINC		433	J	Y	901	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD101-0001			2W-SD-SD102-0001			2W-SD-SD104-0001			2W-SD-SD106-0001		
SDG: WE55-4	LAB_ID	SE2829-21			SE2829-18			SE2829-17			SE2829-20		
FRACTION: MISC	SAMP_DATE	4/6/2011			4/6/2011			4/6/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS	21.3			12.5			9.6			28.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		21			12			9.6			28		

PROJ_NO: 02625 SDG: WE55-4 FRACTION: MISC MEDIA: SEDIMENT	NSAMPLE	2W-SD-SD109-0001			2W-SD-SD111-0001			2W-SD-SD113-0001			2W-SD-SD114-0001		
	LAB_ID	SE2829-19			SE2829-22			SE2829-23			SE2829-31		
	SAMP_DATE	4/6/2011			4/6/2011			4/6/2011			4/6/2011		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS	32.1			16.2			43.9			11.4		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		32			16			44			11		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD124-0001			2W-SD-SD125-0001			2W-SD-SD128-0001			2W-SD-SD129-0001		
SDG: WE55-4	LAB_ID	SE2829-9			SE2829-10			SE2829-8			SE2829-26		
FRACTION: MISC	SAMP_DATE	4/5/2011			4/5/2011			4/5/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS	41.5			29.6			36.1			22.5		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		41			30			36			22		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD131-0001			2W-SD-SD132-0001			2W-SD-SD133-0001			2W-SD-SD137-0001		
SDG: WE55-4	LAB_ID	SE2829-25			SE2829-29			SE2829-24			SE2829-7		
FRACTION: MISC	SAMP_DATE	4/5/2011			4/6/2011			4/5/2011			4/5/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS	16.1			24.0			25.8			39.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		16			24			26			39		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD139-0001			2W-SD-SD141-0001			2W-SD-SD143-0001			2W-SD-SD145-0001		
SDG: WE55-4	LAB_ID	SE2829-30			SE2829-11			SE2829-27			SE2829-28		
FRACTION: MISC	SAMP_DATE	4/6/2011			4/5/2011			4/6/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS	18.8			9.5			11.9			28.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		19			9.4			12			28		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD153-0001			2W-SD-SD155-0001			2W-SD-SD156-0001			2W-SD-SD157-0001		
SDG: WE55-4	LAB_ID	SE2829-1			SE2829-3			SE2829-2			SE2829-4		
FRACTION: MISC	SAMP_DATE	4/4/2011			4/4/2011			4/4/2011			4/4/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS	17.2			26.4			18.2			20.6		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		17			26			18			20		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD160-0001			2W-SD-SD85-0001			2W-SD-SD86-0001			2W-SD-SD91-0001		
SDG: WE55-4	LAB_ID	SE2829-5			SE2829-14			SE2829-15			SE2829-16		
FRACTION: MISC	SAMP_DATE	4/4/2011			4/7/2011			4/7/2011			4/7/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS	13.0			24.0			34.3			22.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		13			24			34			22		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD92-0001			2W-SD-SD93-0001		
SDG: WE55-4	LAB_ID	SE2829-12			SE2829-13		
FRACTION: MISC	SAMP_DATE	4/7/2011			4/7/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM		
	UNITS	%			%		
	PCT_SOLIDS	28.6			56.1		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
TOTAL SOLIDS		28			56		

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD114-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 11.4 **Lab Sample ID:** SE2829-031

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	15.7			P	1	4.3	0.37	2.7
7440-43-9	CADMIUM, TOTAL	1.6	U		P	1	5.4	0.04	1.6
7440-47-3	CHROMIUM, TOTAL	53.4			P	1	8.1	0.14	2.2
7440-50-8	COPPER, TOTAL	77.8			P	1	14	0.85	5.4
7439-92-1	LEAD, TOTAL	77.9		*	P	1	2.7	0.47	2.2
7440-02-0	NICKEL, TOTAL	24.7			P	1	22	0.24	2.2
7440-66-6	ZINC, TOTAL	79.6			P	1	14	0.91	5.4

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD124-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 41.4 **Lab Sample ID:** SE2829-009

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	9.8			P	2	1.9	0.17	1.2
7440-43-9	CADMIUM, TOTAL	3.8			P	2	2.4	0.02	0.73
7440-47-3	CHROMIUM, TOTAL	40.0			P	2	3.6	0.06	0.97
7440-50-8	COPPER, TOTAL	37.0			P	2	6.1	0.38	2.4
7439-92-1	LEAD, TOTAL	23.4		*	P	2	1.2	0.21	0.97
7440-02-0	NICKEL, TOTAL	45.1			P	2	9.7	0.11	0.97
7440-66-6	ZINC, TOTAL	569			P	1	3.0	0.20	1.2

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD125-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 29.6 **Lab Sample ID:** SE2829-010

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	5.8			P	1	2.4	0.20	1.5
7440-43-9	CADMIUM, TOTAL	0.14	J		P	1	2.9	0.02	0.88
7440-47-3	CHROMIUM, TOTAL	75.6			P	1	4.4	0.08	1.2
7440-50-8	COPPER, TOTAL	61.2			P	1	7.3	0.46	2.9
7439-92-1	LEAD, TOTAL	67.0		*	P	1	1.5	0.26	1.2
7440-02-0	NICKEL, TOTAL	25.7			P	1	12	0.13	1.2
7440-66-6	ZINC, TOTAL	151			P	1	7.3	0.49	2.9

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD128-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 36.1 **Lab Sample ID:** SE2829-008

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	12.2			P	1	1.5	0.13	0.96
7440-43-9	CADMIUM, TOTAL	1.1	J		P	1	1.9	0.02	0.58
7440-47-3	CHROMIUM, TOTAL	84.4			P	1	2.9	0.05	0.77
7440-50-8	COPPER, TOTAL	87.2			P	1	4.8	0.30	1.9
7439-92-1	LEAD, TOTAL	53.9		*	P	1	0.96	0.17	0.77
7440-02-0	NICKEL, TOTAL	35.9			P	1	7.7	0.08	0.77
7440-66-6	ZINC, TOTAL	95.9			P	1	4.8	0.32	1.9

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD129-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 22.5 **Lab Sample ID:** SE2829-026

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	11.9			P	1	3.5	0.30	2.2
7440-43-9	CADMIUM, TOTAL	0.52	J		P	1	4.4	0.03	1.3
7440-47-3	CHROMIUM, TOTAL	83.0			P	1	6.5	0.11	1.7
7440-50-8	COPPER, TOTAL	84.5			P	1	11	0.68	4.4
7439-92-1	LEAD, TOTAL	90.3		*	P	1	2.2	0.38	1.7
7440-02-0	NICKEL, TOTAL	28.8			P	1	17	0.19	1.7
7440-66-6	ZINC, TOTAL	159			P	1	11	0.73	4.4

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD131-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 16.1 **Lab Sample ID:** SE2829-025

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	30.1			P	2	6.5	0.55	4.0
7440-43-9	CADMIUM, TOTAL	7.2	J		P	2	8.1	0.06	2.4
7440-47-3	CHROMIUM, TOTAL	13.6			P	2	12	0.21	3.2
7440-50-8	COPPER, TOTAL	320			P	2	20	1.27	8.1
7439-92-1	LEAD, TOTAL	114		*	P	2	4.0	0.71	3.2
7440-02-0	NICKEL, TOTAL	57.0			P	2	32	0.36	3.2
7440-66-6	ZINC, TOTAL	1870			P	1	10	0.68	4.0

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD132-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 24.0 **Lab Sample ID:** SE2829-029

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	10.9			P	1	1.8	0.15	1.1
7440-43-9	CADMIUM, TOTAL	1.6	J		P	1	2.2	0.02	0.67
7440-47-3	CHROMIUM, TOTAL	60.5			P	1	3.4	0.06	0.90
7440-50-8	COPPER, TOTAL	139			P	1	5.6	0.35	2.2
7439-92-1	LEAD, TOTAL	142		*	P	1	1.1	0.19	0.90
7440-02-0	NICKEL, TOTAL	28.6			P	1	9.0	0.10	0.90
7440-66-6	ZINC, TOTAL	264			P	1	5.6	0.38	2.2

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD133-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 25.8 **Lab Sample ID:** SE2829-024

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	6.7			P	1	2.9	0.25	1.8
7440-43-9	CADMIUM, TOTAL	0.22	J		P	1	3.6	0.03	1.1
7440-47-3	CHROMIUM, TOTAL	28.4			P	1	5.5	0.10	1.5
7440-50-8	COPPER, TOTAL	176			P	1	9.1	0.57	3.6
7439-92-1	LEAD, TOTAL	98.0		*	P	1	1.8	0.32	1.5
7440-02-0	NICKEL, TOTAL	38.0			P	1	15	0.16	1.5
7440-66-6	ZINC, TOTAL	372			P	1	9.1	0.61	3.6

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD137-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 39.0 **Lab Sample ID:** SE2829-007

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	11.6			P	1	1.6	0.14	1.0
7440-43-9	CADMIUM, TOTAL	2.0			P	1	2.0	0.02	0.60
7440-47-3	CHROMIUM, TOTAL	93.3			P	1	3.0	0.05	0.81
7440-50-8	COPPER, TOTAL	58.9			P	1	5.0	0.31	2.0
7439-92-1	LEAD, TOTAL	71.9		*	P	1	1.0	0.18	0.81
7440-02-0	NICKEL, TOTAL	31.0			P	1	8.1	0.09	0.81
7440-66-6	ZINC, TOTAL	166			P	1	5.0	0.34	2.0

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD139-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 18.8 **Lab Sample ID:** SE2829-030

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	18.6			P	1	3.6	0.31	2.3
7440-43-9	CADMIUM, TOTAL	2.1	J		P	1	4.5	0.04	1.4
7440-47-3	CHROMIUM, TOTAL	83.2			P	1	6.8	0.12	1.8
7440-50-8	COPPER, TOTAL	155			P	1	11	0.71	4.5
7439-92-1	LEAD, TOTAL	121		*	P	1	2.3	0.40	1.8
7440-02-0	NICKEL, TOTAL	45.9			P	1	18	0.20	1.8
7440-66-6	ZINC, TOTAL	473			P	1	11	0.76	4.5

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD141-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 9.46 **Lab Sample ID:** SE2829-011

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	3.2	J		P	1	6.6	0.56	4.1
7440-43-9	CADMIUM, TOTAL	2.4	U		P	1	8.2	0.07	2.4
7440-47-3	CHROMIUM, TOTAL	15.9			P	1	12	0.21	3.3
7440-50-8	COPPER, TOTAL	53.9			P	1	20	1.28	8.2
7439-92-1	LEAD, TOTAL	40.0		*	P	1	4.1	0.71	3.3
7440-02-0	NICKEL, TOTAL	17.7	J		P	1	33	0.36	3.3
7440-66-6	ZINC, TOTAL	192			P	1	20	1.38	8.2

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD143-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 11.9 **Lab Sample ID:** SE2829-027

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	10.2			P	1	4.5	0.38	2.8
7440-43-9	CADMIUM, TOTAL	1.6	J		P	1	5.6	0.05	1.7
7440-47-3	CHROMIUM, TOTAL	47.5			P	1	8.5	0.15	2.3
7440-50-8	COPPER, TOTAL	85.7			P	1	14	0.88	5.6
7439-92-1	LEAD, TOTAL	67.5		*	P	1	2.8	0.49	2.3
7440-02-0	NICKEL, TOTAL	28.3			P	1	23	0.25	2.3
7440-66-6	ZINC, TOTAL	338			P	1	14	0.95	5.6

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD145-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 28.0 **Lab Sample ID:** SE2829-028

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	12.8			P	1	1.9	0.16	1.2
7440-43-9	CADMIUM, TOTAL	1.1	J		P	1	2.3	0.02	0.70
7440-47-3	CHROMIUM, TOTAL	68.0			P	1	3.5	0.06	0.93
7440-50-8	COPPER, TOTAL	69.6			P	1	5.8	0.36	2.3
7439-92-1	LEAD, TOTAL	63.1		*	P	1	1.2	0.20	0.93
7440-02-0	NICKEL, TOTAL	30.4			P	1	9.3	0.10	0.93
7440-66-6	ZINC, TOTAL	204			P	1	5.8	0.39	2.3

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD153-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 17.2 **Lab Sample ID:** SE2829-001

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-38-2	ARSENIC, TOTAL	12.4			P	3	9.9	0.84	6.2
7440-43-9	CADMIUM, TOTAL	3.7	U		P	3	12	0.10	3.7
7440-47-3	CHROMIUM, TOTAL	21.1			P	3	18	0.32	4.9
7440-50-8	COPPER, TOTAL	41.4			P	3	31	1.93	12
7439-92-1	LEAD, TOTAL	28.9		*	P	3	6.2	1.08	4.9
7440-02-0	NICKEL, TOTAL	17.2	J		P	3	49	0.54	4.9
7440-66-6	ZINC, TOTAL	396			P	1	10	0.69	4.1

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD155-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 26.4 **Lab Sample ID:** SE2829-003

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	7.0			P	1	2.2	0.19	1.4
7440-43-9	CADMIUM, TOTAL	0.82	U		P	1	2.7	0.02	0.82
7440-47-3	CHROMIUM, TOTAL	59.0			P	1	4.1	0.07	1.1
7440-50-8	COPPER, TOTAL	72.3			P	1	6.8	0.43	2.7
7439-92-1	LEAD, TOTAL	76.8		*	P	1	1.4	0.24	1.1
7440-02-0	NICKEL, TOTAL	19.6			P	1	11	0.12	1.1
7440-66-6	ZINC, TOTAL	245			P	1	6.8	0.46	2.7

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD156-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 18.2 **Lab Sample ID:** SE2829-002

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-38-2	ARSENIC, TOTAL	13.3			P	1	4.1	0.35	2.6
7440-43-9	CADMIUM, TOTAL	1.6	U		P	1	5.2	0.04	1.6
7440-47-3	CHROMIUM, TOTAL	64.1			P	1	7.8	0.13	2.1
7440-50-8	COPPER, TOTAL	82.2			P	1	13	0.81	5.2
7439-92-1	LEAD, TOTAL	78.1		*	P	1	2.6	0.45	2.1
7440-02-0	NICKEL, TOTAL	50.5			P	1	21	0.23	2.1
7440-66-6	ZINC, TOTAL	298			P	1	13	0.87	5.2

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD157-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 20.6 **Lab Sample ID:** SE2829-004

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	5.0			P	1	2.4	0.20	1.5
7440-43-9	CADMIUM, TOTAL	0.89	U		P	1	3.0	0.02	0.89
7440-47-3	CHROMIUM, TOTAL	9.6			P	1	4.4	0.08	1.2
7440-50-8	COPPER, TOTAL	33.6			P	1	7.4	0.46	3.0
7439-92-1	LEAD, TOTAL	15.2		*	P	1	1.5	0.26	1.2
7440-02-0	NICKEL, TOTAL	12.8			P	1	12	0.13	1.2
7440-66-6	ZINC, TOTAL	433			P	1	7.4	0.50	3.0

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD160-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 13.0 **Lab Sample ID:** SE2829-005

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	26.3			P	1	5.7	0.49	3.6
7440-43-9	CADMIUM, TOTAL	2.1	U		P	1	7.1	0.06	2.1
7440-47-3	CHROMIUM, TOTAL	218			P	1	11	0.19	2.8
7440-50-8	COPPER, TOTAL	842			P	1	18	1.11	7.1
7439-92-1	LEAD, TOTAL	355		*	P	1	3.6	0.62	2.8
7440-02-0	NICKEL, TOTAL	93.2			P	1	28	0.31	2.8
7440-66-6	ZINC, TOTAL	901			P	1	18	1.20	7.1

Bottle ID: A

Comments:

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-21
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD101-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	21. %	1	N/A	SM2540G	WG92184	28-MAY-11 13:26:00	ASTM D2216	27-MAY-11	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-18
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD102-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	12. %	1	N/A	SM2540G	WG92184	28-MAY-11 13:22:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-17
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD104-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	9.6 %	1	N/A	SM2540G	WG92182	28-MAY-11 12:32:00	ASTM D2216	27-MAY-11	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-20
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD106-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	28. %	1	N/A	SM2540G	WG92184	28-MAY-11 13:25:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-19
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD109-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	32. %	1	N/A	SM2540G	WG92184	28-MAY-11 13:24:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-22
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD111-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	16. %	1	N/A	SM2540G	WG92184	28-MAY-11 13:27:00	ASTM D2216	27-MAY-11	

Katahdin
ANALYTICAL SERVICES

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Cert No E87604

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-23
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD113-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	44. %	1	N/A	SM2540G	WG92184	28-MAY-11 13:28:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-31
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD114-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	11. %	1	N/A	SM2540G	WG92184	28-MAY-11 13:36:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-9
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD124-0001	SL	05-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	41. %	1	N/A	SM2540G	WG92182	28-MAY-11 12:24:00	ASTM D2216	27-MAY-11	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-10
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD125-0001	SL	05-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	30. %	1	N/A	SM2540G	WG92182	28-MAY-11 12:25:00	ASTM D2216	27-MAY-11	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-8
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD128-0001	SL	05-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	36. %	1	N/A	SM2540G	WG92182	28-MAY-11 12:23:00	ASTM D2216	27-MAY-11	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-26
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD129-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	22. %	1	N/A	SM2540G	WG92184	28-MAY-11 13:31:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-25
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD131-0001	SL	05-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	16. %	1	N/A	SM2540G	WG92184	28-MAY-11 13:30:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-29
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD132-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	24. %	1	N/A	SM2540G	WG92184	28-MAY-11 13:34:00	ASTM D2216	27-MAY-11	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-24
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD133-0001	SL	05-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	26. %	1	N/A	SM2540G	WG92184	28-MAY-11 13:29:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-7
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD137-0001	SL	05-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	39. %	1	N/A	SM2540G	WG92182	28-MAY-11 12:22:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-30
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD139-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	19. %	1	N/A	SM2540G	WG92184	28-MAY-11 13:35:00	ASTM D2216	27-MAY-11	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-11
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD141-0001	SL	05-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	9.4 %	1	N/A	SM2540G	WG92182	28-MAY-11 12:27:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-27
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD143-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	12. %	1	N/A	SM2540G	WG92184	28-MAY-11 13:32:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-28
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD145-0001	SL	06-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	28. %	1	N/A	SM2540G	WG92184	28-MAY-11 13:33:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-1
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD153-0001	SL	04-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	17. %	1	N/A	SM2540G	WG92182	28-MAY-11 12:16:00	ASTM D2216	27-MAY-11	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-3
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD155-0001	SL	04-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	26. %	1	N/A	SM2540G	WG92182	28-MAY-11 12:18:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-2
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD156-0001	SL	04-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	18. %	1	N/A	SM2540G	WG92182	28-MAY-11 12:17:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-4
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD157-0001	SL	04-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	20. %	1	N/A	SM2540G	WG92182	28-MAY-11 12:19:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-5
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD160-0001	SL	04-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	13. %	1	N/A	SM2540G	WG92182	28-MAY-11 12:20:00	ASTM D2216	27-MAY-11	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-14
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD85-0001	SL	07-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	24. %	1	N/A	SM2540G	WG92182	28-MAY-11 12:29:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-15
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD86-0001	SL	07-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	34. %	1	N/A	SM2540G	WG92182	28-MAY-11 12:30:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-16
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD91-0001	SL	07-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	22. %	1	N/A	SM2540G	WG92182	28-MAY-11 12:32:00	ASTM D2216	27-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-12
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD92-0001	SL	07-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	28. %	1	N/A	SM2540G	WG92268	01-JUN-11 15:57:00	ASTM D2216	31-MAY-11	

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE2829-13
Report Date: 13-JUN-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: WE55-4

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD93-0001	SL	07-APR-11	08-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	56. %	1	N/A	SM2540G	WG92182	28-MAY-11 12:28:00	ASTM D2216	27-MAY-11	

APPENDIX C

REGIONAL WORKSHEETS

EPA-NE
Data Validation Worksheet Cover Page - Page 1

Site Name NSB New London
Reference No. _____

REGION I INORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name Katahdin
Case/Project No. W2602625
SDG No. WE55-4
No. of Samples/Matrix 18/Metals 30/Total Solids

SOW/Method No. SW-846 6010, 2540G
Sampling Date(s) April 4-7, 2011
Shipping Date(s) _____
Date Rec'd by lab April 6 and 8, 2011

Traffic Report Sample Nos. _____

Equipment Blank No. _____
Bottle Blank No. _____
Field Duplicate Nos. _____
PES Nos. _____

The Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision _____ was used to evaluate the data and/or approved modifications to the EPA-NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attach modified criteria from EPA approved QAPP or amendment to QAPP).

A Tier II or Tier III evaluation was used to validate the data (circle one). If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc., that received partial Tier III validation.

The data were evaluated based upon the following parameters:

- Overall Evaluation of Data
- Data Completeness (CSF Audit - Tier I)
- Preservation and Technical Holding Times
- ICP-MS Tune
- Calibrations
- Blanks
- ICP-AES Interference Check Sample (ICS)
- ICP-MS Interference Check Sample (ICS)
- ICP-MS Internal Standards
- Matrix Spikes
- Laboratory Duplicate Samples
- Field Duplicates
- ICP Serial Dilutions
- Sensitivity Check
- Performance Evaluation Samples/Accuracy Check
- Analyte Quantitation and Reported Quantitation Limits
- System Performance

Region I Definitions and Qualifiers:

A - Acceptable Data
J - Numerical value associated with analyte is an estimated quantity.
R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.
U - Analyte not detected at that numerical sample quantitation limit.
UJ - The sample quantitation limit is an estimated quantity.
BB, EB - Analyte detected in aqueous bottle blank or aqueous equipment blank associated with soil/sediment samples.

Validator's Name Ann Cognetta Company Name TetraTech Phone Number (412) 921-8862

Date Validation Started 7/7/11 Date Validation Completed 7/7/11

EPA-NE
Data Validation Worksheet Cover Page - Page 2

Check if all criteria are met and no hard copy worksheet is provided. Indicate NA if worksheet is not applicable to the analytical method. Note: there is no standard worksheet for System Performance; however, the validator must document all system performance issues in the Data Validation Memorandum.

INORG Worksheets:

INORG	COMPLETE SDG FILE (CSF) AUDIT	
INORG-I	PRESERVATION AND TECHNICAL HOLDING TIMES	
INORG-II	ICP-MS TUNE	
INORG-III-A/B	CALIBRATIONS	
INORG-IV-A/B	BLANKS	
INORG-IV-C.1	BLANKS	
INORG-IV-C.2	BLANKS	
INORG-V-A	ICP-AES INTERFERENCE CHECK SAMPLE - ICSAB	
INORG-V-B.1	ICP-AES INTERFERENCE CHECK SAMPLE - ICSA	
INORG-V-B.2	ICP-AES INTERFERENCE CHECK SAMPLE - ICSA	
INORG-VI-A	ICP-MS INTERFERENCE CHECK SAMPLE - ICSAB	
INORG-VI-B	ICP-MS INTERFERENCE CHECK SAMPLE - ICSA	
INORG-VII	ICP-MS INTERNAL STANDARDS	
INORG-VIII	MATRIX SPIKES	
INORG-IX	LABORATORY DUPLICATE SAMPLES	
INORG-X	FIELD DUPLICATES	
INORG-XI	ICP SERIAL DILUTIONS	
INORG-XII-A/B	SENSITIVITY CHECK	
INORG-XIII-A	PE SAMPLES/ACCURACY CHECK- LCS	
INORG-XIII-B	PE SAMPLES/ACCURACY CHECK- PE RESULTS	
INORG-XIV	ANALYTE QUANTITATION AND REPORTED QUANTITATION LIMITS	
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	

I certify that all criteria were met for the worksheets checked above.

Signature: Ann Cognetti Name: Ann Cognetti

Date: July 7, 2011

The data validator generates a Data Validation Report, applicable to Data Validation Tiers II and III, that consists of the following components in the order specified below: (Refer to Part I - Data Validation Manual, Section 11 for a description of each of the Data Validation Report components).

1. Organic Regional Data Assessment/Inorganic Regional Data Assessment (ORDA/IRDA) Form
2. Data Validation Memorandum
   a. Narrative
   b. Table I-Qualifier Recommendation Summary Table
   c. Table II-Overall Evaluation of Data
   d. Data Summary Tables
3. Standard Data Validation Worksheets
   a. Manual
   b. Automated Data Review Reports
4. Support Documentation
   a. Copy of non-CLP analytical method, e.g., DAS methods, modified EPA methods
   b. Copies of PES Score Reports/Vendor PES QC Acceptance Limits
   c. Copies of Telephone Logs/Communication Forms for:
      - RSCC communications
      - Requests for laboratory data resubmissions/clarifications
      - Communications with samplers resolving sampling problems
      - Communications with PO/DV Chemist/Lead Chemist to report contractually-deficient data for rejection/reduced payment
      - Communications with EPA Site Manager concerning possible data rejection
      - EPA Site Manager authorization for alternate DV tier
   d. Copies of data supporting recommendations for reduced payment resulting from CSF Audit and/or PE sample result evaluation
   e. Original data to support recommendations for data rejection/non-payment identified from Tier II or Tier III data validation
   f. Copies of field sampling notes and/or field report supplied by field sampler
   g. Copies of EPA-approved amendments to QAPP and/or SAP describing modified criteria to be used for validating site data
5. CSF Completeness Evidence Audit
6. DQO Summary Form

The data validator is responsible for implementing all corrective actions required by the contractor Lead Chemist in response to EPA-NE data validation oversight findings.

EPA-NE - Data Validation Worksheet

Overall Evaluation of Data - Data Validation Memorandum - Table II

Site: NSB New London Case: _____ SDG: WE55-4

INORGANICS					
DQO (List all DQOs)	Sampling and/or Analytical Method Appropriate? (Yes or No)	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		
See (data validation) report					

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: John Cognetta

Date: July 7, 2011

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG

COMPLETE SDG FILE (CSF) AUDIT

Inorganic Parameters: Metals, Total Solids

Missing Information	Date Lab Contacted	Date Received

Validator: Ann Cognetta

Date: July 7, 2011

EPA-NE - Data Validation Worksheet
INORG-I

I. PRESERVATION AND HOLDING TIMES

Circle sample numbers with exceeded technical holding times or omitted preservation.
Circle all exceeded technical holding times.

Sample No.	Matrix	Pres. Code		Date Sampled	Metals		Hg		CN		Action
		Metals	CN		Date Analyzed	# of Days from Samp. to Analysis	Date Analyzed	# of Days from Samp. to Analysis	Date Analyzed	# of Days from Samp. to Analysis	
		See data validation report.									

Preservation Code:
1. Cool (≤ 6°C)
2. pH < 2 with HNO_3
3. pH > 12 with NaOH
4. Room Temperature
5. Freeze
6. Reducing agent (for oxidants)
7. Treated for sulfides
8. Other - _____

Action Code:
J - Estimate (J) Detected Values
UJ - Estimate (UJ) Non-Detected Values
R - Reject (R) Non-Detected Values

Sampler: Terry Rojahn Company: Tetra Tech Contacted: Y (N) Date: _____

Validator: Ann Cognetta Date: 7/7/11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-II

II. ICP-MS TUNE

List all Tunes that are outside method QC acceptance criteria.

Method:_____

Method QC acceptance criteria for mass calibration:_____

Method QC acceptance criteria for resolution check/peak width:_____ at_____% peak height.

Method QC acceptance criteria for % RSD:_____

Analysis Date and Time	Analyte	Mass Calibration			Mass Resolution		% RSD of Absolute Signals	Analyte/Samples Affected	Action
		True Mass (amu)	Measured Mass (amu)	Absolute Difference of Masses (amu)	Peak Width (amu)	% Peak Height			

Comments: See (data validation report.

Validator: (Ann Cognetta

Date: July 7, 2011

EPA-NE - Data Validation Worksheet
INORG-III-A/B/C

III. CALIBRATIONS

A. Instrument Calibration - List all calibration correlation coefficients that are outside the method QC acceptance criteria.
Calibration correlation QC acceptance criteria: _____ Calibration Type: _____

Date/Time	Instr.	Analyte	Corr. Coef.	Samples Affected	Action

B. Initial and Continuing Calibration Verifications - List all ICV and CCV analyte recoveries that are outside the method QC acceptance criteria.
ICV method QC acceptance criteria: _____ CCV method QC acceptance criteria: _____

Date	Instr.	Analyte	ICV/CCV #	% R	Samples Affected	Action

C. Quantitation Limit Check Standard - List all QL Check Standard analytes that are outside method QC acceptance criteria.
QL Check Standard method QC acceptance criteria: _____

Date	Instr.	Analyte	QL Check Std. #	% R	Affected Range	Samples Affected	Action

Comments: See data validation report

Validator: Ann Cognetti

Date: July 7, 2011

EPA-NE - Data Validation Worksheet
INORG-IV-A/B

IV. BLANKS - List the blank contamination and negative blank results below.

Sampler: Terry Kopahn Company: Tetra Tech Contacted: Y (N) Date: _____

A. Laboratory: Preparation (Method) and Calibration (Instrument) Blanks

Date Prepared	Date Analyzed	Blank Type (ICB/CCB#/Prep Blank)	Matrix	Instrument	Analyte	Conc. (units)

B. Field: Equipment (Rinsate) and Bottle Blanks

Date Sampled	Date Analyzed	Sample No. (Blank Type)	Matrix	Instrument	Analyte	Conc. (units)

Were the proper number of blanks analyzed at the proper frequency? Y N

For ICP MS - Are internal standard responses in all blanks within method QC acceptance criteria? Y N

Comments: See data validation report

Validator: Ann Cognetta Date: July 7, 2011

EPA-NE - Data Validation Worksheet
INORG-IV-C.1
IV. BLANKS

C.1 Blank Contamination Worksheet

Circle the highest concentration of each contaminant.

Analyte	Date Analyzed	ICB	CCB							PBW	PBS	EB	BB	Max. Conc.	Action Level
			1	2	3	4	5	6	7						
Aluminum															
Antimony															
Arsenic															
Barium															
Beryllium															
Cadmium															
Calcium															
Chromium															
Cobalt															
Copper															
Iron															
Lead															
Magnesium			See data validation report												
Manganese															
Mercury															
Nickel															
Potassium															
Selenium															
Silver															
Sodium															
Thallium															
Vanadium															
Zinc															
Cyanide															

Validator: Ann Cognetti

Date: July 7, 2011

EPA-NE - Data Validation Worksheet
INORG-IV-C.2

IV. BLANKS

C.2 Blank Actions - List the maximum concentrations of each analyte among all blanks associated with each sample.

Analyte	Type of Blank	Date Blank Originated	Max. Conc. (units)	Blank Action Level (units)	Sample QL	Samples Affected	Action
	✓						

Comments:
See data validation report.

Validator: Ann Cognetti

Date: July 7, 2011

DRAFT 11/08

EPA NE - Data Validation Worksheet
INORG-V-A

V. A. ICP-AES INTERFERENCE CHECK SAMPLE - ICSAB

1. List all analytes in the ICSAB that are outside ICSAB percent recovery criteria.

Date	Analyte	%R	Conc. of Interferents Observed in ICSAB (ug/L)				Samples Affected	Action
			Al	Ca	Fe	Mg		

Comments: See data validation report

Validator: Ann Cognetta

Date: July 7, 2011

EPA NE - Data Validation Worksheet
INORG-V-B.1

V. B.1 ICP-AES INTERFERENCE CHECK SAMPLE - ICSA

1. List all analytes in the ICSA that are outside ICSA criteria.

Date	Analyte	MDL (ug/L)	ICSA Observed Conc. (ug/L)	ICSA True Value (ug/L)	Criteria: 80-120% R or TV±2xMDL	Conc. of Interferents Observed in ICSA (ug/L)				Associated Samples
						Al	Ca	Fe	Mg	

Comments: See data validation report.

Validator: Ann Cognetti

Date: July 7, 2011

EPA NE - Data Validation Worksheet
INORG-V-B.2

V. B.2 ICP-AES INTERFERENCE CHECK SAMPLE - ICSA

2. List all affected sample results.

Affected Sample	Interferent	Conc. in Sample (ug/L)	Analyte	Conc. in Sample (ug/L)	Estimated Interference in Sample (ug/L)	Action

Comments:
See data validation report.

Validator: Ann Cognetta

Date: July 7, 2011

EPA NE - Data Validation Worksheet
INORG-VI-A

VI. A. ICP-MS INTERFERENCE CHECK SAMPLE - ICSAB

List all analytes that are outside ICSAB criteria of 80-120% R.

Date	Analyte	%R	Samples Affected	Action

Comments:
See data validation report.

Validator: Ann Cognetta

Date: July 7, 2011

EPA NE - Data Validation Worksheet
INORG-VI-B

VI. B. ICP-MS INTERFERENCE CHECK SAMPLE - ICSA

List all analytes that are outside ICSA criteria.

Date	Analyte	MDL (ug/L)	ICSA Observed Conc. (ug/L)	ICSA True Value (ug/L)	Criteria: 80-120% R or TV ± 2xMDL	Samples Affected	Action

Comments: See data validation report.

Validator: Ann Cognetti

Date: July 7, 2011

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-VII

VII. ICP-MS INTERNAL STANDARDS

List all internal standards that are outside method QC acceptance criteria.

IS method QC acceptance criteria: _____

Sample Number	Date and Time Analyzed	IS, amu	% RI	Analytes Affected (amu)	Action

Comments:

Validator: Ann Cognetta

Date: July 7, 2011

EPA-NE - Data Validation Worksheet
INORG-VIII

VIII. MATRIX SPIKES - List all matrix spike analytes that are outside method QC acceptance criteria.

Use a separate worksheet for each matrix spike sample.

Sample No.: 2W-SD-SD141-0001 Matrix: Sediment

Method	Analyte	Spiked Sample Result	Sample Result	Amount of Spike Added	MS % Recovery	Method QC Limits % Recovery	Post-Digest Spike % Recovery	Action

Comments:
See data validation report.

Validator: Ann Cognetta

Date: July 7, 2011

EPA-NE - Data Validation Worksheet
INORG-IX

IX. LABORATORY DUPLICATE SAMPLES - List all analytes that are outside method QC acceptance criteria for the specific matrix.

Use a separate worksheet for each laboratory duplicate sample.

Sample No.: 2W-SD-SD141-0001 Duplicate Sample No.: _____ Matrix: Sediment

Laboratory duplicate sample method QC acceptance criteria: _____

Method	Analyte	Sample Conc.	Sample		Duplicate Conc.	Duplicate		RPD or Abs. Diff.	QC Acceptance Criteria (RPD or Abs. Diff.)	Action
			SQL	5xSQL		SQL	5xSQL			

Do the field duplicate sample data indicate acceptable field precision? Y N

Comments: See data validation report

Validator: Ann Cognetta

Date: July 7, 2011

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-X

X. FIELD DUPLICATES - List all field duplicate analytes that are outside criteria.

Use a separate worksheet for each field duplicate pair.

Sample No.:_____ Duplicate Sample No.:_____ Matrix:_____

Method	Analyte	Sample Conc.	Sample		Duplicate Conc.	Duplicate		RPD or Abs. Diff.	QC Acceptance Criteria (RPD or Abs. Diff.)	Action
			SQL	5xSQL		SQL	5xSQL			

Do the laboratory duplicate sample data indicate acceptable laboratory precision? Y N

Comments: _____

_____

Sampler Name: _____ Contractor Name: _____ Date Contacted: _____

Reason for contact and resolution obtained: _____

Validator: Ann Cognetta

Date: July 7, 2011

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-XI

XI. ICP SERIAL DILUTIONS

Use a separate worksheet for each serial dilution sample.

Sample No.:_____ Matrix:_____ Method:_____

List all serial dilution analytes that are outside method QC acceptance criteria.

% Difference method QC acceptance criteria: _____
Minimum concentration required to apply the % D criteria (e.g., 50x MDL): _____

Analyte	MDL	Min. Conc. Required	Sample Result	Serial Dilution Sample Result (corrected for dilution)	% D	Action

Comments:
See data validation report.

Validator: John Cognetta

Date: July 7, 2011

EPA-NE - Data Validation Worksheet
INORG-XII-A/B

XII. SENSITIVITY CHECK

A. Method Detection Limit Study - List all analytes that are outside the MDL criteria.

- Has an appropriate MDL study been submitted with seven replicates for each analyte and matrix of interest? **Y N**
- Were samples analyzed within one year of the MDL study and on the same instrument? **Y N**

Matrix	Analyte	MDL	MDL > QL	Samples Affected	Action

If an MDL study has not been submitted, use only the LFB results to evaluate data.

B. Laboratory Fortified Blank - List all LFB analytes that are outside the LFB criteria.

- Has an appropriate and complete LFB been submitted at the proper frequency? **Y N**
- Does the LFB contain all target analytes at their QLs? **Y N**

Matrix	Method	Analyte	% R	Method QC Limits % R	Samples Affected	Action

Comments: _____

Validator: Ann Cognetti

Date: July 7, 2011

EPA-NE - Data Validation Worksheet
INORG-XIII-A

XIII. PERFORMANCE EVALUATION SAMPLES/ACCURACY CHECK

A. Laboratory Control Samples - List all analytes that are outside criteria.

SDG No.:_____ Case:_____

Are more than one-half of the LCS analytes within criteria for each parameter and method? **Y** **N**

Date Prepared	Date Analyzed	Parameter/ Method	Matrix	Analyte	% Recovery (or Observed Conc.)	Method QC Acceptance Criteria	Samples Affected	Action
Comments:								

Validator: Ann Cognetti

Date: July 7, 2011

EPA-NE - Data Validation Worksheet
INORG-XIII-B

XIII. PERFORMANCE EVALUATION SAMPLES/ACCURACY CHECK

B. Performance Evaluation Results - List all analytes that are outside criteria.

SDG No.:_____ Case:_____

Indicate the source of the PES: Region 1 EPA PES Non-EPA PES

Are more than one-half of the PES analytes within criteria for each parameter and method? **Y** **N**

PE Sample Number	Ampule Number	Parameter/ Method	Type of PES	Matrix	Analyte	Conc.	PES Score*	Samples Affected	Action

* For Region I PESs indicate the Region I PES Score Report Result: Action High, Action Low, Analyte Missed, Contaminant.
For Non-EPA PESs indicate the Non-EPA PES Score: PES Analyte Missed; PES Analyte Contaminant; PES Analyte Hit (% Recovery Limits).

Comments:_____

Validator: Ann Cognetti

Date: July 7, 2011

EPA-NE - Data Validation Worksheet
INORG-XIV

XIV. ANALYTE QUANTITATION AND REPORTED QUANTITATION LIMITS

Recalculate, from the raw data, the concentrations for one positive detect and one reported sample quantitation limit for a non-detect in a diluted sample or soil sample per analytical method. (Note: Although Section XIV, C.2.a, requires that one calculation for each method in each sample be performed, the validator is only required to reproduce an example, for each method, of one positive detect and one sample quantitation limit calculation on this worksheet.)

Do all soil/sediment samples have % solids greater than 30%? **Y** **N**

- If no, were any steps employed to address the high moisture content? _____
- Indicate the action and list the affected sample nos.: _____

Method		Calculation
ICP-AES		
Sample No.:		
Reported Analyte:		
Reported Value:		
Non-Detected Analyte:		
Reported Quantitation Limit:		
ICP-MS		
Sample No.:		
Reported Analyte:		
Reported Value:		
Non-Detected Analyte:		
Reported Quantitation Limit:		
Mercury		
Sample No.:		
Reported Value:		
Sample No.:		
Reported Quantitation Limit:		
Cyanide		
Sample No.:		
Reported Value:		
Sample No.:		
Reported Quantitation Limit:		

Validator: Ann Cognetta

Date: July 7, 2011

APPENDIX D

SUPPORT DOCUMENTATION

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO-WE55 NEW LONDON, CT
SDG: WE55-4
SE2829

Sample Receipt

The following samples were received on April 6 and 8, 2011 and were logged in under Katahdin Analytical Services work order number SE2829 for a hardcopy due date of June 8, 2011.

KATAHDIN Sample No.	TTNUS Sample Identification
SE2829-1	2W-SD-SD153-0001
SE2829-2	2W-SD-SD156-0001
SE2829-3	2W-SD-SD155-0001
SE2829-4	2W-SD-SD157-0001
SE2829-5	2W-SD-SD160-0001
SE2829-7	2W-SD-SD137-0001
SE2829-8	2W-SD-SD128-0001
SE2829-9	2W-SD-SD124-0001
SE2829-10	2W-SD-SD125-0001
SE2829-11	2W-SD-SD141-0001
SE2829-12	2W-SD-SD92-0001
SE2829-13	2W-SD-SD93-0001
SE2829-14	2W-SD-SD85-0001
SE2829-15	2W-SD-SD86-0001
SE2829-16	2W-SD-SD91-0001
SE2829-17	2W-SD-SD104-0001
SE2829-18	2W-SD-SD102-0001
SE2829-19	2W-SD-SD109-0001
SE2829-20	2W-SD-SD106-0001
SE2829-21	2W-SD-SD101-0001
SE2829-22	2W-SD-SD111-0001
SE2829-23	2W-SD-SD113-0001
SE2829-24	2W-SD-SD133-0001
SE2829-25	2W-SD-SD131-0001
SE2829-26	2W-SD-SD129-0001
SE2829-27	2W-SD-SD143-0001
SE2829-28	2W-SD-SD145-0001
SE2829-29	2W-SD-SD132-0001
SE2829-30	2W-SD-SD139-0001
SE2829-31	2W-SD-SD114-0001

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

8081 Analysis

All samples and associated QC were subjected to the GPC sample clean-up process.

Surrogate recoveries for all samples and QC, as well as spike recoveries for the LCS/LCSD, were evaluated using laboratory established acceptance limits.

Samples SE2829-1, 3, 5, 9, 24, 28DL, and 31 were manually integrated for the target analytes 4,4'-DDE, 4,4'-DDT, and/or the extraction surrogate DCB. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Samples SE2829-1, 2, 3, 8, 24, 26 and 28DL had RPD's for 4,4'-DDT that were outside of the method acceptance limits of 40%. This analyte is flagged with a "J" qualifier on the report of analysis (ROA).

The target analyte 4,4'-DDD was detected above ½ the reporting limit in the method blank WG91999-1. According to the DoD QSM section D.1.1.1, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit and is greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). The target analyte 4,4'-DDD was detected at a concentration greater than 10 times the concentration in the method blank for all the associated samples except sample SE2829-4. This analyte was flagged with a "B" qualifier indicating that the analyte was detected in the method blank analyzed concurrently with sample SE2829-4.

The opening/closing CV's (files 1EF00079 and 1EF00090) had low responses for 4,4-DDT on both channels, which resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since the opening CV was acceptable and subsequent instrument maintenance resulted in an acceptable CV that confirmed interference, the associated samples were not reanalyzed.

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

Metals Analysis

The samples of Katahdin SDG WE55-4 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Solid-matrix Katahdin Sample Numbers SE2829- (1-5, 7-11, and 24-31) were digested for ICP analysis on 05/31/11 (QC Batch BW31ICS0) in accordance with USEPA Method 3050B. Katahdin Sample Number SE2829- 11 was prepared in duplicate and with a matrix-spiked aliquot

ICP analyses of Katahdin SDG WE55-4 sample digestates was performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010. All samples were analyzed

within holding times and all analytical run QC criteria were met. Some samples were diluted to reduce spectral interferences cause by high iron concentrations in the samples.

Matrix QC Summary

The measured recoveries all elements in the matrix-spiked aliquot of Katahdin Sample Number SE2829-11 are within the project acceptance criteria (80% - 120% recovery of the added element, if the native concentration is less than four times the amount added).

The duplicate analysis of Katahdin Sample Number SE2829- 11 is outside the laboratory's acceptance limit (<20% relative difference between duplicate aliquots) for lead.

The serial dilution analysis of Katahdin Sample Number SE2829-11 is within the laboratory's acceptance limit (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOQ) for all elements.

The measured recovery of all elements in the post-digestion spiked aliquot of Katahdin Sample Number SE2829-11 is within the laboratory's acceptance criteria (75% - 125%).

Reporting of Metals Results

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

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

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

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

Wet Chemistry Analysis

The samples of SDG WE55-4 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Annual Book of ASTM Standards", Method D2216-98 "Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass".

All analyses were performed within analytical holding times. All quality control criteria were met.

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

Leslie Dimond
061511

Leslie Dimond
Quality Assurance Officer

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4186 | PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112G02625	NSB NEW LONDON	A. BERNHARDT	412 921 8433	KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER: T. ROJAHN	PHONE NUMBER: 412 921 8857	ADDRESS: 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER: FED EX AB# 8631 2526 3713		CITY, STATE: SCARBOROUGH, ME 04074

STANDARD TAT ☒ RUSH TAT ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE 168.4/5 GN

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)								PRESERVATIVE USED								COMMENTS
									G	G							4°C	4°C							
									TYPE OF ANALYSIS: PAHs w. SELECT PESTICIDES PCBs & SELECT METALS																
4/04	0952	2W-SD-SD147-0001	SD 147	0	0.33	SD	G	2	1	1															PHASE I ANALIZE
4/04	1012	2W-SD-SD148-0001	SD 148	0	0.33	SD	G	2	* 1	** 1															SEE COMMENT
4/04	1030	2W-SD-SD149-0001	SD 149	0	0.33	SD	G	2	1	1															PHASE I ANALIZE
4/04	1050	2W-SD-SD152-0001	SD 152	0	0.33	SD	G	2	* 1	** 1	(TR)														PHASE I ANALIZE
4/04	1120	2W-SD-SD151-0001	SD 151	0	0.33	SD	G	2	* 1	** 1															SEE COMMENT
4/04	1145	2W-SD-SD153-0001	SD 153	0	0.33	SD	G	2	* 1	** 1															↓
4/04	1205	2W-SD-SD154-0001	SD 154	0	0.33	SD	G	2	1	1															PHASE I ANALIZE
4/04	1415	2W-SD-SD161-0001	SD 161	0	0.33	SD	G	2	1	1															↓
4/04	1430	2W-SD-SD159-0001	SD 159	0	0.33	SD	G	2	1	1															
4/04	1450	2W-SD-SD158-0001	SD 158	0	0.33	SD	G	2	1	1															↓
4/04	1500	2W-SD-SD156-0001	SD 156	0	0.33	SD	G	2	* 1	** 1															SEE COMMENT
4/04	1515	2W-SD-SD155-0001	SD 155	0	0.33	SD	G	2	* 1	** 1															↓
4/04	1525	2W-SD-SD157-0001	SD 157	0	0.33	SD	G	2	* 1	** 1															↓

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY:	4-05-11	1600	1. RECEIVED BY: FED EX	4-05-11	1600
2. RELINQUISHED BY:	DATE	TIME	2. RECEIVED BY:	DATE 4-6-11	TIME 0930
3. RELINQUISHED BY:	DATE	TIME	3. RECEIVED BY:	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD " " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

4100000 0000000 11

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4187 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Tony Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB # 8631 2526 3713		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE16845 GW

	DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS: PAHs & SELECT PESTICIDES	TYPE OF ANALYSIS: PCBs & SELECT METALS	TYPE OF ANALYSIS: PAHs	COMMENTS
										G	0C	G	G	G	
											4C	4C	4C		
5	4/04	1540	2W-SD-SD160-0001	SD_{160}	0	0.33	SD	G	2	* 1	** 1				SEE COMMENT
6	4/04	1555	2W-SD-SD162-0001	SD_{162}	0	0.33	SD	G	2	* 1	** 1				↓
	4/04	0000	FD-040411-01	QC	0	0.33	SD	G	2	1	1				PHASE I ANALIZE
	4/05	0815	2W-SD-SD138-0001	SD_{138}	0	0.33	SD	G	2	1	1				↓
7	4/05	0840	2W-SD-SD137-0001	SD_{137}	0	0.33	SD	G	2	* 1	** 1				SEE COMMENT
8	4/05	0855	2W-SD-SD128-0001	SD_{128}	0	0.33	SD	G	2	* 1	** 1				↓
9	4/05	0925	2W-SD-SD124-0001	SD_{124}	0	0.33	SD	G	2	* 1	** 1				↓
10	4/05	0950	2W-SD-SD125-0001	SD_{125}	0	0.33	SD	G	2	* 1	** 1				↓
	4/05	1015	2W-SD-SD118-0001	SD_{118}	0	0.33	SD	G	2	1	1				PHASE I ANALIZE
	4/05	1040	2W-SD-SD119-0001	SD_{119}	0	0.33	SD	G	2	1	1				↓
	4/05	1100	2W-SD-SD120-0001	SD_{120}	0	0.33	SD	G	2	1	1				↓
	4/05	1140	2W-SD-SD126-0001	SD_{126}	0	0.33	SD	G (TS)	2 1	+ (TR)	1				↓
	4/05	1150	2W-SD-SD121-0001	SD_{121}	0	0.33	SD	G	2	1	1				↓

1. RELINQUISHED BY Tony Rojahn	DATE 4-05-11	TIME 1600	1. RECEIVED BY FED EX	DATE 4-05-11	TIME 1600
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-6-11	TIME 0930
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER to 4°C & HOLD " " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 4188 | PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112602625	NSB NEW LONDON	A. BERNHARDT	412 921 8433	KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
		T. ROJAHN	412 921 8857	600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX AB# 8631 2526 3713		SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2011	TIME	SAMPLE ID (SE1684 5 GW)	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS: PAHs & SELECT	TYPE OF ANALYSIS: PESTICIDES/PCBs & SELECT METALS	COMMENTS
									G	4°C			
									G	4°C			
4/05	1216	2W-SD-SD141-0001	SD 141	0	0.33	SD	G	2	* 1	** 1			SEE COMMENT
4/05	1235	2W-SD-SD136-0001	SD	0	0.33	SD	G	2	1	1			PHASE I ANALYZE
4/05	1250	2W-SD-SD134-0001	SD	0	0.33	SD	G	2	1	1			↓

11 ✓

1. RELINQUISHED BY: Tony Rojahn	DATE: 4-05-11	TIME: 1600	1. RECEIVED BY: FED EX	DATE: 4-05-11	TIME: 1600
2. RELINQUISHED BY:	DATE:	TIME:	2. RECEIVED BY:	DATE: 4-6-11	TIME: 0930
3. RELINQUISHED BY:	DATE:	TIME:	3. RECEIVED BY:	DATE:	TIME:

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD " " " .

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

5E1684 5 GW

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 4093 | PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112602625	NSB NEW LONDON	A. BERNHARDT	412 921 8433	KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
Tony Rojahn		T. ROJAHN	412 9218857	600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX AB# 8747 4934 2822		SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS PAHs								COMMENTS
		SE 1779							G	4°C									
4/06	0000	FD 040611-01	QC	0	4"	SD	G	1	1										
4/07	0830	2W-SD-SD99-0001	SD99	0	4	SD	G	1	1										
4/07	0835	2W-SD-SD92-0001	SD92	0	4	SD	G	1	*1										
4/07	0840	2W-SD-SD90-0001	SD90	0	4	SD	G	1	1										
4/07	0845	2W-SD-SD94-0001	SD94	0	4	SD	G	1	1										
4/07	0850	2W-SD-SD93-0001	SD93	0	4	SD	G	1	*1										
4/07	0855	2W-SD-SD96-0001	SD96	0	4	SD	G	1	1										
4/07	1043	2W-SD-SD97-0001	SD97	0	4	SD	G	1	1										
4/07	1050	2W-SD-SD98-0001	SD98	0	4	SD	G	1	1										
4/07	1055	2W-SD-SD95-0001	SD95	0	4	SD	G	1	1										
4/07	1100	2W-SD-SD85-0001	SD85	0	4	SD	G	1	*1										
4/07	1105	2W-SD-SD88-0001	SD88	0	4	SD	G	1	1										
4/07	1110	2W-SD-SD86-0001	SD86	0	4	SD	G	1	*1										

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Tony Rojahn	4-07-11	1700	1. RECEIVED BY FED EX	4-07-11	1700
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-8-11	TIME 1020
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4094 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Tony Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB # 8747 4934 2822		CITY, STATE SCARBOROUGH, ME 04074 (TR)

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE1779

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS PAHs								COMMENTS
									G	4°C									
4/07	1115	2W-SD-SD87-0001	SD87	0	4"	SD	G	1	1										
4/07	1120	2W-SD-SD89-0001	SD89	0	4	SD	G	1	1										
4/07	1125	2W-SD-SD91-0001	SD91	0	4	SD	G	1	*1										
4/07	1130	2W-SD-SD100-0001	SD100	0	4	SD	G	1	1										
4/07	0000	FD040711-01	QC	0	4	SD	G	1	1										

16 ✓

1. RELINQUISHED BY Tony Rojahn	DATE 4-07-11	TIME 1700	1. RECEIVED BY FED EX
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY

1. RECEIVED BY FED EX	DATE 4-07-11	TIME 1700
2. RECEIVED BY	DATE 4-8-11	TIME 1000
3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

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TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4092 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433
SAMPLERS (SIGNATURE) Terry Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857
STANDARD TAT ☒ RUSH TAT ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day		CARRIER/WAYBILL NUMBER FED EX AB # 8747 4934 2822	CITY, STATE SCARBOROUGH, ME 04074

LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
ADDRESS: 600 TECHNOLOGY WAY

SE1778/9 G

	DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G): G	PRESERVATIVE USED: 4°C	TYPE OF ANALYSIS: PAHs	COMMENTS
7 ✓	4/06	1425	2W-SD-SD104-0001	SD104	0	4"	SD	G	1	1		*	
8 ✓	4/06	1440	2W-SD-SD102-0001	SD102	0	4	SD	G	1	1		*	
	4/06	1455	2W-SD-SD103-0001	SD103	0	4	SD	G	1	1		1	
	4/06	1510	2W-SD-SD105-0001	SD105	0	4	SD	G	1	1		1	
9 ✓	4/06	1520	2W-SD-SD109-0001	SD109	0	4	SD	G	1	1		*	
	4/06	1530	2W-SD-SD110-0001	SD110	0	4	SD	G	1	1		1	
20 ✓	4/06	1540	2W-SD-SD106-0001	SD106	0	4	SD	G	1	1		*	
	4/06	1550	2W-SD-SD108-0001	SD108	0	4	SD	G	1	1		1	
21 ✓	4/06	1605	2W-SD-SD101-0001	SD101	0	4	SD	G	1	1		*	
	4/06	1610	2W-SD-SD107-0001	SD107	0	4	SD	G	1	1		1	
18 ✓	4/06	1615	2W-SD-SD111-0001	SD111	0	4	SD	G	1	1		*	
23 ✓	4/06	1620	2W-SD-SD113-0001	SD113	0	4	SD	G	1	1		*	
	4/06	1630	2W-SD-SD112-0001	SD112	0	4	SD	G	2	2			RUN MS/MSD

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Terry Rojahn	4-07-11	1700	1. RECEIVED BY FED EX	4-07-11	1700
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	4-8-11	10:00
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

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TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4189 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Tony Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB# 8747 4934 2822		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE1778

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)								COMMENTS
									G	G							
									PRESERVATIVE USED		4°C	4°C					
									TYPE OF ANALYSIS		PAHs & SELECT PESTICIDES	PCBs & SELECT METALS					
4/05	1630	2W-SD-SD150-0001	SD 150	0	4"	SD	G	2	*	**							
4/05	1635	2W-SD-SD146-0001	SD 146	0	4	SD	G	2	1	1							
4/05	1641	2W-SD-SD144-0001	SD 144	0	4	SD	G	2	1	1							
4/05	1651	2W-SD-SD140-0001	SD 140	0	4	SD	G	3	2	1							RUN MS/MSD
4/05	1700	2W-SD-SD133-0001	SD 133	0	4	SD	G	2	*	**							
4/05	1705	2W-SD-SD131-0001	SD 131	0	4	SD	G	2	*	**							
4/05	1710	2W-SD-SD127-0001	SD 127	0	4	SD	G	3	2	1							RUN MS/MSD
4/05	1715	2W-SD-SD122-0001	SD 122	0	4	SD	G	2	1	1							
4/05	1725	2W-SD-SD130-0001	SD 130	0	4	SD	G	2	1	1							
4/05	0000	FD-040511-01	QC	0	4	SD	G	2	1	1							
4/05	0000	FD-040511-02	QC	0	4	SD	G	2	1	1							
4/06	0835	2W-SD-SD129-0001	SD 129	0	4	SD	G	2	*	**							
4/06	0910	2W-SD-SD123-0001	SD 123	0	4	SD	G	3	2	1							RUN MS/MSD

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Tony Rojahn	4-07-11	1700	1. RECEIVED BY FED EX	4-07-11	1700
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-8-11	TIME 10:00
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER to 4°C & HOLD " " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

TETRA TECH NUS, INC. — CHAIN OF CUSTODY — NUMBER 4190 — PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER: A. BERNHARDT	PHONE NUMBER: 412 921 8433
SAMPLERS (SIGNATURE): [signature]		FIELD OPERATIONS LEADER: T. ROJAHN	PHONE NUMBER: 412 921 8857
		CARRIER/WAYBILL NUMBER: FED EX AB# 8747 4934 2822	

LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
ADDRESS: 600 TECHNOLOGY WAY
CITY, STATE: SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE1778

CONTAINER TYPE PLASTIC (P) or GLASS (G): G / G
PRESERVATIVE USED: 4°C / 4°C
TYPE OF ANALYSIS: PAHs & SELECT PESTICIDES / PCBs & SELECT METALS

	DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (INCHES)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	PAHs & SELECT PESTICIDES	PCBs & SELECT METALS	COMMENTS
27 ✓	4/06	0925	2W-SD-SD143-0001	SD 143	0	4"	SD	G	2	*1	**1	
28 ✓	4/06	0945	2W-SD-SD145-0001	SD 145	0	4	SD	G	2	*1	**1	
	4/06	1015	2W-SD-SD135-0001	SD 135	0	4	SD	G	2	1	1	
9 ✓	4/06	1030	2W-SD-SD132-0001	SD 132	0	4	SD	G	2	*1	**1	
	4/06	1050	2W-SD-SD142-0001	SD 142	0	4	SD	G	2	1	1	
30 ✓	4/06	1100	2W-SD-SD139-0001	SD 139	0	4	SD	G	2	*1	**1	
	4/06	1155	2W-SD-SD116-0001	SD 116	0	4	SD	G	2	1	1	
31 ✓	4/06	1215	2W-SD-SD114-0001	SD 114	0	4	SD	G	2	*1	**1	
	4/06	1230	2W-SD-SD117-0001	SD 117	0	4	SD	G	2	1	1	
	4/06	1240	2W-SD-SD115-0001	SD 115	0	4	SD	G	2	*1	**1	

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY: [signature]	4-07-11	1700	1. RECEIVED BY: FED EX	4-07-11	1700
2. RELINQUISHED BY			2. RECEIVED BY: [signature]	4-8-11	10:00
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER to 4°C & HOLD " " " .

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

Katahdin Analytical Services, Inc. — Sample Receipt Condition Report

Client: Tetra Tech	KAS PM: ~~SMS~~ KAP	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: FedEx
KAS Work Order#: 5E1684 5	KIMS Review By: GN	Received By: GN
SDG #:	Cooler: 1 of 2	Date/Time Rec.: 4-6-11/0930

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 1.2
Samples received at <6 °C w/o freezing?	—				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

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Katahdin Analytical Services, Inc.

Sample Receipt Condition Report

Client: Tetra Tech	KAS PM: SM KAP	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: Fed-Ex
KAS Work Order#: SE1685	KIMS Review By: GN	Received By: GN
SDG #: GN	Cooler: 2 of 2	Date/Time Rec.: 4-6-11/09:30

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?					
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 2.0
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓			✓	The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

Client: Petra Tech	KAS PM: KAP	Sampled By: Client
Project:	KIMS Entry By: GV	Delivered By: Fed-Ex
KAS Work Order#: SE1778/SE1779	KIMS Review By:	Received By: GV
SDG #:	Cooler: 1 of 3	Date/Time Rec.: 4-8-11/1000

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 1.4
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: Aqueous: No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

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Client: Tetra Tech	KAS PM: KAP	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: Fed-Ex
KAS Work Order#: SE1778/SE1779	KIMS Review By:	Received By: GN
SDG #:	Cooler: 2 of 3	Date/Time Rec.: 4-8-11/10:00

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?			✓		in cooler 1
3. Chain of Custody signed by client?			✓		
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.		✓			Temp (°C): 2.2
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace:				✓	
Aqueous: No bubble larger than a pea					
Soil/Sediment:				✓	
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved?				✓	
Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12					

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

Client:	Tetra Tech	KAS PM:	KAP	Sampled By:	Client
Project:		KIMS Entry By:	GW	Delivered By:	FedEx
KAS Work Order#:	SE177	KIMS Review By:		Received By:	GW
SDG #:		Cooler: 3 of 3		Date/Time Rec.:	4-8-11/10:00

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?			-		in cooler 1
3. Chain of Custody signed by client?			✓		
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/.IR gun.	✓				Temp (°C): 3.7
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace:					
Aqueous: No bubble larger than a pea				✓	
Soil/Sediment:					
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved?					
Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH>12				✓	

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

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SDG WE55-4

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	MG/KG	2W-SD-SD143-0001	SE2829-027	NM	04/06/2011	05/31/2011	05/31/2011	55	0	55
M	MG/KG	2W-SD-SD124-0001	SE2829-009	NM	04/05/2011	05/31/2011	06/01/2011	56	1	57
M	MG/KG	2W-SD-SD125-0001	SE2829-010	NM	04/05/2011	05/31/2011	05/31/2011	56	0	56
M	MG/KG	2W-SD-SD128-0001	SE2829-008	NM	04/05/2011	05/31/2011	05/31/2011	56	0	56
M	MG/KG	2W-SD-SD129-0001	SE2829-026	NM	04/06/2011	05/31/2011	05/31/2011	55	0	55
M	MG/KG	2W-SD-SD131-0001	SE2829-025	NM	04/05/2011	05/31/2011	05/31/2011	56	0	56
M	MG/KG	2W-SD-SD132-0001	SE2829-029	NM	04/06/2011	05/31/2011	05/31/2011	55	0	55
M	MG/KG	2W-SD-SD137-0001	SE2829-007	NM	04/05/2011	05/31/2011	05/31/2011	56	0	56
M	MG/KG	2W-SD-SD124-0001	SE2829-009	NM	04/05/2011	05/31/2011	05/31/2011	56	0	56
M	MG/KG	2W-SD-SD141-0001	SE2829-011	NM	04/05/2011	05/31/2011	05/31/2011	56	0	56
M	MG/KG	2W-SD-SD131-0001	SE2829-025	NM	04/05/2011	05/31/2011	06/01/2011	56	1	57
M	MG/KG	2W-SD-SD145-0001	SE2829-028	NM	04/06/2011	05/31/2011	05/31/2011	55	0	55
M	MG/KG	2W-SD-SD153-0001	SE2829-001	NM	04/04/2011	05/31/2011	05/31/2011	57	0	57
M	MG/KG	2W-SD-SD153-0001	SE2829-001	NM	04/04/2011	05/31/2011	06/01/2011	57	1	58
M	MG/KG	2W-SD-SD155-0001	SE2829-003	NM	04/04/2011	05/31/2011	05/31/2011	57	0	57

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	MG/KG	2W-SD-SD156-0001	SE2829-002	NM	04/04/2011	05/31/2011	05/31/2011	57	0	57
M	MG/KG	2W-SD-SD157-0001	SE2829-004	NM	04/04/2011	05/31/2011	05/31/2011	57	0	57
M	MG/KG	2W-SD-SD160-0001	SE2829-005	NM	04/04/2011	05/31/2011	05/31/2011	57	0	57
M	MG/KG	2W-SD-SD114-0001	SE2829-031	NM	04/06/2011	05/31/2011	05/31/2011	55	0	55
M	MG/KG	2W-SD-SD139-0001	SE2829-030	NM	04/06/2011	05/31/2011	05/31/2011	55	0	55
M	MG/KG	2W-SD-SD133-0001	SE2829-024	NM	04/05/2011	05/31/2011	05/31/2011	56	0	56
TS	%	2W-SD-SD160-0001	SE2829-5	NM	04/04/2011	05/27/2011	05/28/2011	53	1	54
TS	%	2W-SD-SD93-0001	SE2829-13	NM	04/07/2011	05/27/2011	05/28/2011	50	1	51
TS	%	2W-SD-SD92-0001	SE2829-12	NM	04/07/2011	05/31/2011	06/01/2011	54	1	55
TS	%	2W-SD-SD91-0001	SE2829-16	NM	04/07/2011	05/27/2011	05/28/2011	50	1	51
TS	%	2W-SD-SD85-0001	SE2829-14	NM	04/07/2011	05/27/2011	05/28/2011	50	1	51
TS	%	2W-SD-SD125-0001	SE2829-10	NM	04/05/2011	05/27/2011	05/28/2011	52	1	53
TS	%	2W-SD-SD157-0001	SE2829-4	NM	04/04/2011	05/27/2011	05/28/2011	53	1	54
TS	%	2W-SD-SD156-0001	SE2829-2	NM	04/04/2011	05/27/2011	05/28/2011	53	1	54
TS	%	2W-SD-SD155-0001	SE2829-3	NM	04/04/2011	05/27/2011	05/28/2011	53	1	54
TS	%	2W-SD-SD153-0001	SE2829-1	NM	04/04/2011	05/27/2011	05/28/2011	53	1	54
TS	%	2W-SD-SD145-0001	SE2829-28	NM	04/06/2011	05/27/2011	05/28/2011	51	1	52
TS	%	2W-SD-SD143-0001	SE2829-27	NM	04/06/2011	05/27/2011	05/28/2011	51	1	52

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TS	%	2W-SD-SD141-0001	SE2829-11	NM	04/05/2011	05/27/2011	05/28/2011	52	1	53
TS	%	2W-SD-SD139-0001	SE2829-30	NM	04/06/2011	05/27/2011	05/28/2011	51	1	52
TS	%	2W-SD-SD111-0001	SE2829-22	NM	04/06/2011	05/27/2011	05/28/2011	51	1	52
TS	%	2W-SD-SD86-0001	SE2829-15	NM	04/07/2011	05/27/2011	05/28/2011	50	1	51
TS	%	2W-SD-SD137-0001	SE2829-7	NM	04/05/2011	05/27/2011	05/28/2011	52	1	53
TS	%	2W-SD-SD124-0001	SE2829-9	NM	04/05/2011	05/27/2011	05/28/2011	52	1	53
TS	%	2W-SD-SD113-0001	SE2829-23	NM	04/06/2011	05/27/2011	05/28/2011	51	1	52
TS	%	2W-SD-SD109-0001	SE2829-19	NM	04/06/2011	05/27/2011	05/28/2011	51	1	52
TS	%	2W-SD-SD106-0001	SE2829-20	NM	04/06/2011	05/27/2011	05/28/2011	51	1	52
TS	%	2W-SD-SD104-0001	SE2829-17	NM	04/06/2011	05/27/2011	05/28/2011	51	1	52
TS	%	2W-SD-SD102-0001	SE2829-18	NM	04/06/2011	05/27/2011	05/28/2011	51	1	52
TS	%	2W-SD-SD133-0001	SE2829-24	NM	04/05/2011	05/27/2011	05/28/2011	52	1	53
TS	%	2W-SD-SD128-0001	SE2829-8	NM	04/05/2011	05/27/2011	05/28/2011	52	1	53
TS	%	2W-SD-SD129-0001	SE2829-26	NM	04/06/2011	05/27/2011	05/28/2011	51	1	52
TS	%	2W-SD-SD131-0001	SE2829-25	NM	04/05/2011	05/27/2011	05/28/2011	52	1	53
TS	%	2W-SD-SD132-0001	SE2829-29	NM	04/06/2011	05/27/2011	05/28/2011	51	1	52
TS	%	2W-SD-SD101-0001	SE2829-21	NM	04/06/2011	05/27/2011	05/28/2011	51	1	52
TS	%	2W-SD-SD114-0001	SE2829-31	NM	04/06/2011	05/27/2011	05/28/2011	51	1	52

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: WE55-4 **SOW No.** SW846

Client Field ID	Lab Sample ID
2W-SD-SD114-0001	SE2829-031
2W-SD-SD124-0001	SE2829-009
2W-SD-SD125-0001	SE2829-010
2W-SD-SD128-0001	SE2829-008
2W-SD-SD129-0001	SE2829-026
2W-SD-SD131-0001	SE2829-025
2W-SD-SD132-0001	SE2829-029
2W-SD-SD133-0001	SE2829-024
2W-SD-SD137-0001	SE2829-007
2W-SD-SD139-0001	SE2829-030
2W-SD-SD141-0001	SE2829-011
2W-SD-SD141-0001	SE2829-011A
2W-SD-SD141-0001	SE2829-011D
2W-SD-SD141-0001	SE2829-011S
2W-SD-SD143-0001	SE2829-027
2W-SD-SD145-0001	SE2829-028
2W-SD-SD153-0001	SE2829-001
2W-SD-SD155-0001	SE2829-003
2W-SD-SD156-0001	SE2829-002
2W-SD-SD157-0001	SE2829-004
2W-SD-SD160-0001	SE2829-005

Were ICP interelement corrections applied ?	Yes
Were ICP background corrections applied ?	Yes
If yes - were raw data generated before application of background corrections ?	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Heather Henningsen Name: Heather Henningsen

Date: 8-7-11 Title: Analyst I

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-4

Instrument ID: THERMO ICAP 6500 **File Name:** IBE31A

Date: 5/31/2011 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
Blank		1	16:27 AL AS	CD CA CR CU FE PB MG NI ZN
Std 1		1	16:32 AL AS	CD CA CR CU FE PB MG NI ZN
ICV		1	16:36 AL AS	CD CA CR CU FE PB MG NI ZN
ICB		1	16:40 AL AS	CD CA CR CU FE PB MG NI ZN
PQL		1	16:45 AL AS	CD CA CR CU FE PB MG NI ZN
ICSA		1	16:50 AL AS	CD CA CR CU FE PB MG NI ZN
ICSAB		1	16:54 AL AS	CD CA CR CU FE PB MG NI ZN
CCV		1	16:59 AL AS	CD CA CR CU FE PB MG NI ZN
CCB		1	17:03 AL AS	CD CA CR CU FE PB MG NI ZN
ZZZZZZ		2	17:08	
ZZZZZZ		5	17:13	
ZZZZZZ		2	17:17	
ZZZZZZ		5	17:22	
PBSBE31ICS0		1	17:27 AS	CD CR CU PB NI ZN
LCSOBE31ICS0		1	17:31 AS	CD CR CU PB NI ZN
ZZZZZZ		10	17:36	
SE2829-001	2W-SD-SD153-0001	1	17:40	ZN
SE2829-002	2W-SD-SD156-0001	1	17:45 AS	CD CR CU PB NI ZN
SE2829-003	2W-SD-SD155-0001	1	17:49 AS	CD CR CU PB NI ZN
CCV		1	17:54 AL AS	CD CA CR CU FE PB MG NI ZN
CCB		1	17:58 AL AS	CD CA CR CU FE PB MG NI ZN
SE2829-004	2W-SD-SD157-0001	1	18:03 AS	CD CR CU PB NI ZN
SE2829-005	2W-SD-SD160-0001	1	18:07 AS	CD CR CU PB NI ZN
SE2829-007	2W-SD-SD137-0001	1	18:12 AS	CD CR CU PB NI ZN
SE2829-008	2W-SD-SD128-0001	1	18:16 AS	CD CR CU PB NI ZN
SE2829-009	2W-SD-SD124-0001	1	18:21	ZN
SE2829-010	2W-SD-SD125-0001	1	18:26 AS	CD CR CU PB NI ZN
SE2829-011	2W-SD-SD141-0001	1	18:30 AS	CD CR CU PB NI ZN
SE2829-011L	2W-SD-SD141-0001L	5	18:35 AS	CD CR CU PB NI ZN
SE2829-011A	2W-SD-SD141-0001A	1	18:39 AS	CD CR CU PB NI ZN
SE2829-011D	2W-SD-SD141-0001D	1	18:44 AS	CD CR CU PB NI ZN
CCV		1	18:48 AL AS	CD CA CR CU FE PB MG NI ZN
CCB		1	18:53 AL AS	CD CA CR CU FE PB MG NI ZN
SE2829-011S	2W-SD-SD141-0001S	1	18:57 AS	CD CR CU PB NI ZN
SE2829-024	2W-SD-SD133-0001	1	19:02 AS	CD CR CU PB NI ZN
SE2829-025	2W-SD-SD131-0001	1	19:06	ZN
SE2829-026	2W-SD-SD129-0001	1	19:11 AS	CD CR CU PB NI ZN
SE2829-027	2W-SD-SD143-0001	1	19:15 AS	CD CR CU PB NI ZN
SE2829-028	2W-SD-SD145-0001	1	19:20 AS	CD CR CU PB NI ZN
SE2829-029	2W-SD-SD132-0001	1	19:24 AS	CD CR CU PB NI ZN
SE2829-030	2W-SD-SD139-0001	1	19:29 AS	CD CR CU PB NI ZN
SE2829-031	2W-SD-SD114-0001	1	19:33 AS	CD CR CU PB NI ZN
ZZZZZZ		1	19:38	
CCV		1	19:42 AL AS	CD CA CR CU FE PB MG NI ZN
CCB		1	19:47 AL AS	CD CA CR CU FE PB MG NI ZN

FORM XIV - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-4

Concentration Units: ug/L

SAMPLE: ICV

File: IBE31A May 31, 2011 16:36

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10340.00	103.4
ARSENIC	400.0	379.40	94.8
CADMIUM	400.0	389.70	97.4
CALCIUM	10000.0	10370.00	103.7
CHROMIUM	400.0	393.90	98.5
COPPER	400.0	386.90	96.7
IRON	10000.0	10440.00	104.4
LEAD	400.0	397.20	99.3
MAGNESIUM	10000.0	9868.00	98.7
NICKEL	400.0	389.40	97.3
ZINC	400.0	397.10	99.3

SAMPLE: CCV

File: IBE31A May 31, 2011 16:59

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12470.00	99.8
ARSENIC	500.0	494.80	99.0
CADMIUM	500.0	504.80	101.0
CALCIUM	12500.0	12420.00	99.4
CHROMIUM	500.0	525.90	105.2
COPPER	500.0	519.50	103.9
IRON	12500.0	12470.00	99.8
LEAD	500.0	503.30	100.7
MAGNESIUM	12500.0	12550.00	100.4
NICKEL	500.0	505.10	101.0
ZINC	500.0	502.30	100.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-4

Concentration Units: ug/L

SAMPLE: CCV

File: IBE31A May 31, 2011 17:54

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12540.00	100.3
ARSENIC	500.0	494.60	98.9
CADMIUM	500.0	516.70	103.3
CALCIUM	12500.0	12960.00	103.7
CHROMIUM	500.0	498.90	99.8
COPPER	500.0	486.70	97.3
IRON	12500.0	12610.00	100.9
LEAD	500.0	497.20	99.4
MAGNESIUM	12500.0	12640.00	101.1
NICKEL	500.0	507.80	101.6
ZINC	500.0	506.30	101.3

SAMPLE: CCV

File: IBE31A May 31, 2011 18:48

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12860.00	102.9
ARSENIC	500.0	497.00	99.4
CADMIUM	500.0	512.80	102.6
CALCIUM	12500.0	12970.00	103.8
CHROMIUM	500.0	510.00	102.0
COPPER	500.0	500.90	100.2
IRON	12500.0	12820.00	102.6
LEAD	500.0	504.60	100.9
MAGNESIUM	12500.0	12600.00	100.8
NICKEL	500.0	508.00	101.6
ZINC	500.0	509.60	101.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-4

Concentration Units: ug/L

SAMPLE: CCV

File: IBE31A May 31, 2011 19:42

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12970.00	103.8
ARSENIC	500.0	493.70	98.7
CADMIUM	500.0	501.70	100.3
CALCIUM	12500.0	12740.00	101.9
CHROMIUM	500.0	511.60	102.3
COPPER	500.0	502.50	100.5
IRON	12500.0	12890.00	103.1
LEAD	500.0	509.80	102.0
MAGNESIUM	12500.0	12390.00	99.1
NICKEL	500.0	501.90	100.4
ZINC	500.0	510.20	102.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-4

Concentration Units: ug/L

SAMPLE: PQL

File: IBE31A May 31, 2011 16:45

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	313.30	104.4
ARSENIC	8.0	7.88	98.5
CADMIUM	5.0	5.01	100.2
CALCIUM	100.0	101.20	101.2
CHROMIUM	10.0	10.29	102.9
COPPER	25.0	25.46	101.8
IRON	100.0	103.60	103.6
LEAD	5.0	4.96	99.2
MAGNESIUM	100.0	102.40	102.4
NICKEL	10.0	10.14	101.6
ZINC	20.0	19.94	99.8

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-4

Concentration Units: ug/L

SAMPLE: ICB

File: IBE31A May 31, 2011 16:40

Analyte	Result	C
ALUMINUM	11.300	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.100	U
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.380	U

SAMPLE: CCB

File: IBE31A May 31, 2011 17:03

Analyte	Result	C
ALUMINUM	11.300	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.100	U
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.380	U

SAMPLE: CCB

File: IBE31A May 31, 2011 17:58

Analyte	Result	C
ALUMINUM	11.300	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.100	U
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	7.571	J
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U
ZINC	0.380	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-4

Concentration Units: ug/L

SAMPLE: CCB			**SAMPLE: CCB**		
File: IBE31A May 31, 2011 18:53			File: IBE31A May 31, 2011 19:47		
Analyte	**Result**	**C**	**Analyte**	**Result**	**C**
ALUMINUM	11.300	U	ALUMINUM	11.300	U
ARSENIC	2.550	U	ARSENIC	2.550	U
CADMIUM	0.250	U	CADMIUM	0.250	U
CALCIUM	10.100	U	CALCIUM	10.100	U
CHROMIUM	0.670	U	CHROMIUM	0.670	U
COPPER	0.530	U	COPPER	0.530	U
IRON	6.090	J	IRON	6.457	J
LEAD	1.630	U	LEAD	1.630	U
MAGNESIUM	4.330	U	MAGNESIUM	4.330	U
NICKEL	0.640	U	NICKEL	0.640	U
ZINC	0.380	U	ZINC	0.380	U

NT

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-4

Instrument ID: THERMO ICAP 6500 **File Name:** IBF01A

Date: 6/1/2011 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
Blank		1	15:24	AL AS CD CA CR CU FE PB MG NI
Std 1		1	15:28	AL AS CD CA CR CU FE PB MG NI
ICV		1	15:33	AL AS CD CA CR CU FE PB MG NI
ICB		1	15:37	AL AS CD CA CR CU FE PB MG NI
PQL		1	15:42	AL AS CD CA CR CU FE PB MG NI
ICSA		1	15:46	AL AS CD CA CR CU FE PB MG NI
ICSAB		1	15:51	AL AS CD CA CR CU FE PB MG NI
CCV		1	15:56	AL AS CD CA CR CU FE PB MG NI
CCB		1	16:00	AL AS CD CA CR CU FE PB MG NI
ZZZZZZ		5	16:05	
SE2829-001	2W-SD-SD153-0001	3	16:09	AS CD CR CU PB NI
SE2829-009	2W-SD-SD124-0001	2	16:14	AS CD CR CU PB NI
SE2829-025	2W-SD-SD131-0001	2	16:18	AS CD CR CU PB NI
ZZZZZZ		2	16:23	
ZZZZZZ		1	16:28	
ZZZZZZ		1	16:32	
ZZZZZZ		1	16:37	
ZZZZZZ		1	16:41	
ZZZZZZ		1	16:46	
CCV		1	16:50	AL AS CD CA CR CU FE PB MG NI
CCB		1	16:55	AL AS CD CA CR CU FE PB MG NI

FORM XIV - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-4

Concentration Units: ug/L

SAMPLE: ICV

File: IBF01A Jun 01, 2011 15:33

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	9851.00	98.5
ARSENIC	400.0	380.90	95.2
CADMIUM	400.0	395.20	98.8
CALCIUM	10000.0	9875.00	98.8
CHROMIUM	400.0	391.20	97.8
COPPER	400.0	388.30	97.1
IRON	10000.0	9941.00	99.4
LEAD	400.0	393.90	98.5
MAGNESIUM	10000.0	10010.00	100.1
NICKEL	400.0	392.00	98.0

SAMPLE: CCV

File: IBF01A Jun 01, 2011 15:56

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12420.00	99.4
ARSENIC	500.0	477.30	95.5
CADMIUM	500.0	490.00	98.0
CALCIUM	12500.0	12460.00	99.7
CHROMIUM	500.0	476.10	95.2
COPPER	500.0	482.60	96.5
IRON	12500.0	12370.00	99.0
LEAD	500.0	480.80	96.2
MAGNESIUM	12500.0	12850.00	102.8
NICKEL	500.0	489.50	97.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-4

Concentration Units: ug/L

SAMPLE: CCV

File: IBF01A Jun 01, 2011 16:50

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12350.00	98.8
ARSENIC	500.0	478.80	95.8
CADMIUM	500.0	493.90	98.8
CALCIUM	12500.0	12430.00	99.4
CHROMIUM	500.0	467.50	93.5
COPPER	500.0	482.80	96.6
IRON	12500.0	12190.00	97.5
LEAD	500.0	471.40	94.3
MAGNESIUM	12500.0	13060.00	104.5
NICKEL	500.0	489.60	97.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-4

Concentration Units: ug/L

SAMPLE: PQL

File: IBF01A Jun 01, 2011 15:42

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	311.60	103.9
ARSENIC	8.0	7.98	99.8
CADMIUM	5.0	5.08	101.6
CALCIUM	100.0	94.77	94.8
CHROMIUM	10.0	9.63	96.3
COPPER	25.0	24.76	99.0
IRON	100.0	101.30	101.3
LEAD	5.0	5.40	108.0
MAGNESIUM	100.0	102.20	102.2
NICKEL	10.0	10.49	104.8

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-4

Concentration Units: ug/L

SAMPLE: ICB

File: IBF01A Jun 01, 2011 15:37

Analyte	Result	C
ALUMINUM	11.300	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.100	U
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U

SAMPLE: CCB

File: IBF01A Jun 01, 2011 16:00

Analyte	Result	C
ALUMINUM	11.300	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.100	U
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	2.620	U
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U

SAMPLE: CCB

File: IBF01A Jun 01, 2011 16:55

Analyte	Result	C
ALUMINUM	11.300	U
ARSENIC	2.550	U
CADMIUM	0.250	U
CALCIUM	10.100	U
CHROMIUM	0.670	U
COPPER	0.530	U
IRON	3.111	J
LEAD	1.630	U
MAGNESIUM	4.330	U
NICKEL	0.640	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSBE31ICS0

Matrix: SOIL **SDG Name:** WE55-4

QC Batch ID: BE31ICS0

Concentration Units : mg/Kgdrywt

Analyte	RESULT	C
ARSENIC	0.50	U
CADMIUM	0.30	U
CHROMIUM	0.081	J
COPPER	1.0	U
LEAD	0.40	U
NICKEL	0.40	U
ZINC	1.0	U

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-4

Concentration Units: ug/L

SAMPLE: ICSA

File: IBE31A May 31, 2011 16:50

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	508400	101.7
ARSENIC	0	1	
CADMIUM	0	1	
CALCIUM	500000	460600	92.1
CHROMIUM	3	3	
COPPER	0	0	
IRON	200000	185100	92.5
LEAD	0	-1	
MAGNESIUM	500000	468000	93.6
NICKEL	0	2	
ZINC	0	4	

SAMPLE: ICSAB

File: IBE31A May 31, 2011 16:54

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	503400	100.7
ARSENIC	100	100	100.0
CADMIUM	1000	912	91.2
CALCIUM	500000	460100	92.0
CHROMIUM	500	467	93.4
COPPER	500	517	103.4
IRON	200000	184200	92.1
LEAD	50	41	82.0
MAGNESIUM	500000	466800	93.4
NICKEL	1000	885	88.5
ZINC	1000	901	90.1

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** WE55-4

Concentration Units: ug/L

SAMPLE: ICSA

File: IBF01A Jun 01, 2011 15:46

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	513400	102.7
ARSENIC	0	0	
CADMIUM	0	0	
CALCIUM	500000	467800	93.6
CHROMIUM	3	3	
COPPER	0	1	
IRON	200000	184200	92.1
LEAD	0	-1	
MAGNESIUM	500000	479100	95.8
NICKEL	0	1	

SAMPLE: ICSAB

File: IBF01A Jun 01, 2011 15:51

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	506300	101.3
ARSENIC	100	103	103.0
CADMIUM	1000	922	92.2
CALCIUM	500000	465600	93.1
CHROMIUM	500	463	92.6
COPPER	500	521	104.2
IRON	200000	181500	90.8
LEAD	50	42	84.0
MAGNESIUM	500000	474000	94.8
NICKEL	1000	892	89.2

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services

Client Field ID: 2W-SD-SD141-0001S

Matrix: SOIL

SDG Name: WE55-4

Percent Solids: 9.46

Lab Sample ID: SE2829-011S

Concentration Units : mg/Kgdrywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, TOTAL	75.4603		3.1809	J	78.32	92.3		80	120	P
CADMIUM, TOTAL	179.1155		-0.3251	U	195.8	91.5		80	120	P
CHROMIUM, TOTAL	169.9521		15.9497		156.64	98.3		80	120	P
COPPER, TOTAL	249.8375		53.9308		195.8	100.1		80	120	P
LEAD, TOTAL	118.4966		40.0219		78.32	100.2		80	120	P
NICKEL, TOTAL	388.3054		17.7119	J	391.59	94.6		80	120	P
ZINC, TOTAL	596.5555		191.7904		391.59	103.4		80	120	P

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services

Client Field ID: 2W-SD-SD141-0001S

Matrix: SOIL

SDG Name: WE55-4

Percent Solids: 9.46

Lab Sample ID: SE2829-011A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, TOTAL	477.8000		3.8810	J	500	94.8		75	125	P
CADMIUM, TOTAL	489.3000		-0.3967	U	500	97.9		75	125	P
CHROMIUM, TOTAL	534.0000		19.4600		500	102.9		75	125	P
COPPER, TOTAL	570.6000		65.8000		500	101.0		75	125	P
LEAD, TOTAL	531.9000		48.8300		500	96.6		75	125	P
NICKEL, TOTAL	503.8000		21.6100	J	500	96.4		75	125	P
ZINC, TOTAL	714.3000		234.0000		500	96.1		75	125	P

Comments:

DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD141-0001D

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 9.46 **Lab Sample ID:** SE2829-011D

Concentration Units : mg/Kgdrywt

Analyte	Control Limits	Sample Result	C	Duplicate Result	C	RPD	Q	M
ARSENIC, TOTAL		3.1809	J	4.2573	J	28.9		P
CADMIUM, TOTAL		-0.3251	U	-0.1331	U			P
CHROMIUM, TOTAL	12	15.9497		19.9767		22.4		P
COPPER, TOTAL	20	53.9308		66.6744		21.1		P
LEAD, TOTAL		40.0219		50.0378		22.2	*	P
NICKEL, TOTAL		17.7119	J	24.2059	J	31.0		P
ZINC, TOTAL		191.7904		228.5223		17.5		P

Comments:

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSOBE31ICS0

Matrix: SOIL **SDG Name:** WE55-4

QC Batch ID: BE31ICS0

Concentration Units : mg/Kgdrywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ARSENIC	10.0	9.21	92.1	80	120
CADMIUM	25.0	23.93	95.7	80	120
CHROMIUM	20.0	20.02	100.1	80	120
COPPER	25.0	24.37	97.5	80	120
LEAD	10.0	9.67	96.7	80	120
NICKEL	50.0	49.22	98.4	80	120
ZINC	50.0	50.30	100.6	80	120

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD141-0001L

Matrix: SOIL **SDG Name:** WE55-4

Lab Sample ID: SE2829-011L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ARSENIC, TOTAL	3.88	J	1.95	U	100.0		P
CADMIUM, TOTAL	-0.40	U	-0.68	U			P
CHROMIUM, TOTAL	19.46		21.10	J	8.4		P
COPPER, TOTAL	65.80		67.09	J	2.0		P
LEAD, TOTAL	48.83		55.21		13.1		P
NICKEL, TOTAL	21.61	J	21.85	J	1.1		P
ZINC, TOTAL	234.00		241.10		3.0		P

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 2/17/2011

Concentration Units: ug/L

Analyte	CRDL	IDL	M
ALUMINUM	300	11.30	P
ARSENIC	8.0	2.55	P
CADMIUM	10	0.25	P
CALCIUM	100	10.10	P
CHROMIUM	15	0.67	P
COPPER	25	0.53	P
IRON	100	2.62	P
LEAD	5.0	1.63	P
MAGNESIUM	100	4.33	P
NICKEL	40	0.64	P
ZINC	25	0.38	P

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 3/31/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ARSENIC	5.0	ug/L	P	SW846 3010A / SW846 6010B
CADMIUM	5.0	ug/L	P	SW846 3010A / SW846 6010B
CHROMIUM	10.0	ug/L	P	SW846 3010A / SW846 6010B
COPPER	10.0	ug/L	P	SW846 3010A / SW846 6010B
LEAD	4.0	ug/L	P	SW846 3010A / SW846 6010B
NICKEL	4.0	ug/L	P	SW846 3010A / SW846 6010B
ZINC	10.0	ug/L	P	SW846 3010A / SW846 6010B

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/20/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ARSENIC	0.50	mg/Kg	P	SW846 3050B / SW846 6010B
CADMIUM	0.30	mg/Kg	P	SW846 3050B / SW846 6010B
CHROMIUM	0.40	mg/Kg	P	SW846 3050B / SW846 6010B
COPPER	1.00	mg/Kg	P	SW846 3050B / SW846 6010B
LEAD	0.40	mg/Kg	P	SW846 3050B / SW846 6010B
NICKEL	0.40	mg/Kg	P	SW846 3050B / SW846 6010B
ZINC	1.00	mg/Kg	P	SW846 3050B / SW846 6010B

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/19/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ARSENIC	1.43	ug/L	P	SW846 3010A / SW846 6010B
CADMIUM	0.05	ug/L	P	SW846 3010A / SW846 6010B
CHROMIUM	0.36	ug/L	P	SW846 3010A / SW846 6010B
COPPER	0.63	ug/L	P	SW846 3010A / SW846 6010B
LEAD	1.07	ug/L	P	SW846 3010A / SW846 6010B
NICKEL	0.28	ug/L	P	SW846 3010A / SW846 6010B
ZINC	0.72	ug/L	P	SW846 3010A / SW846 6010B

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/20/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ARSENIC	0.07	mg/Kg	P	SW846 3050B / SW846 6010B
CADMIUM	0.008	mg/Kg	P	SW846 3050B / SW846 6010B
CHROMIUM	0.03	mg/Kg	P	SW846 3050B / SW846 6010B
COPPER	0.16	mg/Kg	P	SW846 3050B / SW846 6010B
LEAD	0.09	mg/Kg	P	SW846 3050B / SW846 6010B
NICKEL	0.04	mg/Kg	P	SW846 3050B / SW846 6010B
ZINC	0.17	mg/Kg	P	SW846 3050B / SW846 6010B

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** BE31ICS0

Matrix: SOIL **SDG Name:** WE55-4

Method: P **Prep Date:** 05/31/2011

Client ID	Lab Sample ID	Initial (g)	Final (L)
LCSOBE31ICS0	LCSOBE31ICS0	1	0.1
PBSBE31ICS0	PBSBE31ICS0	1	0.1
2W-SD-SD153-0001	SE2829-001	1.41	0.1
2W-SD-SD156-0001	SE2829-002	1.06	0.1
2W-SD-SD155-0001	SE2829-003	1.39	0.1
2W-SD-SD157-0001	SE2829-004	1.64	0.1
2W-SD-SD160-0001	SE2829-005	1.08	0.1
2W-SD-SD137-0001	SE2829-007	1.27	0.1
2W-SD-SD128-0001	SE2829-008	1.44	0.1
2W-SD-SD124-0001	SE2829-009	1.98	0.1
2W-SD-SD125-0001	SE2829-010	1.15	0.1
2W-SD-SD141-0001	SE2829-011	1.29	0.1
2W-SD-SD141-0001D	SE2829-011D	1.32	0.1
2W-SD-SD141-0001S	SE2829-011S	1.35	0.1
2W-SD-SD133-0001	SE2829-024	1.06	0.1
2W-SD-SD131-0001	SE2829-025	1.53	0.1
2W-SD-SD129-0001	SE2829-026	1.02	0.1
2W-SD-SD143-0001	SE2829-027	1.49	0.1
2W-SD-SD145-0001	SE2829-028	1.53	0.1
2W-SD-SD132-0001	SE2829-029	1.86	0.1
2W-SD-SD139-0001	SE2829-030	1.17	0.1
2W-SD-SD114-0001	SE2829-031	1.61	0.1

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG92182	ASTM D2216	28-MAY-11	27-MAY-11	U 1 %	1 %	N/A
MBLANK	WG92184	ASTM D2216	28-MAY-11	27-MAY-11	U 1 %	1 %	N/A
MBLANK	WG92268	ASTM D2216	01-JUN-11	31-MAY-11	U 1 %	1 %	N/A

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG92182-2	LCS	WG92182	28-MAY-11	27-MAY-11	%	90	90.	100	80-120	
WG92184-2	LCS	WG92184	28-MAY-11	27-MAY-11	%	90	90.	100	80-120	
WG92268-2	LCS	WG92268	01-JUN-11	31-MAY-11	%	90	90.	100	80-120	

Katahdin
ANALYTICAL SERVICES

nelac
Cert No E87604

Quality Control Report

Duplicate Sample Summary Report

Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG92184-3	SE2829-18	WG92184	28-MAY-11	%	12.	12.	0	20
WG92182-4	SE2829-10	WG92182	28-MAY-11	%	30.	24.	19	20
WG92268-3	SE2829-12	WG92268	01-JUN-11	%	28.	28.	0	20

TETRA TECH NUS, INC. **CALCULATION WORKSHEET** PAGE 1 OF 1

CLIENT	JOB NUMBER		
NSB New London	SDG NE55-4		
SUBJECT: Sample Calculation			
BASED ON	DRAWING NUMBER		
BY: Ann Cognetti	CHECKED BY	APPROVED BY	DATE: July 11, 2011

Sample 2W-SD-SD153-0001; Zinc

$$\frac{962.2\ ug/L}{} * \frac{0.1\ L}{1.41g} * \frac{1}{0.172} = 396.8\ mg/kg\ Zinc$$

Sample Calculation

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD153-0001

Matrix: SOIL **SDG Name:** WE55-4

Percent Solids: 17.2 **Lab Sample ID:** SE2829-001

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	12.4			P	3	9.9	0.84	6.2
7440-43-9	CADMIUM, TOTAL	3.7	U		P	3	12	0.10	3.7
7440-47-3	CHROMIUM, TOTAL	21.1			P	3	18	0.32	4.9
7440-50-8	COPPER, TOTAL	41.4			P	3	31	1.93	12
7439-92-1	LEAD, TOTAL	28.9		*	P	3	6.2	1.08	4.9
7440-02-0	NICKEL, TOTAL	17.2	J		P	3	49	0.54	4.9
7440-66-6	ZINC, TOTAL	396			P	1	10	0.69	4.1

Bottle ID: A

Comments:

FORM I - IN

Sample Calculation

SE2829-001 Sample ZW-SD-SD153-0001

Method Name: K6010-2010+Pd
Method Revision: 171
Analyst Name: EAM
Acquire Date: 31/05/2011 17:40:46
Sample Type: Unknown

Elem	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	-6.915	ug/L	0.0915	1.3239	-2,546.00
Al3961_R	29690.	ug/L	13.8962	0.0468	27,219.24
As1891_A	24.32	ug/L	0.0747	0.3071	-4.55
Au2427_A	2.559	ug/L	1.7072	66.7072	261.97
B_2089_A	29.24	ug/L	0.1194	0.4083	26.64
Ba4554_R	627.4	ug/L	0.7243	0.1155	46,919.03
Be3130_R	4.219	ug/L	0.0068	0.1603	410.53
Ca3158_R	11680.	ug/L	17.3458	0.1485	11,557.22
Cd2265_A	-1.879	ug/L	0.2687	14.3011	618.79
Co2286_A	4.091	ug/L	0.3077	7.5212	35.50
Cr2677_A	52.33	ug/L	0.0246	0.0470	494.59
Cu3273_A	94.21	ug/L	0.0582	0.0618	1,086.35
Fe2599_R	F 500500.	ug/L	3,103.5498	0.6201	927,418.24
K_7664_R	3394.	ug/L	20.3502	0.5995	3,097.36
Li6707_R	31.69	ug/L	0.0295	0.0930	504.09
Mg2025_A	5489.	ug/L	2.3396	0.0426	745.29
Mn2576_R	1257.	ug/L	0.3341	0.0266	11,586.66
Mo2020_A	2.113	ug/L	0.0274	1.2960	3.75
Na5895_R	4345.	ug/L	24.2003	0.5570	10,567.51
Ni2316_A	46.94	ug/L	0.2068	0.4405	29.10
Pb2203_A	59.37	ug/L	0.8108	1.3657	51.79
Sb2068_A	.5497	ug/L	0.1271	23.1236	1.60
Se1960_A	.0119	ug/L	0.7008	5,894.2002	2.61
Si2516_R	4114.	ug/L	1.3186	0.0321	1,721.55
Sn1899_A	44.02	ug/L	2.5885	5.8803	13.09
Sr4215_R	87.91	ug/L	0.1227	0.1396	7,627.31
Ti3349_A	1107.	ug/L	2.3024	0.2080	22,975.61
Tl1908_A	-1.951	ug/L	0.5496	28.1720	-3.62
V_2924_A	144.5	ug/L	0.0534	0.0370	1,477.43
Zn2062_A	962.2	ug/L	2.2155	0.2303	1,818.92
Pd3404	-1.885	ug/L	0.5338	28.3275	-301.31
Y_3600_R	23125.	Cts/S	65.4261	0.2829	23,125.32
Y_2243_A	4500.4	Cts/S	3.4907	0.0776	4,500.44
Y_3600_A	173150.	Cts/S	147.6915	0.0853	173,149.96

SE2829-002

Method Name: K6010-2010+Pd
Method Revision: 171
Analyst Name: EAM
Acquire Date: 31/05/2011 17:45:23
Sample Type: Unknown

Elem	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	2.554	ug/L	0.1419	5.5556	-709.73
Al3961_R	100200.	ug/L	459.2087	0.4581	97,889.51
As1891_A	25.62	ug/L	0.5657	2.2075	3.37
Au2427_A	-1.313	ug/L	0.0012	0.0911	77.45
B_2089_A	41.69	ug/L	0.4151	0.9957	40.06
Ba4554_R	598.9	ug/L	1.8808	0.3141	47,700.10
Be3130_R	11.53	ug/L	0.0569	0.4936	1,279.28
Ca3158_R	11930.	ug/L	50.0726	0.4196	12,576.63
Cd2265_A	.0268	ug/L	0.1317	491.0870	189.69
Co2286_A	12.16	ug/L	0.2651	2.1811	50.77
Cr2677_A	123.7	ug/L	0.2032	0.1643	1,155.41
Cu3273_A	158.6	ug/L	0.2109	0.1329	2,012.98
Fe2599_R	141400.	ug/L	684.5803	0.4843	278,979.34
K_7664_R	5983.	ug/L	21.6456	0.3618	5,698.74
Li6707_R	75.72	ug/L	0.1409	0.1861	1,286.22
Mg2025_A	11110.	ug/L	45.7106	0.4115	1,602.00
Mn2576_R	617.4	ug/L	2.2267	0.3606	6,050.29

Sample Calculation

Katahdin Analytical Services, Inc.

Metals Preparation Benchsheet

Reagent Information:

HNO3: K094041 HCL: K12046 H2O2: 102AE1858 Method: 3050H

LCS / Spike — LCS/Spiking Information:

- CLPP-SPK-1 (ID/Vol): MS1674 / 0.1 mL
- CLPP-SPK-INT1 (ID/Vol): MW13075 / 1.0 mL
- CLPP-SPK-INT2 (ID/Vol): MW13074 / 1.0 mL
- Uranium Spike (ID/Vol): N/A / mL
- CLPP-SPK-4 (ID/Vol): N/A / mL
- LCSS: N/A Balance ID: BAL 08

Hot Plate/Block ID: B
Start Time/Temp.: 10:40 / 95 °C
End Time/Temp.: 15:50 / 97 °C
Thermometer ID/Pos.: ALC 19 / 1:1

Filter Paper: 396567 B

REVIEWED
5-06-01-11
KATAHDIN ANALYTICAL METALS SECTION

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Texture	Final Color	Final Clarity	Artifacts	Bottle
LCSOBE31ICS0	BE31ICS0	1.00	g	0.10	L	SL	IC	NAT	05/31/2011	N/A	N/A	N/A	N/A		
PBSBE31ICS0	BE31ICS0	1.00	g		L	SL	IC	NAT	05/31/2011	N/A	N/A	N/A	N/A		
SE2829-001	BE31ICS0	1.41	g		L	SL	IC	NAT	05/31/2011						A
SE2829-002	BE31ICS0	1.06	g		L	SL	IC	NAT	05/31/2011						
SE2829-003	BE31ICS0	1.39	g		L	SL	IC	NAT	05/31/2011						
SE2829-004	BE31ICS0	1.64	g		L	SL	IC	NAT	05/31/2011						
SE2829-005	BE31ICS0	1.08	g		L	SL	IC	NAT	05/31/2011						
~~SE2829-006~~	~~BE31ICS0~~		g		L	SL	IC	NAT	05/31/2011						
SE2829-007	BE31ICS0	1.27	g		L	SL	IC	NAT	05/31/2011						
SE2829-008	BE31ICS0	1.44	g		L	SL	IC	NAT	05/31/2011						
SE2829-009	BE31ICS0	1.98	g		L	SL	IC	NAT	05/31/2011						
SE2829-010	BE31ICS0	1.15	g		L	SL	IC	NAT	05/31/2011						
SE2829-011	BE31ICS0	1.29	g		L	SL	IC	NAT	05/31/2011						
SE2829-024	BE31ICS0	1.06	g		L	SL	IC	NAT	05/31/2011						
SE2829-025	BE31ICS0	1.53	g		L	SL	IC	NAT	05/31/2011						
SE2829-026	BE31ICS0	1.02	g		L	SL	IC	NAT	05/31/2011						
SE2829-027	BE31ICS0	1.49	g		L	SL	IC	NAT	05/31/2011						
SE2829-028	BE31ICS0	1.53	g		L	SL	IC	NAT	05/31/2011						
SE2829-029	BE31ICS0	1.86	g		L	SL	IC	NAT	05/31/2011						
SE2829-030	BE31ICS0	1.17	g		L	SL	IC	NAT	05/31/2011						
SE2829-031	BE31ICS0	1.61	g		L	SL	IC	NAT	05/31/2011						
SE2909-001	BE31ICS0	1.40	g		L	SL	IC	NAT	05/31/2011						
SE2938-004	BE31ICS0	1.92	g		L	SL	IC	NAT	05/31/2011						
SE2829-011D		1.32	g		L										
SE2829-011S		1.35	g		L										

NT 5/31/11

QA-065-Revision 1 - 09/23/2010 Digestion performed by: NT On: 5/31/11 Page: BE153 Revision: 00

Katahdin Analytical Services 4000107

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **A. BERNHARDT** **DATE: JULY 27, 2011**

FROM: **JOSEPH KALINYAK** **COPIES: DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION: PCB/PEST**
NSB NEW LONDON, CTO WE55
SDG WE55-4

SAMPLES: 30 / Sediment / PAH

2W-SD-SD101-0001	2W-SD-SD102-0001	2W-SD-SD104-0001
2W-SD-SD106-0001	2W-SD-SD109-0001	2W-SD-SD111-0001
2W-SD-SD113-0001	2W-SD-SD114-0001	2W-SD-SD124-0001
2W-SD-SD125-0001	2W-SD-SD128-0001	2W-SD-SD129-0001
2W-SD-SD131-0001	2W-SD-SD132-0001	2W-SD-SD133-0001
2W-SD-SD137-0001	2W-SD-SD139-0001	2W-SD-SD141-0001
2W-SD-SD143-0001	2W-SD-SD145-0001	2W-SD-SD153-0001
2W-SD-SD155-0001	2W-SD-SD156-0001	2W-SD-SD157-0001
2W-SD-SD160-0001	2W-SD-SD85-0001	2W-SD-SD86-0001
2W-SD-SD91-0001	2W-SD-SD92-0001	2W-SD-SD93-0001

18 / Sediment / PEST / PCB

2W-SD-SD114-0001	2W-SD-SD124-0001	2W-SD-SD125-0001
2W-SD-SD128-0001	2W-SD-SD129-0001	2W-SD-SD131-0001
2W-SD-SD132-0001	2W-SD-SD133-0001	2W-SD-SD137-0001
2W-SD-SD139-0001	2W-SD-SD141-0001	2W-SD-SD143-0001
2W-SD-SD145-0001	2W-SD-SD153-0001	2W-SD-SD155-0001
2W-SD-SD156-0001	2W-SD-SD157-0001	2W-SD-SD160-0001

Overview

The sample set for SDG WE55-4 CTO WE55, NSB New London, consisted of thirty (30) environmental sediment samples. Thirty (30) environmental sediment samples were analyzed for polynuclear aromatic hydrocarbons (PAH) and eighteen (18) of the environmental sediment samples were analyzed for pesticides (PEST) and polychlorinated biphenyls (PCB). No field duplicate sample pair samples were associated with this Sample Delivery Group (SDG).

The samples were collected by Tetra Tech NUS, Inc. on April 4, 5, 6, and 7, 2011 and analyzed by Katahdin Analytical Services Inc. All analyses were conducted in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria using USEPA SW-846 Method 8270D, 8081B, and 8082A analytical and reporting protocols. A USEPA Region I Tier 3 data validation was performed on the referenced samples. The data was evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • GC/MS Instrument Tuning and System Performance

- Initial and Continuing Calibration
- Blank Results
- Blank Spike/Blank Spike Duplicate Results
- Surrogate Spike Recoveries
- Internal Standard Recoveries
- * Compound Identification and Quantification
- * Detection Limits

The asterisk (*) indicates that all quality control criteria were met for this parameter. Qualified (if applicable) analytical results are summarized in Appendix A. Results as reported by the laboratory are presented in Appendix B. Appendix C contains Region I worksheets, and Appendix D contains the documentation to support the findings as discussed in this data validation report. The attached Table summarizes the validation qualifications which are based on the following information:

INITIAL AND CONTINUING CALIBRATIONS

The PAH continuing calibration verification (CCV) percent difference (%D) was greater than the 20% quality control limit for indeno(1,2,3-cd)pyrene on instrument GCMS-G on 06/02/11 @ 11:41 affecting samples 2W-SD-SD155-0001, 2W-SD-SD157-0001, 2W-SD-SD160-0001, 2W-SD-SD124-0001, 2W-SD-SD125-0001, 2W-SD-SD141-0001, 2W-SD-SD92-0001, 2W-SD-SD93-0001, 2W-SD-SD85-0001, and 2W-SD-SD86-0001. The positive indeno(1,2,3-cd)pyrene results for all samples except 2W-SD-SD92-0001 and 2W-SD-SD93-0001 were qualified estimated, (J). The positive results for samples 2W-SD-SD92-0001 and 2W-SD-SD93-0001 were reported from the sample dilution re-analyses and were not qualified for this issue.

The PAH continuing calibration verification (CCV) percent difference (%D) was greater than the 20% quality control limit for benzo(a)pyrene on instrument GCMS-G on 06/06/11 @ 12:31 affecting samples 2W-SD-SD128-0001, 2W-SD-SD131-0001, 2W-SD-SD1110-0001, 2W-SD-SD137-0001 dilution, 2W-SD-SD92-0001 dilution, 2W-SD-SD93-0001 dilution, 2W-SD-SD91-0001 dilution, 2W-SD-SD106-0001 dilution, 2W-SD-SD143-0001 dilution, 2W-SD-SD145-0001 dilution and 2W-SD-SD132-0001 dilution. The positive benzo(a)pyrene results for all samples except 2W-SD-SD106-0001 dilution, 2W-SD-SD143-0001 dilution, 2W-SD-SD145-0001 dilution and 2W-SD-SD132-0001 dilution were qualified estimated, (J). The positive results for samples 2W-SD-SD106-0001 dilution, 2W-SD-SD143-0001 dilution, 2W-SD-SD145-0001 dilution and 2W-SD-SD132-0001 dilution were reported from the sample undiluted analyses and were not qualified for this issue.

The PEST continuing calibration verification (CCV) percent differences (%D) were greater than the 20% quality control limit for instrument GC01 on 06/07/11 @ 14:53 and @ 18:06 for analytical columns as listed below.

Analyte	ZB-MULTIRESIDUE-1	ZB-MULTIRESIDUE-2
4,4'-DDT (14:53)	25.60	25.40
4,4'-DDT (18:06)	29.20	26.80

Affecting samples: 2W-SD-SD153-0001, 2W-SD-SD156-0001, 2W-SD-SD155-0001, 2W-SD-SD157-0001, 2W-SD-SD160-0001, 2W-SD-SD128-0001, 2W-SD-SD124-0001, 2W-SD-SD133-0001, 2W-SD-SD131-0001, 2W-SD-SD129-0001, 2W-SD-SD114-0001, 2W-SD-SD137-0001, 2W-SD-SD128-0001 diluted, 2W-SD-SD124-0001 diluted, 2W-SD-SD125-0001, 2W-SD-SD141-0001, 2W-SD-SD143-0001, and 2W-SD-SD139-0001.

Action: Positive results for 4,4'-DDT were qualified estimated, (J). Sample 2W-SD-SD141-0001 was not qualified as the non-detected 4,4'-DDT result was qualified rejected due to high moisture content. Samples 2W-SD-SD124-0001 diluted and 2W-SD-SD128-0001 diluted 4,4'-DDT results were reported from the undiluted sample analyses which were also affected and qualified.

The Aroclor CCV average %Ds were greater than the 20% quality control limit for instrument GC07 on 06/03/11 @ 12:47 for Aroclors and analytical columns as listed below.

Analyte	ZB-MULTIRESIDUE-1	ZB-MULTIRESIDUE-2
Aroclor-1016	25.81	------
Aroclor-1260	23.53	------

Affecting samples: 2W-SD-SD153-0001 and 2W-SD-SD156-0001.
Action: Non-detected Aroclor results for the above samples were not qualified as the alternate column, ZB-MULTIRESIDUE-2, had %Ds within the quality control limits.
Qualified Samples: None

The Aroclor CCV average %D was greater than the 20% quality control limit for instrument GC07 on 06/03/11 @ 18:51 for analytical columns as listed below.

Analyte	ZB-MULTIRESIDUE-1	ZB-MULTIRESIDUE-2
Aroclor-1016	23.76	------
Aroclor-1260	------	------

Affecting samples: 2W-SD-SD153-0001, 2W-SD-SD156-0001. 2W-SD-SD155-0001, 2W-SD-SD157-0001, 2W-SD-SD160-0001, 2W-SD-SD137-0001, 2W-SD-SD128-0001, 2W-SD-SD124-0001, 2W-SD-SD125-0001, 2W-SD-SD141-0001, 2W-SD-SD133-0001.
Action: Non-detected Aroclor results for the above samples were not qualified as the alternate column, ZB-MULTIRESIDUE-2, had %Ds within the quality control limits.
Qualified Samples: None

The Aroclor CCV average %D was greater than the 20% quality control limit for instrument GC07 on 06/04/11 @ 00:02 for analytical columns as listed below.

Analyte	ZB-MULTIRESIDUE-1	ZB-MULTIRESIDUE-2
Aroclor-1016	38.12	------
Aroclor-1260	37.47	------

Affecting samples: 2W-SD-SD155-0001, 2W-SD-SD157-0001, 2W-SD-SD160-0001, 2W-SD-SD137-0001, 2W-SD-SD128-0001, 2W-SD-SD124-0001, 2W-SD-SD125-0001, 2W-SD-SD141-0001, 2W-SD-SD133-0001.
Action: Non-detected Aroclor results for the above samples were not qualified as the alternate column, ZB-MULTIRESIDUE-2, had %Ds within the quality control limits. The positive Aroclor-1260 in sample 2W-SD-SD133-0001 from the affected column ZB-MULTIRESIDUE-1 was qualified estimated, (J).
Qualified Samples: 2W-SD-SD133-0001

The Aroclor CCV average %D was greater than the 20% quality control limit for instrument GC07 on 06/06/11 @ 11:40 and @ 18:29 for analytical columns as listed below.

Analyte	ZB-MULTIRESIDUE1	ZB-MULTIRESIDUE-2
Aroclor-1016 (@ 11:40)	29.03	------
Aroclor-1260 (@ 11:40)	24.42	------
Aroclor-1016 (@ 18:29)	29.20	------
Aroclor-1260 (@ 18:29)	21.36	------

Affecting samples: 2W-SD-SD129-0001, 2W-SD-SD143-0001.
Action: Non-detected Aroclor results for the above samples were not qualified as the alternate column, ZB-MULTIRESIDUE-2, had %Ds within the quality control limits.
Qualified Samples: None

The Aroclor CCV average %D was greater than the 20% quality control limit for instrument GC07 on 06/10/11 @ 12:12 and @ 18:54 for analytical columns as listed below.

Analyte	ZB-MULTIRESIDUE-1	ZB-MULTIRESIDUE-2
Aroclor-1016 (@ 12:12)	27.06	------
Aroclor-1260 (@ 12:12)	43.29	------
Aroclor-1016 (@ 18:54)	34.28	------
Aroclor-1260 (@ 18:54)	42.48	------

Affecting samples: 2W-SD-SD131-0001, 2W-SD-SD143-0001 re-analysis, 2W-SD-SD145-0001, 2W-SD-SD132-0001, 2W-SD-SD139-0001, 2W-SD-SD114-0001.
Action: Non-detected Aroclor results for the above samples were not qualified as the alternate column, ZB-MULTIRESIDUE-2, had %Ds within the quality control limits.
Qualified Samples: None

BLANKS

The following PEST laboratory contaminant was detected in the method blank for batch WG91999 at the following maximum concentration affecting the all PEST samples except sample 2W-SD-SD145-0001.

Analyte	Maximum Conc. µg/kg	Action Level µg/kg
4,4'-DDD	2.0	10.0

An action level of five times the maximum level for the laboratory contaminant 4,4'-DDD has been used to evaluate sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Samples 2W-SD-SD157-0001, 2W-SD-SD156-0001, and 2W-SD-SD153-0001 4,4'-DDD results were qualified non-detected, (U), for method blank contamination.

The samples listed below were not qualified for 4,4-DDD laboratory method blank contamination because consideration of high dilution factors and low percent solids content in the application of the blank action level would have improperly rendered 4,4'-DDD results in each of the referenced samples as being attributable to laboratory blank contamination. As an illustration supporting the presence of 4,4'-DDD in samples without influence from laboratory contamination, 4,4'-DDD was present in the chromatogram of the undiluted analysis of sample 2W-SD-SD129-0001 at a height significantly greater than 5 times the contaminant height detected in the method blank. Because the concentration of 4,4'-DDD in the undiluted sample 2W-SD-SD129-0001 was so much greater than the level detected in the blank, (the concentration in the undiluted sample exceeded the blank action level by more than a factor of 10) the sample result was not qualified for laboratory contamination. Therefore, the routine practice of the application of dilution factors and low percent solids on the blank action level of highly diluted, contaminated samples in this SDG, will improperly attribute and qualify samples for laboratory contamination. Positive results for 4,4'-DDD, which were associated with the contaminated laboratory method blank but were not qualified for blank contamination, were qualified as estimated, (J).

Sample	Dilution	%Solids
2W-SD-SD129-0001	1X, 500X	22.5%
2W-SD-SD132-0001	500X	24.0%
2W-SD-SD139-0001	1000X	18.8%
2W-SD-SD145-0001	1000X	28.0%

SURROGATE SPIKE RECOVERIES

The Aroclor surrogate %Rs were outside the quality control limits for analytical columns as listed below. Sample 2W-SD-SD143-0001 was re-analyzed by the laboratory.

TCX (56-115)	ZB-1	ZB-2	DCB (59-124)	ZB-1	ZB-2
2W-SD-SD153-0001	46	----	2W-SD-SD153-0001	----	----
2W-SD-SD155-0001	53	----	2W-SD-SD155-0001	----	----
2W-SD-SD128-0001	50	55	2W-SD-SD128-0001	49	----
2W-SD-SD124-0001	44	----	2W-SD-SD124-0001	45	----
2W-SD-SD125-0001	53	----	2W-SD-SD125-0001	51	----
2W-SD-SD129-0001	55	----	2W-SD-SD129-0001	57	----
2W-SD-SD143-0001	37	45	2W-SD-SD143-0001	47	53
2W-SD-SD143-0001 RE	35	39	2W-SD-SD143-0001 RE	45	45
2W-SD-SD145-0001	38	50	2W-SD-SD145-0001	49	----
2W-SD-SD132-0001	53	----	2W-SD-SD132-0001	56	----
2W-SD-SD139-0001	50	----	2W-SD-SD139-0001	56	----
2W-SD-SD114-0001	52	49	2W-SD-SD114-0001	----	58
WG92000-LCS	----	54	WG92000-LCS	----	----
WG92620-BLANK	43	39	WG92620-BLANK	----	----

TCX - tetrachloro-m-xylene DCB - decachlorobiphenyl
ZB-1 – ZB-MULTIRESIDUE1 ZB-2 – ZB-MULTIRESIDUE2

Actions:

1. Non-detected Aroclor results for samples 2W-SD-SD128-0001, 2W-SD-SD143-0001, 2W-SD-SD145-0001, and 2W-SD-SD114-0001 were qualified estimated, (UJ).
2. The samples 2W-SD-SD153-0001, 2W-SD-SD155-0001, 2W-SD-SD124-0001, 2W-SD-SD125-0001, 2W-SD-SD129-0001, 2W-SD-SD132-0001, and 2W-SD-SD139-0001 non-detected Aroclor results were not qualified as the ZB-MULTIRESIDUE-2 column surrogate %Rs were within the quality control limits.
3. The sample 2W-SD-SD129-0001, 2W-SD-SD132-0001, and 2W-SD-SD155-0001 positive Aroclor-1260 results were not qualified as they were reported from the ZB-MULTIRESIDUE-2 column with surrogate %Rs within the quality control limits.
4. No validation action was taken for the LCS and method blank surrogate %R quality control limit non-compliances.
5. Sample 2W-SD-SD143-0001 was re-analyzed due to the low surrogate %R with similar %Rs for the re-analyzed sample. The original sample analysis results were reported.

INTERNAL STANDARD RECOVERY

The PAH internal standard recovery for acenaphthene-d10 was greater than the quality control limit for samples 2W-SD-SD145-0001 dilution analysis and 2W-SD-SD132-0001 dilution analysis affecting the PAH analytes acenaphthylene, acenaphthene, and fluorene. No validation action was taken as the positive results for the aforementioned analytes were reported from the undiluted sample analyses.

The PAH internal standard recovery for phenanthrene-d10 was less than the quality control limit for sample 2W-SD-SD145-0001 undiluted analysis affecting the PAH analytes phenanthrene, anthracene, and fluoranthene. The positive results for the aforementioned analytes were reported from this sample analysis and were qualified estimated, (J).

The PAH internal standard recovery for perylene-d12 was greater than the quality control limit for sample 2W-SD-SD143-0001 undiluted analysis affecting the PAH analytes benzo(b)fluoranthene,

benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene. The positive results for the aforementioned analytes were reported from the undiluted sample analysis and were therefore qualified estimated, (J).

LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE

The PAH percent recovery (%R) was less than the quality control limit and less than 10% for the laboratory control sample duplicate (LCSD) and the relative percent difference (RPD) for the LCS/LCSD %Rs was greater than the quality control limit for benzo(g,h,i)perylene associated with batch WG91997. No validation action was taken as the LCS %R was within the quality control limits.

COMPOUND QUANTITATION

The RPD was greater than 40% between the analytical columns for the PEST analyses for a number of samples. The samples with RPDs greater than 40% were qualified estimated, (J). The samples and the %RPDs are listed as follows.

Sample	Compound	RPD	Qualifier
2W-SD-SD128-0001	4,4'-DDT	73.2	J
2W-SD-SD129-0001	4,4'-DDT	49.1	J
2W-SD-SD133-0001	4,4'-DDT	57.6	J
2W-SD-SD145-0001	4,4'-DDT	44.4	J
2W-SD-SD153-0001	4,4'-DDT	76.9	J
2W-SD-SD155-0001	4,4'-DDT	100.0	J
2W-SD-SD156-0001	4,4'-DDT	45.2	J

ADDITIONAL COMMENTS

Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

The higher of the two column PEST and Aroclor results was reported by the laboratory when choosing between the two analytical column results.

Sample positive and non-detected PAH, PEST, and PCB analyte results were qualified estimated, (J) and (UJ), respectively, for moisture content greater than 70% as listed below. The laboratory used a larger than routine sample aliquot for preparation to compensate for high percent moisture.

Sample	% Moisture
2W-SD-SD101-0001	78.7
2W-SD-SD102-0001	87.5
2W-SD-SD104-0001	90.4
2W-SD-SD106-0001	71.7
2W-SD-SD111-0001	83.8
2W-SD-SD114-0001	88.6
2W-SD-SD125-0001	70.4
2W-SD-SD129-0001	77.5
2W-SD-SD131-0001	83.9
2W-SD-SD132-0001	76.0
2W-SD-SD133-0001	74.2
2W-SD-SD139-0001	81.2
2W-SD-SD141-0001	90.5

2W-SD-SD143-0001	88.1
2W-SD-SD145-0001	72.0
2W-SD-SD153-0001	82.8
2W-SD-SD155-0001	73.6
2W-SD-SD156-0001	81.8
2W-SD-SD157-0001	79.4
2W-SD-SD160-0001	87.0
2W-SD-SD85-0001	76.0
2W-SD-SD91-0001	78.0
2W-SD-SD92-0001	71.4

The laboratory performed dilution re-analyses on some of the samples for PAH analysis as indicated below due to PAH analytes that exceeded the highest calibration level in the undiluted sample analysis. Only those analytes which exceeded the calibration range in the 1X analysis were reported from the dilution re-analyses.

Sample	Dilution
2W-SD-SD106-0001	1X, 4X
2W-SD-SD132-0001	1X, 2X
2W-SD-SD137-0001	1X, 4X
2W-SD-SD143-0001	1X, 4X
2W-SD-SD145-0001	1X, 3X
2W-SD-SD91-0001	1X, 25X
2W-SD-SD92-0001	1X, 20X
2W-SD-SD93-0001	1X, 8X

The laboratory performed dilution analysis and re-analysis on some of the samples for PEST analysis as indicated below. Only those analytes which exceeded the calibration range in the 1X analysis were reported from the dilution re-analyses. The detection limit for the non-detected 4,4'-DDT result for sample 2W-SD-SD141-0001 was elevated due to the dilution.

Sample	Dilution
2W-SD-SD124-0001	1X, 500X
2W-SD-SD125-0001	50X
2W-SD-SD128-0001	1X, 20X
2W-SD-SD129-0001	1X, 500X
2W-SD-SD132-0001	500X
2W-SD-SD137-0001	100X
2W-SD-SD139-0001	1000X
2W-SD-SD141-0001	20X
2W-SD-SD143-0001	1000X
2W-SD-SD145-0001	1000X

EXECUTIVE SUMMARY

Laboratory Performance: PAH results were qualified due to continuing calibration quality control limit non-compliances. PEST and Aroclor results were qualified due to continuing calibration quality control limit non-compliances. PEST 4,4'-DDD sample results were qualified for method blank contamination. Aroclor results were qualified for surrogate recovery quality control limit non-compliances. Sample PAH analytes were qualified due to internal standard quality control limit non-compliances. PEST sample results were qualified for analytical column result RPD quality control limit non-compliances.

Other Factors Affecting Data Quality: Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J). Sample PAH, PEST, and PCB analyte results were qualified for moisture content greater than 70%.

The data for these analyses were reviewed with reference to the Region I EPA "Data Validation Functional Guidelines - Part II" (12/96), National Functional Guidelines for Low Concentration Organic Data Review, and the DoD Quality Systems (QSM) (April 2009).

TetraTech NUS
Joseph Kalinyak
Chemist/Data Validator

TetraTech NUS
Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Regional Worksheets
4. Appendix D - Support Documentation

APPENDIX A

QUALIFIED LABORATORY RESULTS

Value Qualifier Key (Val Qual)

J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The result is an estimated non-detected quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U - Value is a non-detect as reported by the laboratory.

UR – Non-detected result is considered rejected, (UR), as a result of technical non-compliances.

DATA QUALIFICATION CODE (QUAL CODE)

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's r < 0.995 / ICP PDS Recovery Noncompliance
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 02625	NSAMPLE	2W-SD-SD101-0001			2W-SD-SD102-0001			2W-SD-SD104-0001			2W-SD-SD106-0001		
SDG: WE55-4	LAB_ID	SE2829-21			SE2829-18			SE2829-17			SE2829-20		
FRACTION: PAH	SAMP_DATE	4/6/2011			4/6/2011			4/6/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	21.3			12.5			9.6			28.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		40	UJ	Y	75	UJ	Y	100	UR	Y	18	J	PY
2-METHYLNAPHTHALENE		40	UJ	Y	75	UJ	Y	100	UR	Y	26	J	PY
ACENAPHTHENE		10	J	PY	75	UJ	Y	100	UR	Y	21	J	PY
ACENAPHTHYLENE		10	J	PY	17	J	PY	63	J	PY	44	J	PY
ANTHRACENE		25	J	PY	17	J	PY	50	J	PY	66	J	PY
BENZO(A)ANTHRACENE		220	J	Y	160	J	Y	350	J	Y	590	J	Y
BENZO(A)PYRENE		200	J	Y	190	J	Y	390	J	Y	690	J	Y
BENZO(B)FLUORANTHENE		320	J	Y	450	J	Y	910	J	Y			
BENZO(G,H,I)PERYLENE		120	J	Y	130	J	PY	280	J	Y	410	J	Y
BENZO(K)FLUORANTHENE		98	J	Y	130	J	PY	200	J	PY	320	J	Y
CHRYSENE		240	J	Y	220	J	Y	500	J	Y	720	J	Y
DIBENZO(A,H)ANTHRACENE		54	J	PY	38	J	PY	74	J	PY	140	J	Y
FLUORANTHENE		470	J	Y	360	J	Y	780	J	Y			
FLUORENE		14	J	PY	75	UJ	Y	100	UR	Y	40	J	PY
INDENO(1,2,3-CD)PYRENE		230	J	Y	220	J	Y	440	J	Y	650	J	Y
NAPHTHALENE		11	J	PY	75	UJ	Y	100	UR	Y	38	J	PY
PHENANTHRENE		220	J	Y	190	J	Y	420	J	Y	590	J	Y
PYRENE		640	J	Y	400	J	Y	840	J	Y			

PROJ_NO: 02625 SDG: WE55-4 FRACTION: PAH MEDIA: SEDIMENT	NSAMPLE	2W-SD-SD106-0001DL			2W-SD-SD109-0001			2W-SD-SD111-0001			2W-SD-SD113-0001		
	LAB_ID	SE2829-20DL			SE2829-19			SE2829-22			SE2829-23		
	SAMP_DATE	4/6/2011			4/6/2011			4/6/2011			4/6/2011		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	28.3			32.1			16.2			43.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE					15	J	P	60	UJ	Y	22	U	
2-METHYLNAPHTHALENE					26	J	P	60	UJ	Y	22	U	
ACENAPHTHENE					7.8	J	P	60	UJ	Y	5	J	P
ACENAPHTHYLENE					30	J	P	60	UJ	Y	5	J	P
ANTHRACENE					27	J	P	10	J	PY	19	J	P
BENZO(A)ANTHRACENE					230			120	J	PY	150		
BENZO(A)PYRENE					290			170	J	CY	200		
BENZO(B)FLUORANTHENE		1200	J	Y	520			330	J	Y	310		
BENZO(G,H,I)PERYLENE					210			140	J	Y	150		
BENZO(K)FLUORANTHENE					150			99	J	PY	85		
CHRYSENE					320			180	J	Y	190		
DIBENZO(A,H)ANTHRACENE					74			55	J	PY	46		
FLUORANTHENE		1200	J	Y	480			290	J	Y	300		
FLUORENE					20	J	P	60	UJ	Y	8.7	J	P
INDENO(1,2,3-CD)PYRENE					340			230	J	Y	240		
NAPHTHALENE					38	J	P	60	UJ	Y	5.9	J	P
PHENANTHRENE					250			120	J	PY	170		
PYRENE		1900	J	Y	680			350	J	Y	450		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD114-0001			2W-SD-SD124-0001			2W-SD-SD125-0001			2W-SD-SD128-0001		
SDG: WE55-4	LAB_ID	SE2829-31			SE2829-9			SE2829-10			SE2829-8		
FRACTION: PAH	SAMP_DATE	4/6/2011			4/5/2011			4/5/2011			4/5/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	11.4			41.5			29.6			36.1		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		87	UJ	Y	29	J	P	12	J	PY	17	J	P
2-METHYLNAPHTHALENE		87	UJ	Y	34	J	P	14	J	PY	29	J	P
ACENAPHTHENE		87	UJ	Y	24	U		16	J	PY	17	J	P
ACENAPHTHYLENE		44	J	PY	59			25	J	PY	21	J	P
ANTHRACENE		46	J	PY	48	J	P	41	J	PY	39	J	P
BENZO(A)ANTHRACENE		430	J	Y	140			180	J	Y	200		
BENZO(A)PYRENE		500	J	Y	140			230	J	Y	230	J	C
BENZO(B)FLUORANTHENE		990	J	Y	220			320	J	Y	310		
BENZO(G,H,I)PERYLENE		360	J	Y	88			140	J	Y	160		
BENZO(K)FLUORANTHENE		300	J	Y	62			100	J	Y	92		
CHRYSENE		570	J	Y	190			210	J	Y	230		
DIBENZO(A,H)ANTHRACENE		150	J	PY	24	U		45	J	PY	53	J	P
FLUORANTHENE		730	J	Y	220			250	J	Y	260		
FLUORENE		87	UJ	Y	86			58	J	PY	46	J	P
INDENO(1,2,3-CD)PYRENE		680	J	Y	150	J	C	230	J	CY	240		
NAPHTHALENE		87	UJ	Y	32	J	P	11	J	PY	40	J	P
PHENANTHRENE		400	J	Y	120			150	J	Y	140		
PYRENE		1300	J	Y	530			500	J	Y	620		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD129-0001			2W-SD-SD131-0001			2W-SD-SD132-0001			2W-SD-SD132-0001DL		
SDG: WE55-4	LAB_ID	SE2829-26			SE2829-25			SE2829-29			SE2829-29DL		
FRACTION: PAH	SAMP_DATE	4/6/2011			4/5/2011			4/6/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	22.5			16.1			24.0			24.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		32	J	PY	62	UJ	Y	32	J	PY			
2-METHYLNAPHTHALENE		38	J	PY	62	UJ	Y	27	J	PY			
ACENAPHTHENE		32	J	PY	66	J	PY	78	J	PY			
ACENAPHTHYLENE		33	J	PY	8.1	J	PY	54	J	PY			
ANTHRACENE		52	J	PY	19	J	PY	79	J	PY			
BENZO(A)ANTHRACENE		300	J	Y	200	J	Y	540	J	Y			
BENZO(A)PYRENE		360	J	Y	320	J	CY	600	J	Y			
BENZO(B)FLUORANTHENE		520	J	Y	370	J	Y	950	J	Y			
BENZO(G,H,I)PERYLENE		200	J	Y	320	J	Y	300	J	Y			
BENZO(K)FLUORANTHENE		160	J	Y	95	J	PY	220	J	Y			
CHRYSENE		360	J	Y	230	J	Y	640	J	Y			
DIBENZO(A,H)ANTHRACENE		79	J	PY	79	J	PY	110	J	Y			
FLUORANTHENE		540	J	Y	300	J	Y	930	J	Y			
FLUORENE		56	J	PY	56	J	PY	91	J	Y			
INDENO(1,2,3-CD)PYRENE		350	J	Y	280	J	Y	530	J	Y			
NAPHTHALENE		51	J	PY	62	UJ	Y	20	J	PY			
PHENANTHRENE		240	J	Y	140	J	Y	310	J	Y			
PYRENE		850	J	Y	430	J	Y				1800	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD133-0001			2W-SD-SD137-0001			2W-SD-SD137-0001DL			2W-SD-SD139-0001		
SDG: WE55-4	LAB_ID	SE2829-24			SE2829-7			SE2829-7DL			SE2829-30		
FRACTION: PAH	SAMP_DATE	4/5/2011			4/5/2011			4/5/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	25.8			39.0			39.0			18.8		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		38	UJ	Y	28	J	P				25	J	PY
2-METHYLNAPHTHALENE		38	UJ	Y	49	J	P				21	J	PY
ACENAPHTHENE		18	J	PY	31	J	P				62	J	PY
ACENAPHTHYLENE		14	J	PY	38	J	P				41	J	PY
ANTHRACENE		36	J	PY	68						54	J	PY
BENZO(A)ANTHRACENE		290	J	Y	340						460	J	Y
BENZO(A)PYRENE		340	J	Y	370	J	C				580	J	Y
BENZO(B)FLUORANTHENE		550	J	Y	510						870	J	Y
BENZO(G,H,I)PERYLENE		180	J	Y	180						340	J	Y
BENZO(K)FLUORANTHENE		170	J	Y	170						270	J	Y
CHRYSENE		310	J	Y	440						520	J	Y
DIBENZO(A,H)ANTHRACENE		73	J	PY	56						120	J	Y
FLUORANTHENE		540	J	Y				720			760	J	Y
FLUORENE		15	J	PY	91						72	J	PY
INDENO(1,2,3-CD)PYRENE		330	J	Y	300						590	J	Y
NAPHTHALENE		11	J	PY	69						53	UJ	Y
PHENANTHRENE		220	J	Y	300						290	J	Y
PYRENE		740	J	Y				1300			1200	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD141-0001			2W-SD-SD143-0001			2W-SD-SD143-0001DL			2W-SD-SD145-0001		
SDG: WE55-4	LAB_ID	SE2829-11			SE2829-27			SE2829-27DL			SE2829-28		
FRACTION: PAH	SAMP_DATE	4/5/2011			4/6/2011			4/6/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	9.5			11.9			11.9			28.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		55	J	PY	62	J	PY				49	J	PY
2-METHYLNAPHTHALENE		35	J	PY	47	J	PY				30	J	PY
ACENAPHTHENE		97	J	PY	120	J	PY				130	J	Y
ACENAPHTHYLENE		37	J	PY	59	J	PY				34	UJ	Y
ANTHRACENE		44	J	PY	140	J	PY				110	J	CY
BENZO(A)ANTHRACENE		350	J	Y	1100	J	Y				460	J	Y
BENZO(A)PYRENE		450	J	Y	1400	J	CY				550	J	Y
BENZO(B)FLUORANTHENE		730	J	Y	2100	J	CY				840	J	Y
BENZO(G,H,I)PERYLENE		360	J	Y	56	J	CPY				240	J	Y
BENZO(K)FLUORANTHENE		210	J	Y	590	J	CY				260	J	Y
CHRYSENE		410	J	Y	1400	J	Y				590	J	Y
DIBENZO(A,H)ANTHRACENE		130	J	PY	300	J	CY				77	J	Y
FLUORANTHENE		660	J	Y	1900	J	Y				620	J	CY
FLUORENE		81	J	PY	190	J	Y				100	J	Y
INDENO(1,2,3-CD)PYRENE		630	J	CY	1400	J	CY				430	J	Y
NAPHTHALENE		100	UR	Y	34	J	PY				22	J	PY
PHENANTHRENE		250	J	Y	1000	J	Y				360	J	CY
PYRENE		1100	J	Y				3300	J	Y			

PROJ_NO: 02625	NSAMPLE	2W-SD-SD101-0001			2W-SD-SD102-0001			2W-SD-SD104-0001			2W-SD-SD106-0001		
SDG: WE55-4	LAB_ID	SE2829-21			SE2829-18			SE2829-17			SE2829-20		
FRACTION: PAH	SAMP_DATE	4/6/2011			4/6/2011			4/6/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	21.3			12.5			9.6			28.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		40	UJ	Y	75	UJ	Y	100	UJ	Y	18	J	PY
2-METHYLNAPHTHALENE		40	UJ	Y	75	UJ	Y	100	UJ	Y	26	J	PY
ACENAPHTHENE		10	J	PY	75	UJ	Y	100	UJ	Y	21	J	PY
ACENAPHTHYLENE		10	J	PY	17	J	PY	63	J	PY	44	J	PY
ANTHRACENE		25	J	PY	17	J	PY	50	J	PY	66	J	PY
BENZO(A)ANTHRACENE		220	J	Y	160	J	Y	350	J	Y	590	J	Y
BENZO(A)PYRENE		200	J	Y	190	J	Y	390	J	Y	690	J	Y
BENZO(B)FLUORANTHENE		320	J	Y	450	J	Y	910	J	Y			
BENZO(G,H,I)PERYLENE		120	J	Y	130	J	PY	280	J	Y	410	J	Y
BENZO(K)FLUORANTHENE		98	J	Y	130	J	PY	200	J	PY	320	J	Y
CHRYSENE		240	J	Y	220	J	Y	500	J	Y	720	J	Y
DIBENZO(A,H)ANTHRACENE		54	J	PY	38	J	PY	74	J	PY	140	J	Y
FLUORANTHENE		470	J	Y	360	J	Y	780	J	Y			
FLUORENE		14	J	PY	75	UJ	Y	100	UJ	Y	40	J	PY
INDENO(1,2,3-CD)PYRENE		230	J	Y	220	J	Y	440	J	Y	650	J	Y
NAPHTHALENE		11	J	PY	75	UJ	Y	100	UJ	Y	38	J	PY
PHENANTHRENE		220	J	Y	190	J	Y	420	J	Y	590	J	Y
PYRENE		640	J	Y	400	J	Y	840	J	Y			

PROJ_NO: 02625	NSAMPLE	2W-SD-SD106-0001DL			2W-SD-SD109-0001			2W-SD-SD111-0001			2W-SD-SD113-0001		
SDG: WE55-4	LAB_ID	SE2829-20DL			SE2829-19			SE2829-22			SE2829-23		
FRACTION: PAH	SAMP_DATE	4/6/2011			4/6/2011			4/6/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	28.3			32.1			16.2			43.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE					15	J	P	60	UJ	Y	22	U	
2-METHYLNAPHTHALENE					26	J	P	60	UJ	Y	22	U	
ACENAPHTHENE					7.8	J	P	60	UJ	Y	5	J	P
ACENAPHTHYLENE					30	J	P	60	UJ	Y	5	J	P
ANTHRACENE					27	J	P	10	J	PY	19	J	P
BENZO(A)ANTHRACENE					230			120	J	PY	150		
BENZO(A)PYRENE					290			170	J	CY	200		
BENZO(B)FLUORANTHENE		1200	J	Y	520			330	J	Y	310		
BENZO(G,H,I)PERYLENE					210			140	J	Y	150		
BENZO(K)FLUORANTHENE					150			99	J	PY	85		
CHRYSENE					320			180	J	Y	190		
DIBENZO(A,H)ANTHRACENE					74			55	J	PY	46		
FLUORANTHENE		1200	J	Y	480			290	J	Y	300		
FLUORENE					20	J	P	60	UJ	Y	8.7	J	P
INDENO(1,2,3-CD)PYRENE					340			230	J	Y	240		
NAPHTHALENE					38	J	P	60	UJ	Y	5.9	J	P
PHENANTHRENE					250			120	J	PY	170		
PYRENE		1900	J	Y	680			350	J	Y	450		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD114-0001			2W-SD-SD124-0001			2W-SD-SD125-0001			2W-SD-SD128-0001		
SDG: WE55-4	LAB_ID	SE2829-31			SE2829-9			SE2829-10			SE2829-8		
FRACTION: PAH	SAMP_DATE	4/6/2011			4/5/2011			4/5/2011			4/5/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	11.4			41.5			29.6			36.1		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		87	UJ	Y	29	J	P	12	J	PY	17	J	P
2-METHYLNAPHTHALENE		87	UJ	Y	34	J	P	14	J	PY	29	J	P
ACENAPHTHENE		87	UJ	Y	24	U		16	J	PY	17	J	P
ACENAPHTHYLENE		44	J	PY	59			25	J	PY	21	J	P
ANTHRACENE		46	J	PY	48	J	P	41	J	PY	39	J	P
BENZO(A)ANTHRACENE		430	J	Y	140			180	J	Y	200		
BENZO(A)PYRENE		500	J	Y	140			230	J	Y	230	J	C
BENZO(B)FLUORANTHENE		990	J	Y	220			320	J	Y	310		
BENZO(G,H,I)PERYLENE		360	J	Y	88			140	J	Y	160		
BENZO(K)FLUORANTHENE		300	J	Y	62			100	J	Y	92		
CHRYSENE		570	J	Y	190			210	J	Y	230		
DIBENZO(A,H)ANTHRACENE		150	J	PY	24	U		45	J	PY	53	J	P
FLUORANTHENE		730	J	Y	220			250	J	Y	260		
FLUORENE		87	UJ	Y	86			58	J	PY	46	J	P
INDENO(1,2,3-CD)PYRENE		680	J	Y	150	J	C	230	J	CY	240		
NAPHTHALENE		87	UJ	Y	32	J	P	11	J	PY	40	J	P
PHENANTHRENE		400	J	Y	120			150	J	Y	140		
PYRENE		1300	J	Y	530			500	J	Y	620		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD129-0001			2W-SD-SD131-0001			2W-SD-SD132-0001			2W-SD-SD132-0001DL		
SDG: WE55-4	LAB_ID	SE2829-26			SE2829-25			SE2829-29			SE2829-29DL		
FRACTION: PAH	SAMP_DATE	4/6/2011			4/5/2011			4/6/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	22.5			16.1			24.0			24.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		32	J	PY	62	UJ	Y	32	J	PY			
2-METHYLNAPHTHALENE		38	J	PY	62	UJ	Y	27	J	PY			
ACENAPHTHENE		32	J	PY	66	J	PY	78	J	PY			
ACENAPHTHYLENE		33	J	PY	8.1	J	PY	54	J	PY			
ANTHRACENE		52	J	PY	19	J	PY	79	J	PY			
BENZO(A)ANTHRACENE		300	J	Y	200	J	Y	540	J	Y			
BENZO(A)PYRENE		360	J	Y	320	J	CY	600	J	Y			
BENZO(B)FLUORANTHENE		520	J	Y	370	J	Y	950	J	Y			
BENZO(G,H,I)PERYLENE		200	J	Y	320	J	Y	300	J	Y			
BENZO(K)FLUORANTHENE		160	J	Y	95	J	PY	220	J	Y			
CHRYSENE		360	J	Y	230	J	Y	640	J	Y			
DIBENZO(A,H)ANTHRACENE		79	J	PY	79	J	PY	110	J	Y			
FLUORANTHENE		540	J	Y	300	J	Y	930	J	Y			
FLUORENE		56	J	PY	56	J	PY	91	J	Y			
INDENO(1,2,3-CD)PYRENE		350	J	Y	280	J	Y	530	J	Y			
NAPHTHALENE		51	J	PY	62	UJ	Y	20	J	PY			
PHENANTHRENE		240	J	Y	140	J	Y	310	J	Y			
PYRENE		850	J	Y	430	J	Y				1800	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD133-0001			2W-SD-SD137-0001			2W-SD-SD137-0001DL			2W-SD-SD139-0001		
SDG: WE55-4	LAB_ID	SE2829-24			SE2829-7			SE2829-7DL			SE2829-30		
FRACTION: PAH	SAMP_DATE	4/5/2011			4/5/2011			4/5/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	25.8			39.0			39.0			18.8		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		38	UJ	Y	28	J	P				25	J	PY
2-METHYLNAPHTHALENE		38	UJ	Y	49	J	P				21	J	PY
ACENAPHTHENE		18	J	PY	31	J	P				62	J	PY
ACENAPHTHYLENE		14	J	PY	38	J	P				41	J	PY
ANTHRACENE		36	J	PY	68						54	J	PY
BENZO(A)ANTHRACENE		290	J	Y	340						460	J	Y
BENZO(A)PYRENE		340	J	Y	370						580	J	Y
BENZO(B)FLUORANTHENE		550	J	Y	510						870	J	Y
BENZO(G,H,I)PERYLENE		180	J	Y	180						340	J	Y
BENZO(K)FLUORANTHENE		170	J	Y	170						270	J	Y
CHRYSENE		310	J	Y	440						520	J	Y
DIBENZO(A,H)ANTHRACENE		73	J	PY	56						120	J	Y
FLUORANTHENE		540	J	Y				720			760	J	Y
FLUORENE		15	J	PY	91						72	J	PY
INDENO(1,2,3-CD)PYRENE		330	J	Y	300						590	J	Y
NAPHTHALENE		11	J	PY	69						53	UJ	Y
PHENANTHRENE		220	J	Y	300						290	J	Y
PYRENE		740	J	Y				1300			1200	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD141-0001			2W-SD-SD143-0001			2W-SD-SD143-0001DL			2W-SD-SD145-0001		
SDG: WE55-4	LAB_ID	SE2829-11			SE2829-27			SE2829-27DL			SE2829-28		
FRACTION: PAH	SAMP_DATE	4/5/2011			4/6/2011			4/6/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	9.5			11.9			11.9			28.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		55	J	PY	62	J	PY				49	J	PY
2-METHYLNAPHTHALENE		35	J	PY	47	J	PY				30	J	PY
ACENAPHTHENE		97	J	PY	120	J	PY				130	J	Y
ACENAPHTHYLENE		37	J	PY	59	J	PY				34	UJ	Y
ANTHRACENE		44	J	PY	140	J	PY				110	J	NY
BENZO(A)ANTHRACENE		350	J	Y	1100	J	Y				460	J	Y
BENZO(A)PYRENE		450	J	Y	1400	J	NY				550	J	Y
BENZO(B)FLUORANTHENE		730	J	Y	2100	J	NY				840	J	Y
BENZO(G,H,I)PERYLENE		360	J	Y	56	J	NPY				240	J	Y
BENZO(K)FLUORANTHENE		210	J	Y	590	J	NY				260	J	Y
CHRYSENE		410	J	Y	1400	J	Y				590	J	Y
DIBENZO(A,H)ANTHRACENE		130	J	PY	300	J	NY				77	J	Y
FLUORANTHENE		660	J	Y	1900	J	Y				620	J	NY
FLUORENE		81	J	PY	190	J	Y				100	J	Y
INDENO(1,2,3-CD)PYRENE		630	J	CY	1400	J	NY				430	J	Y
NAPHTHALENE		100	UJ	Y	34	J	PY				22	J	PY
PHENANTHRENE		250	J	Y	1000	J	Y				360	J	NY
PYRENE		1100	J	Y				3300	J	Y			

PROJ_NO: 02625	NSAMPLE	2W-SD-SD145-0001DL			2W-SD-SD153-0001			2W-SD-SD155-0001			2W-SD-SD156-0001		
SDG: WE55-4	LAB_ID	SE2829-28DL			SE2829-1			SE2829-3			SE2829-2		
FRACTION: PAH	SAMP_DATE	4/6/2011			4/4/2011			4/4/2011			4/4/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	28.0			17.2			26.4			18.2		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE					180	J	Y	110	J	Y	22	J	PY
2-METHYLNAPHTHALENE					120	J	PY	40	J	PY	30	J	PY
ACENAPHTHENE					310	J	Y	440	J	Y	35	J	PY
ACENAPHTHYLENE					58	UJ	Y	36	UJ	Y	29	J	PY
ANTHRACENE					180	J	Y	53	J	PY	27	J	PY
BENZO(A)ANTHRACENE					180	J	Y	88	J	Y	220	J	Y
BENZO(A)PYRENE					180	J	Y	110	J	Y	260	J	Y
BENZO(B)FLUORANTHENE					320	J	Y	170	J	Y	380	J	Y
BENZO(G,H,I)PERYLENE					140	J	Y	91	J	Y	160	J	Y
BENZO(K)FLUORANTHENE					100	J	PY	49	J	PY	140	J	Y
CHRYSENE					260	J	Y	110	J	Y	290	J	Y
DIBENZO(A,H)ANTHRACENE					50	J	PY	36	J	PY	67	J	PY
FLUORANTHENE					370	J	Y	220	J	Y	410	J	Y
FLUORENE					620	J	Y	370	J	Y	34	J	PY
INDENO(1,2,3-CD)PYRENE					230	J	Y	160	J	CY	280	J	Y
NAPHTHALENE					78	J	PY	56	J	PY	50	J	PY
PHENANTHRENE					730	J	Y	300	J	Y	220	J	Y
PYRENE		2000	J	Y	790	J	Y	320	J	Y	630	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD157-0001			2W-SD-SD160-0001			2W-SD-SD85-0001			2W-SD-SD86-0001		
SDG: WE55-4	LAB_ID	SE2829-4			SE2829-5			SE2829-14			SE2829-15		
FRACTION: PAH	SAMP_DATE	4/4/2011			4/4/2011			4/7/2011			4/7/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	20.6			13.0			24.0			34.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		48	UJ	Y	54	J	PY	40	UJ	Y	28	U	
2-METHYLNAPHTHALENE		48	UJ	Y	90	J	PY	40	UJ	Y	28	U	
ACENAPHTHENE		27	J	PY	55	J	PY	40	UJ	Y	6.4	J	P
ACENAPHTHYLENE		7.1	J	PY	81	J	PY	10	J	PY	16	J	P
ANTHRACENE		53	J	PY	120	J	PY	12	J	PY	23	J	P
BENZO(A)ANTHRACENE		300	J	Y	570	J	Y	120	J	Y	170		
BENZO(A)PYRENE		330	J	Y	610	J	Y	120	J	Y	240		
BENZO(B)FLUORANTHENE		580	J	Y	880	J	Y	220	J	Y	380		
BENZO(G,H,I)PERYLENE		240	J	Y	350	J	Y	83	J	Y	150		
BENZO(K)FLUORANTHENE		170	J	Y	290	J	Y	68	J	PY	120		
CHRYSENE		400	J	Y	650	J	Y	160	J	Y	200		
DIBENZO(A,H)ANTHRACENE		84	J	PY	130	J	PY	41	J	PY	54	J	P
FLUORANTHENE		640	J	Y	1000	J	Y	250	J	Y	370		
FLUORENE		26	J	PY	160	J	Y	40	UJ	Y	11	J	P
INDENO(1,2,3-CD)PYRENE		410	J	CY	580	J	CY	160	J	Y	260		
NAPHTHALENE		48	UJ	Y	120	J	PY	12	J	PY	28	U	
PHENANTHRENE		340	J	Y	430	J	Y	130	J	Y	190		
PYRENE		820	J	Y	1800	J	Y	380	J	Y	500		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD91-0001			2W-SD-SD91-0001DL			2W-SD-SD92-0001			2W-SD-SD92-0001DL		
SDG: WE55-4	LAB_ID	SE2829-16			SE2829-16DL			SE2829-12			SE2829-12DL		
FRACTION: PAH	SAMP_DATE	4/7/2011			4/7/2011			4/7/2011			4/7/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	22.0			22.0			28.6			28.6		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		45	UJ	Y				11	J	PY			
2-METHYLNAPHTHALENE		45	UJ	Y				13	J	PY			
ACENAPHTHENE		37	J	PY				52	J	P			
ACENAPHTHYLENE		36	J	PY				40	J	PY			
ANTHRACENE		130	J	Y				200	J	Y			
BENZO(A)ANTHRACENE					8500	J	Y				2600	J	Y
BENZO(A)PYRENE					11000	J	CY				4000	J	CY
BENZO(B)FLUORANTHENE					12000	J	Y				5900	J	Y
BENZO(G,H,I)PERYLENE					5700	J	Y				2900	J	Y
BENZO(K)FLUORANTHENE					5300	J	Y				2100	J	Y
CHRYSENE					6900	J	Y				3300	J	Y
DIBENZO(A,H)ANTHRACENE					2200	J	PY	540	J	Y			
FLUORANTHENE					12000	J	Y				5400	J	Y
FLUORENE		31	J	PY				73	J	Y			
INDENO(1,2,3-CD)PYRENE		45	UJ	Y							5300	J	Y
NAPHTHALENE		45	UJ	Y				30	J	PY			
PHENANTHRENE		1100	J	Y							1900	J	Y
PYRENE					17000	J	Y				7100	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD93-0001			2W-SD-SD93-0001DL		
SDG: WE55-4	LAB_ID	SE2829-13			SE2829-13DL		
FRACTION: PAH	SAMP_DATE	4/7/2011			4/7/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	56.1			56.1		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		15	J	P			
2-METHYLNAPHTHALENE		25	J	P			
ACENAPHTHENE		13	J	P			
ACENAPHTHYLENE		40					
ANTHRACENE		64					
BENZO(A)ANTHRACENE					690		
BENZO(A)PYRENE					1100	J	C
BENZO(B)FLUORANTHENE					1500		
BENZO(G,H,I)PERYLENE		390					
BENZO(K)FLUORANTHENE		330					
CHRYSENE					900		
DIBENZO(A,H)ANTHRACENE		120					
FLUORANTHENE					1400		
FLUORENE		26	J	P			
INDENO(1,2,3-CD)PYRENE					1200		
NAPHTHALENE		39					
PHENANTHRENE					590		
PYRENE					1800		

PROJ_NO: 02625	NSAMPLE	2W-SD-SD114-0001			2W-SD-SD124-0001			2W-SD-SD125-0001			2W-SD-SD128-0001		
SDG: WE55-4	LAB_ID	SE2829-31			SE2829-9			SE2829-10			SE2829-8		
FRACTION: PCB	SAMP_DATE	4/6/2011			4/5/2011			4/5/2011			4/5/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	11.4			41.5			29.6			36.1		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		66	UJ	RY	20	U		28	UJ	Y	22	UJ	R
AROCLOR-1221		66	UJ	RY	20	U		28	UJ	Y	22	UJ	R
AROCLOR-1232		78	UJ	RY	24	U		33	UJ	Y	26	UJ	R
AROCLOR-1242		66	UJ	RY	20	U		28	UJ	Y	22	UJ	R
AROCLOR-1248		66	UJ	RY	20	U		28	UJ	Y	22	UJ	R
AROCLOR-1254		66	UJ	RY	20	U		28	UJ	Y	22	UJ	R
AROCLOR-1260		66	UJ	RY	20	U		28	UJ	Y	22	UJ	R

PROJ_NO: 02625	NSAMPLE	2W-SD-SD129-0001			2W-SD-SD131-0001			2W-SD-SD132-0001			2W-SD-SD133-0001		
SDG: WE55-4	LAB_ID	SE2829-26			SE2829-25			SE2829-29			SE2829-24		
FRACTION: PCB	SAMP_DATE	4/6/2011			4/5/2011			4/6/2011			4/5/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	22.5			16.1			24.0			25.8		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		35	UJ	Y	51	UJ	Y	33	UJ	Y	31	UJ	Y
AROCLOR-1221		35	UJ	Y	51	UJ	Y	33	UJ	Y	31	UJ	Y
AROCLOR-1232		41	UJ	Y	60	UJ	Y	38	UJ	Y	37	UJ	Y
AROCLOR-1242		35	UJ	Y	51	UJ	Y	33	UJ	Y	31	UJ	Y
AROCLOR-1248		35	UJ	Y	51	UJ	Y	33	UJ	Y	31	UJ	Y
AROCLOR-1254		35	UJ	Y	51	UJ	Y	33	UJ	Y	31	UJ	Y
AROCLOR-1260		310	J	Y	51	UJ	Y	770	J	Y	450	J	CY

PROJ_NO: 02625	NSAMPLE	2W-SD-SD137-0001			2W-SD-SD139-0001			2W-SD-SD141-0001			2W-SD-SD143-0001		
SDG: WE55-4	LAB_ID	SE2829-7			SE2829-30			SE2829-11			SE2829-27		
FRACTION: PCB	SAMP_DATE	4/5/2011			4/6/2011			4/5/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	39.0			18.8			9.5			11.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		22	U		42	UJ	Y	90	UJ	Y	70	UJ	RY
AROCLOR-1221		22	U		42	UJ	Y	90	UJ	Y	70	UJ	RY
AROCLOR-1232		26	U		50	UJ	Y	100	UJ	Y	82	UJ	RY
AROCLOR-1242		22	U		42	UJ	Y	90	UJ	Y	70	UJ	RY
AROCLOR-1248		22	U		42	UJ	Y	90	UJ	Y	70	UJ	RY
AROCLOR-1254		22	U		42	UJ	Y	90	UJ	Y	70	UJ	RY
AROCLOR-1260		22	U		42	UJ	Y	90	UJ	Y	70	UJ	RY

PROJ_NO: 02625	NSAMPLE	2W-SD-SD145-0001			2W-SD-SD153-0001			2W-SD-SD155-0001			2W-SD-SD156-0001		
SDG: WE55-4	LAB_ID	SE2829-28			SE2829-1			SE2829-3			SE2829-2		
FRACTION: PCB	SAMP_DATE	4/6/2011			4/4/2011			4/4/2011			4/4/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	28.0			17.2			26.4			18.2		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		28	UJ	RY	49	UJ	Y	32	UJ	Y	46	UJ	Y
AROCLOR-1221		28	UJ	RY	49	UJ	Y	32	UJ	Y	46	UJ	Y
AROCLOR-1232		33	UJ	RY	57	UJ	Y	37	UJ	Y	55	UJ	Y
AROCLOR-1242		28	UJ	RY	49	UJ	Y	32	UJ	Y	46	UJ	Y
AROCLOR-1248		28	UJ	RY	49	UJ	Y	32	UJ	Y	46	UJ	Y
AROCLOR-1254		28	UJ	RY	49	UJ	Y	32	UJ	Y	46	UJ	Y
AROCLOR-1260		28	UJ	RY	49	UJ	Y	150	J	Y	46	UJ	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD157-0001			2W-SD-SD160-0001		
SDG: WE55-4	LAB_ID	SE2829-4			SE2829-5		
FRACTION: PCB	SAMP_DATE	4/4/2011			4/4/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	20.6			13.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		39	UJ	Y	62	UJ	Y
AROCLOR-1221		39	UJ	Y	62	UJ	Y
AROCLOR-1232		46	UJ	Y	73	UJ	Y
AROCLOR-1242		39	UJ	Y	62	UJ	Y
AROCLOR-1248		39	UJ	Y	62	UJ	Y
AROCLOR-1254		39	UJ	Y	62	UJ	Y
AROCLOR-1260		39	UJ	Y	62	UJ	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD114-0001			2W-SD-SD124-0001			2W-SD-SD124-0001DL			2W-SD-SD125-0001		
SDG: WE55-4	LAB_ID	SE2829-31			SE2829-9			SE2829-9DL			SE2829-10DL		
FRACTION: PEST	SAMP_DATE	4/6/2011			4/5/2011			4/5/2011			4/5/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	11.4			41.5			41.5			29.6		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD		110	J	Y				25000			3400	J	Y
4,4'-DDE		18	J	PY				2700	J	P	530	J	PY
4,4'-DDT		39	J	CY	19	J	C				380	J	CPY

PROJ_NO: 02625	NSAMPLE	2W-SD-SD128-0001			2W-SD-SD128-0001DL			2W-SD-SD129-0001			2W-SD-SD129-0001DL2		
SDG: WE55-4	LAB_ID	SE2829-8			SE2829-8DL			SE2829-26			SE2829-26DL2		
FRACTION: PEST	SAMP_DATE	4/5/2011			4/5/2011			4/6/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	36.1			36.1			22.5			22.5		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD					480	J	Q				2600	J	PQY
4,4'-DDE		69						73	J	Y			
4,4'-DDT		5.3	J	CPU				27	J	CUY			

PROJ_NO: 02625	NSAMPLE	2W-SD-SD131-0001			2W-SD-SD132-0001			2W-SD-SD133-0001			2W-SD-SD137-0001		
SDG: WE55-4	LAB_ID	SE2829-25			SE2829-29DL2			SE2829-24			SE2829-7DL		
FRACTION: PEST	SAMP_DATE	4/5/2011			4/6/2011			4/5/2011			4/5/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	16.1			24.0			25.8			39.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD		140	J	Y	20000	J	QY	54	J	Y	8300		
4,4'-DDE		28	J	Y	2100	J	PY	24	J	Y	1400		
4,4'-DDT		33	J	CY	2800	J	PY	36	J	CUY	470	J	CP

PROJ_NO: 02625	NSAMPLE	2W-SD-SD139-0001			2W-SD-SD141-0001			2W-SD-SD143-0001			2W-SD-SD145-0001		
SDG: WE55-4	LAB_ID	SE2829-30DL			SE2829-11DL			SE2829-27DL			SE2829-28DL		
FRACTION: PEST	SAMP_DATE	4/6/2011			4/5/2011			4/6/2011			4/6/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	18.8			9.5			11.9			28.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD		39000	J	QY	2200	J	Y	120000	J	Y	14000	J	QY
4,4'-DDE		4600	J	PY	180	J	PY	10000	J	PY	2400	J	PY
4,4'-DDT		6500	J	CPY	350	UJ	CY	15000	J	CPY	3500	J	PUY

PROJ_NO: 02625	NSAMPLE	2W-SD-SD153-0001			2W-SD-SD155-0001			2W-SD-SD156-0001			2W-SD-SD157-0001		
SDG: WE55-4	LAB_ID	SE2829-1			SE2829-3			SE2829-2			SE2829-4		
FRACTION: PEST	SAMP_DATE	4/4/2011			4/4/2011			4/4/2011			4/4/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	17.2			26.4			18.2			20.6		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD		50	U	A	95	J	Y	38	U	A	13	U	A
4,4'-DDE		9.6	J	PY	6	J	PY	7.9	J	PY	3.9	J	PY
4,4'-DDT		9.8	J	CPUY	12	J	CPUY	19	J	CUY	7.5	UJ	CY

PROJ_NO: 02625	NSAMPLE	2W-SD-SD160-0001		
SDG: WE55-4	LAB_ID	SE2829-5		
FRACTION: PEST	SAMP_DATE	4/4/2011		
MEDIA: SEDIMENT	QC_TYPE	NM		
	UNITS	UG/KG		
	PCT_SOLIDS	13.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
4,4'-DDD		110	J	Y
4,4'-DDE		13	J	PY
4,4'-DDT		19	J	CPY

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-21
Client ID: 2W-SD-SD101-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 03-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 21.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	11.	ug/Kgdrywt	1	20	81.	10.	40.
2-Methylnaphthalene	U	40.	ug/Kgdrywt	1	20	81.	8.9	40.
1-Methylnaphthalene	U	40.	ug/Kgdrywt	1	20	81.	6.9	40.
Acenaphthylene	J	10.	ug/Kgdrywt	1	20	81.	4.8	40.
Acenaphthene	J	10.	ug/Kgdrywt	1	20	81.	6.1	40.
Fluorene	J	14.	ug/Kgdrywt	1	20	81.	13.	40.
Phenanthrene		220	ug/Kgdrywt	1	20	81.	7.3	40.
Anthracene	J	25.	ug/Kgdrywt	1	20	81.	4.8	40.
Fluoranthene		470	ug/Kgdrywt	1	20	81.	7.3	40.
Pyrene		640	ug/Kgdrywt	1	20	81.	8.5	40.
Benzo (a) anthracene		220	ug/Kgdrywt	1	20	81.	7.7	40.
Chrysene		240	ug/Kgdrywt	1	20	81.	6.9	40.
Benzo (b) Fluoranthene		320	ug/Kgdrywt	1	20	81.	9.7	40.
Benzo(k)fluoranthene		98.	ug/Kgdrywt	1	20	81.	12.	40.
Benzo(a)pyrene		200	ug/Kgdrywt	1	20	81.	13.	40.
Indeno (1,2,3-cd) pyrene		230	ug/Kgdrywt	1	20	81.	7.7	40.
Dibenzo (a,h) anthracene	J	54.	ug/Kgdrywt	1	20	81.	7.3	40.
Benzo(g,h,i)perylene		120	ug/Kgdrywt	1	20	81.	8.1	40.
2-Methylnaphthalene-D10		55.9	%					
Fluorene-D10		51.5	%					
Pyrene-D10		87.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-18
Client ID: 2W-SD-SD102-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 07-JUN-11
Extracted By: JS
Extraction Method: SW846 3550
Lab Prep Batch: WG92497

Analysis Date: 07-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 12.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	75.	ug/Kgdrywt	1	20	150	19.	75.
2-Methylnaphthalene	U	75.	ug/Kgdrywt	1	20	150	16.	75.
1-Methylnaphthalene	U	75.	ug/Kgdrywt	1	20	150	13.	75.
Acenaphthylene	J	17.	ug/Kgdrywt	1	20	150	9.0	75.
Acenaphthene	U	75.	ug/Kgdrywt	1	20	150	11.	75.
Fluorene	U	75.	ug/Kgdrywt	1	20	150	24.	75.
Phenanthrene		190	ug/Kgdrywt	1	20	150	13.	75.
Anthracene	J	17.	ug/Kgdrywt	1	20	150	9.0	75.
Fluoranthene		360	ug/Kgdrywt	1	20	150	13.	75.
Pyrene		400	ug/Kgdrywt	1	20	150	16.	75.
Benzo (a) anthracene		160	ug/Kgdrywt	1	20	150	14.	75.
Chrysene		220	ug/Kgdrywt	1	20	150	13.	75.
Benzo (b) Fluoranthene		450	ug/Kgdrywt	1	20	150	18.	75.
Benzo(k)fluoranthene	J	130	ug/Kgdrywt	1	20	150	23.	75.
Benzo(a)pyrene		190	ug/Kgdrywt	1	20	150	25.	75.
Indeno (1,2,3-cd) pyrene		220	ug/Kgdrywt	1	20	150	14.	75.
Dibenzo (a,h) anthracene	J	38.	ug/Kgdrywt	1	20	150	13.	75.
Benzo(g,h,i)perylene	J	130	ug/Kgdrywt	1	20	150	15.	75.
2-Methylnaphthalene-D10		44.4	%					
Fluorene-D10		44.4	%					
Pyrene-D10		62.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-17
Client ID: 2W-SD-SD104-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 07-JUN-11
Extracted By: JS
Extraction Method: SW846 3550
Lab Prep Batch: WG92497

Analysis Date: 07-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 9.6
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	100	ug/Kgdrywt	1	20	200	27.	100
2-Methylnaphthalene	U	100	ug/Kgdrywt	1	20	200	22.	100
1-Methylnaphthalene	U	100	ug/Kgdrywt	1	20	200	17.	100
Acenaphthylene	J	63.	ug/Kgdrywt	1	20	200	12.	100
Acenaphthene	U	100	ug/Kgdrywt	1	20	200	15.	100
Fluorene	U	100	ug/Kgdrywt	1	20	200	33.	100
Phenanthrene		420	ug/Kgdrywt	1	20	200	18.	100
Anthracene	J	50.	ug/Kgdrywt	1	20	200	12.	100
Fluoranthene		780	ug/Kgdrywt	1	20	200	18.	100
Pyrene		840	ug/Kgdrywt	1	20	200	22.	100
Benzo (a) anthracene		350	ug/Kgdrywt	1	20	200	19.	100
Chrysene		500	ug/Kgdrywt	1	20	200	17.	100
Benzo (b) Fluoranthene		910	ug/Kgdrywt	1	20	200	25.	100
Benzo(k)fluoranthene	J	200	ug/Kgdrywt	1	20	200	32.	100
Benzo(a)pyrene		390	ug/Kgdrywt	1	20	200	34.	100
Indeno (1,2,3-cd) pyrene		440	ug/Kgdrywt	1	20	200	19.	100
Dibenzo (a,h) anthracene	J	74.	ug/Kgdrywt	1	20	200	18.	100
Benzo(g,h,i)perylene		280	ug/Kgdrywt	1	20	200	20.	100
2-Methylnaphthalene-D10		51.0	%					
Fluorene-D10		56.0	%					
Pyrene-D10		72.7	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-20
Client ID: 2W-SD-SD106-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 03-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 28.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	38.	ug/Kgdrywt	1	20	67.	8.7	33.
2-Methylnaphthalene	J	26.	ug/Kgdrywt	1	20	67.	7.4	33.
1-Methylnaphthalene	J	18.	ug/Kgdrywt	1	20	67.	5.7	33.
Acenaphthylene	J	44.	ug/Kgdrywt	1	20	67.	4.0	33.
Acenaphthene	J	21.	ug/Kgdrywt	1	20	67.	5.0	33.
Fluorene	J	40.	ug/Kgdrywt	1	20	67.	11.	33.
Phenanthrene		590	ug/Kgdrywt	1	20	67.	6.0	33.
Anthracene	J	66.	ug/Kgdrywt	1	20	67.	4.0	33.
Fluoranthene	E	1300	ug/Kgdrywt	1	20	67.	6.0	33.
Pyrene	E	1800	ug/Kgdrywt	1	20	67.	7.0	33.
Benzo (a) anthracene		590	ug/Kgdrywt	1	20	67.	6.4	33.
Chrysene		720	ug/Kgdrywt	1	20	67.	5.7	33.
Benzo (b) Fluoranthene	E	1100	ug/Kgdrywt	1	20	67.	8.0	33.
Benzo(k)fluoranthene		320	ug/Kgdrywt	1	20	67.	10.	33.
Benzo(a)pyrene		690	ug/Kgdrywt	1	20	67.	11.	33.
Indeno (1,2,3-cd) pyrene		650	ug/Kgdrywt	1	20	67.	6.4	33.
Dibenzo (a,h) anthracene		140	ug/Kgdrywt	1	20	67.	6.0	33.
Benzo(g,h,i)perylene		410	ug/Kgdrywt	1	20	67.	6.7	33.
2-Methylnaphthalene-D10		61.0	%					
Fluorene-D10		60.1	%					
Pyrene-D10		96.9	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-20DL
Client ID: 2W-SD-SD106-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 06-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 28.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	36.	ug/Kgdrywt	4	20	270	35.	130
2-Methylnaphthalene	U	130	ug/Kgdrywt	4	20	270	29.	130
1-Methylnaphthalene	U	130	ug/Kgdrywt	4	20	270	23.	130
Acenaphthylene	J	45.	ug/Kgdrywt	4	20	270	16.	130
Acenaphthene	U	20.	ug/Kgdrywt	4	20	270	20.	130
Fluorene	U	130	ug/Kgdrywt	4	20	270	43.	130
Phenanthrene		610	ug/Kgdrywt	4	20	270	24.	130
Anthracene	J	70.	ug/Kgdrywt	4	20	270	16.	130
Fluoranthene		1200	ug/Kgdrywt	4	20	270	24.	130
Pyrene		1900	ug/Kgdrywt	4	20	270	28.	130
Benzo (a) anthracene		620	ug/Kgdrywt	4	20	270	25.	130
Chrysene		800	ug/Kgdrywt	4	20	270	23.	130
Benzo (b) Fluoranthene		1200	ug/Kgdrywt	4	20	270	32.	130
Benzo(k)fluoranthene		360	ug/Kgdrywt	4	20	270	41.	130
Benzo(a)pyrene		760	ug/Kgdrywt	4	20	270	44.	130
Indeno (1,2,3-cd) pyrene		860	ug/Kgdrywt	4	20	270	25.	130
Dibenzo (a,h) anthracene	J	200	ug/Kgdrywt	4	20	270	24.	130
Benzo(g,h,i)perylene		470	ug/Kgdrywt	4	20	270	27.	130
2-Methylnaphthalene-D10		55.2	%					
Fluorene-D10		52.5	%					
Pyrene-D10		100.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-19
Client ID: 2W-SD-SD109-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 03-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 32.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	38.	ug/Kgdrywt	1	20	60.	7.7	30.
2-Methylnaphthalene	J	26.	ug/Kgdrywt	1	20	60.	6.6	30.
1-Methylnaphthalene	J	15.	ug/Kgdrywt	1	20	60.	5.1	30.
Acenaphthylene	J	30.	ug/Kgdrywt	1	20	60.	3.6	30.
Acenaphthene	J	7.8	ug/Kgdrywt	1	20	60.	4.5	30.
Fluorene	J	20.	ug/Kgdrywt	1	20	60.	9.5	30.
Phenanthrene		250	ug/Kgdrywt	1	20	60.	5.4	30.
Anthracene	J	27.	ug/Kgdrywt	1	20	60.	3.6	30.
Fluoranthene		480	ug/Kgdrywt	1	20	60.	5.4	30.
Pyrene		680	ug/Kgdrywt	1	20	60.	6.2	30.
Benzo (a) anthracene		230	ug/Kgdrywt	1	20	60.	5.6	30.
Chrysene		320	ug/Kgdrywt	1	20	60.	5.1	30.
Benzo (b) Fluoranthene		520	ug/Kgdrywt	1	20	60.	7.1	30.
Benzo(k)fluoranthene		150	ug/Kgdrywt	1	20	60.	9.2	30.
Benzo(a)pyrene		290	ug/Kgdrywt	1	20	60.	9.8	30.
Indeno (1,2,3-cd) pyrene		340	ug/Kgdrywt	1	20	60.	5.6	30.
Dibenzo (a,h) anthracene		74.	ug/Kgdrywt	1	20	60.	5.4	30.
Benzo(g,h,i)perylene		210	ug/Kgdrywt	1	20	60.	6.0	30.
2-Methylnaphthalene-D10		59.6	%					
Fluorene-D10		55.6	%					
Pyrene-D10		94.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-22
Client ID: 2W-SD-SD111-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 06-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 16.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	60.	ug/Kgdrywt	1	20	120	16.	60.
2-Methylnaphthalene	U	60.	ug/Kgdrywt	1	20	120	13.	60.
1-Methylnaphthalene	U	60.	ug/Kgdrywt	1	20	120	10.	60.
Acenaphthylene	U	60.	ug/Kgdrywt	1	20	120	7.2	60.
Acenaphthene	U	60.	ug/Kgdrywt	1	20	120	8.9	60.
Fluorene	U	60.	ug/Kgdrywt	1	20	120	19.	60.
Phenanthrene	J	120	ug/Kgdrywt	1	20	120	11.	60.
Anthracene	J	10.	ug/Kgdrywt	1	20	120	7.2	60.
Fluoranthene		290	ug/Kgdrywt	1	20	120	11.	60.
Pyrene		350	ug/Kgdrywt	1	20	120	12.	60.
Benzo (a) anthracene	J	120	ug/Kgdrywt	1	20	120	11.	60.
Chrysene		180	ug/Kgdrywt	1	20	120	10.	60.
Benzo (b) Fluoranthene		330	ug/Kgdrywt	1	20	120	14.	60.
Benzo(k)fluoranthene	J	99.	ug/Kgdrywt	1	20	120	18.	60.
Benzo(a)pyrene		170	ug/Kgdrywt	1	20	120	20.	60.
Indeno (1,2,3-cd) pyrene		230	ug/Kgdrywt	1	20	120	11.	60.
Dibenzo (a,h) anthracene	J	55.	ug/Kgdrywt	1	20	120	11.	60.
Benzo(g,h,i)perylene		140	ug/Kgdrywt	1	20	120	12.	60.
2-Methylnaphthalene-D10		28.6	%					
Fluorene-D10		31.9	%					
Pyrene-D10		59.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-23
Client ID: 2W-SD-SD113-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 03-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 44.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	5.9	ug/Kgdrywt	1	20	45.	5.8	22.
2-Methylnaphthalene	U	22.	ug/Kgdrywt	1	20	45.	5.0	22.
1-Methylnaphthalene	U	22.	ug/Kgdrywt	1	20	45.	3.8	22.
Acenaphthylene	J	5.0	ug/Kgdrywt	1	20	45.	2.7	22.
Acenaphthene	J	5.0	ug/Kgdrywt	1	20	45.	3.4	22.
Fluorene	J	8.7	ug/Kgdrywt	1	20	45.	7.2	22.
Phenanthrene		170	ug/Kgdrywt	1	20	45.	4.0	22.
Anthracene	J	19.	ug/Kgdrywt	1	20	45.	2.7	22.
Fluoranthene		300	ug/Kgdrywt	1	20	45.	4.0	22.
Pyrene		450	ug/Kgdrywt	1	20	45.	4.7	22.
Benzo (a) anthracene		150	ug/Kgdrywt	1	20	45.	4.3	22.
Chrysene		190	ug/Kgdrywt	1	20	45.	3.8	22.
Benzo (b) Fluoranthene		310	ug/Kgdrywt	1	20	45.	5.4	22.
Benzo(k)fluoranthene		85.	ug/Kgdrywt	1	20	45.	7.0	22.
Benzo(a)pyrene		200	ug/Kgdrywt	1	20	45.	7.4	22.
Indeno (1,2,3-cd) pyrene		240	ug/Kgdrywt	1	20	45.	4.3	22.
Dibenzo (a,h) anthracene		46.	ug/Kgdrywt	1	20	45.	4.0	22.
Benzo(g,h,i)perylene		150	ug/Kgdrywt	1	20	45.	4.5	22.
2-Methylnaphthalene-D10		32.3	%					
Fluorene-D10		29.5	%					
Pyrene-D10		51.5	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-31
Client ID: 2W-SD-SD114-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 04-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 11.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	87.	ug/Kgdrywt	1	20	170	22.	87.
2-Methylnaphthalene	U	87.	ug/Kgdrywt	1	20	170	19.	87.
1-Methylnaphthalene	U	87.	ug/Kgdrywt	1	20	170	15.	87.
Acenaphthylene	J	44.	ug/Kgdrywt	1	20	170	10.	87.
Acenaphthene	U	87.	ug/Kgdrywt	1	20	170	13.	87.
Fluorene	U	87.	ug/Kgdrywt	1	20	170	28.	87.
Phenanthrene		400	ug/Kgdrywt	1	20	170	16.	87.
Anthracene	J	46.	ug/Kgdrywt	1	20	170	10.	87.
Fluoranthene		730	ug/Kgdrywt	1	20	170	16.	87.
Pyrene		1300	ug/Kgdrywt	1	20	170	18.	87.
Benzo (a) anthracene		430	ug/Kgdrywt	1	20	170	16.	87.
Chrysene		570	ug/Kgdrywt	1	20	170	15.	87.
Benzo (b) Fluoranthene		990	ug/Kgdrywt	1	20	170	21.	87.
Benzo(k)fluoranthene		300	ug/Kgdrywt	1	20	170	27.	87.
Benzo(a)pyrene		500	ug/Kgdrywt	1	20	170	29.	87.
Indeno (1,2,3-cd) pyrene		680	ug/Kgdrywt	1	20	170	16.	87.
Dibenzo (a,h) anthracene	J	150	ug/Kgdrywt	1	20	170	16.	87.
Benzo(g,h,i)perylene		360	ug/Kgdrywt	1	20	170	17.	87.
2-Methylnaphthalene-D10		40.1	%					
Fluorene-D10		43.9	%					
Pyrene-D10		82.9	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-9
Client ID: 2W-SD-SD124-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 02-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 41.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	32.	ug/Kgdrywt	1	20	48.	6.2	24.
2-Methylnaphthalene	J	34.	ug/Kgdrywt	1	20	48.	5.3	24.
1-Methylnaphthalene	J	29.	ug/Kgdrywt	1	20	48.	4.1	24.
Acenaphthylene		59.	ug/Kgdrywt	1	20	48.	2.9	24.
Acenaphthene	U	24.	ug/Kgdrywt	1	20	48.	3.6	24.
Fluorene		86.	ug/Kgdrywt	1	20	48.	7.7	24.
Phenanthrene		120	ug/Kgdrywt	1	20	48.	4.3	24.
Anthracene	J	48.	ug/Kgdrywt	1	20	48.	2.9	24.
Fluoranthene		220	ug/Kgdrywt	1	20	48.	4.3	24.
Pyrene		530	ug/Kgdrywt	1	20	48.	5.0	24.
Benzo (a) anthracene		140	ug/Kgdrywt	1	20	48.	4.6	24.
Chrysene		190	ug/Kgdrywt	1	20	48.	4.1	24.
Benzo (b) Fluoranthene		220	ug/Kgdrywt	1	20	48.	5.8	24.
Benzo(k)fluoranthene		62.	ug/Kgdrywt	1	20	48.	7.4	24.
Benzo(a)pyrene		140	ug/Kgdrywt	1	20	48.	7.9	24.
Indeno (1,2,3-cd) pyrene		150	ug/Kgdrywt	1	20	48.	4.6	24.
Dibenzo (a,h) anthracene	U	24.	ug/Kgdrywt	1	20	48.	4.3	24.
Benzo(g,h,i)perylene		88.	ug/Kgdrywt	1	20	48.	4.8	24.
2-Methylnaphthalene-D10		64.4	%					
Fluorene-D10		76.2	%					
Pyrene-D10		111.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-10
Client ID: 2W-SD-SD125-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 02-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 30.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	11.	ug/Kgdrywt	1	20	64.	8.3	32.
2-Methylnaphthalene	J	14.	ug/Kgdrywt	1	20	64.	7.0	32.
1-Methylnaphthalene	J	12.	ug/Kgdrywt	1	20	64.	5.4	32.
Acenaphthylene	J	25.	ug/Kgdrywt	1	20	64.	3.8	32.
Acenaphthene	J	16.	ug/Kgdrywt	1	20	64.	4.8	32.
Fluorene	J	58.	ug/Kgdrywt	1	20	64.	10.	32.
Phenanthrene		150	ug/Kgdrywt	1	20	64.	5.8	32.
Anthracene	J	41.	ug/Kgdrywt	1	20	64.	3.8	32.
Fluoranthene		250	ug/Kgdrywt	1	20	64.	5.8	32.
Pyrene		500	ug/Kgdrywt	1	20	64.	6.7	32.
Benzo (a) anthracene		180	ug/Kgdrywt	1	20	64.	6.1	32.
Chrysene		210	ug/Kgdrywt	1	20	64.	5.4	32.
Benzo (b) Fluoranthene		320	ug/Kgdrywt	1	20	64.	7.7	32.
Benzo(k)fluoranthene		100	ug/Kgdrywt	1	20	64.	9.9	32.
Benzo(a)pyrene		230	ug/Kgdrywt	1	20	64.	10.	32.
Indeno (1,2,3-cd) pyrene		230	ug/Kgdrywt	1	20	64.	6.1	32.
Dibenzo (a,h) anthracene	J	45.	ug/Kgdrywt	1	20	64.	5.8	32.
Benzo(g,h,i)perylene		140	ug/Kgdrywt	1	20	64.	6.4	32.
2-Methylnaphthalene-D10		40.9	%					
Fluorene-D10		43.1	%					
Pyrene-D10		67.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-8
Client ID: 2W-SD-SD128-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 06-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 36.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	40.	ug/Kgdrywt	1	20	53.	6.9	26.
2-Methylnaphthalene	J	29.	ug/Kgdrywt	1	20	53.	5.8	26.
1-Methylnaphthalene	J	17.	ug/Kgdrywt	1	20	53.	4.5	26.
Acenaphthylene	J	21.	ug/Kgdrywt	1	20	53.	3.2	26.
Acenaphthene	J	17.	ug/Kgdrywt	1	20	53.	4.0	26.
Fluorene	J	46.	ug/Kgdrywt	1	20	53.	8.5	26.
Phenanthrene		140	ug/Kgdrywt	1	20	53.	4.8	26.
Anthracene	J	39.	ug/Kgdrywt	1	20	53.	3.2	26.
Fluoranthene		260	ug/Kgdrywt	1	20	53.	4.8	26.
Pyrene		620	ug/Kgdrywt	1	20	53.	5.6	26.
Benzo (a) anthracene		200	ug/Kgdrywt	1	20	53.	5.0	26.
Chrysene		230	ug/Kgdrywt	1	20	53.	4.5	26.
Benzo (b) Fluoranthene		310	ug/Kgdrywt	1	20	53.	6.4	26.
Benzo(k)fluoranthene		92.	ug/Kgdrywt	1	20	53.	8.2	26.
Benzo(a)pyrene		230	ug/Kgdrywt	1	20	53.	8.7	26.
Indeno (1,2,3-cd) pyrene		240	ug/Kgdrywt	1	20	53.	5.0	26.
Dibenzo (a,h) anthracene	J	53.	ug/Kgdrywt	1	20	53.	4.8	26.
Benzo(g,h,i)perylene		160	ug/Kgdrywt	1	20	53.	5.3	26.
2-Methylnaphthalene-D10		51.6	%					
Fluorene-D10		47.0	%					
Pyrene-D10		91.5	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-26
Client ID: 2W-SD-SD129-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 03-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 22.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	51.	ug/Kgdrywt	1	20	88.	11.	44.
2-Methylnaphthalene	J	38.	ug/Kgdrywt	1	20	88.	9.7	44.
1-Methylnaphthalene	J	32.	ug/Kgdrywt	1	20	88.	7.5	44.
Acenaphthylene	J	33.	ug/Kgdrywt	1	20	88.	5.3	44.
Acenaphthene	J	32.	ug/Kgdrywt	1	20	88.	6.6	44.
Fluorene	J	56.	ug/Kgdrywt	1	20	88.	14.	44.
Phenanthrene		240	ug/Kgdrywt	1	20	88.	7.9	44.
Anthracene	J	52.	ug/Kgdrywt	1	20	88.	5.3	44.
Fluoranthene		540	ug/Kgdrywt	1	20	88.	7.9	44.
Pyrene		850	ug/Kgdrywt	1	20	88.	9.2	44.
Benzo (a) anthracene		300	ug/Kgdrywt	1	20	88.	8.4	44.
Chrysene		360	ug/Kgdrywt	1	20	88.	7.5	44.
Benzo (b) Fluoranthene		520	ug/Kgdrywt	1	20	88.	10.	44.
Benzo(k)fluoranthene		160	ug/Kgdrywt	1	20	88.	14.	44.
Benzo(a)pyrene		360	ug/Kgdrywt	1	20	88.	14.	44.
Indeno (1,2,3-cd) pyrene		350	ug/Kgdrywt	1	20	88.	8.4	44.
Dibenzo (a,h) anthracene	J	79.	ug/Kgdrywt	1	20	88.	7.9	44.
Benzo(g,h,i)perylene		200	ug/Kgdrywt	1	20	88.	8.8	44.
2-Methylnaphthalene-D10		53.2	%					
Fluorene-D10		50.8	%					
Pyrene-D10		77.5	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-25
Client ID: 2W-SD-SD131-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 06-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 16.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	62.	ug/Kgdrywt	1	20	120	16.	62.
2-Methylnaphthalene	U	62.	ug/Kgdrywt	1	20	120	14.	62.
1-Methylnaphthalene	U	62.	ug/Kgdrywt	1	20	120	10.	62.
Acenaphthylene	J	8.1	ug/Kgdrywt	1	20	120	7.4	62.
Acenaphthene	J	66.	ug/Kgdrywt	1	20	120	9.2	62.
Fluorene	J	56.	ug/Kgdrywt	1	20	120	20.	62.
Phenanthrene		140	ug/Kgdrywt	1	20	120	11.	62.
Anthracene	J	19.	ug/Kgdrywt	1	20	120	7.4	62.
Fluoranthene		300	ug/Kgdrywt	1	20	120	11.	62.
Pyrene		430	ug/Kgdrywt	1	20	120	13.	62.
Benzo (a) anthracene		200	ug/Kgdrywt	1	20	120	12.	62.
Chrysene		230	ug/Kgdrywt	1	20	120	10.	62.
Benzo (b) Fluoranthene		370	ug/Kgdrywt	1	20	120	15.	62.
Benzo(k)fluoranthene	J	95.	ug/Kgdrywt	1	20	120	19.	62.
Benzo(a)pyrene		320	ug/Kgdrywt	1	20	120	20.	62.
Indeno (1,2,3-cd) pyrene		280	ug/Kgdrywt	1	20	120	12.	62.
Dibenzo (a,h) anthracene	J	79.	ug/Kgdrywt	1	20	120	11.	62.
Benzo(g,h,i)perylene		320	ug/Kgdrywt	1	20	120	12.	62.
2-Methylnaphthalene-D10		48.7	%					
Fluorene-D10		43.1	%					
Pyrene-D10		77.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-29
Client ID: 2W-SD-SD132-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 03-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 24.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	20.	ug/Kgdrywt	1	20	82.	11.	41.
2-Methylnaphthalene	J	27.	ug/Kgdrywt	1	20	82.	9.0	41.
1-Methylnaphthalene	J	32.	ug/Kgdrywt	1	20	82.	7.0	41.
Acenaphthylene	J	54.	ug/Kgdrywt	1	20	82.	4.9	41.
Acenaphthene	J	78.	ug/Kgdrywt	1	20	82.	6.1	41.
Fluorene		91.	ug/Kgdrywt	1	20	82.	13.	41.
Phenanthrene		310	ug/Kgdrywt	1	20	82.	7.4	41.
Anthracene	J	79.	ug/Kgdrywt	1	20	82.	4.9	41.
Fluoranthene		930	ug/Kgdrywt	1	20	82.	7.4	41.
Pyrene	E	1400	ug/Kgdrywt	1	20	82.	8.6	41.
Benzo (a) anthracene		540	ug/Kgdrywt	1	20	82.	7.8	41.
Chrysene		640	ug/Kgdrywt	1	20	82.	7.0	41.
Benzo (b) Fluoranthene		950	ug/Kgdrywt	1	20	82.	9.8	41.
Benzo(k)fluoranthene		220	ug/Kgdrywt	1	20	82.	13.	41.
Benzo(a)pyrene		600	ug/Kgdrywt	1	20	82.	14.	41.
Indeno (1,2,3-cd) pyrene		530	ug/Kgdrywt	1	20	82.	7.8	41.
Dibenzo (a,h) anthracene		110	ug/Kgdrywt	1	20	82.	7.4	41.
Benzo(g,h,i)perylene		300	ug/Kgdrywt	1	20	82.	8.2	41.
2-Methylnaphthalene-D10		39.6	%					
Fluorene-D10		37.4	%					
Pyrene-D10		59.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-29DL
Client ID: 2W-SD-SD132-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 06-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 24.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	82.	ug/Kgdrywt	2	20	160	21.	82.
2-Methylnaphthalene	J	27.	ug/Kgdrywt	2	20	160	18.	82.
1-Methylnaphthalene	J	36.	ug/Kgdrywt	2	20	160	14.	82.
Acenaphthylene	J	54.	ug/Kgdrywt	2	20	160	9.8	82.
Acenaphthene	J	79.	ug/Kgdrywt	2	20	160	12.	82.
Fluorene	J	90.	ug/Kgdrywt	2	20	160	26.	82.
Phenanthrene		330	ug/Kgdrywt	2	20	160	15.	82.
Anthracene	J	77.	ug/Kgdrywt	2	20	160	9.8	82.
Fluoranthene		780	ug/Kgdrywt	2	20	160	15.	82.
Pyrene		1800	ug/Kgdrywt	2	20	160	17.	82.
Benzo (a) anthracene		560	ug/Kgdrywt	2	20	160	16.	82.
Chrysene		660	ug/Kgdrywt	2	20	160	14.	82.
Benzo (b) Fluoranthene		1000	ug/Kgdrywt	2	20	160	20.	82.
Benzo(k)fluoranthene		340	ug/Kgdrywt	2	20	160	25.	82.
Benzo(a)pyrene		720	ug/Kgdrywt	2	20	160	27.	82.
Indeno (1,2,3-cd) pyrene		890	ug/Kgdrywt	2	20	160	16.	82.
Dibenzo (a,h) anthracene		180	ug/Kgdrywt	2	20	160	15.	82.
Benzo(g,h,i)perylene		520	ug/Kgdrywt	2	20	160	16.	82.
2-Methylnaphthalene-D10		34.8	%					
Fluorene-D10		33.6	%					
Pyrene-D10		76.9	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-24
Client ID: 2W-SD-SD133-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 03-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 26.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	11.	ug/Kgdrywt	1	20	76.	9.9	38.
2-Methylnaphthalene	U	38.	ug/Kgdrywt	1	20	76.	8.4	38.
1-Methylnaphthalene	U	38.	ug/Kgdrywt	1	20	76.	6.5	38.
Acenaphthylene	J	14.	ug/Kgdrywt	1	20	76.	4.6	38.
Acenaphthene	J	18.	ug/Kgdrywt	1	20	76.	5.7	38.
Fluorene	J	15.	ug/Kgdrywt	1	20	76.	12.	38.
Phenanthrene		220	ug/Kgdrywt	1	20	76.	6.8	38.
Anthracene	J	36.	ug/Kgdrywt	1	20	76.	4.6	38.
Fluoranthene		540	ug/Kgdrywt	1	20	76.	6.8	38.
Pyrene		740	ug/Kgdrywt	1	20	76.	8.0	38.
Benzo (a) anthracene		290	ug/Kgdrywt	1	20	76.	7.2	38.
Chrysene		310	ug/Kgdrywt	1	20	76.	6.5	38.
Benzo (b) Fluoranthene		550	ug/Kgdrywt	1	20	76.	9.1	38.
Benzo(k)fluoranthene		170	ug/Kgdrywt	1	20	76.	12.	38.
Benzo(a)pyrene		340	ug/Kgdrywt	1	20	76.	12.	38.
Indeno (1,2,3-cd) pyrene		330	ug/Kgdrywt	1	20	76.	7.2	38.
Dibenzo (a,h) anthracene	J	73.	ug/Kgdrywt	1	20	76.	6.8	38.
Benzo(g,h,i)perylene		180	ug/Kgdrywt	1	20	76.	7.6	38.
2-Methylnaphthalene-D10		44.1	%					
Fluorene-D10		39.8	%					
Pyrene-D10		60.6	%					

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Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-7
Client ID: 2W-SD-SD137-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 01-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 39.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		69.	ug/Kgdrywt	1	20	51.	6.6	25.
2-Methylnaphthalene	J	49.	ug/Kgdrywt	1	20	51.	5.6	25.
1-Methylnaphthalene	J	28.	ug/Kgdrywt	1	20	51.	4.3	25.
Acenaphthylene	J	38.	ug/Kgdrywt	1	20	51.	3.0	25.
Acenaphthene	J	31.	ug/Kgdrywt	1	20	51.	3.8	25.
Fluorene		91.	ug/Kgdrywt	1	20	51.	8.1	25.
Phenanthrene		300	ug/Kgdrywt	1	20	51.	4.6	25.
Anthracene		68.	ug/Kgdrywt	1	20	51.	3.0	25.
Fluoranthene	E	700	ug/Kgdrywt	1	20	51.	4.6	25.
Pyrene	E	1300	ug/Kgdrywt	1	20	51.	5.3	25.
Benzo (a) anthracene		340	ug/Kgdrywt	1	20	51.	4.8	25.
Chrysene		440	ug/Kgdrywt	1	20	51.	4.3	25.
Benzo (b) Fluoranthene		510	ug/Kgdrywt	1	20	51.	6.1	25.
Benzo(k)fluoranthene		170	ug/Kgdrywt	1	20	51.	7.9	25.
Benzo(a)pyrene		370	ug/Kgdrywt	1	20	51.	8.4	25.
Indeno (1,2,3-cd) pyrene		300	ug/Kgdrywt	1	20	51.	4.8	25.
Dibenzo (a,h) anthracene		56.	ug/Kgdrywt	1	20	51.	4.6	25.
Benzo(g,h,i)perylene		180	ug/Kgdrywt	1	20	51.	5.1	25.
2-Methylnaphthalene-D10		63.5	%					
Fluorene-D10		61.2	%					
Pyrene-D10		104.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-7DL
Client ID: 2W-SD-SD137-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 06-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 39.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	69.	ug/Kgdrywt	4	20	200	26.	100
2-Methylnaphthalene	J	50.	ug/Kgdrywt	4	20	200	22.	100
1-Methylnaphthalene	J	30.	ug/Kgdrywt	4	20	200	17.	100
Acenaphthylene	J	52.	ug/Kgdrywt	4	20	200	12.	100
Acenaphthene	J	24.	ug/Kgdrywt	4	20	200	15.	100
Fluorene	J	91.	ug/Kgdrywt	4	20	200	32.	100
Phenanthrene		320	ug/Kgdrywt	4	20	200	18.	100
Anthracene	J	81.	ug/Kgdrywt	4	20	200	12.	100
Fluoranthene		720	ug/Kgdrywt	4	20	200	18.	100
Pyrene		1300	ug/Kgdrywt	4	20	200	21.	100
Benzo (a) anthracene		410	ug/Kgdrywt	4	20	200	19.	100
Chrysene		470	ug/Kgdrywt	4	20	200	17.	100
Benzo (b) Fluoranthene		660	ug/Kgdrywt	4	20	200	24.	100
Benzo(k)fluoranthene		250	ug/Kgdrywt	4	20	200	32.	100
Benzo(a)pyrene		510	ug/Kgdrywt	4	20	200	34.	100
Indeno (1,2,3-cd) pyrene		490	ug/Kgdrywt	4	20	200	19.	100
Dibenzo (a,h) anthracene	J	120	ug/Kgdrywt	4	20	200	18.	100
Benzo(g,h,i)perylene		270	ug/Kgdrywt	4	20	200	20.	100
2-Methylnaphthalene-D10		56.0	%					
Fluorene-D10		54.6	%					
Pyrene-D10		98.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-30
Client ID: 2W-SD-SD139-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 03-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 19.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	53.	ug/Kgdrywt	1	20	110	14.	53.
2-Methylnaphthalene	J	21.	ug/Kgdrywt	1	20	110	12.	53.
1-Methylnaphthalene	J	25.	ug/Kgdrywt	1	20	110	9.0	53.
Acenaphthylene	J	41.	ug/Kgdrywt	1	20	110	6.4	53.
Acenaphthene	J	62.	ug/Kgdrywt	1	20	110	8.0	53.
Fluorene	J	72.	ug/Kgdrywt	1	20	110	17.	53.
Phenanthrene		290	ug/Kgdrywt	1	20	110	9.6	53.
Anthracene	J	54.	ug/Kgdrywt	1	20	110	6.4	53.
Fluoranthene		760	ug/Kgdrywt	1	20	110	9.6	53.
Pyrene		1200	ug/Kgdrywt	1	20	110	11.	53.
Benzo (a) anthracene		460	ug/Kgdrywt	1	20	110	10.	53.
Chrysene		520	ug/Kgdrywt	1	20	110	9.0	53.
Benzo (b) Fluoranthene		870	ug/Kgdrywt	1	20	110	13.	53.
Benzo(k)fluoranthene		270	ug/Kgdrywt	1	20	110	16.	53.
Benzo(a)pyrene		580	ug/Kgdrywt	1	20	110	18.	53.
Indeno (1,2,3-cd) pyrene		590	ug/Kgdrywt	1	20	110	10.	53.
Dibenzo (a,h) anthracene		120	ug/Kgdrywt	1	20	110	9.6	53.
Benzo(g,h,i)perylene		340	ug/Kgdrywt	1	20	110	11.	53.
2-Methylnaphthalene-D10		36.7	%					
Fluorene-D10		34.5	%					
Pyrene-D10		61.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-11
Client ID: 2W-SD-SD141-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 02-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 9.4
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	100	ug/Kgdrywt	1	20	200	26.	100
2-Methylnaphthalene	J	35.	ug/Kgdrywt	1	20	200	22.	100
1-Methylnaphthalene	J	55.	ug/Kgdrywt	1	20	200	17.	100
Acenaphthylene	J	37.	ug/Kgdrywt	1	20	200	12.	100
Acenaphthene	J	97.	ug/Kgdrywt	1	20	200	15.	100
Fluorene	J	81.	ug/Kgdrywt	1	20	200	32.	100
Phenanthrene		250	ug/Kgdrywt	1	20	200	18.	100
Anthracene	J	44.	ug/Kgdrywt	1	20	200	12.	100
Fluoranthene		660	ug/Kgdrywt	1	20	200	18.	100
Pyrene		1100	ug/Kgdrywt	1	20	200	21.	100
Benzo (a) anthracene		350	ug/Kgdrywt	1	20	200	19.	100
Chrysene		410	ug/Kgdrywt	1	20	200	17.	100
Benzo (b) Fluoranthene		730	ug/Kgdrywt	1	20	200	24.	100
Benzo(k)fluoranthene		210	ug/Kgdrywt	1	20	200	31.	100
Benzo(a)pyrene		450	ug/Kgdrywt	1	20	200	33.	100
Indeno (1,2,3-cd) pyrene		630	ug/Kgdrywt	1	20	200	19.	100
Dibenzo (a,h) anthracene	J	130	ug/Kgdrywt	1	20	200	18.	100
Benzo(g,h,i)perylene		360	ug/Kgdrywt	1	20	200	20.	100
2-Methylnaphthalene-D10		49.6	%					
Fluorene-D10		52.0	%					
Pyrene-D10		86.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-27
Client ID: 2W-SD-SD143-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 03-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 12.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	34.	ug/Kgdrywt	1	20	160	21.	81.
2-Methylnaphthalene	J	47.	ug/Kgdrywt	1	20	160	18.	81.
1-Methylnaphthalene	J	62.	ug/Kgdrywt	1	20	160	14.	81.
Acenaphthylene	J	59.	ug/Kgdrywt	1	20	160	9.7	81.
Acenaphthene	J	120	ug/Kgdrywt	1	20	160	12.	81.
Fluorene		190	ug/Kgdrywt	1	20	160	26.	81.
Phenanthrene		1000	ug/Kgdrywt	1	20	160	14.	81.
Anthracene	J	140	ug/Kgdrywt	1	20	160	9.7	81.
Fluoranthene		1900	ug/Kgdrywt	1	20	160	14.	81.
Pyrene	E	4100	ug/Kgdrywt	1	20	160	17.	81.
Benzo (a) anthracene		1100	ug/Kgdrywt	1	20	160	15.	81.
Chrysene		1400	ug/Kgdrywt	1	20	160	14.	81.
Benzo (b) Fluoranthene		2100	ug/Kgdrywt	1	20	160	19.	81.
Benzo(k)fluoranthene		590	ug/Kgdrywt	1	20	160	25.	81.
Benzo(a)pyrene		1400	ug/Kgdrywt	1	20	160	27.	81.
Indeno (1,2,3-cd) pyrene		1400	ug/Kgdrywt	1	20	160	15.	81.
Dibenzo (a,h) anthracene		300	ug/Kgdrywt	1	20	160	14.	81.
Benzo(g,h,i)perylene	J	56.	ug/Kgdrywt	1	20	160	16.	81.
2-Methylnaphthalene-D10		47.4	%					
Fluorene-D10		56.5	%					
Pyrene-D10		108.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-27DL
Client ID: 2W-SD-SD143-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 06-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 12.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	320	ug/Kgdrywt	4	20	650	84.	320
2-Methylnaphthalene	U	320	ug/Kgdrywt	4	20	650	71.	320
1-Methylnaphthalene	J	56.	ug/Kgdrywt	4	20	650	55.	320
Acenaphthylene	J	57.	ug/Kgdrywt	4	20	650	39.	320
Acenaphthene	J	100	ug/Kgdrywt	4	20	650	48.	320
Fluorene	J	160	ug/Kgdrywt	4	20	650	100	320
Phenanthrene		980	ug/Kgdrywt	4	20	650	58.	320
Anthracene	J	120	ug/Kgdrywt	4	20	650	39.	320
Fluoranthene		2300	ug/Kgdrywt	4	20	650	58.	320
Pyrene		3300	ug/Kgdrywt	4	20	650	68.	320
Benzo (a) anthracene		1100	ug/Kgdrywt	4	20	650	62.	320
Chrysene		1400	ug/Kgdrywt	4	20	650	55.	320
Benzo (b) Fluoranthene		2100	ug/Kgdrywt	4	20	650	78.	320
Benzo(k)fluoranthene		680	ug/Kgdrywt	4	20	650	100	320
Benzo(a)pyrene		1400	ug/Kgdrywt	4	20	650	110	320
Indeno (1,2,3-cd) pyrene		1200	ug/Kgdrywt	4	20	650	62.	320
Dibenzo (a,h) anthracene	J	300	ug/Kgdrywt	4	20	650	58.	320
Benzo(g,h,i)perylene	U	320	ug/Kgdrywt	4	20	650	65.	320
2-Methylnaphthalene-D10		41.8	%					
Fluorene-D10		41.3	%					
Pyrene-D10		78.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-28
Client ID: 2W-SD-SD145-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 03-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 28.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	22.	ug/Kgdrywt	1	20	69.	9.0	34.
2-Methylnaphthalene	J	30.	ug/Kgdrywt	1	20	69.	7.6	34.
1-Methylnaphthalene	J	49.	ug/Kgdrywt	1	20	69.	5.9	34.
Acenaphthylene	U	34.	ug/Kgdrywt	1	20	69.	4.1	34.
Acenaphthene		130	ug/Kgdrywt	1	20	69.	5.2	34.
Fluorene		100	ug/Kgdrywt	1	20	69.	11.	34.
Phenanthrene		360	ug/Kgdrywt	1	20	69.	6.2	34.
Anthracene		110	ug/Kgdrywt	1	20	69.	4.1	34.
Fluoranthene		620	ug/Kgdrywt	1	20	69.	6.2	34.
Pyrene	E	1500	ug/Kgdrywt	1	20	69.	7.2	34.
Benzo (a) anthracene		460	ug/Kgdrywt	1	20	69.	6.6	34.
Chrysene		590	ug/Kgdrywt	1	20	69.	5.9	34.
Benzo (b) Fluoranthene		840	ug/Kgdrywt	1	20	69.	8.3	34.
Benzo(k)fluoranthene		260	ug/Kgdrywt	1	20	69.	11.	34.
Benzo(a)pyrene		550	ug/Kgdrywt	1	20	69.	11.	34.
Indeno (1,2,3-cd) pyrene		430	ug/Kgdrywt	1	20	69.	6.6	34.
Dibenzo (a,h) anthracene		77.	ug/Kgdrywt	1	20	69.	6.2	34.
Benzo(g,h,i)perylene		240	ug/Kgdrywt	1	20	69.	6.9	34.
2-Methylnaphthalene-D10		32.1	%					
Fluorene-D10		52.6	%					
Pyrene-D10		68.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-28DL
Client ID: 2W-SD-SD145-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 06-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 28.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	100	ug/Kgdrywt	3	20	210	27.	100
2-Methylnaphthalene	J	31.	ug/Kgdrywt	3	20	210	23.	100
1-Methylnaphthalene	J	49.	ug/Kgdrywt	3	20	210	18.	100
Acenaphthylene	U	100	ug/Kgdrywt	3	20	210	12.	100
Acenaphthene	J	110	ug/Kgdrywt	3	20	210	16.	100
Fluorene	J	96.	ug/Kgdrywt	3	20	210	33.	100
Phenanthrene		390	ug/Kgdrywt	3	20	210	19.	100
Anthracene	J	70.	ug/Kgdrywt	3	20	210	12.	100
Fluoranthene		690	ug/Kgdrywt	3	20	210	19.	100
Pyrene		2000	ug/Kgdrywt	3	20	210	22.	100
Benzo (a) anthracene		470	ug/Kgdrywt	3	20	210	20.	100
Chrysene		590	ug/Kgdrywt	3	20	210	18.	100
Benzo (b) Fluoranthene		840	ug/Kgdrywt	3	20	210	25.	100
Benzo(k)fluoranthene	J	210	ug/Kgdrywt	3	20	210	32.	100
Benzo(a)pyrene		560	ug/Kgdrywt	3	20	210	34.	100
Indeno (1,2,3-cd) pyrene		640	ug/Kgdrywt	3	20	210	20.	100
Dibenzo (a,h) anthracene	J	120	ug/Kgdrywt	3	20	210	19.	100
Benzo(g,h,i)perylene		390	ug/Kgdrywt	3	20	210	21.	100
2-Methylnaphthalene-D10		30.8	%					
Fluorene-D10		50.9	%					
Pyrene-D10		76.5	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-1
Client ID: 2W-SD-SD153-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 01-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 17.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	78.	ug/Kgdrywt	1	20	120	15.	58.
2-Methylnaphthalene	J	120	ug/Kgdrywt	1	20	120	13.	58.
1-Methylnaphthalene		180	ug/Kgdrywt	1	20	120	9.8	58.
Acenaphthylene	U	58.	ug/Kgdrywt	1	20	120	6.9	58.
Acenaphthene		310	ug/Kgdrywt	1	20	120	8.6	58.
Fluorene		620	ug/Kgdrywt	1	20	120	18.	58.
Phenanthrene		730	ug/Kgdrywt	1	20	120	10.	58.
Anthracene		180	ug/Kgdrywt	1	20	120	6.9	58.
Fluoranthene		370	ug/Kgdrywt	1	20	120	10.	58.
Pyrene		790	ug/Kgdrywt	1	20	120	12.	58.
Benzo (a) anthracene		180	ug/Kgdrywt	1	20	120	11.	58.
Chrysene		260	ug/Kgdrywt	1	20	120	9.8	58.
Benzo (b) Fluoranthene		320	ug/Kgdrywt	1	20	120	14.	58.
Benzo(k)fluoranthene	J	100	ug/Kgdrywt	1	20	120	18.	58.
Benzo(a)pyrene		180	ug/Kgdrywt	1	20	120	19.	58.
Indeno (1,2,3-cd) pyrene		230	ug/Kgdrywt	1	20	120	11.	58.
Dibenzo (a,h) anthracene	J	50.	ug/Kgdrywt	1	20	120	10.	58.
Benzo(g,h,i)perylene		140	ug/Kgdrywt	1	20	120	12.	58.
2-Methylnaphthalene-D10		54.0	%					
Fluorene-D10		71.4	%					
Pyrene-D10		102.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-3
Client ID: 2W-SD-SD155-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date:
Extracted By: JCG
Extraction Method: SW846 8270D
Lab Prep Batch: WG91997

Analysis Date: 02-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 26.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	56.	ug/Kgdrywt	1	20	73.	9.4	36.
2-Methylnaphthalene	J	40.	ug/Kgdrywt	1	20	73.	8.0	36.
1-Methylnaphthalene		110	ug/Kgdrywt	1	20	73.	6.2	36.
Acenaphthylene	U	36.	ug/Kgdrywt	1	20	73.	4.4	36.
Acenaphthene		440	ug/Kgdrywt	1	20	73.	5.4	36.
Fluorene		370	ug/Kgdrywt	1	20	73.	12.	36.
Phenanthrene		300	ug/Kgdrywt	1	20	73.	6.5	36.
Anthracene	J	53.	ug/Kgdrywt	1	20	73.	4.4	36.
Fluoranthene		220	ug/Kgdrywt	1	20	73.	6.5	36.
Pyrene		320	ug/Kgdrywt	1	20	73.	7.6	36.
Benzo (a) anthracene		88.	ug/Kgdrywt	1	20	73.	6.9	36.
Chrysene		110	ug/Kgdrywt	1	20	73.	6.2	36.
Benzo (b) Fluoranthene		170	ug/Kgdrywt	1	20	73.	8.7	36.
Benzo(k)fluoranthene	J	49.	ug/Kgdrywt	1	20	73.	11.	36.
Benzo(a)pyrene		110	ug/Kgdrywt	1	20	73.	12.	36.
Indeno (1,2,3-cd) pyrene		160	ug/Kgdrywt	1	20	73.	6.9	36.
Dibenzo (a,h) anthracene	J	36.	ug/Kgdrywt	1	20	73.	6.5	36.
Benzo(g,h,i)perylene		91.	ug/Kgdrywt	1	20	73.	7.3	36.
2-Methylnaphthalene-D10		54.1	%					
Fluorene-D10		54.1	%					
Pyrene-D10		88.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-2
Client ID: 2W-SD-SD156-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 01-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 18.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	50.	ug/Kgdrywt	1	20	110	14.	54.
2-Methylnaphthalene	J	30.	ug/Kgdrywt	1	20	110	12.	54.
1-Methylnaphthalene	J	22.	ug/Kgdrywt	1	20	110	9.3	54.
Acenaphthylene	J	29.	ug/Kgdrywt	1	20	110	6.5	54.
Acenaphthene	J	35.	ug/Kgdrywt	1	20	110	8.2	54.
Fluorene	J	34.	ug/Kgdrywt	1	20	110	17.	54.
Phenanthrene		220	ug/Kgdrywt	1	20	110	9.8	54.
Anthracene	J	27.	ug/Kgdrywt	1	20	110	6.5	54.
Fluoranthene		410	ug/Kgdrywt	1	20	110	9.8	54.
Pyrene		630	ug/Kgdrywt	1	20	110	11.	54.
Benzo (a) anthracene		220	ug/Kgdrywt	1	20	110	10.	54.
Chrysene		290	ug/Kgdrywt	1	20	110	9.3	54.
Benzo (b) Fluoranthene		380	ug/Kgdrywt	1	20	110	13.	54.
Benzo(k)fluoranthene		140	ug/Kgdrywt	1	20	110	17.	54.
Benzo(a)pyrene		260	ug/Kgdrywt	1	20	110	18.	54.
Indeno (1,2,3-cd) pyrene		280	ug/Kgdrywt	1	20	110	10.	54.
Dibenzo (a,h) anthracene	J	67.	ug/Kgdrywt	1	20	110	9.8	54.
Benzo(g,h,i)perylene		160	ug/Kgdrywt	1	20	110	11.	54.
2-Methylnaphthalene-D10		66.2	%					
Fluorene-D10		58.5	%					
Pyrene-D10		107.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-4
Client ID: 2W-SD-SD157-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 02-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 20.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	48.	ug/Kgdrywt	1	20	96.	12.	48.
2-Methylnaphthalene	U	48.	ug/Kgdrywt	1	20	96.	10.	48.
1-Methylnaphthalene	U	48.	ug/Kgdrywt	1	20	96.	8.2	48.
Acenaphthylene	J	7.1	ug/Kgdrywt	1	20	96.	5.8	48.
Acenaphthene	J	27.	ug/Kgdrywt	1	20	96.	7.2	48.
Fluorene	J	26.	ug/Kgdrywt	1	20	96.	15.	48.
Phenanthrene		340	ug/Kgdrywt	1	20	96.	8.6	48.
Anthracene	J	53.	ug/Kgdrywt	1	20	96.	5.8	48.
Fluoranthene		640	ug/Kgdrywt	1	20	96.	8.6	48.
Pyrene		820	ug/Kgdrywt	1	20	96.	10.	48.
Benzo (a) anthracene		300	ug/Kgdrywt	1	20	96.	9.1	48.
Chrysene		400	ug/Kgdrywt	1	20	96.	8.2	48.
Benzo (b) Fluoranthene		580	ug/Kgdrywt	1	20	96.	12.	48.
Benzo(k)fluoranthene		170	ug/Kgdrywt	1	20	96.	15.	48.
Benzo(a)pyrene		330	ug/Kgdrywt	1	20	96.	16.	48.
Indeno (1,2,3-cd) pyrene		410	ug/Kgdrywt	1	20	96.	9.1	48.
Dibenzo (a,h) anthracene	J	84.	ug/Kgdrywt	1	20	96.	8.6	48.
Benzo(g,h,i)perylene		240	ug/Kgdrywt	1	20	96.	9.6	48.
2-Methylnaphthalene-D10		49.5	%					
Fluorene-D10		48.9	%					
Pyrene-D10		81.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-5
Client ID: 2W-SD-SD160-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 02-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 13.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	120	ug/Kgdrywt	1	20	150	20.	76.
2-Methylnaphthalene	J	90.	ug/Kgdrywt	1	20	150	17.	76.
1-Methylnaphthalene	J	54.	ug/Kgdrywt	1	20	150	13.	76.
Acenaphthylene	J	81.	ug/Kgdrywt	1	20	150	9.1	76.
Acenaphthene	J	55.	ug/Kgdrywt	1	20	150	11.	76.
Fluorene		160	ug/Kgdrywt	1	20	150	24.	76.
Phenanthrene		430	ug/Kgdrywt	1	20	150	14.	76.
Anthracene	J	120	ug/Kgdrywt	1	20	150	9.1	76.
Fluoranthene		1000	ug/Kgdrywt	1	20	150	14.	76.
Pyrene		1800	ug/Kgdrywt	1	20	150	16.	76.
Benzo (a) anthracene		570	ug/Kgdrywt	1	20	150	14.	76.
Chrysene		650	ug/Kgdrywt	1	20	150	13.	76.
Benzo (b) Fluoranthene		880	ug/Kgdrywt	1	20	150	18.	76.
Benzo(k)fluoranthene		290	ug/Kgdrywt	1	20	150	24.	76.
Benzo(a)pyrene		610	ug/Kgdrywt	1	20	150	25.	76.
Indeno (1,2,3-cd) pyrene		580	ug/Kgdrywt	1	20	150	14.	76.
Dibenzo (a,h) anthracene	J	130	ug/Kgdrywt	1	20	150	14.	76.
Benzo(g,h,i)perylene		350	ug/Kgdrywt	1	20	150	15.	76.
2-Methylnaphthalene-D10		57.2	%					
Fluorene-D10		61.5	%					
Pyrene-D10		96.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-14
Client ID: 2W-SD-SD85-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 02-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 24.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	12.	ug/Kgdrywt	1	20	80.	10.	40.
2-Methylnaphthalene	U	40.	ug/Kgdrywt	1	20	80.	8.8	40.
1-Methylnaphthalene	U	40.	ug/Kgdrywt	1	20	80.	6.8	40.
Acenaphthylene	J	10.	ug/Kgdrywt	1	20	80.	4.8	40.
Acenaphthene	U	40.	ug/Kgdrywt	1	20	80.	6.0	40.
Fluorene	U	40.	ug/Kgdrywt	1	20	80.	13.	40.
Phenanthrene		130	ug/Kgdrywt	1	20	80.	7.2	40.
Anthracene	J	12.	ug/Kgdrywt	1	20	80.	4.8	40.
Fluoranthene		250	ug/Kgdrywt	1	20	80.	7.2	40.
Pyrene		380	ug/Kgdrywt	1	20	80.	8.4	40.
Benzo (a) anthracene		120	ug/Kgdrywt	1	20	80.	7.6	40.
Chrysene		160	ug/Kgdrywt	1	20	80.	6.8	40.
Benzo (b) Fluoranthene		220	ug/Kgdrywt	1	20	80.	9.6	40.
Benzo(k)fluoranthene	J	68.	ug/Kgdrywt	1	20	80.	12.	40.
Benzo(a)pyrene		120	ug/Kgdrywt	1	20	80.	13.	40.
Indeno (1,2,3-cd) pyrene		160	ug/Kgdrywt	1	20	80.	7.6	40.
Dibenzo (a,h) anthracene	J	41.	ug/Kgdrywt	1	20	80.	7.2	40.
Benzo(g,h,i)perylene		83.	ug/Kgdrywt	1	20	80.	8.0	40.
2-Methylnaphthalene-D10		62.7	%					
Fluorene-D10		54.5	%					
Pyrene-D10		94.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-15
Client ID: 2W-SD-SD86-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 02-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 34.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	28.	ug/Kgdrywt	1	20	56.	7.3	28.
2-Methylnaphthalene	U	28.	ug/Kgdrywt	1	20	56.	6.2	28.
1-Methylnaphthalene	U	28.	ug/Kgdrywt	1	20	56.	4.8	28.
Acenaphthylene	J	16.	ug/Kgdrywt	1	20	56.	3.4	28.
Acenaphthene	J	6.4	ug/Kgdrywt	1	20	56.	4.2	28.
Fluorene	J	11.	ug/Kgdrywt	1	20	56.	9.0	28.
Phenanthrene		190	ug/Kgdrywt	1	20	56.	5.1	28.
Anthracene	J	23.	ug/Kgdrywt	1	20	56.	3.4	28.
Fluoranthene		370	ug/Kgdrywt	1	20	56.	5.1	28.
Pyrene		500	ug/Kgdrywt	1	20	56.	5.9	28.
Benzo (a) anthracene		170	ug/Kgdrywt	1	20	56.	5.3	28.
Chrysene		200	ug/Kgdrywt	1	20	56.	4.8	28.
Benzo (b) Fluoranthene		380	ug/Kgdrywt	1	20	56.	6.7	28.
Benzo(k)fluoranthene		120	ug/Kgdrywt	1	20	56.	8.7	28.
Benzo(a)pyrene		240	ug/Kgdrywt	1	20	56.	9.3	28.
Indeno (1,2,3-cd) pyrene		260	ug/Kgdrywt	1	20	56.	5.3	28.
Dibenzo (a,h) anthracene	J	54.	ug/Kgdrywt	1	20	56.	5.1	28.
Benzo(g,h,i)perylene		150	ug/Kgdrywt	1	20	56.	5.6	28.
2-Methylnaphthalene-D10		47.9	%					
Fluorene-D10		45.4	%					
Pyrene-D10		80.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-16
Client ID: 2W-SD-SD91-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 03-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 22.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	45.	ug/Kgdrywt	1	20	90.	12.	45.
2-Methylnaphthalene	U	45.	ug/Kgdrywt	1	20	90.	10.	45.
1-Methylnaphthalene	U	45.	ug/Kgdrywt	1	20	90.	7.7	45.
Acenaphthylene	J	36.	ug/Kgdrywt	1	20	90.	5.4	45.
Acenaphthene	J	37.	ug/Kgdrywt	1	20	90.	6.8	45.
Fluorene	J	31.	ug/Kgdrywt	1	20	90.	14.	45.
Phenanthrene		1100	ug/Kgdrywt	1	20	90.	8.1	45.
Anthracene		130	ug/Kgdrywt	1	20	90.	5.4	45.
Fluoranthene	E	12000	ug/Kgdrywt	1	20	90.	8.1	45.
Pyrene	E	15000	ug/Kgdrywt	1	20	90.	9.5	45.
Benzo (a) anthracene	E	8400	ug/Kgdrywt	1	20	90.	8.6	45.
Chrysene	E	5700	ug/Kgdrywt	1	20	90.	7.7	45.
Benzo (b) Fluoranthene	E	14000	ug/Kgdrywt	1	20	90.	11.	45.
Benzo(k)fluoranthene	E	3900	ug/Kgdrywt	1	20	90.	14.	45.
Benzo(a)pyrene	E	11000	ug/Kgdrywt	1	20	90.	15.	45.
Indeno (1,2,3-cd) pyrene	U	45.	ug/Kgdrywt	1	20	90.	8.6	45.
Dibenzo (a,h) anthracene	E	1300	ug/Kgdrywt	1	20	90.	8.1	45.
Benzo(g,h,i)perylene	E	4400	ug/Kgdrywt	1	20	90.	9.0	45.
2-Methylnaphthalene-D10		35.4	%					
Fluorene-D10		35.1	%					
Pyrene-D10		53.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-16DL
Client ID: 2W-SD-SD91-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 06-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 22.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	1100	ug/Kgdrywt	25	20	2300	290	1100
2-Methylnaphthalene	U	1100	ug/Kgdrywt	25	20	2300	250	1100
1-Methylnaphthalene	U	1100	ug/Kgdrywt	25	20	2300	190	1100
Acenaphthylene	U	1100	ug/Kgdrywt	25	20	2300	140	1100
Acenaphthene	U	1100	ug/Kgdrywt	25	20	2300	170	1100
Fluorene	U	1100	ug/Kgdrywt	25	20	2300	360	1100
Phenanthrene	J	1100	ug/Kgdrywt	25	20	2300	200	1100
Anthracene	J	170	ug/Kgdrywt	25	20	2300	140	1100
Fluoranthene		12000	ug/Kgdrywt	25	20	2300	200	1100
Pyrene		17000	ug/Kgdrywt	25	20	2300	240	1100
Benzo (a) anthracene		8500	ug/Kgdrywt	25	20	2300	210	1100
Chrysene		6900	ug/Kgdrywt	25	20	2300	190	1100
Benzo (b) Fluoranthene		12000	ug/Kgdrywt	25	20	2300	270	1100
Benzo(k)fluoranthene		5300	ug/Kgdrywt	25	20	2300	350	1100
Benzo(a)pyrene		11000	ug/Kgdrywt	25	20	2300	370	1100
Indeno (1,2,3-cd) pyrene		11000	ug/Kgdrywt	25	20	2300	210	1100
Dibenzo (a,h) anthracene	J	2200	ug/Kgdrywt	25	20	2300	200	1100
Benzo(g,h,i)perylene		5700	ug/Kgdrywt	25	20	2300	230	1100
2-Methylnaphthalene-D10	D	29.3	%					
Fluorene-D10	D	3.74	%					
Pyrene-D10	D	63.9	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-12
Client ID: 2W-SD-SD92-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 02-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 28.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	30.	ug/Kgdrywt	1	20	67.	8.7	34.
2-Methylnaphthalene	J	13.	ug/Kgdrywt	1	20	67.	7.4	34.
1-Methylnaphthalene	J	11.	ug/Kgdrywt	1	20	67.	5.7	34.
Acenaphthylene	J	40.	ug/Kgdrywt	1	20	67.	4.0	34.
Acenaphthene	J	52.	ug/Kgdrywt	1	20	67.	5.0	34.
Fluorene		73.	ug/Kgdrywt	1	20	67.	11.	34.
Phenanthrene	E	2100	ug/Kgdrywt	1	20	67.	6.0	34.
Anthracene		200	ug/Kgdrywt	1	20	67.	4.0	34.
Fluoranthene	E	6300	ug/Kgdrywt	1	20	67.	6.0	34.
Pyrene	E	7600	ug/Kgdrywt	1	20	67.	7.0	34.
Benzo (a) anthracene	E	2300	ug/Kgdrywt	1	20	67.	6.4	34.
Chrysene	E	3200	ug/Kgdrywt	1	20	67.	5.7	34.
Benzo (b) Fluoranthene	E	5400	ug/Kgdrywt	1	20	67.	8.0	34.
Benzo(k)fluoranthene	E	1600	ug/Kgdrywt	1	20	67.	10.	34.
Benzo(a)pyrene	E	3300	ug/Kgdrywt	1	20	67.	11.	34.
Indeno (1,2,3-cd) pyrene	E	1100	ug/Kgdrywt	1	20	67.	6.4	34.
Dibenzo (a,h) anthracene		540	ug/Kgdrywt	1	20	67.	6.0	34.
Benzo(g,h,i)perylene	E	1900	ug/Kgdrywt	1	20	67.	6.7	34.
2-Methylnaphthalene-D10		62.5	%					
Fluorene-D10		59.4	%					
Pyrene-D10		100.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-12DL
Client ID: 2W-SD-SD92-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 06-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 28.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	670	ug/Kgdrywt	20	20	1300	170	670
2-Methylnaphthalene	U	670	ug/Kgdrywt	20	20	1300	150	670
1-Methylnaphthalene	U	670	ug/Kgdrywt	20	20	1300	110	670
Acenaphthylene	U	670	ug/Kgdrywt	20	20	1300	80.	670
Acenaphthene	U	670	ug/Kgdrywt	20	20	1300	100	670
Fluorene	U	670	ug/Kgdrywt	20	20	1300	210	670
Phenanthrene		1900	ug/Kgdrywt	20	20	1300	120	670
Anthracene	J	230	ug/Kgdrywt	20	20	1300	80.	670
Fluoranthene		5400	ug/Kgdrywt	20	20	1300	120	670
Pyrene		7100	ug/Kgdrywt	20	20	1300	140	670
Benzo (a) anthracene		2600	ug/Kgdrywt	20	20	1300	130	670
Chrysene		3300	ug/Kgdrywt	20	20	1300	110	670
Benzo (b) Fluoranthene		5900	ug/Kgdrywt	20	20	1300	160	670
Benzo(k)fluoranthene		2100	ug/Kgdrywt	20	20	1300	210	670
Benzo(a)pyrene		4000	ug/Kgdrywt	20	20	1300	220	670
Indeno (1,2,3-cd) pyrene		5300	ug/Kgdrywt	20	20	1300	130	670
Dibenzo (a,h) anthracene	J	1000	ug/Kgdrywt	20	20	1300	120	670
Benzo(g,h,i)perylene		2900	ug/Kgdrywt	20	20	1300	130	670
2-Methylnaphthalene-D10	D	55.4	%					
Fluorene-D10	D	58.5	%					
Pyrene-D10	D	96.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-13
Client ID: 2W-SD-SD93-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 02-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 56.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		39.	ug/Kgdrywt	1	20	36.	4.6	18.
2-Methylnaphthalene	J	25.	ug/Kgdrywt	1	20	36.	3.9	18.
1-Methylnaphthalene	J	15.	ug/Kgdrywt	1	20	36.	3.0	18.
Acenaphthylene		40.	ug/Kgdrywt	1	20	36.	2.1	18.
Acenaphthene	J	13.	ug/Kgdrywt	1	20	36.	2.7	18.
Fluorene	J	26.	ug/Kgdrywt	1	20	36.	5.7	18.
Phenanthrene	E	540	ug/Kgdrywt	1	20	36.	3.2	18.
Anthracene		64.	ug/Kgdrywt	1	20	36.	2.1	18.
Fluoranthene	E	1300	ug/Kgdrywt	1	20	36.	3.2	18.
Pyrene	E	1800	ug/Kgdrywt	1	20	36.	3.7	18.
Benzo (a) anthracene	E	620	ug/Kgdrywt	1	20	36.	3.4	18.
Chrysene	E	800	ug/Kgdrywt	1	20	36.	3.0	18.
Benzo (b) Fluoranthene	E	1200	ug/Kgdrywt	1	20	36.	4.3	18.
Benzo(k)fluoranthene		330	ug/Kgdrywt	1	20	36.	5.5	18.
Benzo(a)pyrene	E	730	ug/Kgdrywt	1	20	36.	5.9	18.
Indeno (1,2,3-cd) pyrene	E	550	ug/Kgdrywt	1	20	36.	3.4	18.
Dibenzo (a,h) anthracene		120	ug/Kgdrywt	1	20	36.	3.2	18.
Benzo(g,h,i)perylene		390	ug/Kgdrywt	1	20	36.	3.6	18.
2-Methylnaphthalene-D10		62.9	%					
Fluorene-D10		60.4	%					
Pyrene-D10		107.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-13DL
Client ID: 2W-SD-SD93-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 07-APR-11
Received Date: 08-APR-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 06-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 56.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	41.	ug/Kgdrywt	8	20	280	37.	140
2-Methylnaphthalene	U	140	ug/Kgdrywt	8	20	280	31.	140
1-Methylnaphthalene	U	140	ug/Kgdrywt	8	20	280	24.	140
Acenaphthylene	J	38.	ug/Kgdrywt	8	20	280	17.	140
Acenaphthene	U	140	ug/Kgdrywt	8	20	280	21.	140
Fluorene	U	140	ug/Kgdrywt	8	20	280	45.	140
Phenanthrene		590	ug/Kgdrywt	8	20	280	26.	140
Anthracene	J	71.	ug/Kgdrywt	8	20	280	17.	140
Fluoranthene		1400	ug/Kgdrywt	8	20	280	26.	140
Pyrene		1800	ug/Kgdrywt	8	20	280	30.	140
Benzo (a) anthracene		690	ug/Kgdrywt	8	20	280	27.	140
Chrysene		900	ug/Kgdrywt	8	20	280	24.	140
Benzo (b) Fluoranthene		1500	ug/Kgdrywt	8	20	280	34.	140
Benzo(k)fluoranthene		470	ug/Kgdrywt	8	20	280	44.	140
Benzo(a)pyrene		1100	ug/Kgdrywt	8	20	280	47.	140
Indeno (1,2,3-cd) pyrene		1200	ug/Kgdrywt	8	20	280	27.	140
Dibenzo (a,h) anthracene	J	240	ug/Kgdrywt	8	20	280	26.	140
Benzo(g,h,i)perylene		650	ug/Kgdrywt	8	20	280	28.	140
2-Methylnaphthalene-D10		63.4	%					
Fluorene-D10		55.0	%					
Pyrene-D10		104.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-31
Client ID: 2W-SD-SD114-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 11.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	18.	ug/Kgdrywt	1	3.3	28.	1.6	14.
4,4'-DDD		110	ug/Kgdrywt	1	3.3	28.	1.7	14.
4,4'-DDT		39.	ug/Kgdrywt	1	3.3	28.	2.7	14.
Tetrachloro-M-Xylene		39.2	%					
Decachlorobiphenyl		47.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-9
Client ID: 2W-SD-SD124-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 41.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	E	1400	ug/Kgdrywt	1	3.3	7.8	0.45	3.9
4,4'-DDD	E	7300	ug/Kgdrywt	1	3.3	7.8	0.47	3.9
4,4'-DDT		19.	ug/Kgdrywt	1	3.3	7.8	0.73	3.9
Tetrachloro-M-Xylene		46.4	%					
Decachlorobiphenyl		60.2	%					

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Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-9DL
Client ID: 2W-SD-SD124-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 41.
Report Date: 14-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	2700	ug/Kgdrywt	500	3.3	3900	220	1900
4,4'-DDD		25000	ug/Kgdrywt	500	3.3	3900	240	1900
4,4'-DDT	U	1900	ug/Kgdrywt	500	3.3	3900	360	1900
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-10DL
Client ID: 2W-SD-SD125-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 30.
Report Date: 13-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	530	ug/Kgdrywt	50	3.3	550	32.	280
4,4'-DDD		3400	ug/Kgdrywt	50	3.3	550	33.	280
4,4'-DDT	J	380	ug/Kgdrywt	50	3.3	550	52.	280
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-8
Client ID: 2W-SD-SD128-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 36.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		69.	ug/Kgdrywt	1	3.3	8.6	0.49	4.3
4,4'-DDD	E	500	ug/Kgdrywt	1	3.3	8.6	0.52	4.3
4,4'-DDT	JJ	5.3	ug/Kgdrywt	1	3.3	8.6	0.81	4.3
Tetrachloro-M-Xylene		47.0	%					
Decachlorobiphenyl		58.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-8DL
Client ID: 2W-SD-SD128-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 36.
Report Date: 14-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	78.	ug/Kgdrywt	20	3.3	170	9.9	86.
4,4'-DDD		480	ug/Kgdrywt	20	3.3	170	10.	86.
4,4'-DDT	U	86.	ug/Kgdrywt	20	3.3	170	16.	86.
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-26
Client ID: 2W-SD-SD129-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 22.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		73.	ug/Kgdrywt	1	3.3	14.	0.78	6.8
4,4'-DDD	E	750	ug/Kgdrywt	1	3.3	14.	0.82	6.8
4,4'-DDT	J	27.	ug/Kgdrywt	1	3.3	14.	1.3	6.8
Tetrachloro-M-Xylene		52.5	%					
Decachlorobiphenyl		62.1	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-26DL2
Client ID: 2W-SD-SD129-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 08-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 22.
Report Date: 15-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	U	3400	ug/Kgdrywt	500	3.3	6800	390	3400
4,4'-DDD	J	2600	ug/Kgdrywt	500	3.3	6800	410	3400
4,4'-DDT	U	3400	ug/Kgdrywt	500	3.3	6800	640	3400
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-25
Client ID: 2W-SD-SD131-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 16.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		28.	ug/Kgdrywt	1	3.3	20.	1.1	9.8
4,4'-DDD		140	ug/Kgdrywt	1	3.3	20.	1.2	9.8
4,4'-DDT		33.	ug/Kgdrywt	1	3.3	20.	1.8	9.8
Tetrachloro-M-Xylene		42.0	%					
Decachlorobiphenyl		47.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-29DL2
Client ID: 2W-SD-SD132-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 08-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 24.
Report Date: 14-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	2100	ug/Kgdrywt	500	3.3	6600	380	3300
4,4'-DDD		20000	ug/Kgdrywt	500	3.3	6600	400	3300
4,4'-DDT	J	2800	ug/Kgdrywt	500	3.3	6600	620	3300
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-24
Client ID: 2W-SD-SD133-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 26.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		24.	ug/Kgdrywt	1	3.3	12.	0.70	6.1
4,4'-DDD		54.	ug/Kgdrywt	1	3.3	12.	0.74	6.1
4,4'-DDT	J	36.	ug/Kgdrywt	1	3.3	12.	1.1	6.1
Tetrachloro-M-Xylene		60.0	%					
Decachlorobiphenyl		66.9	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-7DL
Client ID: 2W-SD-SD137-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 39.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE		1400	ug/Kgdrywt	100	3.3	840	48.	420
4,4'-DDD		8300	ug/Kgdrywt	100	3.3	840	51.	420
4,4'-DDT	J	470	ug/Kgdrywt	100	3.3	840	79.	420
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-30DL
Client ID: 2W-SD-SD139-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 19.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	4600	ug/Kgdrywt	1000	3.3	17000	980	8500
4,4'-DDD		39000	ug/Kgdrywt	1000	3.3	17000	1000	8500
4,4'-DDT	J	6500	ug/Kgdrywt	1000	3.3	17000	1600	8500
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-11DL
Client ID: 2W-SD-SD141-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 9.4
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	180	ug/Kgdrywt	20	3.3	700	40.	350
4,4'-DDD		2200	ug/Kgdrywt	20	3.3	700	42.	350
4,4'-DDT	U	350	ug/Kgdrywt	20	3.3	700	65.	350
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-27DL
Client ID: 2W-SD-SD143-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 12.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	10000	ug/Kgdrywt	1000	3.3	27000	1600	13000
4,4'-DDD		120000	ug/Kgdrywt	1000	3.3	27000	1600	13000
4,4'-DDT	J	15000	ug/Kgdrywt	1000	3.3	27000	2500	13000
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-28DL
Client ID: 2W-SD-SD145-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 09-JUN-11
Extracted By: JS
Extraction Method: SW846 3550
Lab Prep Batch: WG92619

Analysis Date: 10-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 28.
Report Date: 13-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	2400	ug/Kgdrywt	1000	3.3	11000	620	5400
4,4'-DDD		14000	ug/Kgdrywt	1000	3.3	11000	650	5400
4,4'-DDT	JJ	3500	ug/Kgdrywt	1000	3.3	11000	1000	5400
Tetrachloro-M-Xylene	D	0.00	%					
Decachlorobiphenyl	D	0.00	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-1
Client ID: 2W-SD-SD153-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 17.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	9.6	ug/Kgdrywt	1	3.3	19.	1.1	9.4
4,4'-DDD		50.	ug/Kgdrywt	1	3.3	19.	1.1	9.4
4,4'-DDT	JJ	9.8	ug/Kgdrywt	1	3.3	19.	1.8	9.4
Tetrachloro-M-Xylene		50.2	%					
Decachlorobiphenyl		70.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-3
Client ID: 2W-SD-SD155-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 26.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	6.0	ug/Kgdrywt	1	3.3	12.	0.71	6.2
4,4'-DDD		95.	ug/Kgdrywt	1	3.3	12.	0.75	6.2
4,4'-DDT	JJ	12.	ug/Kgdrywt	1	3.3	12.	1.2	6.2
Tetrachloro-M-Xylene		52.0	%					
Decachlorobiphenyl		65.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-2
Client ID: 2W-SD-SD156-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 18.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	7.9	ug/Kgdrywt	1	3.3	18.	1.0	9.0
4,4'-DDD		38.	ug/Kgdrywt	1	3.3	18.	1.1	9.0
4,4'-DDT	J	19.	ug/Kgdrywt	1	3.3	18.	1.7	9.0
Tetrachloro-M-Xylene		56.0	%					
Decachlorobiphenyl		68.1	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-4
Client ID: 2W-SD-SD157-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 20.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	3.9	ug/Kgdrywt	1	3.3	15.	0.87	7.5
4,4'-DDD	JB	13.	ug/Kgdrywt	1	3.3	15.	0.91	7.5
4,4'-DDT	U	7.5	ug/Kgdrywt	1	3.3	15.	1.4	7.5
Tetrachloro-M-Xylene		58.0	%					
Decachlorobiphenyl		67.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-5
Client ID: 2W-SD-SD160-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 07-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 13.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	13.	ug/Kgdrywt	1	3.3	24.	1.4	12.
4,4'-DDD		110	ug/Kgdrywt	1	3.3	24.	1.4	12.
4,4'-DDT	J	19.	ug/Kgdrywt	1	3.3	24.	2.3	12.
Tetrachloro-M-Xylene		55.6	%					
Decachlorobiphenyl		64.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-31
Client ID: 2W-SD-SD114-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 09-JUN-11
Extracted By: JS
Extraction Method: SW846 3550
Lab Prep Batch: WG92620

Analysis Date: 10-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 11.
Report Date: 13-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	66.	ug/Kgdrywt	1	17	130	47.	66.
Aroclor-1221	U	66.	ug/Kgdrywt	1	17	130	62.	66.
Aroclor-1232	U	78.	ug/Kgdrywt	1	17	130	73.	78.
Aroclor-1242	U	66.	ug/Kgdrywt	1	17	130	45.	66.
Aroclor-1248	U	66.	ug/Kgdrywt	1	17	130	48.	66.
Aroclor-1254	U	66.	ug/Kgdrywt	1	17	130	37.	66.
Aroclor-1260	U	66.	ug/Kgdrywt	1	17	130	47.	66.
Tetrachloro-M-Xylene	*	51.9	%					
Decachlorobiphenyl		60.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-9
Client ID: 2W-SD-SD124-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG92000

Analysis Date: 03-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 41.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	20.	ug/Kgdrywt	1	17	40.	14.	20.
Aroclor-1221	U	20.	ug/Kgdrywt	1	17	40.	19.	20.
Aroclor-1232	U	24.	ug/Kgdrywt	1	17	40.	22.	24.
Aroclor-1242	U	20.	ug/Kgdrywt	1	17	40.	14.	20.
Aroclor-1248	U	20.	ug/Kgdrywt	1	17	40.	14.	20.
Aroclor-1254	U	20.	ug/Kgdrywt	1	17	40.	11.	20.
Aroclor-1260	U	20.	ug/Kgdrywt	1	17	40.	14.	20.
Tetrachloro-M-Xylene	*	55.9	%					
Decachlorobiphenyl		65.5	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-10
Client ID: 2W-SD-SD125-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG92000

Analysis Date: 03-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 30.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	28.	ug/Kgdrywt	1	17	57.	20.	28.
Aroclor-1221	U	28.	ug/Kgdrywt	1	17	57.	26.	28.
Aroclor-1232	U	33.	ug/Kgdrywt	1	17	57.	31.	33.
Aroclor-1242	U	28.	ug/Kgdrywt	1	17	57.	19.	28.
Aroclor-1248	U	28.	ug/Kgdrywt	1	17	57.	20.	28.
Aroclor-1254	U	28.	ug/Kgdrywt	1	17	57.	16.	28.
Aroclor-1260	U	28.	ug/Kgdrywt	1	17	57.	20.	28.
Tetrachloro-M-Xylene		62.9	%					
Decachlorobiphenyl		67.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-8
Client ID: 2W-SD-SD128-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG92000

Analysis Date: 03-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 36.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	22.	ug/Kgdrywt	1	17	44.	16.	22.
Aroclor-1221	U	22.	ug/Kgdrywt	1	17	44.	20.	22.
Aroclor-1232	U	26.	ug/Kgdrywt	1	17	44.	24.	26.
Aroclor-1242	U	22.	ug/Kgdrywt	1	17	44.	15.	22.
Aroclor-1248	U	22.	ug/Kgdrywt	1	17	44.	16.	22.
Aroclor-1254	U	22.	ug/Kgdrywt	1	17	44.	12.	22.
Aroclor-1260	U	22.	ug/Kgdrywt	1	17	44.	16.	22.
Tetrachloro-M-Xylene	*	54.9	%					
Decachlorobiphenyl		61.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-26
Client ID: 2W-SD-SD129-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG92000

Analysis Date: 06-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 22.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	35.	ug/Kgdrywt	1	17	70.	25.	35.
Aroclor-1221	U	35.	ug/Kgdrywt	1	17	70.	33.	35.
Aroclor-1232	U	41.	ug/Kgdrywt	1	17	70.	38.	41.
Aroclor-1242	U	35.	ug/Kgdrywt	1	17	70.	24.	35.
Aroclor-1248	U	35.	ug/Kgdrywt	1	17	70.	25.	35.
Aroclor-1254	U	35.	ug/Kgdrywt	1	17	70.	19.	35.
Aroclor-1260		310	ug/Kgdrywt	1	17	70.	25.	35.
Tetrachloro-M-Xylene		60.5	%					
Decachlorobiphenyl		66.9	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-25
Client ID: 2W-SD-SD131-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 09-JUN-11
Extracted By: JS
Extraction Method: SW846 3550
Lab Prep Batch: WG92620

Analysis Date: 10-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 16.
Report Date: 13-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	51.	ug/Kgdrywt	1	17	100	36.	51.
Aroclor-1221	U	51.	ug/Kgdrywt	1	17	100	48.	51.
Aroclor-1232	U	60.	ug/Kgdrywt	1	17	100	56.	60.
Aroclor-1242	U	51.	ug/Kgdrywt	1	17	100	35.	51.
Aroclor-1248	U	51.	ug/Kgdrywt	1	17	100	37.	51.
Aroclor-1254	U	51.	ug/Kgdrywt	1	17	100	28.	51.
Aroclor-1260	U	51.	ug/Kgdrywt	1	17	100	36.	51.
Tetrachloro-M-Xylene		61.2	%					
Decachlorobiphenyl		69.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-29
Client ID: 2W-SD-SD132-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 09-JUN-11
Extracted By: JS
Extraction Method: SW846 3550
Lab Prep Batch: WG92620

Analysis Date: 10-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 24.
Report Date: 13-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	33.	ug/Kgdrywt	1	17	66.	23.	33.
Aroclor-1221	U	33.	ug/Kgdrywt	1	17	66.	30.	33.
Aroclor-1232	U	38.	ug/Kgdrywt	1	17	66.	36.	38.
Aroclor-1242	U	33.	ug/Kgdrywt	1	17	66.	22.	33.
Aroclor-1248	U	33.	ug/Kgdrywt	1	17	66.	24.	33.
Aroclor-1254	U	33.	ug/Kgdrywt	1	17	66.	18.	33.
Aroclor-1260		770	ug/Kgdrywt	1	17	66.	23.	33.
Tetrachloro-M-Xylene		59.4	%					
Decachlorobiphenyl		65.9	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-24
Client ID: 2W-SD-SD133-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG92000

Analysis Date: 03-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 26.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	31.	ug/Kgdrywt	1	17	63.	22.	31.
Aroclor-1221	U	31.	ug/Kgdrywt	1	17	63.	29.	31.
Aroclor-1232	U	37.	ug/Kgdrywt	1	17	63.	34.	37.
Aroclor-1242	U	31.	ug/Kgdrywt	1	17	63.	21.	31.
Aroclor-1248	U	31.	ug/Kgdrywt	1	17	63.	22.	31.
Aroclor-1254	U	31.	ug/Kgdrywt	1	17	63.	17.	31.
Aroclor-1260		450	ug/Kgdrywt	1	17	63.	22.	31.
Tetrachloro-M-Xylene		75.3	%					
Decachlorobiphenyl		71.9	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-7
Client ID: 2W-SD-SD137-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG92000

Analysis Date: 03-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 39.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	22.	ug/Kgdrywt	1	17	43.	15.	22.
Aroclor-1221	U	22.	ug/Kgdrywt	1	17	43.	20.	22.
Aroclor-1232	U	26.	ug/Kgdrywt	1	17	43.	24.	26.
Aroclor-1242	U	22.	ug/Kgdrywt	1	17	43.	15.	22.
Aroclor-1248	U	22.	ug/Kgdrywt	1	17	43.	16.	22.
Aroclor-1254	U	22.	ug/Kgdrywt	1	17	43.	12.	22.
Aroclor-1260	U	22.	ug/Kgdrywt	1	17	43.	15.	22.
Tetrachloro-M-Xylene		71.8	%					
Decachlorobiphenyl		81.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-30
Client ID: 2W-SD-SD139-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 09-JUN-11
Extracted By: JS
Extraction Method: SW846 3550
Lab Prep Batch: WG92620

Analysis Date: 10-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 19.
Report Date: 13-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	42.	ug/Kgdrywt	1	17	85.	30.	42.
Aroclor-1221	U	42.	ug/Kgdrywt	1	17	85.	39.	42.
Aroclor-1232	U	50.	ug/Kgdrywt	1	17	85.	46.	50.
Aroclor-1242	U	42.	ug/Kgdrywt	1	17	85.	29.	42.
Aroclor-1248	U	42.	ug/Kgdrywt	1	17	85.	30.	42.
Aroclor-1254	U	42.	ug/Kgdrywt	1	17	85.	23.	42.
Aroclor-1260	U	42.	ug/Kgdrywt	1	17	85.	30.	42.
Tetrachloro-M-Xylene		58.5	%					
Decachlorobiphenyl		66.9	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-11
Client ID: 2W-SD-SD141-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 05-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG92000

Analysis Date: 03-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 9.4
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	90.	ug/Kgdrywt	1	17	180	63.	90.
Aroclor-1221	U	90.	ug/Kgdrywt	1	17	180	83.	90.
Aroclor-1232	U	100	ug/Kgdrywt	1	17	180	98.	100
Aroclor-1242	U	90.	ug/Kgdrywt	1	17	180	61.	90.
Aroclor-1248	U	90.	ug/Kgdrywt	1	17	180	64.	90.
Aroclor-1254	U	90.	ug/Kgdrywt	1	17	180	50.	90.
Aroclor-1260	U	90.	ug/Kgdrywt	1	17	180	63.	90.
Tetrachloro-M-Xylene		66.1	%					
Decachlorobiphenyl		72.9	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-27
Client ID: 2W-SD-SD143-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG92000

Analysis Date: 06-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 12.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	70.	ug/Kgdrywt	1	17	140	49.	70.
Aroclor-1221	U	70.	ug/Kgdrywt	1	17	140	64.	70.
Aroclor-1232	U	82.	ug/Kgdrywt	1	17	140	76.	82.
Aroclor-1242	U	70.	ug/Kgdrywt	1	17	140	47.	70.
Aroclor-1248	U	70.	ug/Kgdrywt	1	17	140	50.	70.
Aroclor-1254	U	70.	ug/Kgdrywt	1	17	140	38.	70.
Aroclor-1260	U	70.	ug/Kgdrywt	1	17	140	49.	70.
Tetrachloro-M-Xylene	*	45.2	%					
Decachlorobiphenyl	*	53.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-27RE
Client ID: 2W-SD-SD143-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 09-JUN-11
Extracted By: JS
Extraction Method: SW846 3550
Lab Prep Batch: WG92620

Analysis Date: 10-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 12.
Report Date: 13-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	64.	ug/Kgdrywt	1	17	130	45.	64.
Aroclor-1221	U	64.	ug/Kgdrywt	1	17	130	60.	64.
Aroclor-1232	U	75.	ug/Kgdrywt	1	17	130	70.	75.
Aroclor-1242	U	64.	ug/Kgdrywt	1	17	130	44.	64.
Aroclor-1248	U	64.	ug/Kgdrywt	1	17	130	46.	64.
Aroclor-1254	U	64.	ug/Kgdrywt	1	17	130	35.	64.
Aroclor-1260	U	64.	ug/Kgdrywt	1	17	130	45.	64.
Tetrachloro-M-Xylene	*	39.3	%					
Decachlorobiphenyl	*	45.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-28
Client ID: 2W-SD-SD145-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 06-APR-11
Received Date: 08-APR-11
Extract Date: 09-JUN-11
Extracted By: JS
Extraction Method: SW846 3550
Lab Prep Batch: WG92620

Analysis Date: 10-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 28.
Report Date: 13-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	28.	ug/Kgdrywt	1	17	56.	20.	28.
Aroclor-1221	U	28.	ug/Kgdrywt	1	17	56.	26.	28.
Aroclor-1232	U	33.	ug/Kgdrywt	1	17	56.	30.	33.
Aroclor-1242	U	28.	ug/Kgdrywt	1	17	56.	19.	28.
Aroclor-1248	U	28.	ug/Kgdrywt	1	17	56.	20.	28.
Aroclor-1254	U	28.	ug/Kgdrywt	1	17	56.	15.	28.
Aroclor-1260	U	28.	ug/Kgdrywt	1	17	56.	20.	28.
Tetrachloro-M-Xylene	*	50.3	%					
Decachlorobiphenyl		64.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-1
Client ID: 2W-SD-SD153-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG92000

Analysis Date: 03-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 17.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	49.	ug/Kgdrywt	1	17	97.	34.	49.
Aroclor-1221	U	49.	ug/Kgdrywt	1	17	97.	45.	49.
Aroclor-1232	U	57.	ug/Kgdrywt	1	17	97.	53.	57.
Aroclor-1242	U	49.	ug/Kgdrywt	1	17	97.	33.	49.
Aroclor-1248	U	49.	ug/Kgdrywt	1	17	97.	35.	49.
Aroclor-1254	U	49.	ug/Kgdrywt	1	17	97.	27.	49.
Aroclor-1260	U	49.	ug/Kgdrywt	1	17	97.	34.	49.
Tetrachloro-M-Xylene		58.6	%					
Decachlorobiphenyl		73.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-3
Client ID: 2W-SD-SD155-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG92000

Analysis Date: 03-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 26.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	32.	ug/Kgdrywt	1	17	64.	22.	32.
Aroclor-1221	U	32.	ug/Kgdrywt	1	17	64.	30.	32.
Aroclor-1232	U	37.	ug/Kgdrywt	1	17	64.	35.	37.
Aroclor-1242	U	32.	ug/Kgdrywt	1	17	64.	22.	32.
Aroclor-1248	U	32.	ug/Kgdrywt	1	17	64.	23.	32.
Aroclor-1254	U	32.	ug/Kgdrywt	1	17	64.	18.	32.
Aroclor-1260		150	ug/Kgdrywt	1	17	64.	22.	32.
Tetrachloro-M-Xylene		59.8	%					
Decachlorobiphenyl		67.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-2
Client ID: 2W-SD-SD156-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG92000

Analysis Date: 03-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 18.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	46.	ug/Kgdrywt	1	17	93.	33.	46.
Aroclor-1221	U	46.	ug/Kgdrywt	1	17	93.	43.	46.
Aroclor-1232	U	55.	ug/Kgdrywt	1	17	93.	51.	55.
Aroclor-1242	U	46.	ug/Kgdrywt	1	17	93.	32.	46.
Aroclor-1248	U	46.	ug/Kgdrywt	1	17	93.	33.	46.
Aroclor-1254	U	46.	ug/Kgdrywt	1	17	93.	26.	46.
Aroclor-1260	U	46.	ug/Kgdrywt	1	17	93.	33.	46.
Tetrachloro-M-Xylene		71.4	%					
Decachlorobiphenyl		69.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-4
Client ID: 2W-SD-SD157-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG92000

Analysis Date: 03-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 20.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	39.	ug/Kgdrywt	1	17	78.	27.	39.
Aroclor-1221	U	39.	ug/Kgdrywt	1	17	78.	36.	39.
Aroclor-1232	U	46.	ug/Kgdrywt	1	17	78.	42.	46.
Aroclor-1242	U	39.	ug/Kgdrywt	1	17	78.	26.	39.
Aroclor-1248	U	39.	ug/Kgdrywt	1	17	78.	28.	39.
Aroclor-1254	U	39.	ug/Kgdrywt	1	17	78.	21.	39.
Aroclor-1260	U	39.	ug/Kgdrywt	1	17	78.	27.	39.
Tetrachloro-M-Xylene		71.0	%					
Decachlorobiphenyl		65.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE2829-5
Client ID: 2W-SD-SD160-0001
Project: CTO-WE55 New London, CT
SDG: WE55-4

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG92000

Analysis Date: 03-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 13.
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	62.	ug/Kgdrywt	1	17	120	44.	62.
Aroclor-1221	U	62.	ug/Kgdrywt	1	17	120	58.	62.
Aroclor-1232	U	73.	ug/Kgdrywt	1	17	120	68.	73.
Aroclor-1242	U	62.	ug/Kgdrywt	1	17	120	42.	62.
Aroclor-1248	U	62.	ug/Kgdrywt	1	17	120	44.	62.
Aroclor-1254	U	62.	ug/Kgdrywt	1	17	120	34.	62.
Aroclor-1260	U	62.	ug/Kgdrywt	1	17	120	44.	62.
Tetrachloro-M-Xylene		60.5	%					
Decachlorobiphenyl		63.0	%					

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APPENDIX C

REGIONAL WORKSHEETS

EPA-NE
Data Validation Worksheet Cover Page - Page 1

Site Name NSB New London
Reference No. _____

REGION I ORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name Katahdin
Case/Project No. _____
SDG No. WE55-4
No. of Samples/Matrix _____

SOW/Method No. _____
Sampling Date(s) _____
Shipping Date(s) _____
Date Rec'd by lab _____

Traffic Report Sample Nos. See DV Report

Trip Blank No. _____
Equipment Blank No. _____
Bottle Blank No. _____
Field Duplicate Nos. _____

PES Nos. _____

The Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision _____ was used to evaluate the data and/or approved modifications to the EPA-NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attach modified criteria from EPA approved QAPjP or amendment to QAPjP).

A Tier II or Tier III evaluation was used to validate the data (circle one). If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc. that received partial Tier III validation

_____

The data were evaluated based upon the following parameters:

- Overall Evaluation of Data
- Data Completeness (CSF Audit - Tier I)
- Preservation & Technical Holding Times
- GC/MS & GC/ECD Instrument Performance Check
- Initial & Continuing Calibrations
- Blanks
- Surrogate Compounds
- Internal Standards
- Matrix Spike/Matrix Spike Duplicate
- Field Duplicates
- Sensitivity Check
- PE Samples/Accuracy Check
- Target Compound Identification
- Compound Quantitation and Reported Quantitation Limits
- TICs
- Semivolatile and Pesticide/PCB Cleanup
- System Performance

Region I Definitions and Qualifiers:

A - Acceptable Data
J - Numerical value associated with compound is an estimated quantity.
R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.
U - Compound not detected at that numerical sample quantitation limit.
UJ - The sample quantitation limit is an estimated quantity.
TB, BB, EB - Compound detected in aqueous trip blank, aqueous bottle blank, or aqueous equipment blank associated with soil/sediment samples.

Validator's Name J. Kahnyak Company Name TetraTech Phone Number _____

Date Validation Started _____ Date Validation Completed _____

EPA-NE
Data Validation Worksheet Cover Page - Page 2

Check if all criteria are met and no hard copy worksheet provided. Indicate NA if worksheet is not applicable to analytical method. Note: there is no standard worksheet for System Performance, however, the validator must document all system performance issues in the Data Validation Memorandum.

See DV Report

VOA/SV worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES
VOA/SV-II	GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)
VOA/SV-III	INITIAL CALIBRATION
VOA/SV-IV	CONTINUING CALIBRATION
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS
VOA-VI	VOA SURROGATE SPIKE RECOVERIES
SV-VI	SV SURROGATE SPIKE RECOVERIES
VOA/SV-VII	INTERNAL STANDARD PERFORMANCE
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK
VOA/SV-Pest/PCB-XI	ACCURACY CHECK
VOA/SV-Pest/PCB-XII	TARGET COMPOUND IDENTIFICATION
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION
VOA/SV-XIV	TENTATIVELY IDENTIFIED COMPOUNDS
VOA/SV-XV	SEMIVOLATILE CLEANUP
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA

Pest/PCB worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES
Pest/PCB-IIA	GC/ECD INSTRUMENT PERFORMANCE CHECK-RESOLUTION
Pest/PCB-IIB	GC/ECD INSTRUMENT PERFORMANCE CHECK-RETENTION TIMES
Pest/PCB-IIC	GC/ECD INSTRUMENT PERFORMANCE CHECK-ACCURACY CHECK OF INITIAL CALIBRATION
Pest/PCB-IID	GC/ECD INSTRUMENT PERFORMANCE CHECK-PESTICIDE DEGRADATION
Pest/PCB-III	INITIAL CALIBRATION
Pest/PCB-IV	CONTINUING CALIBRATION
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS
Pest/PCB-VI	SURROGATE COMPOUNDS: SPIKE RECOVERIES AND RETENTION TIME SHIFT
Pest/PCB-VII	PESTICIDE CLEANUP
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK
VOA/SV-Pest/PCB-XI	ACCURACY CHECK
Pest/PCB-XII	COMPOUND IDENTIFICATION
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA

I certify that all criteria were met for the worksheets checked above.

Signature: _____ Name: J. Kalinyak

Date: 7/11/11

The data validator generates a Data Validation Report, applicable to Data Validation Tiers II and III, that consists of the following components in the order specified below: (Refer to Section 11 for a description of each of the Data Validation Report components).

1. Organic Regional Data Assessment/Inorganic Regional Data Assessment (ORDA/IRDA) Form
2. Data Validation Memorandum
   a. Narrative
   b. Table I-Qualifier Recommendation Summary Table
   c. Table II-Overall Evaluation of Data
   d. Table III-Tentatively Identified Compounds
   e. Data Summary Tables
3. Standard Data Validation Worksheets
   a. Manual
   b. Automated Data Review Reports (i.e., CADRE)
4. Support Documentation
   a. Copy of non-CLP analytical method, e.g., DAS methods, modified EPA methods
   b. Copies of PES Score Reports/Vendor PES QC Acceptance Limits
   c. Copies of Telephone Logs/Communication Forms for:
      - RSCC communications
      - Requests for laboratory data resubmissions/clarifications
      - Communications with samplers resolving sampling problems
      - Communications with TPO/Lead Chemist to report contractually-deficient data for rejection/reduced payment
      - Communications with EPA Site Manager concerning possible data rejection
      - EPA Site Manager authorization for alternate DV tier
   d. Copies of data supporting recommendations for reduced payment resulting from CSF Audit and/or PE sample result evaluation
   e. Original data to support recommendations for data rejection/non-payment identified from Tier II or Tier III data validation
   f. Copies of field sampling notes and/or field report supplied by field sampler
   g. Copies of EPA-approved amendments to QAPjP and/or SAP describing modified criteria to be used for validating site data
5. CSF Completeness Evidence Audit
6. DQO Summary Form

The data validator is responsible for implementing all corrective actions required by the contractor Lead Chemist in response to EPA-NE data validation oversight findings.

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

N/A

VOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: _____

Date: 7/11/11

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

See DV Report

SEMIVOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: _____

Date: 7/11/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB

COMPLETE SDG FILE (CSF) AUDIT

Organic Fractions: _____

Missing Information	Date Lab Contacted	Date Received
See OV Report		

Validator: _____ Date: 7/11/11

EPA-NE - Data Validation
VOA/SV - Pest/PCB-I

12/96

Sampler:_____ Company:_____ Contacted: Yes No Date:_____

I. PRESERVATION AND HOLDING TIMES - Circle sample numbers with exceeded technical holding times or omitted preservation.
List all required preservation codes and circle omitted preservation codes.
Circle all exceeded technical holding times.
Identify extraction technique after "# of Days"/(*Extraction Code).

See DV Report

Sample No. (TR No.)	Matrix	Pres. Code	Date Sampled	VOA			BNA					PEST/PCB				
				Date Analyzed	# of Days from Samp. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action

Preservation Code:
1. Cool @ 4°C (± 2°)
2. Preserve with HCl to at least pH 2
3. Protect from light
4. Freeze
5. Room Temperature (Avoid excessive heat)

(*Extraction Code:)
L/L - Liquid/Liquid
SON - Sonication
SEP - Separatory Funnel
SOX - Soxhlet
SPE - Solid Phase Extraction

Action Code:
J - Estimate (J) Detected Values
UJ - Estimate (UJ) Non-Detected Values
R - Reject (R) Non-Detected Values

Validator: _____ Date: 7/11/11

II. GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)

See DV Report

List all Instrument Performance Checks that are outside method QC tuning acceptance criteria.

Volatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action
Comments:							

Semivolatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action
Comments:							

If tuning compounds and criteria are different from those specified in CLP SOW OLM03.1, then the validator should include a copy of the method-specific tuning criteria with this worksheet.

Validator: _____

Date: 7/11/11

EPA-NE - Data Validation Worksheet
VOA/SV-III

III. INITIAL CALIBRATION - List all analytes that are outside calibration criteria. See DV Report

Date of ICAL	Instrument	Parameter	Matrix	Compound	% RSD	$\overline{RRF}$	Samples Affected	Action

Comments:

Validator: _____

Date: 7/11/11

EPA-NE - Data Validation Worksheet

VOA/SV-IV

See DV Report

IV. CONTINUING CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Date of CCAL	Instrument	Parameter	Matrix	Compound	%D	RRF	Samples Affected	Action

Comments:

Validator: _____

Date: 7/11/11

EPA-NE - Data Validation Worksheet

VOA/SV - Pest/PCB-V-A

V. BLANK ANALYSIS

See DV Report

List the blank contamination below. Concentration Level:____

Sampler: _____ Company: _____ Contacted: Yes No Date:_____

1. Laboratory: Method, Storage and Instrument Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

2. Field: Equipment (Rinsate), Trip and Bottle Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

Validator: _____ Date: 7/11/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-V-B

See DV Report

3. Blank Actions - List the maximum concentrations of blank compounds.

Compound	Type of Blank	Date Blank Sampled/Originated	Max. Conc. (units)	Action Level (units)	Sample QL	Samples Affected	Action

Comments: _____

Validator: _____ Date: 7/11/11

EPA-NE - Data Validation Worksheet
VOA-VI

See DV Report

VI. VOA SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Volatile Method QC Acceptance Criteria				
	Toluene-d_8	BFB	DCE-d_4	Other:	
OLM03.2	Water 88-110 Soil 84-138	Water 86-115 Soil 59-113	Water 76-114 Soil 70-121		
OLC02.1	NA	80-120	NA		
Other:					
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

Validator: JK

Date: 7/11/11

EPA-NE - Data Validation Worksheet
SV-VI

See DV Report

VI. SV SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Base/Neutral Method QC Acceptance Criteria					
	NBZ-d_5	2-FBP	TPH-d_{14}	1,2-DCB-d_4*	Other:	
OLM03.2	Water Soil 35-114 23-120	Water Soil 43-116 30-115	Water Soil 33-141 18-137	Water Soil 16-110 20-130		
OLC02.1	40-110	30-110	20-140	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

Method	Acid Method QC Acceptance Criteria					
	Phenol-d_5	2-FP	2,4,6-TBP	2-CP-d_4*	Other:	
OLM03.2	Water Soil 10-110 24-113	Water Soil 21-110 25-121	Water Soil 10-123 19-122	Water Soil 33-110 20-130		
OLC02.1	15-115	15-110	15-130	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

* Advisory Surrogates - OLM03.2

Validator: _____

Date: 7/11/11

EPA-NE - Data Validation Worksheet
VOA/SV-VII

See DV Report

VII. INTERNAL STANDARD PERFORMANCE

List the internal standards that are outside the area count and retention time method QC acceptance criteria.
IS Area Count method QC acceptance criteria: _____
IS Retention Time method QC acceptance criteria: _____

Sample Number (TR#)	Date and Time Analyzed	Instrument	Parameter	IS Outside Area Count and/or RT Criteria	__IS Area	RT Shift	Acceptable Range (IS area or RT shift)	Action

Validator: _____

Date: 7/11/11

See DV Report

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-VIII

VIII. MATRIX SPIKE/MATRIX SPIKE DUPLICATE - List all MS/MSD analytes that are outside method QC acceptance criteria.

Use a separate worksheet for each MS/MSD pair.

Sample # _____ Matrix _____ Concentration Level _____

Parameter	Compound	MS %Rec	MSD %Rec	RPD	Method QC Limits		Concentration			% RSD	Action
					% Rec	RPD	Unspiked Sample	MS	MSD		

Validator: _____

Date: 7/11/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-IX

IX. FIELD DUPLICATE PRECISION - List all field duplicate analytes that are outside criteria.

Use a separate worksheet for each field duplicate pair.

Sample Number _____ Duplicate Sample Number _____ Matrix _____ See DV Report

Parameter	Compound	Sample Conc.	Sample QL		Duplicate Conc.	Duplicate QL		RPD	QC Acceptance Criteria RPD or NA*	Action
			SQL	2xSQL		SQL	2xSQL			

* For instances where one duplicate result is ND (or reported less than the sample QL).

Does the MS/MSD data indicate acceptable laboratory precision? Y N

Comments: _____

_____

Sampler Name: _____ Contractor Name: _____ Date Contacted: _____

Reason for Contact and resolution obtained: _____

Validator: _____ Date: 7/11/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-X

X. SENSITIVITY CHECK (Method Detection Limit Study)

See DV Report

List all compounds, surrogates, and internal standards that are outside the MDL criteria.

- Has an appropriate MDL study been submitted with seven replicates for each compound and matrix of interest? Y N
- Date of Preparation/Analysis: _____ Within 1 year? Y N
- Instrument I.D.: _____ Same as samples? Y N
- Column I.D.: _____ Same as samples? Y N

Matrix	Compound	MDL > QL	Method QC Limits < 80% or > 120%	IS Outside Area Count and/or RT Criteria	RSD > 20%	Samples Affected	Action

If an MDL study has not been submitted, use only the LFB results to evaluate data.

(Laboratory Fortified Blank) - List all LFB compounds, surrogates and internal standards that are outside criteria.

- Has an appropriate and complete LFB been submitted at the proper frequency? Y N
- Does it contain all target compounds at the method-required QLs? Y N
- Was the LFB spiked with a standard from a source (vendor) independent of the calibration standard? Y N

Matrix	Compound	Method QC Limits < 60% or > 140% Other:	IS Outside Area Count and/or RT Criteria	Samples Affected	Action

Validator: _____ Date: 7/11/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XI

See DV Report

XI. ACCURACY CHECK (Performance Evaluation Results) - List all analytes that are outside criteria.

SDG No: _____ CASE: _____

Are more than one-half of the PES analytes within criteria for each parameter. **Y N**

PE Sample Number	Ampule Number	Parameter	Type of PES	Matrix	Analyte	Conc.	Region I EPA PES Scores*	Non-EPA PES Scores**	Samples Affected	Action

* For Region I PESs indicate the Region I PES Score Report Result: Action High; Action Low; TCL MISS; TCL CONTAMINANT; TIC HIT; TIC MISS; TIC CONTAMINANT

** For Non-EPA PESs indicate the Non-EPA PES Score: PES COMPOUND MISS; PES COMPOUND CONTAMINANT; PES COMPOUND HIT (% Recovery Limits)

Validator: _____ Date: 7/11/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XII

See DV Report

XII. TARGET COMPOUND IDENTIFICATION - List the analytes that are outside the acceptance criteria.

Sample Number	Compound	___MS Ions	____RRT	Action

Validator: _____

Date: 7/11/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XIII

XIII. SAMPLE QUANTITATION

See DV Report

Recalculate, from the raw data, the concentrations for one positive detect and one reported sample quantitation limit for a non-detect in a diluted sample or soil sample per fraction. (Note: Although Section XIII, C.1.a, requires that one calculation for each fraction in each sample be performed, the validator is only required to reproduce an example, for each fraction, of one positive detect and one sample quantitation limit calculation on this worksheet.)

Do all soil/sediment samples have % solids greater than 30%? Y N
If no, list sample numbers_____

Fraction		Calculation
VOA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
BNA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
Pesticide/PCB		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		

Validator:

Date: 7/11/11

EPA-NE - Data Validation Worksheet
VOA/SV-XIV

XIV. TENTATIVELY IDENTIFIED COMPOUNDS (TICs)

See DV Report

List the 5 TICs having the highest concentration for each sample parameter.

Sample Number	Parameter	Compound	RRT	Est. Conc.	Action

Validator: _____

Date: 7/11/11

EPA-NE - Data Validation Worksheet
VOA/SV-XV

See DV Report

XV. SEMIVOLATILE CLEANUP - List all analytes that are outside method cleanup QC criteria.

Cleanup Procedure	Instrument # or Lot #	Date/Time GPC Calibrated or Check Solution Analyzed	Compound	% Rec	QC Limits	Samples Affected	Action

Did the GPC column meet; resolution requirements? Y or N
peak shape requirements? Y or N
retention time shift requirements? Y or N

Was the GPC calibration, Silica Gel cleanup checked at the method required frequency with correct compounds and concentrations? Y or N

Were all compounds less than QL for the GPC/Silica Gel/Acid-Partition blank? Y or N

Did the blank surrogate recoveries and IS area counts and RTs (if added) meet method QC acceptance criteria? Y or N

Comments: _____

Validator: _____ Date: 7/11/11

APPENDIX D

SUPPORT DOCUMENTATION

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	%	2W-SD-SD133-0001	SE2829-24	NM	04/05/2011	05/25/2011	06/03/2011	50	9	59
SIM	%	2W-SD-SD137-0001	SE2829-7	NM	04/05/2011	05/25/2011	06/01/2011	50	7	57
SIM	%	2W-SD-SD137-0001	SE2829-7DL	NM	04/05/2011	05/25/2011	06/06/2011	50	12	62
SIM	%	2W-SD-SD139-0001	SE2829-30	NM	04/06/2011	05/26/2011	06/03/2011	50	8	58
SIM	%	2W-SD-SD141-0001	SE2829-11	NM	04/05/2011	05/26/2011	06/02/2011	51	7	58
SIM	%	2W-SD-SD153-0001	SE2829-1	NM	04/04/2011	05/25/2011	06/01/2011	51	7	58
SIM	%	2W-SD-SD143-0001	SE2829-27	NM	04/06/2011	05/26/2011	06/03/2011	50	8	58
SIM	%	2W-SD-SD145-0001	SE2829-28DL	NM	04/06/2011	05/26/2011	06/06/2011	50	11	61
SIM	%	2W-SD-SD145-0001	SE2829-28	NM	04/06/2011	05/26/2011	06/03/2011	50	8	58
SIM	%	2W-SD-SD132-0001	SE2829-29	NM	04/06/2011	05/26/2011	06/03/2011	50	8	58
SIM	%	2W-SD-SD109-0001	SE2829-19	NM	04/06/2011	05/25/2011	06/03/2011	49	9	58
SIM	%	2W-SD-SD143-0001	SE2829-27DL	NM	04/06/2011	05/26/2011	06/06/2011	50	11	61
SIM	%	2W-SD-SD131-0001	SE2829-25	NM	04/05/2011	05/25/2011	06/06/2011	50	12	62
SIM	%	2W-SD-SD129-0001	SE2829-26	NM	04/06/2011	05/25/2011	06/03/2011	49	9	58
SIM	%	2W-SD-SD128-0001	SE2829-8	NM	04/05/2011	05/25/2011	06/06/2011	50	12	62
SIM	%	2W-SD-SD125-0001	SE2829-10	NM	04/05/2011	05/26/2011	06/02/2011	51	7	58
SIM	%	2W-SD-SD124-0001	SE2829-9	NM	04/05/2011	05/25/2011	06/02/2011	50	8	58
SIM	%	2W-SD-SD114-0001	SE2829-31	NM	04/06/2011	05/26/2011	06/04/2011	50	9	59

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	%	2W-SD-SD111-0001	SE2829-22	NM	04/06/2011	05/26/2011	06/06/2011	50	11	61
SIM	%	2W-SD-SD106-0001	SE2829-20	NM	04/06/2011	05/25/2011	06/03/2011	49	9	58
SIM	%	2W-SD-SD102-0001	SE2829-18	NM	04/06/2011	06/07/2011	06/07/2011	62	0	62
SIM	%	2W-SD-SD155-0001	SE2829-3	NM	04/04/2011	06/02/2011	06/02/2011	59	0	59
SIM	%	2W-SD-SD104-0001	SE2829-17	NM	04/06/2011	06/07/2011	06/07/2011	62	0	62
SIM	%	2W-SD-SD113-0001	SE2829-23	NM	04/06/2011	05/25/2011	06/03/2011	49	9	58
SIM	%	2W-SD-SD101-0001	SE2829-21	NM	04/06/2011	05/25/2011	06/03/2011	49	9	58
SIM	%	2W-SD-SD156-0001	SE2829-2	NM	04/04/2011	05/25/2011	06/01/2011	51	7	58
SIM	%	2W-SD-SD93-0001	SE2829-13	NM	04/07/2011	05/25/2011	06/02/2011	48	8	56
SIM	%	2W-SD-SD92-0001	SE2829-12	NM	04/07/2011	05/25/2011	06/02/2011	48	8	56
SIM	%	2W-SD-SD91-0001	SE2829-16	NM	04/07/2011	05/26/2011	06/03/2011	49	8	57
SIM	%	2W-SD-SD86-0001	SE2829-15	NM	04/07/2011	05/26/2011	06/02/2011	49	7	56
SIM	%	2W-SD-SD85-0001	SE2829-14	NM	04/07/2011	05/25/2011	06/02/2011	48	8	56
SIM	%	2W-SD-SD160-0001	SE2829-5	NM	04/04/2011	05/25/2011	06/02/2011	51	8	59
SIM	%	2W-SD-SD157-0001	SE2829-4	NM	04/04/2011	05/26/2011	06/02/2011	52	7	59
SIM	UG/KG	2W-SD-SD143-0001	SE2829-27	NM	04/06/2011	05/26/2011	06/03/2011	50	8	58
SIM	UG/KG	2W-SD-SD157-0001	SE2829-4	NM	04/04/2011	05/26/2011	06/02/2011	52	7	59
SIM	UG/KG	2W-SD-SD92-0001	SE2829-12	NM	04/07/2011	05/25/2011	06/02/2011	48	8	56

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/KG	2W-SD-SD91-0001	SE2829-16DL	NM	04/07/2011	05/26/2011	06/06/2011	49	11	60
SIM	UG/KG	2W-SD-SD91-0001	SE2829-16	NM	04/07/2011	05/26/2011	06/03/2011	49	8	57
SIM	UG/KG	2W-SD-SD86-0001	SE2829-15	NM	04/07/2011	05/26/2011	06/02/2011	49	7	56
SIM	UG/KG	2W-SD-SD85-0001	SE2829-14	NM	04/07/2011	05/25/2011	06/02/2011	48	8	56
SIM	UG/KG	2W-SD-SD160-0001	SE2829-5	NM	04/04/2011	05/25/2011	06/02/2011	51	8	59
SIM	UG/KG	2W-SD-SD92-0001	SE2829-12DL	NM	04/07/2011	05/25/2011	06/06/2011	48	12	60
SIM	UG/KG	2W-SD-SD156-0001	SE2829-2	NM	04/04/2011	05/25/2011	06/01/2011	51	7	58
SIM	UG/KG	2W-SD-SD155-0001	SE2829-3	NM	04/04/2011	06/02/2011	06/02/2011	59	0	59
SIM	UG/KG	2W-SD-SD153-0001	SE2829-1	NM	04/04/2011	05/25/2011	06/01/2011	51	7	58
SIM	UG/KG	2W-SD-SD93-0001	SE2829-13	NM	04/07/2011	05/25/2011	06/02/2011	48	8	56
SIM	UG/KG	2W-SD-SD145-0001	SE2829-28	NM	04/06/2011	05/26/2011	06/03/2011	50	8	58
SIM	UG/KG	2W-SD-SD143-0001	SE2829-27DL	NM	04/06/2011	05/26/2011	06/06/2011	50	11	61
SIM	UG/KG	2W-SD-SD139-0001	SE2829-30	NM	04/06/2011	05/26/2011	06/03/2011	50	8	58
SIM	UG/KG	2W-SD-SD137-0001	SE2829-7DL	NM	04/05/2011	05/25/2011	06/06/2011	50	12	62
SIM	UG/KG	2W-SD-SD145-0001	SE2829-28DL	NM	04/06/2011	05/26/2011	06/06/2011	50	11	61
SIM	UG/KG	2W-SD-SD111-0001	SE2829-22	NM	04/06/2011	05/26/2011	06/06/2011	50	11	61
SIM	UG/KG	2W-SD-SD141-0001	SE2829-11	NM	04/05/2011	05/26/2011	06/02/2011	51	7	58
SIM	UG/KG	2W-SD-SD102-0001	SE2829-18	NM	04/06/2011	06/07/2011	06/07/2011	62	0	62

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/KG	2W-SD-SD101-0001	SE2829-21	NM	04/06/2011	05/25/2011	06/03/2011	49	9	58
SIM	UG/KG	2W-SD-SD104-0001	SE2829-17	NM	04/06/2011	06/07/2011	06/07/2011	62	0	62
SIM	UG/KG	2W-SD-SD106-0001	SE2829-20	NM	04/06/2011	05/25/2011	06/03/2011	49	9	58
SIM	UG/KG	2W-SD-SD106-0001	SE2829-20DL	NM	04/06/2011	05/25/2011	06/06/2011	49	12	61
SIM	UG/KG	2W-SD-SD93-0001	SE2829-13DL	NM	04/07/2011	05/25/2011	06/06/2011	48	12	60
SIM	UG/KG	2W-SD-SD109-0001	SE2829-19	NM	04/06/2011	05/25/2011	06/03/2011	49	9	58
SIM	UG/KG	2W-SD-SD113-0001	SE2829-23	NM	04/06/2011	05/25/2011	06/03/2011	49	9	58
SIM	UG/KG	2W-SD-SD131-0001	SE2829-25	NM	04/05/2011	05/25/2011	06/06/2011	50	12	62
SIM	UG/KG	2W-SD-SD137-0001	SE2829-7	NM	04/05/2011	05/25/2011	06/01/2011	50	7	57
SIM	UG/KG	2W-SD-SD133-0001	SE2829-24	NM	04/05/2011	05/25/2011	06/03/2011	50	9	59
SIM	UG/KG	2W-SD-SD132-0001	SE2829-29	NM	04/06/2011	05/26/2011	06/03/2011	50	8	58
SIM	UG/KG	2W-SD-SD114-0001	SE2829-31	NM	04/06/2011	05/26/2011	06/04/2011	50	9	59
SIM	UG/KG	2W-SD-SD129-0001	SE2829-26	NM	04/06/2011	05/25/2011	06/03/2011	49	9	58
SIM	UG/KG	2W-SD-SD128-0001	SE2829-8	NM	04/05/2011	05/25/2011	06/06/2011	50	12	62
SIM	UG/KG	2W-SD-SD125-0001	SE2829-10	NM	04/05/2011	05/26/2011	06/02/2011	51	7	58
SIM	UG/KG	2W-SD-SD124-0001	SE2829-9	NM	04/05/2011	05/25/2011	06/02/2011	50	8	58
SIM	UG/KG	2W-SD-SD132-0001	SE2829-29DL	NM	04/06/2011	05/26/2011	06/06/2011	50	11	61
PCB	%	2W-SD-SD156-0001	SE2829-2	NM	04/04/2011	05/26/2011	06/03/2011	52	8	60

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	%	2W-SD-SD157-0001	SE2829-4	NM	04/04/2011	05/26/2011	06/03/2011	52	8	60
PCB	%	2W-SD-SD155-0001	SE2829-3	NM	04/04/2011	05/26/2011	06/03/2011	52	8	60
PCB	%	2W-SD-SD139-0001	SE2829-30	NM	04/06/2011	06/09/2011	06/10/2011	64	1	65
PCB	%	2W-SD-SD153-0001	SE2829-1	NM	04/04/2011	05/26/2011	06/03/2011	52	8	60
PCB	%	2W-SD-SD145-0001	SE2829-28	NM	04/06/2011	06/09/2011	06/10/2011	64	1	65
PCB	%	2W-SD-SD141-0001	SE2829-11	NM	04/05/2011	05/26/2011	06/03/2011	51	8	59
PCB	%	2W-SD-SD160-0001	SE2829-5	NM	04/04/2011	05/26/2011	06/03/2011	52	8	60
PCB	%	2W-SD-SD133-0001	SE2829-24	NM	04/05/2011	05/26/2011	06/03/2011	51	8	59
PCB	%	2W-SD-SD132-0001	SE2829-29	NM	04/06/2011	06/09/2011	06/10/2011	64	1	65
PCB	%	2W-SD-SD131-0001	SE2829-25	NM	04/05/2011	06/09/2011	06/10/2011	65	1	66
PCB	%	2W-SD-SD129-0001	SE2829-26	NM	04/06/2011	05/26/2011	06/06/2011	50	11	61
PCB	%	2W-SD-SD128-0001	SE2829-8	NM	04/05/2011	05/26/2011	06/03/2011	51	8	59
PCB	%	2W-SD-SD125-0001	SE2829-10	NM	04/05/2011	05/26/2011	06/03/2011	51	8	59
PCB	%	2W-SD-SD124-0001	SE2829-9	NM	04/05/2011	05/26/2011	06/03/2011	51	8	59
PCB	%	2W-SD-SD114-0001	SE2829-31	NM	04/06/2011	06/09/2011	06/10/2011	64	1	65
PCB	%	2W-SD-SD143-0001	SE2829-27	NM	04/06/2011	05/26/2011	06/06/2011	50	11	61
PCB	%	2W-SD-SD137-0001	SE2829-7	NM	04/05/2011	05/26/2011	06/03/2011	51	8	59
PCB	UG/KG	2W-SD-SD133-0001	SE2829-24	NM	04/05/2011	05/26/2011	06/03/2011	51	8	59

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	2W-SD-SD132-0001	SE2829-29	NM	04/06/2011	06/09/2011	06/10/2011	64	1	65
PCB	UG/KG	2W-SD-SD131-0001	SE2829-25	NM	04/05/2011	06/09/2011	06/10/2011	65	1	66
PCB	UG/KG	2W-SD-SD129-0001	SE2829-26	NM	04/06/2011	05/26/2011	06/06/2011	50	11	61
PCB	UG/KG	2W-SD-SD128-0001	SE2829-8	NM	04/05/2011	05/26/2011	06/03/2011	51	8	59
PCB	UG/KG	2W-SD-SD125-0001	SE2829-10	NM	04/05/2011	05/26/2011	06/03/2011	51	8	59
PCB	UG/KG	2W-SD-SD137-0001	SE2829-7	NM	04/05/2011	05/26/2011	06/03/2011	51	8	59
PCB	UG/KG	2W-SD-SD114-0001	SE2829-31	NM	04/06/2011	06/09/2011	06/10/2011	64	1	65
PCB	UG/KG	2W-SD-SD155-0001	SE2829-3	NM	04/04/2011	05/26/2011	06/03/2011	52	8	60
PCB	UG/KG	2W-SD-SD124-0001	SE2829-9	NM	04/05/2011	05/26/2011	06/03/2011	51	8	59
PCB	UG/KG	2W-SD-SD139-0001	SE2829-30	NM	04/06/2011	06/09/2011	06/10/2011	64	1	65
PCB	UG/KG	2W-SD-SD141-0001	SE2829-11	NM	04/05/2011	05/26/2011	06/03/2011	51	8	59
PCB	UG/KG	2W-SD-SD143-0001	SE2829-27	NM	04/06/2011	05/26/2011	06/06/2011	50	11	61
PCB	UG/KG	2W-SD-SD143-0001	SE2829-27RE	NM	04/06/2011	06/09/2011	06/10/2011	64	1	65
PCB	UG/KG	2W-SD-SD153-0001	SE2829-1	NM	04/04/2011	05/26/2011	06/03/2011	52	8	60
PCB	UG/KG	2W-SD-SD156-0001	SE2829-2	NM	04/04/2011	05/26/2011	06/03/2011	52	8	60
PCB	UG/KG	2W-SD-SD157-0001	SE2829-4	NM	04/04/2011	05/26/2011	06/03/2011	52	8	60
PCB	UG/KG	2W-SD-SD160-0001	SE2829-5	NM	04/04/2011	05/26/2011	06/03/2011	52	8	60
PCB	UG/KG	2W-SD-SD145-0001	SE2829-28	NM	04/06/2011	06/09/2011	06/10/2011	64	1	65

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	%	2W-SD-SD129-0001	SE2829-26	NM	04/06/2011	05/26/2011	06/07/2011	50	12	62
PEST	%	2W-SD-SD155-0001	SE2829-3	NM	04/04/2011	05/26/2011	06/07/2011	52	12	64
PEST	%	2W-SD-SD125-0001	SE2829-10DL	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63
PEST	%	2W-SD-SD114-0001	SE2829-31	NM	04/06/2011	05/26/2011	06/07/2011	50	12	62
PEST	%	2W-SD-SD160-0001	SE2829-5	NM	04/04/2011	05/26/2011	06/07/2011	52	12	64
PEST	%	2W-SD-SD156-0001	SE2829-2	NM	04/04/2011	05/26/2011	06/07/2011	52	12	64
PEST	%	2W-SD-SD153-0001	SE2829-1	NM	04/04/2011	05/26/2011	06/07/2011	52	12	64
PEST	%	2W-SD-SD145-0001	SE2829-28DL	NM	04/06/2011	06/09/2011	06/10/2011	64	1	65
PEST	%	2W-SD-SD143-0001	SE2829-27DL	NM	04/06/2011	05/26/2011	06/07/2011	50	12	62
PEST	%	2W-SD-SD128-0001	SE2829-8	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63
PEST	%	2W-SD-SD139-0001	SE2829-30DL	NM	04/06/2011	05/26/2011	06/07/2011	50	12	62
PEST	%	2W-SD-SD137-0001	SE2829-7DL	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63
PEST	%	2W-SD-SD133-0001	SE2829-24	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63
PEST	%	2W-SD-SD132-0001	SE2829-29DL2	NM	04/06/2011	05/26/2011	06/08/2011	50	13	63
PEST	%	2W-SD-SD131-0001	SE2829-25	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63
PEST	%	2W-SD-SD141-0001	SE2829-11DL	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63
PEST	%	2W-SD-SD157-0001	SE2829-4	NM	04/04/2011	05/26/2011	06/07/2011	52	12	64
PEST	%	2W-SD-SD124-0001	SE2829-9	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	UG/KG	2W-SD-SD141-0001	SE2829-11DL	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63
PEST	UG/KG	2W-SD-SD143-0001	SE2829-27DL	NM	04/06/2011	05/26/2011	06/07/2011	50	12	62
PEST	UG/KG	2W-SD-SD145-0001	SE2829-28DL	NM	04/06/2011	06/09/2011	06/10/2011	64	1	65
PEST	UG/KG	2W-SD-SD153-0001	SE2829-1	NM	04/04/2011	05/26/2011	06/07/2011	52	12	64
PEST	UG/KG	2W-SD-SD155-0001	SE2829-3	NM	04/04/2011	05/26/2011	06/07/2011	52	12	64
PEST	UG/KG	2W-SD-SD156-0001	SE2829-2	NM	04/04/2011	05/26/2011	06/07/2011	52	12	64
PEST	UG/KG	2W-SD-SD160-0001	SE2829-5	NM	04/04/2011	05/26/2011	06/07/2011	52	12	64
PEST	UG/KG	2W-SD-SD139-0001	SE2829-30DL	NM	04/06/2011	05/26/2011	06/07/2011	50	12	62
PEST	UG/KG	2W-SD-SD124-0001	SE2829-9DL	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63
PEST	UG/KG	2W-SD-SD157-0001	SE2829-4	NM	04/04/2011	05/26/2011	06/07/2011	52	12	64
PEST	UG/KG	2W-SD-SD137-0001	SE2829-7DL	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63
PEST	UG/KG	2W-SD-SD133-0001	SE2829-24	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63
PEST	UG/KG	2W-SD-SD132-0001	SE2829-29DL2	NM	04/06/2011	05/26/2011	06/08/2011	50	13	63
PEST	UG/KG	2W-SD-SD131-0001	SE2829-25	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63
PEST	UG/KG	2W-SD-SD129-0001	SE2829-26DL2	NM	04/06/2011	05/26/2011	06/08/2011	50	13	63
PEST	UG/KG	2W-SD-SD129-0001	SE2829-26	NM	04/06/2011	05/26/2011	06/07/2011	50	12	62
PEST	UG/KG	2W-SD-SD128-0001	SE2829-8DL	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63
PEST	UG/KG	2W-SD-SD125-0001	SE2829-10DL	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	UG/KG	2W-SD-SD124-0001	SE2829-9	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63
PEST	UG/KG	2W-SD-SD114-0001	SE2829-31	NM	04/06/2011	05/26/2011	06/07/2011	50	12	62
PEST	UG/KG	2W-SD-SD128-0001	SE2829-8	NM	04/05/2011	05/26/2011	06/07/2011	51	12	63

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4186 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB# 8631 2526 3713		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒ RUSH TAT ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: PAHs / PCBs w. SELECT PESTICIDES / METALS w. SELECT	COMMENTS
		SE168.45 GW							CONTAINER TYPE: G G; PRESERVATIVE USED: 4°C 4°C	
4/04	0952	2W-SD-SD147-0001	SD 147	0	0.33	SD	G	2	1 / 1	PHASE I ANALIZE
4/04	1012	2W-SD-SD148-0001	SD 148	0	0.33	SD	G	2	* 1 / ** 1	SEE COMMENT
4/04	1030	2W-SD-SD149-0001	SD 149	0	0.33	SD	G	2	1 / 1	PHASE I ANALIZE
4/04	1050	2W-SD-SD152-0001	SD 152	0	0.33	SD	G	2	* 1 / [redacted] 1 (TR)	PHASE I ANALIZE
4/04	1120	2W-SD-SD151-0001	SD 151	0	0.33	SD	G	2	* 1 / ** 1	SEE COMMENT
(1) ✓ 4/04	1145	2W-SD-SD153-0001	SD 153	0	0.33	SD	G	2	* 1 / ** 1	↓
4/04	1205	2W-SD-SD154-0001	SD 154	0	0.33	SD	G	2	1 / 1	PHASE I ANALIZE
4/04	1415	2W-SD-SD161-0001	SD 161	0	0.33	SD	G	2	1 / 1	↓
4/04	1430	2W-SD-SD159-0001	SD 159	0	0.33	SD	G	2	1 / 1	
4/04	1450	2W-SD-SD158-0001	SD 158	0	0.33	SD	G	2	1 / 1	↓
2 ✓ 4/04	1500	2W-SD-SD156-0001	SD 156	0	0.33	SD	G	2	* 1 / ** 1	SEE COMMENT
3 ✓ 4/04	1515	2W-SD-SD155-0001	SD 155	0	0.33	SD	G	2	* 1 / ** 1	↓
4 ✓ 4/04	1525	2W-SD-SD157-0001	SD 157	0	0.33	SD	G	2	* 1 / ** 1	↓

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	4-05-11	1600	1. RECEIVED BY FED EX	4-05-11	1600
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	4-6-11	0930
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD " " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

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4100000 4100000

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4187 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Tony Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB # 8631 2526 3713		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G G G
PRESERVATIVE USED: 4°C | 4°C | 4°C

	DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: PAHs & SELECT PESTICIDES	PCBs & SELECT METALS	PAHs	COMMENTS
			SE16845 GW										
5	4/04	1540	2W-SD-SD160-0001	SD 160	0	0.33	SD	G	2	* 1	** 1		SEE COMMENT
6	4/04	1555	2W-SD-SD162-0001	SD 162	0	0.33	SD	G	2	* 1	** 1		↓
	4/04	0000	FD-040411-01	QC	0	0.33	SD	G	2	1	1		PHASE I ANALIZE
	4/05	0815	2W-SD-SD138-0001	SD 138	0	0.33	SD	G	2	1	1		↓
7	4/05	0840	2W-SD-SD137-0001	SD 137	0	0.33	SD	G	2	* 1	** 1		SEE COMMENT
8	4/05	0855	2W-SD-SD128-0001	SD 128	0	0.33	SD	G	2	* 1	** 1		↓
9	4/05	0925	2W-SD-SD124-0001	SD 124	0	0.33	SD	G	2	* 1	** 1		↓
10	4/05	0950	2W-SD-SD125-0001	SD 125	0	0.33	SD	G	2	* 1	** 1		↓
	4/05	1015	2W-SD-SD118-0001	SD 118	0	0.33	SD	G	2	1	1		PHASE I ANALIZE
	4/05	1040	2W-SD-SD119-0001	SD 119	0	0.33	SD	G	2	1	1		↓
	4/05	1100	2W-SD-SD120-0001	SD 120	0	0.33	SD	G	2	1	1		↓
	4/05	1140	2W-SD-SD126-0001	SD 126	0	0.33	SD	G (TB)	2 1	+ (TIC)		1	↓
	4/05	1150	2W-SD-SD121-0001	SD 121	0	0.33	SD	G	2	1	1		↓

1. RELINQUISHED BY Tony Rojahn	DATE 4-05-11	TIME 1600	1. RECEIVED BY FED EX	DATE 4-05-11	TIME 1600
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-6-11	TIME 0930
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER to 4°C & HOLD " " " .

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

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8100000

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4188 | PAGE 1 OF 1

PROJECT NO: 112602625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB# 8631 2526 3713		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE168X5 GW

DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS: PAHs & SELECT METALS	TYPE OF ANALYSIS: PESTICIDES/PCBs & SELECT METALS	COMMENTS
									G	4°C			
2011									G	4°C			
4/05	1216	2W-SD-SD141-0001	SD 141	0	0.33	SD	G	2	*1	**1			SEE COMMENT
4/05	1235	2W-SD-SD136-0001	SD	0	0.33	SD	G	2	1	1			PHASE I ANALYZE
4/05	1250	2W-SD-SD134-0001	SD	0	0.33	SD	G	2	1	1			↓

1. RELINQUISHED BY Tony Rojahn	DATE 4-05-11	TIME 1600	1. RECEIVED BY FED EX	DATE 4-05-11	TIME 1600
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-6-11	TIME 0930
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD " " " .

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

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FORM NO. TINUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4093 | PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112602625	NSB NEW LONDON	A. BERNHARDT	412 921 8433	KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
Tony Rojahn		T. ROJAHN	412 9218857	600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX AB#	8747 4934 2822	SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE 1779

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS PAHs	COMMENTS
									G	4°C		
4/06	0000	FD 040611-01	QC	0	4"	SD	G	1	1			
4/07	0830	2W-SD-SD99-0001	SD_{99}	0	4	SD	G	1	1			
12 ✓ 4/07	0835	2W-SD-SD92-0001	SD_{92}	0	4	SD	G	1	*1			
4/07	0840	2W-SD-SD90-0001	SD_{90}	0	4	SD	G	1	1			
4/07	0845	2W-SD-SD94-0001	SD_{94}	0	4	SD	G	1	1			
13 ✓ 4/07	0850	2W-SD-SD93-0001	SD_{93}	0	4	SD	G	1	*1			
4/07	0855	2W-SD-SD96-0001	SD_{96}	0	4	SD	G	1	1			
4/07	1043	2W-SD-SD97-0001	SD_{97}	0	4	SD	G	1	1			
4/07	1050	2W-SD-SD98-0001	SD_{98}	0	4	SD	G	1	1			
4/07	1055	2W-SD-SD95-0001	SD_{95}	0	4	SD	G	1	1			
14 ✓ 4/07	1100	2W-SD-SD85-0001	SD_{85}	0	4	SD	G	1	*1			
4/07	1105	2W-SD-SD88-0001	SD_{88}	0	4	SD	G	1	1			
15 ✓ 4/07	1110	2W-SD-SD86-0001	SD_{86}	0	4	SD	G	1	*1			

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY: Tony Rojahn	4-07-11	1700	1. RECEIVED BY: FED EX	4-07-11	1700
2. RELINQUISHED BY:	DATE	TIME	2. RECEIVED BY:	4-8-11	1000
3. RELINQUISHED BY:	DATE	TIME	3. RECEIVED BY:	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

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TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4094 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Terry Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB # 8747 4934 2822		CITY, STATE SCARBOROUGH, ME 04074 (TR)

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (IN INCHES)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS PAHs	COMMENTS
		SE1779							G	4°C		
4/07	1115	2W-SD-SD87-0001	SD_{87}	0	4"	SD	G	1	1			
4/07	1120	2W-SD-SD89-0001	SD_{89}	0	4	SD	G	1	1			
4/07	1125	2W-SD-SD91-0001	SD_{91}	0	4	SD	G	1	*1			
4/07	1130	2W-SD-SD100-0001	SD_{100}	0	4	SD	G	1	1			
4/07	0000	FD040711-01	QC	0	4	SD	G	1	1			

16 ✓

1. RELINQUISHED BY Terry Rojahn	DATE 4-07-11	TIME 1700	1. RECEIVED BY FED EX	DATE 4-07-11	TIME 1700
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-8-11	TIME 1000
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

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120000 20000 1

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4092 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Terry Royahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB # 8747 4934 2822		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE1778 9 G

	DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G): G	PRESERVATIVE USED: 4°C	TYPE OF ANALYSIS: PAHs							COMMENTS
7 ✓	4/06	1425	2W-SD-SD104-0001	SD104	0	4"	SD	G	1	*1									
8 ✓	4/06	1440	2W-SD-SD102-0001	SD102	0	4	SD	G	1	*1									
	4/06	1455	2W-SD-SD103-0001	SD103	0	4	SD	G	1	1									
	4/06	1510	2W-SD-SD105-0001	SD105	0	4	SD	G	1	1									
9 ✓	4/06	1520	2W-SD-SD109-0001	SD109	0	4	SD	G	1	*1									
	4/06	1530	2W-SD-SD110-0001	SD110	0	4	SD	G	1	1									
20 ✓	4/06	1540	2W-SD-SD106-0001	SD106	0	4	SD	G	1	*1									
	4/06	1550	2W-SD-SD108-0001	SD108	0	4	SD	G	1	1									
21 ✓	4/06	1605	2W-SD-SD101-0001	SD101	0	4	SD	G	1	*1									
	4/06	1610	2W-SD-SD107-0001	SD107	0	4	SD	G	1	1									
18 ✓	4/06	1615	2W-SD-SD111-0001	SD111	0	4	SD	G	1	*1									
23 ✓	4/06	1620	2W-SD-SD113-0001	SD113	0	4	SD	G	1	*1									
	4/06	1630	2W-SD-SD112-0001	SD112	0	4	SD	G	2	2									RUN MS/MSD

1. RELINQUISHED BY Terry Royahn	DATE 4-07-11	TIME 1700	1. RECEIVED BY FED EX	DATE 4-07-11	TIME 1700
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-8-11	TIME 10:00
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

27000 27000 27000 27000

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4189 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Terry Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB# 8747 4934 2822		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE1778

DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT) INCHES	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)								COMMENTS
									G	G							
									4°C	4°C							
									TYPE OF ANALYSIS: PAHs & SELECT PESTICIDES PCBs & SELECT METALS								
4/05	1630	2W-SD-SD150-0001	SD150	0	4"	SD	G	2	*1	**1							
4/05	1635	2W-SD-SD146-0001	SD146	0	4	SD	G	2	1	1							
4/05	1641	2W-SD-SD144-0001	SD144	0	4	SD	G	2	1	1							
4/05	1651	2W-SD-SD140-0001	SD140	0	4	SD	G	3	2	1							RUN MS/MSD
4/05	1700	2W-SD-SD133-0001	SD133	0	4	SD	G	2	*1	**1							
4/05	1705	2W-SD-SD131-0001	SD131	0	4	SD	G	2	*1	**1							
4/05	1710	2W-SD-SD127-0001	SD127	0	4	SD	G	3	2	1							RUN MS/MSD
4/05	1715	2W-SD-SD122-0001	SD122	0	4	SD	G	2	1	1							
4/05	1725	2W-SD-SD130-0001	SD130	0	4	SD	G	2	1	1							
4/05	0000	FD-040511-01	QC	0	4	SD	G	2	1	1							
4/05	0000	FD-040511-02	QC	0	4	SD	G	2	1	1							
4/06	0835	2W-SD-SD129-0001	SD129	0	4	SD	G	2	*1	**1							
4/06	0910	2W-SD-SD123-0001	SD123	0	4	SD	G	3	2	1							RUN MS/MSD

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Terry Rojahn	4-07-11	1700	1. RECEIVED BY FED EX	4-07-11	1700
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	4-8-11	10:00
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER to 4°C & HOLD " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

TETRA TECH NUS, INC. — CHAIN OF CUSTODY — NUMBER 4190 — PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER: A. BERNHARDT	PHONE NUMBER: 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE): [signature]		FIELD OPERATIONS LEADER: T. ROJAHN	PHONE NUMBER: 412 921 8857	ADDRESS: 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER: FED EX AB# 8747 4934 2822		CITY, STATE: SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE1778

CONTAINER TYPE PLASTIC (P) or GLASS (G): G, G
PRESERVATIVE USED: 4°C, 4°C
TYPE OF ANALYSIS: PAHS & SELECT PESTICIDES; PCBS & SELECT METALS

	DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (INCHES)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	PAHS & SELECT PESTICIDES	PCBS & SELECT METALS	COMMENTS
27 ✓	4/06	0925	2W-SD-SD143-0001	SD 143	0	4"	SD	G	2	*1	**1	
28 ✓	4/06	0945	2W-SD-SD145-0001	SD 145	0	4	SD	G	2	*1	**1	
	4/06	1015	2W-SD-SD135-0001	SD 135	0	4	SD	G	2	1	1	
9 ✓	4/06	1030	2W-SD-SD132-0001	SD 132	0	4	SD	G	2	*1	**1	
	4/06	1050	2W-SD-SD142-0001	SD 142	0	4	SD	G	2	1	1	
30 ✓	4/06	1100	2W-SD-SD139-0001	SD 139	0	4	SD	G	2	*1	**1	
	4/06	1155	2W-SD-SD116-0001	SD 116	0	4	SD	G	2	1	1	
31 ✓	4/06	1215	2W-SD-SD114-0001	SD 114	0	4	SD	G	2	*1	**1	
	4/06	1230	2W-SD-SD117-0001	SD 117	0	4	SD	G	2	1	1	
	4/06	1240	2W-SD-SD115-0001	SD 115	0	4	SD	G	2	*1	**1	

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY: [signature]	4-07-11	1700	1. RECEIVED BY: FED EX	4-07-11	1700
2. RELINQUISHED BY			2. RECEIVED BY: [signature]	4-8-11	10:00
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER to 4°C & HOLD " " " .

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

0100088
4200000

Katahdin Analytical Services, Inc. — Sample Receipt Condition Report

Client: Tetra Tech	KAS PM: ~~SMS~~ KAP	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: FedEx
KAS Work Order#: SE1684S	KIMS Review By: DN	Received By: GN
SDG #:	Cooler: 1 of 2	Date/Time Rec.: 4-6-11/0930

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 1.2
Samples received at <6 °C w/o freezing?	—				Note: Not required for metals analysis.
Ice packs or Ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				—	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

0000009

Katahdin Analytical Services, Inc. **Sample Receipt Condition Report**

Client: Tetra Tech	KAS PM: SM KAP	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: Fed-Ex
KAS Work Order#: 5E1685	KIMS Review By: GN	Received By: GN
SDG #: GN	Cooler: 2 of 2	Date/Time Rec.: 4-6-11/0930

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?					
5. Temperature Blanks present? If not, take temperature of any sample w/.IR gun.	✓				Temp (°C): 2.0
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓			✓	The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

0000010

Client: Fibra Tech	KAS PM: KAP	Sampled By: Client
Project:	KIMS Entry By: GV	Delivered By: Fed-Ex
KAS Work Order#: SE1778/SE1779	KIMS Review By:	Received By: GV
SDG #:	Cooler: 1 of 3	Date/Time Rec.: 4-8-11/1000

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 1.4
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

0000010

Client: Tetra Tech	KAS PM: KAP	Sampled By: Client	
Project:	KIMS Entry By: GN	Delivered By: Fed-Ex	
KAS Work Order#: SE1778/SE1779	KIMS Review By:	Received By: GN	
SDG #:	Cooler: 2 of 3	Date/Time Rec.: 4-8-11/10:00	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?			✓		in cooler 1
3. Chain of Custody signed by client?			✓		
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/IR gun.		✓			Temp (°C): 2.2
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

0000011

Client:	Tetra Tech	KAS PM:	KAP	Sampled By:	Client
Project:		KIMS Entry By:	GN	Delivered By:	FedEx
KAS Work Order#:	SE177	KIMS Review By:		Received By:	GN
SDG #:		Cooler: 3 of 3		Date/Time Rec.:	4-8-11/10:00

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?			-		in cooler 1
3. Chain of Custody signed by client?			✓		
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/.IR gun.	✓				Temp (°C): 3.7
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: Aqueous: No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

0000012

Jennifer Obrin

From: Kelly Perkins [kperkins@katahdinlab.com]
Sent: Wednesday, June 08, 2011 1:09 PM
To: 'Peter Lemay'; 'Deb Nadeau'; jobrin@katahdinlab.com
Subject: FW: CTO-WE55 New London, CT pesticide and PCB surrogate recoveries

fyi

Kelly Perkins
Project Manager
Katahdin Analytical Services
600 Technology Way
Scarborough, ME 04074
(207) 874-2400 Ext. 17

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From: Carper, Kelly [mailto:Kelly.Carper@tetratech.com]
Sent: Wednesday, June 08, 2011 1:07 PM
To: Kelly Perkins
Cc: Rich, Corey; Bernhardt, Aaron; Ganser, Leanne; Samchuck, Joseph
Subject: RE: CTO-WE55 New London, CT pesticide and PCB surrogate recoveries

Please re-extract and reanalyze them all. thanks

From: Kelly Perkins [mailto:kperkins@katahdinlab.com]
Sent: Wednesday, June 08, 2011 12:38 PM
To: Carper, Kelly
Subject: CTO-WE55 New London, CT pesticide and PCB surrogate recoveries
Importance: High

Hi Kelly,

We have some pesticide and PCB samples from CTO-WE55 New London, CT (the samples were the ones that were frozen for pesticides and were recently taken off hold) that have surrogate recoveries below acceptance limits. The samples are as follows:

KAS Sample #	Client sample	Fraction	TCX % Rec	TCX acceptance %	DCB % Rec	DCB acceptance %
SE2827-25	2W-SD-SD131-0001	PCB	51, 48	56-115	48, 52	59-124
SE2829-27	2W-SD-SD143-0001	PCB	37, 45	56-115	47, 53	59-124
SE2829-28	2W-SD-SD145-0001	PCB	21, 28	56-115	26, 35	59-124
SE2829-28	2W-SD-SD145-0001	Pest	25, 24	32-89	36, 34	44-99

0000015

SE2829-29 59-124	2W-SD-SD132-0001	PCB	38, 46	56-115	36, 50
SE2829-30 59-124	2W-SD-SD139-0001	PCB	39, 50	56-115	38, 54
SE2829-31 59-124	2W-SD-SD145-0001	PCB	46, 45	56-115	44, 50

The pesticide sample was thawed out on 5/26 so we could extract it and placed in the refrigerator after extraction (so today is day 13 after thawing).

Please let me know if you need us to re-extract any of these.

Thanks!

Kelly Perkins
Project Manager
Katahdin Analytical Services
600 Technology Way
Scarborough, ME 04074
(207) 874-2400 Ext. 17

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0000016

Kelly Perkins

From: Ganser, Leanne [Leanne.Ganser@tetratech.com]
Sent: Friday, May 20, 2011 11:43 AM
To: 'Kelly Perkins'
Subject: WE55 New London additional analysis

Hi Kelly,

Several samples are on hold for analysis for project 112G02625, WE55, New London.

The list below indicates with an 'X' which samples should now by analyzed.

Sample ID	Remove from hold and analyze
2W-SD-SD85-0001	X
2W-SD-SD86-0001	X
2W-SD-SD91-0001	X
2W-SD-SD92-0001	X
2W-SD-SD93-0001	X
2W-SD-SD101-0001	X
2W-SD-SD102-0001	X
2W-SD-SD104-0001	X
2W-SD-SD106-0001	X
2W-SD-SD109-0001	X
2W-SD-SD111-0001	X
2W-SD-SD113-0001	X
2W-SD-SD114-0001	X
2W-SD-SD115-0001	
2W-SD-SD124-0001	X
2W-SD-SD125-0001	X
2W-SD-SD128-0001	X
2W-SD-SD129-0001	X
2W-SD-SD131-0001	X

S20000

Sample ID	Remove from hold and analyze
2W-SD-SD132-0001	X
2W-SD-SD133-0001	X
2W-SD-SD137-0001	X
2W-SD-SD139-0001	X
2W-SD-SD141-0001	X
2W-SD-SD143-0001	X
2W-SD-SD145-0001	X
2W-SD-SD148-0001	
2W-SD-SD150-0001	
2W-SD-SD151-0001	
2W-SD-SD153-0001	X
2W-SD-SD155-0001	X
2W-SD-SD156-0001	X
2W-SD-SD157-0001	X
2W-SD-SD160-0001	X
2W-SD-SD162-0001	

Thanks, Leanne

Leanne M. Ganser | Environmental Scientist II
Direct: 412.921.8148 | Main: 412.921.7090 | Personal Fax: 412.921.4040
Leanne.Ganser@tetratech.com

Tetra Tech | Risk Assessment
661 Andersen Drive | Pittsburgh, PA 15220 | www.tetratech.com

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9200026

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Jun. 13, 2011
07:31 AM

Quote/Incoming: TETRATNL-WE55

Login Number: SE2829

Account: TETRAT001 Web
Tetra Tech NUS, Inc.

Project: TETRATNL-WE55
CTO-WE55 New London, CT

Primary Report Address:
Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Foster Plaza 7
Pittsburgh,PA 15220

Primary Invoice Address:
Accounts Payable
Tetra Tech NUS, Inc.
661 Andersen Drive
Foster Plaza 7
Pittsburgh,PA 15220

Report CC Addresses:

Invoice CC Addresses:

Login Information:

ANALYSIS INSTRUCTIONS	:	DOD QSM with lab limits. ND to LOD. "J" flag between MDL and LOQ. Metals run MS/lab dup, post-dig spike and serial dilution on field QC sample. Decant before analysis. Run TS first-digest/extract addtl volume to account for TS. metals 6010C, SVOA-8270D, pest-8081B, PCB-8082A
CHECK NO.	:	
CLIENT PO#	:	1045366 34-CTO WE55(01)
CLIENT PROJECT MANAGE	:	
CONTRACT	:	
COOLER TEMPERATURE	:	
DELIVERY SERVICES	:	Fed Ex
EDD FORMAT	:	KAS119QC-CSV
LOGIN INITIALS	:	DD
PM	:	KAP
PROJECT NAME	:	CTO-WE55 New London, CT
QC LEVEL	:	IV
REGULATORY LIST	:	
REPORT INSTRUCTIONS	:	~~Send hardcopy and pdf (2 copies, 2 CDs) to Tobrena. Summary package needs all forms.~~
SDG ID	:	WE55-4
SDG STATUS	:	Begin/End

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SE2829-1	2W-SD-SD153-0001	04-APR-11 11:45	06-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	01-OCT-11			
Solid	S	SW6010-ARSENIC	01-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	01-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	01-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	01-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	01-OCT-11	4oz Glass		
Solid	S	SW8081-S	18-APR-11	100g Glass		
Solid	S	SW8082-S	18-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	18-APR-11	4oz Glass		
Solid	S	TS	04-MAY-11	8oz Glass		

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SE2829-2	2W-SD-SD156-0001	04-APR-11 15:00	06-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	01-OCT-11			
Solid	S	SW6010-ARSENIC	01-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	01-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	01-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	01-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	01-OCT-11	4oz Glass		
Solid	S	SW8081-S	18-APR-11	100g Glass		
Solid	S	SW8082-S	18-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	18-APR-11	4oz Glass		
Solid	S	TS	04-MAY-11	8oz Glass		

6000027

Login Number: SE2829

Account: TETRAT001 Web
Tetra Tech NUS, Inc.

Project: TETRATNL-WE55
CTO-WE55 New London, CT

Quote/Incoming: TETRATNL-WE55

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SE2829-3	2W-SD-SD155-0001	04-APR-11 15:15	06-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	01-OCT-11			
Solid	S	SW6010-ARSENIC	01-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	01-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	01-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	01-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	01-OCT-11	4oz Glass		
Solid	S	SW8081-S	18-APR-11	100g Glass		
Solid	S	SW8082-S	18-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	18-APR-11	4oz Glass		
Solid	S	TS	04-MAY-11	8oz Glass		

SE2829-4	2W-SD-SD157-0001	04-APR-11 15:25	06-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	01-OCT-11			
Solid	S	SW6010-ARSENIC	01-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	01-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	01-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	01-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	01-OCT-11	4oz Glass		
Solid	S	SW8081-S	18-APR-11	100g Glass		
Solid	S	SW8082-S	18-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	18-APR-11	4oz Glass		
Solid	S	TS	04-MAY-11	8oz Glass		

SE2829-5	2W-SD-SD160-0001	04-APR-11 15:40	06-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	01-OCT-11			
Solid	S	SW6010-ARSENIC	01-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	01-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	01-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	01-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	01-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	01-OCT-11	4oz Glass		
Solid	S	SW8081-S	18-APR-11	100g Glass		
Solid	S	SW8082-S	18-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	18-APR-11	4oz Glass		
Solid	S	TS	04-MAY-11	8oz Glass		

SE2829-7	2W-SD-SD137-0001	05-APR-11 08:40	06-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	02-OCT-11			
Solid	S	SW6010-ARSENIC	02-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	02-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	02-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	02-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	02-OCT-11	4oz Glass		
Solid	S	SW8081-S	19-APR-11	100g Glass		
Solid	S	SW8082-S	19-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	19-APR-11	4oz Glass		
Solid	S	TS	05-MAY-11	8oz Glass		

Katahdin ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Jun. 13, 2011
07:31 AM

Quote/Incoming: TETRATNL-WE55

Login Number: SE2829

Account: TETRAT001 Web
Tetra Tech NUS, Inc.

Project: TETRATNL-WE55
CTO-WE55 New London, CT

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SE2829-8	2W-SD-SD128-0001	05-APR-11 08:55	06-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	02-OCT-11			
Solid	S	SW6010-ARSENIC	02-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	02-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	02-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	02-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	02-OCT-11	4oz Glass		
Solid	S	SW8081-S	19-APR-11	100g Glass		
Solid	S	SW8082-S	19-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	19-APR-11	4oz Glass		
Solid	S	TS	05-MAY-11	8oz Glass		

SE2829-9	2W-SD-SD124-0001	05-APR-11 09:25	06-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	02-OCT-11			
Solid	S	SW6010-ARSENIC	02-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	02-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	02-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	02-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	02-OCT-11	4oz Glass		
Solid	S	SW8081-S	19-APR-11	100g Glass		
Solid	S	SW8082-S	19-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	19-APR-11	4oz Glass		
Solid	S	TS	05-MAY-11	8oz Glass		

SE2829-10	2W-SD-SD125-0001	05-APR-11 09:50	06-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	02-OCT-11			
Solid	S	SW6010-ARSENIC	02-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	02-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	02-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	02-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	02-OCT-11	4oz Glass		
Solid	S	SW8081-S	19-APR-11	100g Glass		
Solid	S	SW8082-S	19-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	19-APR-11	4oz Glass		
Solid	S	TS	05-MAY-11	8oz Glass		

SE2829-11	2W-SD-SD141-0001	05-APR-11 12:16	06-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	02-OCT-11			
Solid	S	SW6010-ARSENIC	02-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	02-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	02-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	02-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	02-OCT-11	4oz Glass		
Solid	S	SW8081-S	19-APR-11	100g Glass		
Solid	S	SW8082-S	19-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	19-APR-11	4oz Glass		
Solid	S	TS	05-MAY-11	8oz Glass		

0000029

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Jun. 13, 2011
07:31 AM

Login Number: SE2829

Quote/Incoming: TETRATNL-WE55

Account: TETRAT001 Web
Tetra Tech NUS, Inc.

Project: TETRATNL-WE55
CTO-WE55 New London, CT

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SE2829-12	2W-SD-SD92-0001	07-APR-11 08:35	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIMPAH-S	21-APR-11	4oz Glass		
Solid	S	TS	07-MAY-11	4oz Glass		

SE2829-13	2W-SD-SD93-0001	07-APR-11 08:50	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIMPAH-S	21-APR-11	4oz Glass		
Solid	S	TS	07-MAY-11	4oz Glass		

SE2829-14	2W-SD-SD85-0001	07-APR-11 11:00	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIMPAH-S	21-APR-11	4oz Glass		
Solid	S	TS	07-MAY-11	4oz Glass		

SE2829-15	2W-SD-SD86-0001	07-APR-11 11:10	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIMPAH-S	21-APR-11	4oz Glass		
Solid	S	TS	07-MAY-11	4oz Glass		

SE2829-16	2W-SD-SD91-0001	07-APR-11 11:25	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIMPAH-S	21-APR-11	4oz Glass		
Solid	S	TS	07-MAY-11	4oz Glass		

SE2829-17	2W-SD-SD104-0001	06-APR-11 14:25	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIMPAH-S	20-APR-11	4oz Glass		
Solid	S	TS	06-MAY-11	4oz Glass		

SE2829-18	2W-SD-SD102-0001	06-APR-11 14:40	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIMPAH-S	20-APR-11	4oz Glass		
Solid	S	TS	06-MAY-11	4oz Glass		

SE2829-19	2W-SD-SD109-0001	06-APR-11 15:20	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIMPAH-S	20-APR-11	4oz Glass		
Solid	S	TS	06-MAY-11	4oz Glass		

SE2829-20	2W-SD-SD106-0001	06-APR-11 15:40	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIMPAH-S	20-APR-11	4oz Glass		
Solid	S	TS	06-MAY-11	4oz Glass		

SE2829-21	2W-SD-SD101-0001	06-APR-11 16:05	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIMPAH-S	20-APR-11	4oz Glass		
Solid	S	TS	06-MAY-11	4oz Glass		

0000030

Katahdin ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Jun. 13, 2011
07:31 AM

Login Number: SE2829

Quote/Incoming: TETRATNL-WE55

Account: TETRAT001 Web
Tetra Tech NUS, Inc.

Project: TETRATNL-WE55
CTO-WE55 New London, CT

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SE2829-22	2W-SD-SD111-0001	06-APR-11 16:15	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIMPAH-S	20-APR-11	4oz Glass		
Solid	S	TS	06-MAY-11	4oz Glass		

SE2829-23	2W-SD-SD113-0001	06-APR-11 16:20	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIMPAH-S	20-APR-11	4oz Glass		
Solid	S	TS	06-MAY-11	4oz Glass		

SE2829-24	2W-SD-SD133-0001	05-APR-11 17:00	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	02-OCT-11			
Solid	S	SW6010-ARSENIC	02-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	02-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	02-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	02-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	02-OCT-11	4oz Glass		
Solid	S	SW8081-S	19-APR-11	100g Glass		
Solid	S	SW8082-S	19-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	19-APR-11	4oz Glass		
Solid	S	TS	05-MAY-11	8oz Glass		

SE2829-25	2W-SD-SD131-0001	05-APR-11 17:05	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	02-OCT-11			
Solid	S	SW6010-ARSENIC	02-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	02-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	02-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	02-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	02-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	02-OCT-11	4oz Glass		
Solid	S	SW8081-S	19-APR-11	100g Glass		
Solid	S	SW8082-S	19-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	19-APR-11	4oz Glass		
Solid	S	TS	05-MAY-11	8oz Glass		

SE2829-26	2W-SD-SD129-0001	06-APR-11 08:35	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	03-OCT-11			
Solid	S	SW6010-ARSENIC	03-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	03-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	03-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	03-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	03-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	03-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	03-OCT-11	4oz Glass		
Solid	S	SW8081-S	20-APR-11	100g Glass		
Solid	S	SW8082-S	20-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	20-APR-11	4oz Glass		
Solid	S	TS	06-MAY-11	8oz Glass		

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Login Number: SE2829

Quote/Incoming: TETRATNL-WE55

Account: TETRAT001 Web
Tetra Tech NUS, Inc.

Project: TETRATNL-WE55
CTO-WE55 New London, CT

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SE2829-27	2W-SD-SD143-0001	06-APR-11 09:25	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	03-OCT-11			
Solid	S	SW6010-ARSENIC	03-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	03-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	03-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	03-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	03-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	03-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	03-OCT-11	4oz Glass		
Solid	S	SW8081-S	20-APR-11	100g Glass		
Solid	S	SW8082-S	20-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	20-APR-11	4oz Glass		
Solid	S	TS	06-MAY-11	8oz Glass		

SE2829-28	2W-SD-SD145-0001	06-APR-11 09:45	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	03-OCT-11			
Solid	S	SW6010-ARSENIC	03-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	03-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	03-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	03-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	03-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	03-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	03-OCT-11	4oz Glass		
Solid	S	SW8081-S	20-APR-11	100g Glass		
Solid	S	SW8082-S	20-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	20-APR-11	4oz Glass		
Solid	S	TS	06-MAY-11	8oz Glass		

SE2829-29	2W-SD-SD132-0001	06-APR-11 10:30	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	03-OCT-11			
Solid	S	SW6010-ARSENIC	03-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	03-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	03-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	03-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	03-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	03-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	03-OCT-11	4oz Glass		
Solid	S	SW8081-S	20-APR-11	100g Glass		
Solid	S	SW8082-S	20-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	20-APR-11	4oz Glass		
Solid	S	TS	06-MAY-11	8oz Glass		

SE2829-30	2W-SD-SD139-0001	06-APR-11 11:00	08-APR-11		08-JUN-11	08-JUN-11	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050-PREP	03-OCT-11			
Solid	S	SW6010-ARSENIC	03-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	03-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	03-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	03-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	03-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	03-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	03-OCT-11	4oz Glass		
Solid	S	SW8081-S	20-APR-11	100g Glass		
Solid	S	SW8082-S	20-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	20-APR-11	4oz Glass		
Solid	S	TS	06-MAY-11	8oz Glass		

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Login Number: SE2829

Quote/Incoming: TETRATNL-WE55

Account: TETRAT001 Web

Tetra Tech NUS, Inc.

Project: TETRATNL-WE55

CTO-WE55 New London, CT

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SE2829-31	2W-SD-SD114-0001	06-APR-11 12:15	08-APR-11		**08-JUN-11**	08-JUN-11	

Matrix		*Product*	*Hold Date (shortest)*	*Bottle Type*	*Bottle Count*	*Comments*
Solid	S	SW3050-PREP	03-OCT-11			
Solid	S	SW6010-ARSENIC	03-OCT-11	4oz Glass		
Solid	S	SW6010-CADMIUM	03-OCT-11	4oz Glass		
Solid	S	SW6010-CHROMIUM	03-OCT-11	4oz Glass		
Solid	S	SW6010-COPPER	03-OCT-11	4oz Glass		
Solid	S	SW6010-LEAD	03-OCT-11	4oz Glass		
Solid	S	SW6010-NICKEL	03-OCT-11	4oz Glass		
Solid	S	SW6010-ZINC	03-OCT-11	4oz Glass		
Solid	S	SW8081-S	20-APR-11	100g Glass		
Solid	S	SW8082-S	20-APR-11	100g Glass		
Solid	S	SW8270SIMPAH-S	20-APR-11	4oz Glass		
Solid	S	TS	06-MAY-11	8oz Glass		

Total Samples: *30* ***Total Analyses:*** *240*

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO-WE55 NEW LONDON, CT
SDG: WE55-4
SE2829

Sample Receipt

The following samples were received on April 6 and 8, 2011 and were logged in under Katahdin Analytical Services work order number SE2829 for a hardcopy due date of June 8, 2011.

KATAHDIN Sample No.	TTNUS Sample Identification
SE2829-1	2W-SD-SD153-0001
SE2829-2	2W-SD-SD156-0001
SE2829-3	2W-SD-SD155-0001
SE2829-4	2W-SD-SD157-0001
SE2829-5	2W-SD-SD160-0001
SE2829-7	2W-SD-SD137-0001
SE2829-8	2W-SD-SD128-0001
SE2829-9	2W-SD-SD124-0001
SE2829-10	2W-SD-SD125-0001
SE2829-11	2W-SD-SD141-0001
SE2829-12	2W-SD-SD92-0001
SE2829-13	2W-SD-SD93-0001
SE2829-14	2W-SD-SD85-0001
SE2829-15	2W-SD-SD86-0001
SE2829-16	2W-SD-SD91-0001
SE2829-17	2W-SD-SD104-0001
SE2829-18	2W-SD-SD102-0001
SE2829-19	2W-SD-SD109-0001
SE2829-20	2W-SD-SD106-0001
SE2829-21	2W-SD-SD101-0001
SE2829-22	2W-SD-SD111-0001
SE2829-23	2W-SD-SD113-0001
SE2829-24	2W-SD-SD133-0001
SE2829-25	2W-SD-SD131-0001
SE2829-26	2W-SD-SD129-0001
SE2829-27	2W-SD-SD143-0001
SE2829-28	2W-SD-SD145-0001
SE2829-29	2W-SD-SD132-0001
SE2829-30	2W-SD-SD139-0001
SE2829-31	2W-SD-SD114-0001

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

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

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

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

Organics Analysis

The samples of SDG WE55-4 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, and III 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, for the specific methods listed below or on the Report of Analysis.

8270C SIM Analysis

Surrogate recoveries for all samples and QC were evaluated using laboratory established acceptance limits.

All soil samples and associated QC, with the exception of SE2829-17, 18 and the associated QC, were subjected to the GPC sample clean-up process.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are nominal acceptance limits for the associated samples that were put through the GPC and laboratory established acceptance limits for the samples that were not put through the GPC. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long the LCS is acceptable. Nominal limits are used for the LCS/LCSD until enough data is collected to generate statistically based acceptance limits.

Samples SE2829-1, 3, 4, 5, 7, 7DL, 8, 9, 10, 11, 12DL, 15, 16DL, 17, 20, 20DL, 21, 22, 23, 24, 25, 26, 27, 27DL, 28, 28DL, 29, 29DL, 30 and 31 were manually integrated for the analytes 2-methylnaphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, benzo(g,h,i)perylene, and/or the internal standards acenaphthene-d10, phenanthrene-d10, chrysene-d12, perylene-d12, indeno(1,2,3-cd)pyrene, and/or the surrogates fluorene-d10 and pyrene-d10. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Sample SE2829-27 had a low response for the internal standard phenanthrene-d10 that resulted in a %D which was outside the DoD QSM 4.1 acceptance limit of -50% to +100% of the responses

of the internal standards of the midpoint initial calibration standard. This sample was reanalyzed at a dilution and had acceptable responses for the internal standards. Therefore, the sample was not reanalyzed undiluted and the results from both analyses are reported.

Sample SE2829-28 had a high response for the internal standard pyrene-d12 that resulted in a %D which was outside the DoD QSM 4.1 acceptance limit of -50% to +100% of the responses of the internal standards of the midpoint initial calibration standard. This sample was reanalyzed at a dilution and also had a high response for the internal standard acenaphthalene-d10, confirming a matrix effect. The results from both analyses are reported.

Sample SE2829-29DL had a high response for the internal standard acenaphthalene-d10 that resulted in a %D which was outside the DoD QSM 4.1 acceptance limit of -50% to +100% of the responses of the internal standards of the midpoint initial calibration standard. This sample was originally analyzed undiluted and had acceptable responses for the internal standards. Therefore, the sample was not reanalyzed at a dilution and the results from both analyses are reported.

The independent check standard (file G1424), associated with the initial calibration on 06/07/11 had a low concentration for the target analyte indeno(1,2,3-cd)pyrene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The Form 7 for the CV (file G1366) had a high response for the target analyte indeno(1,2,3-cd)pyrene. The CV (file G1403) had a high response for benzo(a)pyrene. These responses resulted in %D's that were greater than the acceptance limit of 20% from DoD QSM Version 4.1.

8082 Analysis

All samples and associated QC were subjected to the GPC sample clean-up process.

Surrogate recoveries for all samples and QC, as well as spike recoveries for the laboratory control sample and laboratory control sample duplicate (LCS/LCSD), were evaluated using laboratory established acceptance limits.

Samples SE2829-9, 11 and 29 were manually integrated for the surrogates TCX or DCB or Aroclor 1260. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

The LCS WG92000-2 had a low recovery for TCX on channel B, which was outside of the laboratory established acceptance limits. The recoveries of the surrogate DCB on both channels and the recovery of TCX on channel A were acceptable. The spike recoveries were acceptable. Therefore, the associated samples were not reextracted.

Samples SE2829-1 and 3 had low recoveries for TXC on channel A, which were outside of the laboratory established acceptance limits. Since the recoveries of the surrogate DCB on both channels and the recoveries of TCX on channel B were acceptable, the samples were not reextracted.

Samples SE2829-8 and 28 had low recoveries for TCX on both channels and low recoveries for DCB on channel A, which were outside of the laboratory established acceptance limits. Since the recoveries of DCB on channel B were acceptable, the samples were not reextracted.

Samples SE2829-9, 10, 26, 29 and 30 had low recoveries for TCX and DCB on channel A, which were outside of the laboratory established acceptance limits. Since the recoveries on channel B were acceptable, the samples were not reextracted.

Sample SE2829-27 had low recoveries for TCX and DCB on both channels, which were outside of the laboratory established acceptance limits. The sample was reextracted, analyzed and had low surrogate recoveries, indicating a possible matrix effect. The results from both extractions are included.

The method blank WG92620-1 had low recoveries for TCX on both channels, which were outside of the laboratory established acceptance limits. Since the recoveries for DCB were acceptable, the associated samples were not reextracted.

Sample SE2829-31 had low recoveries for TCX on both channels and a low recovery for DCB on channel B, which were outside of the laboratory established acceptance limits. Since the recovery of DCB on channel A was acceptable, the sample was not reextracted.

The opening/closing calibration verification standards (CV's) (files 7EF002 and 7EF026) had high responses for TCX on both channels and high responses for Aroclor 1016 and Aroclor 1260 on channel A, which resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since the responses for Aroclor 1016 and Aroclor 1260 were acceptable on channel B, the associated samples were not reanalyzed. The recoveries for TCX may be biased high for the associated samples.

The opening/closing CV (file 7EF014) had high responses for TCX and Aroclor 1016 on channel A, which resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since the responses were acceptable on channel B, the associated samples were not reanalyzed.

The opening/closing CVs (files 7EF028 and 7EF043) had high responses for the surrogate TCX, Aroclor 1016 and Aroclor 1260 on channel A, which resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since the responses were acceptable on channel B, the associated samples were not reanalyzed.

The opening CV (file 7EF133) had high responses for DCB on both channels and high responses for TCX, Aroclor 1016 and Aroclor 1260 on channel A, which resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since the responses for Aroclor 1016 and Aroclor 1260 and the surrogate TCX were acceptable on channel B, the associated samples were not reanalyzed. The recoveries for DCB may be biased high for the associated samples.

The closing CV (file 7EF148) had high responses for TCX and DCB on both channels and high responses for Aroclor 1016 and Aroclor 1260 on channel A, which resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since the responses for Aroclor 1016 and Aroclor 1260 were acceptable on channel B, the associated samples were not reanalyzed. The recoveries for TCX and DCB may be biased high for the associated samples.

8081 Analysis

All samples and associated QC were subjected to the GPC sample clean-up process.

Surrogate recoveries for all samples and QC, as well as spike recoveries for the LCS/LCSD, were evaluated using laboratory established acceptance limits.

Samples SE2829-1, 3, 5, 9, 24, 28DL, and 31 were manually integrated for the target analytes 4,4'-DDE, 4,4'-DDT, and/or the extraction surrogate DCB. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Samples SE2829-1, 2, 3, 8, 24, 26 and 28DL had RPD's for 4,4'-DDT that were outside of the method acceptance limits of 40%. This analyte is flagged with a "J" qualifier on the report of analysis (ROA).

The target analyte 4,4'-DDD was detected above ½ the reporting limit in the method blank WG91999-1. According to the DoD QSM section D.1.1.1, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit and is greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). The target analyte 4,4'-DDD was detected at a concentration greater than 10 times the concentration in the method blank for all the associated samples except sample SE2829-4. This analyte was flagged with a "B" qualifier indicating that the analyte was detected in the method blank analyzed concurrently with sample SE2829-4.

The opening/closing CV's (files 1EF00079 and 1EF00090) had low responses for 4,4-DDT on both channels, which resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since the opening CV was acceptable and subsequent instrument maintenance resulted in an acceptable CV that confirmed interference, the associated samples were not reanalyzed.

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

Metals Analysis

The samples of Katahdin SDG WE55-4 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Solid-matrix Katahdin Sample Numbers SE2829- (1-5, 7-11, and 24-31) were digested for ICP analysis on 05/31/11 (QC Batch BW31ICS0) in accordance with USEPA Method 3050B. Katahdin Sample Number SE2829- 11 was prepared in duplicate and with a matrix-spiked aliquot

ICP analyses of Katahdin SDG WE55-4 sample digestates was performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010. All samples were analyzed

within holding times and all analytical run QC criteria were met. Some samples were diluted to reduce spectral interferences cause by high iron concentrations in the samples.

Matrix QC Summary

The measured recoveries all elements in the matrix-spiked aliquot of Katahdin Sample Number SE2829-11 are within the project acceptance criteria (80% - 120% recovery of the added element, if the native concentration is less than four times the amount added).

The duplicate analysis of Katahdin Sample Number SE2829- 11 is outside the laboratory's acceptance limit (<20% relative difference between duplicate aliquots) for lead.

The serial dilution analysis of Katahdin Sample Number SE2829-11 is within the laboratory's acceptance limit (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOQ) for all elements.

The measured recovery of all elements in the post-digestion spiked aliquot of Katahdin Sample Number SE2829-11 is within the laboratory's acceptance criteria (75% - 125%).

Reporting of Metals Results

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

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

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

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

Wet Chemistry Analysis

The samples of SDG WE55-4 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Annual Book of ASTM Standards", Method D2216-98 "Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass".

All analyses were performed within analytical holding times. All quality control criteria were met.

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

Leslie Dimond
06/5/11
Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticide/Aroclor analyte when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS
(Refer to BOD Qualifiers Page for BOD footnotes)

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

MCL Maximum Contaminant Level

NL No limit

NFL No Free Liquid Present

FLP Free Liquid Present

NOD No Odor Detected

TON Threshold Odor Number

H1 Please note that the regulatory holding time for pH is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. pH for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H2 Please note that the regulatory holding time for DO is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. DO for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H3 Please note that the regulatory holding time for sulfite is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. Sulfite for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H4 Please note that the regulatory holding time for residual chlorine is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. Residual chlorine for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	Spiked sample recovery not within control limits.
*	Duplicate sample analysis not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.
J	The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ) (previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID: GD782 DFTPP Injection Date: 06/01/11

Instrument ID: GCMS-G DFTPP Injection Time: 1001

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	41.1
68	Less than 2.0% of mass 69	0.6 (1.4)1
69	Less than 100.0% of mass 198	45.3
70	Less than 2.0% of mass 69	0.3 (0.7)1
127	40.0 - 60.0% of mass 198	55.8
197	Less than 1.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	25.2
365	1.0 - 100.0% of mass 198	4.0
441	0.0 - 100.0% of mass 443	12.0 (77.2)2
442	40.0 - 100.0% of mass 198	80.5
443	17.0 - 23.0% of mass 442	15.5 (19.3)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00G0601	G1349	06/01/11	1107
02		SSTD8.00G0601	G1350	06/01/11	1156
03		SSTD5.00G0601	G1351	06/01/11	1239
04		SSTD2.00G0601	G1352	06/01/11	1323
05		SSTD0.50G0601	G1353	06/01/11	1406
06		SSTD0.20G0601	G1354	06/01/11	1450
07		SIM IND CHECK	G1355	06/01/11	1533
08	WG91939-BLANK	WG91939-1	G1356	06/01/11	1617
09	WG91939-LCS	WG91939-2	G1357	06/01/11	1700
10	WG91939-LCSD	WG91939-3	G1358	06/01/11	1744
11	2W-SD-SD153-0001	SE2829-1	G1359	06/01/11	1827
12	2W-SD-SD156-0001	SE2829-2	G1360	06/01/11	1911
13	2W-SD-SD137-0001	SE2829-7	G1363	06/01/11	2120
14					
15					
16					
17					
18					
19					
20					

FORM V SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GCMS-G Calibration Date(s): 06/01/11 06/01/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 1107 1450

LAB FILE ID: RF0.2: G1354 RF0.5: G1353 RF1: G1349
RF2: G1352 RF5: G1351 RF8: G1350

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2	
1-Methylnaphthalene	0.563	0.569	0.561	0.562	0.519	0.507	AVRG		0.54677749		4.882	15.000	
Naphthalene	0.906	0.914	0.903	0.884	0.820	0.799	AVRG		0.87098207		5.657	15.000	
2-Methylnaphthalene	0.691	0.637	0.597	0.591	0.544	0.528	AVRG		0.59803393		10.051	15.000	
Acenaphthylene	1.604	1.624	1.685	1.718	1.705	1.738	AVRG		1.67905567		3.190	15.000	
Acenaphthene	1.033	1.063	1.065	1.087	1.048	1.073	AVRG		1.06159468		1.771	15.000	
Fluorene	1.188	1.154	1.132	1.166	1.137	1.150	AVRG		1.15456036		1.788	15.000	
Phenanthrene	0.863	0.934	0.930	0.943	0.913	0.932	AVRG		0.91932627		3.179	15.000	
Anthracene	0.758	0.950	0.961	0.900	0.942	0.946	AVRG		0.90964724		8.456	15.000	
Fluoranthene	0.820	0.950	0.972	0.968	0.975	0.990	AVRG		0.94593435		6.666	15.000	
Pyrene	1.346	1.308	1.332	1.351	1.325	1.381	AVRG		1.34038541		1.873	15.000	
Benzo(a)anthracene	9765	49629	109470	231590	645480	962710	LINR	7.305e-002	1.08358197		0.99969	0.99000	
Chrysene	1.379	1.174	1.117	1.053	0.959	0.958	AVRG		1.10659322		14.302	15.000	
Benzo(b)fluoranthene	8552	36852	82948	184560	525960	782060	LINR	0.15264155	0.93783362		0.99883	0.99000	
Benzo(k)fluoranthene	1.492	1.460	1.410	1.362	1.229	1.231	AVRG		1.36382616		8.273	15.000	
Benzo(a)pyrene	0.609	0.762	0.886	0.887	0.915	0.946	AVRG		0.83440574		15.201	15.000	<--OK using 20%
Indeno(1,2,3-cd)pyrene	6328	11804	35007	77857	233260	369800	2ORDR	6.254e-002	2.52797499	-0.1102995	0.99942	0.99000	
Dibenzo(a,h)anthracene	4555	18986	44584	101930	284870	427280	LINR	0.16164258	1.71787421		0.99876	0.99000	
Benzo(g,h,i)perylene	0.596	0.651	0.721	0.678	0.653	0.656	AVRG		0.65938326		6.191	15.000	
2-Methylnaphthalene-D10	1.051	1.072	1.094	1.066	1.012	1.049	AVRG		1.05727553		2.602	15.000	
Fluorene-D10	1.321	1.332	1.233	1.169	1.039	1.052	AVRG		1.19090416		10.726	15.000	
Pyrene-D10	0.983	0.896	0.918	0.938	0.925	0.954	AVRG		0.93569255		3.216	15.000	

FORM VI SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID: GD783 DFTPP Injection Date: 06/02/11

Instrument ID: GCMS-G DFTPP Injection Time: 1122

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	41.8
68	Less than 2.0% of mass 69	0.2 (0.5)1
69	Less than 100.0% of mass 198	45.9
70	Less than 2.0% of mass 69	0.4 (0.8)1
127	40.0 - 60.0% of mass 198	58.2
197	Less than 1.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.1
275	10.0 - 30.0% of mass 198	27.6
365	1.0 - 100.0% of mass 198	4.4
441	0.0 - 100.0% of mass 443	12.7 (78.5)2
442	40.0 - 100.0% of mass 198	89.1
443	17.0 - 23.0% of mass 442	16.1 (18.1)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00G0602	G1366	06/02/11	1141
02	WG91997-BLANK	WG91997-1	G1367	06/02/11	1227
03	WG91997-LCS	WG91997-2	G1368	06/02/11	1310
04	WG91997-LCSD	WG91997-3	G1369	06/02/11	1354
05	2W-SD-SD155-0001	SE2829-3	G1373	06/02/11	1649
06	2W-SD-SD157-0001	SE2829-4	G1374	06/02/11	1733
07	2W-SD-SD160-0001	SE2829-5	G1375	06/02/11	1817
08	2W-SD-SD124-0001	SE2829-9	G1376	06/02/11	1901
09	2W-SD-SD125-0001	SE2829-10	G1377	06/02/11	1944
10	2W-SD-SD141-0001	SE2829-11	G1378	06/02/11	2028
11	2W-SD-SD92-0001	SE2829-12	G1379	06/02/11	2111
12	2W-SD-SD93-0001	SE2829-13	G1380	06/02/11	2154
13	2W-SD-SD85-0001	SE2829-14	G1381	06/02/11	2238
14	2W-SD-SD86-0001	SE2829-15	G1382	06/02/11	2321
15					
16					
17					
18					
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20					

FORM V SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GCMS-G Calibration Date: 06/02/11 Time: 1141

Lab File ID: G1366 Init. Calib. Date(s): 06/01/11 06/01/11

Init. Calib. Times: 1107 1450

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
1-Methylnaphthalene	0.5470000	0.5555300	0.5555300	0.01	1.56	20.00	AVRG	
Naphthalene	0.8710000	0.8709700	0.8709700	0.01	-0.00	20.00	AVRG	
2-Methylnaphthalene	0.5980000	0.5913800	0.5913800	0.01	-1.11	20.00	AVRG	
Acenaphthylene	1.6790000	1.7326000	1.7326000	0.01	3.19	20.00	AVRG	
Acenaphthene	1.0620000	1.0527000	1.0527000	0.01	-0.88	20.01	AVRG	
Fluorene	1.1540000	1.1674000	1.1674000	0.01	1.16	20.00	AVRG	
Phenanthrene	0.9190000	0.9288300	0.9288300	0.01	1.07	20.00	AVRG	
Anthracene	0.9100000	0.9518200	0.9518200	0.01	4.60	20.00	AVRG	
Fluoranthene	0.9460000	0.9795200	0.9795200	0.01	3.54	20.01	AVRG	
Pyrene	1.3400000	1.3281000	1.3281000	0.01	-0.89	20.00	AVRG	
Benzo(a)anthracene	1.0928000	1.0000000	0.9546300	0.01	9.28	20.00	LINR	
Chrysene	1.1070000	0.9899400	0.9899400	0.01	-10.57	20.00	AVRG	
Benzo(b)fluoranthene	1.0738000	1.0000000	1.0147000	0.01	7.38	20.00	LINR	
Benzo(k)fluoranthene	1.3640000	1.2230000	1.2230000	0.01	-10.34	20.00	AVRG	
Benzo(a)pyrene	0.8340000	0.9249200	0.9249200	0.01	10.90	20.01	AVRG	
Indeno(1,2,3-cd)pyrene	1.3788000	1.0000000	0.5416100	0.01	37.88	20.00	2RDR	<-
Dibenzo(a,h)anthracene	1.1482000	1.0000000	0.5931400	0.01	14.82	20.00	LINR	
Benzo(g,h,i)perylene	0.6590000	0.6926200	0.6926200	0.01	5.10	20.00	AVRG	
2-Methylnaphthalene-D10	1.0570000	1.0630000	1.0630000	0.01	0.57	20.00	AVRG	
Fluorene-D10	1.1910000	1.2460000	1.2460000	0.01	4.62	20.00	AVRG	
Pyrene-D10	0.9360000	0.9315800	0.9315800	0.01	-0.47	20.00	AVRG	

FORM VII PEST

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID: GD784 DFTPP Injection Date: 06/03/11

Instrument ID: GCMS-G DFTPP Injection Time: 1215

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	40.8
68	Less than 2.0% of mass 69	0.5 (1.0)1
69	Less than 100.0% of mass 198	45.8
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	40.0 - 60.0% of mass 198	57.2
197	Less than 1.0% of mass 198	0.1
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.3
275	10.0 - 30.0% of mass 198	26.1
365	1.0 - 100.0% of mass 198	4.6
441	0.0 - 100.0% of mass 443	12.0 (75.5)2
442	40.0 - 100.0% of mass 198	81.3
443	17.0 - 23.0% of mass 442	15.9 (19.6)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00G0603	G1384	06/03/11	1233
02	2W-SD-SD91-0001	SE2829-16	G1387	06/03/11	1440
03	2W-SD-SD109-0001	SE2829-19	G1388	06/03/11	1524
04	2W-SD-SD106-0001	SE2829-20	G1389	06/03/11	1608
05	2W-SD-SD101-0001	SE2829-21	G1390	06/03/11	1651
06	2W-SD-SD113-0001	SE2829-23	G1392	06/03/11	1818
07	2W-SD-SD133-0001	SE2829-24	G1393	06/03/11	1902
08	2W-SD-SD129-0001	SE2829-26	G1395	06/03/11	2029
09	2W-SD-SD143-0001	SE2829-27	G1396	06/03/11	2113
10	2W-SD-SD145-0001	SE2829-28	G1397	06/03/11	2156
11	2W-SD-SD132-0001	SE2829-29	G1398	06/03/11	2239
12	2W-SD-SD139-0001	SE2829-30	G1399	06/03/11	2323
13	2W-SD-SD114-0001	SE2829-31	G1400	06/04/11	0006
14					
15					
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20					

FORM V SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GCMS-G Calibration Date: 06/03/11 Time: 1233

Lab File ID: G1384 Init. Calib. Date(s): 06/01/11 06/01/11

Init. Calib. Times: 1107 1450

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1-Methylnaphthalene	0.5470000	0.5768800	0.5768800	0.01	5.46	20.00	AVRG
Naphthalene	0.8710000	0.8081500	0.8081500	0.01	-7.22	20.00	AVRG
2-Methylnaphthalene	0.5980000	0.6918000	0.6918000	0.01	15.69	20.00	AVRG
Acenaphthylene	1.6790000	1.6007000	1.6007000	0.01	-4.66	20.00	AVRG
Acenaphthene	1.0620000	1.0013000	1.0013000	0.01	-5.72	20.01	AVRG
Fluorene	1.1540000	1.1611000	1.1611000	0.01	0.62	20.00	AVRG
Phenanthrene	0.9190000	0.8333600	0.8333600	0.01	-9.32	20.00	AVRG
Anthracene	0.9100000	0.9438900	0.9438900	0.01	3.72	20.00	AVRG
Fluoranthene	0.9460000	0.9240200	0.9240200	0.01	-2.32	20.01	AVRG
Pyrene	1.3400000	1.4601000	1.4601000	0.01	8.96	20.00	AVRG
Benzo(a)anthracene	1.0425000	1.0000000	0.9082000	0.01	4.25	20.00	LINR
Chrysene	1.1070000	1.0267000	1.0267000	0.01	-7.25	20.00	AVRG
Benzo(b)fluoranthene	1.0037000	1.0000000	0.9399900	0.01	0.37	20.00	LINR
Benzo(k)fluoranthene	1.3640000	1.2472000	1.2472000	0.01	-8.56	20.00	AVRG
Benzo(a)pyrene	0.8340000	0.8741000	0.8741000	0.01	4.81	20.01	AVRG
Indeno(1,2,3-cd)pyrene	1.1966000	1.0000000	0.4653700	0.01	19.66	20.00	2RDR
Dibenzo(a,h)anthracene	1.0347000	1.0000000	0.5270600	0.01	3.47	20.00	LINR
Benzo(g,h,i)perylene	0.6590000	0.5911700	0.5911700	0.01	-10.29	20.00	AVRG
2-Methylnaphthalene-D10	1.0570000	0.9549400	0.9549400	0.01	-9.66	20.00	AVRG
Fluorene-D10	1.1910000	1.2312000	1.2312000	0.01	3.38	20.00	AVRG
Pyrene-D10	0.9360000	1.0116000	1.0116000	0.01	8.08	20.00	AVRG

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID: GD785 DFTPP Injection Date: 06/06/11

Instrument ID: GCMS-G DFTPP Injection Time: 1212

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	32.2
68	Less than 2.0% of mass 69	0.5 (1.2)1
69	Less than 100.0% of mass 198	38.0
70	Less than 2.0% of mass 69	0.2 (0.6)1
127	40.0 - 60.0% of mass 198	52.9
197	Less than 1.0% of mass 198	0.1
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	22.0
365	1.0 - 100.0% of mass 198	3.4
441	0.0 - 100.0% of mass 443	10.3 (73.3)2
442	40.0 - 100.0% of mass 198	72.4
443	17.0 - 23.0% of mass 442	14.1 (19.5)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00G0606	G1403	06/06/11	1231
02	2W-SD-SD128-0001	SE2829-8	G1404	06/06/11	1317
03	2W-SD-SD131-0001	SE2829-25	G1405	06/06/11	1400
04	2W-SD-SD111-0001	SE2829-22	G1406	06/06/11	1444
05	2W-SD-SD137-0001	SE2829-7DL	G1408	06/06/11	1610
06	2W-SD-SD92-0001	SE2829-12DL	G1409	06/06/11	1654
07	2W-SD-SD93-0001	SE2829-13DL	G1410	06/06/11	1737
08	2W-SD-SD91-0001	SE2829-16DL	G1411	06/06/11	1820
09	2W-SD-SD106-0001	SE2829-20DL	G1412	06/06/11	1903
10	2W-SD-SD143-0001	SE2829-27DL	G1413	06/06/11	1946
11	2W-SD-SD145-0001	SE2829-28DL	G1414	06/06/11	2029
12	2W-SD-SD132-0001	SE2829-29DL	G1415	06/06/11	2112
13					
14					
15					
16					
17					
18					
19					
20					

FORM V SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GCMS-G Calibration Date: 06/06/11 Time: 1231

Lab File ID: G1403 Init. Calib. Date(s): 06/01/11 06/01/11

Init. Calib. Times: 1107 1450

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
1-Methylnaphthalene	0.5470000	0.5835200	0.5835200	0.01	6.68	20.00	AVRG	
Naphthalene	0.8710000	0.8510200	0.8510200	0.01	-2.29	20.00	AVRG	
2-Methylnaphthalene	0.5980000	0.6973400	0.6973400	0.01	16.61	20.00	AVRG	
Acenaphthylene	1.6790000	1.6906000	1.6906000	0.01	0.69	20.00	AVRG	
Acenaphthene	1.0620000	1.0558000	1.0558000	0.01	-0.58	20.01	AVRG	
Fluorene	1.1540000	1.1996000	1.1996000	0.01	3.95	20.00	AVRG	
Phenanthrene	0.9190000	0.9264400	0.9264400	0.01	0.81	20.00	AVRG	
Anthracene	0.9100000	1.0737000	1.0737000	0.01	17.99	20.00	AVRG	
Fluoranthene	0.9460000	0.9876800	0.9876800	0.01	4.40	20.01	AVRG	
Pyrene	1.3400000	1.4250000	1.4250000	0.01	6.34	20.00	AVRG	
Benzo(a)anthracene	1.0946000	1.0000000	0.9562300	0.01	9.46	20.00	LINR	
Chrysene	1.1070000	1.1670000	1.1670000	0.01	5.42	20.00	AVRG	
Benzo(b)fluoranthene	1.1234000	1.0000000	1.0676000	0.01	12.34	20.00	LINR	
Benzo(k)fluoranthene	1.3640000	1.5723000	1.5723000	0.01	15.27	20.00	AVRG	
Benzo(a)pyrene	0.8340000	1.0342000	1.0342000	0.01	24.00	20.01	AVRG	<-
Indeno(1,2,3-cd)pyrene	1.1839000	1.0000000	0.4600700	0.01	18.39	20.00	2RDR	
Dibenzo(a,h)anthracene	1.1162000	1.0000000	0.5744900	0.01	11.62	20.00	LINR	
Benzo(g,h,i)perylene	0.6590000	0.6310400	0.6310400	0.01	-4.24	20.00	AVRG	
2-Methylnaphthalene-D10	1.0570000	1.0248000	1.0248000	0.01	-3.05	20.00	AVRG	
Fluorene-D10	1.1910000	1.1743000	1.1743000	0.01	-1.40	20.00	AVRG	
Pyrene-D10	0.9360000	0.9231100	0.9231100	0.01	-1.38	20.00	AVRG	

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID: GD786 DFTPP Injection Date: 06/07/11

Instrument ID: GCMS-G DFTPP Injection Time: 0928

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	36.2
68	Less than 2.0% of mass 69	0.5 (1.1)1
69	Less than 100.0% of mass 198	40.1
70	Less than 2.0% of mass 69	0.3 (0.6)1
127	40.0 - 60.0% of mass 198	55.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.2
275	10.0 - 30.0% of mass 198	21.2
365	1.0 - 100.0% of mass 198	2.8
441	0.0 - 100.0% of mass 443	8.7 (74.8)2
442	40.0 - 100.0% of mass 198	61.2
443	17.0 - 23.0% of mass 442	11.6 (18.9)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00G0607	G1418	06/07/11	1021
02		SSTD8.00G0607	G1419	06/07/11	1107
03		SSTD5.00G0607	G1420	06/07/11	1150
04		SSTD2.00G0607	G1421	06/07/11	1233
05		SSTD0.50G0607	G1422	06/07/11	1317
06		SSTD0.20G0607	G1423	06/07/11	1400
07		SIM IND CHECK	G1424	06/07/11	1444
08	2W-SD-SD104-0001	SE2829-17	G1425	06/07/11	1527
09	2W-SD-SD102-0001	SE2829-18	G1426	06/07/11	1610
10	WG92497-LCS	WG92497-2	G1427	06/07/11	1654
11	WG92497-LCSD	WG92497-3	G1428	06/07/11	1737
12	WG92497-BLANK	WG92497-1	G1429	06/07/11	1820
13					
14					
15					
16					
17					
18					
19					
20					

FORM V SV

Katahdin Analytical Services A0000058

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GCMS-G Calibration Date(s): 06/07/11 06/07/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 1021 1400

LAB FILE ID: RF0.2: G1423 RF0.5: G1422 RF1: G1418
RF2: G1421 RF5: G1420 RF8: G1419

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
1-Methylnaphthalene	0.489	0.598	0.522	0.492	0.491	0.458	AVRG		0.50825543		9.561	15.000
Naphthalene	0.799	0.869	0.798	0.791	0.755	0.709	AVRG		0.78698078		6.727	15.000
2-Methylnaphthalene	49593	117580	205620	388300	1050700	1608600	LINR	-0.2295514	2.07173368		0.99751	0.99000
Acenaphthylene	1.565	1.672	1.566	1.537	1.484	1.489	AVRG		1.55220977		4.442	15.000
Acenaphthene	0.957	1.053	0.960	0.940	0.939	0.920	AVRG		0.96162427		4.898	15.000
Fluorene	1.035	1.164	1.077	1.040	1.045	1.034	AVRG		1.06587410		4.763	15.000
Phenanthrene	0.776	0.816	0.802	0.772	0.877	0.866	AVRG		0.81808290		5.436	15.000
Anthracene	1.032	1.011	0.912	0.892	0.970	0.940	AVRG		0.95939369		5.758	15.000
Fluoranthene	0.770	0.789	0.717	0.720	0.810	0.810	AVRG		0.76929634		5.482	15.000
Pyrene	1.713	1.726	1.571	1.426	1.463	1.384	AVRG		1.54720455		9.515	15.000
Benzo(a)anthracene	0.604	0.760	0.916	0.867	0.864	0.880	AVRG		0.81539552		14.224	15.000
Chrysene	27910	86951	129450	282490	757410	1227900	LINR	-0.1799349	1.08928674		0.99913	0.99000
Benzo(b)fluoranthene	0.769	0.831	0.919	0.788	0.856	0.906	AVRG		0.84504153		7.186	15.000
Benzo(k)fluoranthene	1.626	1.642	1.324	1.386	1.278	1.189	AVRG		1.40731116		13.272	15.000
Benzo(a)pyrene	0.949	0.988	0.936	0.893	0.910	0.905	AVRG		0.93028204		3.776	15.000
Indeno(1,2,3-cd)pyrene	15069	47163	48211	100660	320880	595690	2ORDR	-0.1906227	2.09807954	-7.32e-002	0.99656	0.99000
Dibenzo(a,h)anthracene	0.822	0.761	0.724	0.666	0.733	0.725	AVRG		0.73835523		6.935	15.000
Benzo(g,h,i)perylene	0.957	0.892	0.816	0.763	0.802	0.789	AVRG		0.83678394		8.768	15.000
2-Methylnaphthalene-D10	0.914	0.985	0.902	0.912	0.932	0.925	AVRG		0.92857145		3.195	15.000
Fluorene-D10	41860	111400	190320	330940	869350	1335400	LINR	-0.1721858	1.14603900		0.99922	0.99000
Pyrene-D10	1.110	1.111	1.016	0.929	0.950	0.888	AVRG		1.00050161		9.468	15.000

FORM VI SV

FORM 4

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG91939-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID: G1356 Lab Sample ID: WG91939-1

Instrument ID: GCMS-G Date Extracted: 05/25/11

Matrix: (soil/water) SOIL Date Analyzed: 06/01/11

Level: (low/med) LOW Time Analyzed: 1617

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG91939-LCS	WG91939-2	G1357	06/01/11	1700
02	WG91939-LCSD	WG91939-3	G1358	06/01/11	1744
03	2W-SD-SD153-0001	SE2829-1	G1359	06/01/11	1827
04	2W-SD-SD156-0001	SE2829-2	G1360	06/01/11	1911
05	2W-SD-SD137-0001	SE2829-7	G1363	06/01/11	2120
06	2W-SD-SD155-0001	SE2829-3	G1373	06/02/11	1649
07	2W-SD-SD160-0001	SE2829-5	G1375	06/02/11	1817
08	2W-SD-SD124-0001	SE2829-9	G1376	06/02/11	1901
09	2W-SD-SD92-0001	SE2829-12	G1379	06/02/11	2111
10	2W-SD-SD93-0001	SE2829-13	G1380	06/02/11	2154
11	2W-SD-SD85-0001	SE2829-14	G1381	06/02/11	2238
12	2W-SD-SD109-0001	SE2829-19	G1388	06/03/11	1524
13	2W-SD-SD106-0001	SE2829-20	G1389	06/03/11	1608
14	2W-SD-SD101-0001	SE2829-21	G1390	06/03/11	1651
15	2W-SD-SD113-0001	SE2829-23	G1392	06/03/11	1818
16	2W-SD-SD133-0001	SE2829-24	G1393	06/03/11	1902
17	2W-SD-SD129-0001	SE2829-26	G1395	06/03/11	2029
18	2W-SD-SD128-0001	SE2829-8	G1404	06/06/11	1317
19	2W-SD-SD131-0001	SE2829-25	G1405	06/06/11	1400
20	2W-SD-SD137-0001	SE2829-7DL	G1408	06/06/11	1610
21	2W-SD-SD92-0001	SE2829-12DL	G1409	06/06/11	1654
22	2W-SD-SD93-0001	SE2829-13DL	G1410	06/06/11	1737
23	2W-SD-SD106-0001	SE2829-20DL	G1412	06/06/11	1903
24					
25					
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COMMENTS:

FORM IVSV

Katahdin Analytical Services A0000051

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG91939-1
Client ID: Method Blank Sample
Project:
SDG: WE55-4

Sample Date:
Received Date: 25-MAY-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 01-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 08-jun-2011 08:06

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.6	10.
2-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.2	10.
1-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Acenaphthylene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10.	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10.	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	U	10.	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo (a) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo (b) Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	U	10.	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno (1,2,3-cd) pyrene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo (a,h) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	U	10.	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene-D10		60.4	%					
Fluorene-D10		46.4	%					
Pyrene-D10		74.1	%					

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LCS/LCSD Recovery Report

LCS ID: WG91939-2
LCSD ID: WG91939-3
Project:
SDG: WE55-4
Report Date: 08-jun-2011 08:07

Received Date: 25-MAY-11
Extract Date: 25-MAY-11
Extracted By: KD
Extraction Method: SW846 3540
Lab Prep Batch: WG91939

Analysis Date: 01-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Naphthalene	66.7	44.0	66.0	39.4	59.1	ug/Kgdrywt	11	50	40-100
2-Methylnaphthalene	66.7	44.4	66.6	40.4	60.6	ug/Kgdrywt	9	50	40-100
1-Methylnaphthalene	66.7	43.6	65.4	39.9	59.8	ug/Kgdrywt	9	50	40-100
Acenaphthylene	66.7	41.5	62.2	37.3	55.9	ug/Kgdrywt	11	50	40-100
Acenaphthene	66.7	44.1	66.1	39.2	58.8	ug/Kgdrywt	12	50	40-100
Fluorene	66.7	43.2	64.8	38.8	58.2	ug/Kgdrywt	11	50	40-100
Phenanthrene	66.7	49.7	74.5	46.5	69.7	ug/Kgdrywt	7	50	40-100
Anthracene	66.7	46.7	70.0	46.7	70.0	ug/Kgdrywt	0	50	40-100
Fluoranthene	66.7	49.4	74.1	48.4	72.6	ug/Kgdrywt	2	50	40-100
Pyrene	66.7	54.8	82.2	48.9	73.3	ug/Kgdrywt	11	50	40-100
Benzo (a) anthracene	66.7	48.6	72.9	46.8	70.2	ug/Kgdrywt	4	50	40-100
Chrysene	66.7	47.7	71.5	45.2	67.8	ug/Kgdrywt	5	50	40-100
Benzo (b) Fluoranthene	66.7	49.0	73.5	48.5	72.7	ug/Kgdrywt	1	50	40-100
Benzo(k)fluoranthene	66.7	50.3	75.4	48.4	72.6	ug/Kgdrywt	4	50	40-100
Benzo(a)pyrene	66.7	58.2	87.2	55.2	82.8	ug/Kgdrywt	5	50	40-100
Indeno (1,2,3-cd) pyrene	66.7	48.2	72.3	39.2	58.8	ug/Kgdrywt	20	50	40-100
Dibenzo (a,h) anthracene	66.7	50.7	76.0	43.8	65.7	ug/Kgdrywt	15	50	40-100
Benzo(g,h,i)perylene	66.7	55.9	83.8	47.5	71.2	ug/Kgdrywt	16	50	40-100
2-Methylnaphthalene-D10			64.3		58.0				19-94
Fluorene-D10			57.6		52.5				20-96
Pyrene-D10			81.1		71.0				31-128

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FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG92497-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID: G1429 Lab Sample ID: WG92497-1

Instrument ID: GCMS-G Date Extracted: 06/07/11

Matrix: (soil/water) SOIL Date Analyzed: 06/07/11

Level: (low/med) LOW Time Analyzed: 1820

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	2W-SD-SD104-0001	SE2829-17	G1425	06/07/11	1527
02	2W-SD-SD102-0001	SE2829-18	G1426	06/07/11	1610
03	WG92497-LCS	WG92497-2	G1427	06/07/11	1654
04	WG92497-LCSD	WG92497-3	G1428	06/07/11	1737
05					
06					
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COMMENTS:

FORM IVSV

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG92497-1
Client ID: Method Blank Sample
Project:
SDG: WE55-4

Sample Date:
Received Date: 07-JUN-11
Extract Date: 07-JUN-11
Extracted By: JS
Extraction Method: SW846 3550
Lab Prep Batch: WG92497

Analysis Date: 07-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 08-jun-2011 08:07

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.6	10.
2-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.2	10.
1-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Acenaphthylene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10.	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10.	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	U	10.	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo (a) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo (b) Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	U	10.	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno (1,2,3-cd) pyrene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo (a,h) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	U	10.	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene-D10		72.9	%					
Fluorene-D10		67.8	%					
Pyrene-D10		89.6	%					

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LCS/LCSD Recovery Report

LCS ID: WG92497-2
LCSD ID: WG92497-3
Project:
SDG: WE55-4
Report Date: 08-jun-2011 09:35

Received Date: 07-JUN-11
Extract Date: 07-JUN-11
Extracted By: JS
Extraction Method: SW846 3550
Lab Prep Batch: WG92497

Analysis Date: 07-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Naphthalene	66.7	48.5	72.7	57.7	86.5	ug/Kgdrywt	17	50	54-94
2-Methylnaphthalene	66.7	55.2	82.8	61.9	92.8	ug/Kgdrywt	11	50	75-132
1-Methylnaphthalene	66.7	50.6	75.9	57.2	85.8	ug/Kgdrywt	12	50	36-114
Acenaphthylene	66.7	47.7	71.5	53.0	79.5	ug/Kgdrywt	10	50	51-103
Acenaphthene	66.7	49.0	73.5	55.1	82.6	ug/Kgdrywt	12	50	56-97
Fluorene	66.7	51.5	77.2	58.0	87.0	ug/Kgdrywt	12	50	61-103
Phenanthrene	66.7	60.1	90.1	66.2	99.2	ug/Kgdrywt	10	50	58-122
Anthracene	66.7	55.5	83.2	60.5	90.7	ug/Kgdrywt	9	50	55-113
Fluoranthene	66.7	61.2	91.8	70.6	106.	ug/Kgdrywt	14	50	68-126
Pyrene	66.7	56.2	84.2	54.7	82.0	ug/Kgdrywt	3	50	33-133
Benzo (a) anthracene	66.7	60.0	90.0	66.1	99.1	ug/Kgdrywt	10	50	50-138
Chrysene	66.7	57.7	86.5	62.0	93.0	ug/Kgdrywt	7	50	44-132
Benzo (b) Fluoranthene	66.7	61.8	92.6	71.6	107.	ug/Kgdrywt	15	50	44-119
Benzo(k)fluoranthene	66.7	53.1	79.6	58.6	87.8	ug/Kgdrywt	10	50	40-120
Benzo(a)pyrene	66.7	57.4	86.0	62.5	93.7	ug/Kgdrywt	8	50	52-113
Indeno (1,2,3-cd) pyrene	66.7	54.3	81.4	54.0	81.0	ug/Kgdrywt	0	50	32-134
Dibenzo (a,h) anthracene	66.7	49.6	74.4	49.2	73.8	ug/Kgdrywt	1	50	30-134
Benzo(g,h,i)perylene	66.7	44.0	66.0	43.2	64.8	ug/Kgdrywt	2	50	43-121
2-Methylnaphthalene-D10			65.1		70.9				19-94
Fluorene-D10			74.9		80.5				20-96
Pyrene-D10			84.1		79.8				31-128

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FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG91997-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID: G1367 Lab Sample ID: WG91997-1

Instrument ID: GCMS-G Date Extracted: 05/26/11

Matrix: (soil/water) SOIL Date Analyzed: 06/02/11

Level: (low/med) LOW Time Analyzed: 1227

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG91997-LCS	WG91997-2	G1368	06/02/11	1310
02	WG91997-LCSD	WG91997-3	G1369	06/02/11	1354
03	2W-SD-SD157-0001	SE2829-4	G1374	06/02/11	1733
04	2W-SD-SD125-0001	SE2829-10	G1377	06/02/11	1944
05	2W-SD-SD141-0001	SE2829-11	G1378	06/02/11	2028
06	2W-SD-SD86-0001	SE2829-15	G1382	06/02/11	2321
07	2W-SD-SD91-0001	SE2829-16	G1387	06/03/11	1440
08	2W-SD-SD143-0001	SE2829-27	G1396	06/03/11	2113
09	2W-SD-SD145-0001	SE2829-28	G1397	06/03/11	2156
10	2W-SD-SD132-0001	SE2829-29	G1398	06/03/11	2239
11	2W-SD-SD139-0001	SE2829-30	G1399	06/03/11	2323
12	2W-SD-SD114-0001	SE2829-31	G1400	06/04/11	0006
13	2W-SD-SD111-0001	SE2829-22	G1406	06/06/11	1444
14	2W-SD-SD91-0001	SE2829-16DL	G1411	06/06/11	1820
15	2W-SD-SD143-0001	SE2829-27DL	G1413	06/06/11	1946
16	2W-SD-SD145-0001	SE2829-28DL	G1414	06/06/11	2029
17	2W-SD-SD132-0001	SE2829-29DL	G1415	06/06/11	2112
18					
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30					

COMMENTS:

FORM IVSV

Report of Analytical Results

Client:
Lab ID: WG91997-1
Client ID: Method Blank Sample
Project:
SDG: WE55-4

Sample Date:
Received Date: 26-MAY-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 02-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 08-jun-2011 08:06

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.6	10.
2-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.2	10.
1-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Acenaphthylene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10.	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10.	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	U	10.	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo (a) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo (b) Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	U	10.	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno (1,2,3-cd) pyrene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo (a,h) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	U	10.	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene-D10		55.9	%					
Fluorene-D10		40.4	%					
Pyrene-D10		87.5	%					

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Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG91997-2
LCSD ID: WG91997-3
Project:
SDG: WE55-4
Report Date: 08-jun-2011 08:07

Received Date: 26-MAY-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91997

Analysis Date: 02-JUN-11
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Naphthalene	66.7	37.7	56.5	44.0	66.0	ug/Kgdrywt	15	50	40-100
2-Methylnaphthalene	66.7	39.7	59.5	46.0	69.0	ug/Kgdrywt	15	50	40-100
1-Methylnaphthalene	66.7	37.6	56.4	45.1	67.6	ug/Kgdrywt	18	50	40-100
Acenaphthylene	66.7	36.9	55.3	43.2	64.8	ug/Kgdrywt	16	50	40-100
Acenaphthene	66.7	38.4	57.6	43.5	65.2	ug/Kgdrywt	12	50	40-100
Fluorene	66.7	39.0	58.5	44.5	66.7	ug/Kgdrywt	13	50	40-100
Phenanthrene	66.7	47.0	70.5	51.5	77.2	ug/Kgdrywt	9	50	40-100
Anthracene	66.7	44.1	66.1	48.6	72.9	ug/Kgdrywt	10	50	40-100
Fluoranthene	66.7	48.9	73.3	53.8	80.6	ug/Kgdrywt	10	50	40-100
Pyrene	66.7	53.1	79.6	52.7	79.0	ug/Kgdrywt	1	50	40-100
Benzo (a) anthracene	66.7	51.7	77.5	54.0	81.0	ug/Kgdrywt	4	50	40-100
Chrysene	66.7	45.3	67.9	47.3	70.9	ug/Kgdrywt	4	50	40-100
Benzo (b) Fluoranthene	66.7	53.8	80.6	59.5	89.2	ug/Kgdrywt	10	50	40-100
Benzo(k)fluoranthene	66.7	45.9	68.8	49.6	74.4	ug/Kgdrywt	8	50	40-100
Benzo(a)pyrene	66.7	53.0	79.5	61.6	92.4	ug/Kgdrywt	15	50	40-100
Indeno (1,2,3-cd) pyrene	66.7	59.5	89.2	63.4	95.0	ug/Kgdrywt	6	50	40-100
Dibenzo (a,h) anthracene	66.7	51.1	76.6	57.5	86.2	ug/Kgdrywt	12	50	40-100
Benzo(g,h,i)perylene	66.7	48.3	72.4	3.82	5.73*	ug/Kgdrywt	171*	50	40-100
2-Methylnaphthalene-D10			57.2		63.2				19-94
Fluorene-D10			51.3		58.2				20-96
Pyrene-D10			78.0		77.8				31-128

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http://www.katahdinlab.com

FORM 2
SOIL SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Level:(low/med) LOW

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	WG91939-BLANK	WG91939-1	60	46	74						0
02	WG91939-LCS	WG91939-2	64	58	81						0
03	WG91939-LCSD	WG91939-3	58	52	71						0
04	2W-SD-SD153-0001	SE2829-1	54	72	102						0
05	2W-SD-SD156-0001	SE2829-2	66	58	108						0
06	2W-SD-SD137-0001	SE2829-7	64	62	104						0
07	WG91997-BLANK	WG91997-1	56	40	87						0
08	WG91997-LCS	WG91997-2	57	51	78						0
09	WG91997-LCSD	WG91997-3	63	58	78						0
10	2W-SD-SD155-0001	SE2829-3	54	54	88						0
11	2W-SD-SD157-0001	SE2829-4	50	49	82						0
12	2W-SD-SD160-0001	SE2829-5	57	61	97						0
13	2W-SD-SD124-0001	SE2829-9	64	76	111						0
14	2W-SD-SD125-0001	SE2829-10	41	43	67						0
15	2W-SD-SD141-0001	SE2829-11	50	52	86						0
16	2W-SD-SD92-0001	SE2829-12	62	60	100						0
17	2W-SD-SD93-0001	SE2829-13	63	60	106						0
18	2W-SD-SD85-0001	SE2829-14	63	54	94						0
19	2W-SD-SD86-0001	SE2829-15	48	45	80						0
20	2W-SD-SD91-0001	SE2829-16	36	35	54						0
21	2W-SD-SD109-0001	SE2829-19	59	55	94						0
22	2W-SD-SD106-0001	SE2829-20	61	60	97						0
23	2W-SD-SD101-0001	SE2829-21	56	52	87						0
24	2W-SD-SD113-0001	SE2829-23	32	29	51						0
25	2W-SD-SD133-0001	SE2829-24	44	40	61						0
26	2W-SD-SD129-0001	SE2829-26	53	51	77						0
27	2W-SD-SD143-0001	SE2829-27	47	56	108						0
28	2W-SD-SD145-0001	SE2829-28	32	53	68						0

		QC LIMITS
S1	= 2-Methylnaphthalene-D1	(19- 94)
S2	= Fluorene-D10	(20- 96)
S3	= Pyrene-D10	(31-128)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

Katahdin Analytical Services A0000046

FORM 2
SOIL SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Level:(low/med) LOW

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	2W-SD-SD132-0001	SE2829-29	39	37	59						0
02	2W-SD-SD139-0001	SE2829-30	37	34	61						0
03	2W-SD-SD114-0001	SE2829-31	40	44	83						0
04	2W-SD-SD128-0001	SE2829-8	52	47	92						0
05	2W-SD-SD131-0001	SE2829-25	49	43	77						0
06	2W-SD-SD111-0001	SE2829-22	29	32	59						0
07	2W-SD-SD137-0001	SE2829-7DL	56	55	98						0
08	2W-SD-SD92-0001	SE2829-12DL	D	D	D						0
09	2W-SD-SD93-0001	SE2829-13DL	63	55	104						0
10	2W-SD-SD91-0001	SE2829-16DL	D	D	D						0
11	2W-SD-SD106-0001	SE2829-20DL	55	52	100						0
12	2W-SD-SD143-0001	SE2829-27DL	42	41	78						0
13	2W-SD-SD145-0001	SE2829-28DL	31	51	76						0
14	2W-SD-SD132-0001	SE2829-29DL	35	34	77						0
15	2W-SD-SD104-0001	SE2829-17	51	56	73						0
16	2W-SD-SD102-0001	SE2829-18	44	44	62						0
17	WG92497-LCS	WG92497-2	65	75	84						0
18	WG92497-LCSD	WG92497-3	71	80	80						0
19	WG92497-BLANK	WG92497-1	73	68	90						0
20											
21											
22											
23											
24											
25											
26											
27											
28											

		QC LIMITS
S1	= 2-Methylnaphthalene-D1	(19- 94)
S2	= Fluorene-D10	(20- 96)
S3	= Pyrene-D10	(31-128)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

Katahdin Analytical Services A0000047

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID (Standard): G1349 Date Analyzed: 06/01/11

Instrument ID: GCMS-G Time Analyzed: 1107

		IS1(DCB)		IS2(NPT)		IS3(ANT)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		47639	8.03	163874	10.75	84007	14.82
UPPER LIMIT		95278	8.57	327748	11.29	168014	15.36
LOWER LIMIT		23820	7.49	81937	10.21	42004	14.28
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01	WG91939-BLANK	WG91939-1	54782	8.04	164568	10.76	86315	14.82
02	WG91939-LCS	WG91939-2	43221	8.03	147953	10.75	76513	14.82
03	WG91939-LCSD	WG91939-3	46755	8.03	162532	10.75	85769	14.82
04	2W-SD-SD153-0001	SE2829-1	44949	8.03	183933	10.75	121261	14.86
05	2W-SD-SD156-0001	SE2829-2	48701	8.03	176038	10.75	94355	14.82
06	2W-SD-SD137-0001	SE2829-7	49796	8.03	187623	10.75	103157	14.82
07		SSTD1.00G0602	56441	8.03	206577	10.74	105140	14.82
08	WG91997-BLANK	WG91997-1	54326	8.03	193355	10.75	93418	14.82
09	WG91997-LCS	WG91997-2	56479	8.04	210571	10.75	105843	14.82
10	WG91997-LCSD	WG91997-3	63870	8.04	237358	10.75	126530	14.82
11	2W-SD-SD155-0001	SE2829-3	42172	8.03	163709	10.74	95717	14.82
12	2W-SD-SD157-0001	SE2829-4	45085	8.03	174532	10.75	103256	14.82
13	2W-SD-SD160-0001	SE2829-5	39634	8.03	161697	10.75	95134	14.82
14	2W-SD-SD124-0001	SE2829-9	52630	8.03	216486	10.76	140403	14.88
15	2W-SD-SD125-0001	SE2829-10	50741	8.04	204423	10.75	118962	14.84
16	2W-SD-SD141-0001	SE2829-11	52321	8.04	204309	10.75	117435	14.84
17	2W-SD-SD92-0001	SE2829-12	51967	8.03	196866	10.75	110099	14.82
18	2W-SD-SD93-0001	SE2829-13	59567	8.03	211627	10.75	120025	14.82
19	2W-SD-SD85-0001	SE2829-14	58321	8.03	208353	10.75	116547	14.84
20	2W-SD-SD86-0001	SE2829-15	50333	8.04	196219	10.76	109693	14.84

IS1 (DCB) = 1,4-Dichlorobenzene-D4
IS2 (NPT) = Naphthalene-D8
IS3 (ANT) = Acenaphthene-D10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000064

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID (Standard): G1349 Date Analyzed: 06/01/11

Instrument ID: GCMS-G Time Analyzed: 1107

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
12 HOUR STD		47639		8.03		163874		10.75		84007		14.82	
UPPER LIMIT		95278		8.57		327748		11.29		168014		15.36	
LOWER LIMIT		23820		7.49		81937		10.21		42004		14.28	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01		SSTD1.00G0603		45527		8.03		193761		10.75		112860		14.82	
02	2W-SD-SD91-0001	SE2829-16		52072		8.03		197493		10.75		118793		14.82	
03	2W-SD-SD109-0001	SE2829-19		56233		8.03		208060		10.75		117908		14.82	
04	2W-SD-SD106-0001	SE2829-20		56023		8.03		206666		10.75		114782		14.82	
05	2W-SD-SD101-0001	SE2829-21		55457		8.03		207632		10.75		118061		14.82	
06	2W-SD-SD113-0001	SE2829-23		48018		8.03		189915		10.76		108875		14.84	
07	2W-SD-SD133-0001	SE2829-24		53100		8.03		196064		10.76		113047		14.84	
08	2W-SD-SD129-0001	SE2829-26		55047		8.03		210951		10.75		125800		14.84	
09	2W-SD-SD143-0001	SE2829-27		48865		8.03		186328		10.75		98922		14.84	
10	2W-SD-SD145-0001	SE2829-28		61523		8.04		234258		10.76		152019		14.89	
11	2W-SD-SD132-0001	SE2829-29		66110		8.04		254855		10.76		137871		14.84	
12	2W-SD-SD139-0001	SE2829-30		62154		8.03		237272		10.76		126175		14.84	
13	2W-SD-SD114-0001	SE2829-31		61681		8.03		237991		10.76		132381		14.84	
14		SSTD1.00G0606		65734		8.03		259282		10.75		128979		14.82	
15	2W-SD-SD128-0001	SE2829-8		66475		8.03		275766		10.74		151164		14.82	
16	2W-SD-SD131-0001	SE2829-25		74687		8.03		272911		10.75		159836		14.82	
17	2W-SD-SD111-0001	SE2829-22		79461		8.03		294052		10.75		163762		14.82	
18	2W-SD-SD137-0001	SE2829-7DL		66713		8.03		250484		10.75		150728		14.82	
19	2W-SD-SD92-0001	SE2829-12DL		72583		8.03		281197		10.75		143154		14.82	
20	2W-SD-SD93-0001	SE2829-13DL		70413		8.03		258356		10.75		140634		14.82	

IS1 (DCB) = 1,4-Dichlorobenzene-D4
IS2 (NPT) = Naphthalene-D8
IS3 (ANT) = Acenaphthene-D10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID (Standard): G1349 Date Analyzed: 06/01/11

Instrument ID: GCMS-G Time Analyzed: 1107

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD		47639	8.03	163874	10.75	84007	14.82
UPPER LIMIT		95278	8.57	327748	11.29	168014	15.36
LOWER LIMIT		23820	7.49	81937	10.21	42004	14.28
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01	2W-SD-SD91-0001	SE2829-16DL	70204	8.03	274089	10.77	142293	14.85
02	2W-SD-SD106-0001	SE2829-20DL	69857	8.03	268295	10.75	152477	14.82
03	2W-SD-SD143-0001	SE2829-27DL	91396	8.03	307487	10.75	164461	14.82
04	2W-SD-SD145-0001	SE2829-28DL	78964	8.03	296851	10.75	185445*	14.84
05	2W-SD-SD132-0001	SE2829-29DL	82152	8.03	301921	10.75	176149*	14.82
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

IS1 (DCB) = 1,4-Dichlorobenzene-D4
IS2 (NPT) = Naphthalene-D8
IS3 (ANT) = Acenaphthene-D10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID (Standard): G1349 Date Analyzed: 06/01/11

Instrument ID: GCMS-G Time Analyzed: 1107

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD		129856	18.33	99359	24.65	73135	27.81
UPPER LIMIT		259712	18.87	198718	25.19	146270	28.35
LOWER LIMIT		64928	17.79	49680	24.11	36568	27.27
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01	WG91939-BLANK	WG91939-1	120383	18.35	75739	24.67	54810	27.83
02	WG91939-LCS	WG91939-2	113291	18.33	76681	24.65	58720	27.81
03	WG91939-LCSD	WG91939-3	128962	18.33	96457	24.65	71317	27.81
04	2W-SD-SD153-0001	SE2829-1	171171	18.37	56140	24.66	37262	27.80
05	2W-SD-SD156-0001	SE2829-2	150869	18.33	64641	24.65	38757	27.80
06	2W-SD-SD137-0001	SE2829-7	174899	18.35	65344	24.66	36648	27.81
07		SSTD1.00G0602	171462	18.34	127798	24.65	98160	27.81
08	WG91997-BLANK	WG91997-1	124810	18.35	63148	24.66	45731	27.82
09	WG91997-LCS	WG91997-2	160759	18.34	110001	24.65	81073	27.81
10	WG91997-LCSD	WG91997-3	200807	18.33	153890	24.65	103648	27.81
11	2W-SD-SD155-0001	SE2829-3	174474	18.35	78971	24.66	46160	27.81
12	2W-SD-SD157-0001	SE2829-4	174475	18.33	74766	24.66	42612	27.82
13	2W-SD-SD160-0001	SE2829-5	174286	18.34	77505	24.66	44523	27.82
14	2W-SD-SD124-0001	SE2829-9	216272	18.41	64557	24.70	46406	27.86
15	2W-SD-SD125-0001	SE2829-10	217783	18.37	84619	24.69	56543	27.87
16	2W-SD-SD141-0001	SE2829-11	218039	18.36	98115	24.67	54940	27.84
17	2W-SD-SD92-0001	SE2829-12	190608	18.34	87988	24.67	50382	27.83
18	2W-SD-SD93-0001	SE2829-13	201906	18.34	87556	24.67	48319	27.83
19	2W-SD-SD85-0001	SE2829-14	200216	18.35	83592	24.66	57723	27.83
20	2W-SD-SD86-0001	SE2829-15	185860	18.35	87438	24.67	40020	27.83

IS4 (PHN) = Phenanthrene-D10
IS5 (CRY) = Chrysene-D12
IS6 (PRY) = Perylene-D12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID (Standard): G1349 Date Analyzed: 06/01/11

Instrument ID: GCMS-G Time Analyzed: 1107

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
12 HOUR STD		129856		18.33		99359		24.65		73135		27.81	
UPPER LIMIT		259712		18.87		198718		25.19		146270		28.35	
LOWER LIMIT		64928		17.79		49680		24.11		36568		27.27	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01		SSTD1.00G0603		199959	18.36		129393	24.67		90782		27.84	
02	2W-SD-SD91-0001	SE2829-16		198189	18.34		103861	24.67		54426		27.82	
03	2W-SD-SD109-0001	SE2829-19		204135	18.34		92708	24.66		52312		27.82	
04	2W-SD-SD106-0001	SE2829-20		198510	18.34		86733	24.67		50656		27.82	
05	2W-SD-SD101-0001	SE2829-21		199219	18.34		79567	24.66		53777		27.83	
06	2W-SD-SD113-0001	SE2829-23		166721	18.35		63012	24.66		36771		27.83	
07	2W-SD-SD133-0001	SE2829-24		183940	18.35		81164	24.66		38262		27.83	
08	2W-SD-SD129-0001	SE2829-26		189783	18.35		90020	24.69		55993		27.85	
09	2W-SD-SD143-0001	SE2829-27		168865	18.36		57267	24.67		33566*		27.83	
10	2W-SD-SD145-0001	SE2829-28		278933*	18.43		91282	24.71		52019		27.90	
11	2W-SD-SD132-0001	SE2829-29		213834	18.37		94986	24.71		68828		27.89	
12	2W-SD-SD139-0001	SE2829-30		199422	18.36		78630	24.69		52588		27.85	
13	2W-SD-SD114-0001	SE2829-31		197837	18.36		72143	24.69		43967		27.84	
14		SSTD1.00G0606		196587	18.36		142872	24.67		97416		27.84	
15	2W-SD-SD128-0001	SE2829-8		210855	18.34		85902	24.66		53493		27.82	
16	2W-SD-SD131-0001	SE2829-25		254898	18.34		119833	24.66		60516		27.82	
17	2W-SD-SD111-0001	SE2829-22		257391	18.34		123338	24.66		60334		27.82	
18	2W-SD-SD137-0001	SE2829-7DL		236678	18.34		113050	24.66		64448		27.82	
19	2W-SD-SD92-0001	SE2829-12DL		242204	18.35		111698	24.66		65164		27.82	
20	2W-SD-SD93-0001	SE2829-13DL		211926	18.34		109064	24.66		63865		27.81	

IS4 (PHN) = Phenanthrene-D10
IS5 (CRY) = Chrysene-D12
IS6 (PRY) = Perylene-D12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID (Standard): G1349 Date Analyzed: 06/01/11

Instrument ID: GCMS-G Time Analyzed: 1107

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
12 HOUR STD		129856		18.33		99359		24.65		73135		27.81	
UPPER LIMIT		259712		18.87		198718		25.19		146270		28.35	
LOWER LIMIT		64928		17.79		49680		24.11		36568		27.27	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	2W-SD-SD91-0001	SE2829-16DL		232540	18.35		116139	24.66		67807		27.82	
02	2W-SD-SD106-0001	SE2829-20DL		246551	18.34		110121	24.66		65114		27.81	
03	2W-SD-SD143-0001	SE2829-27DL		233106	18.34		122843	24.66		56480		27.82	
04	2W-SD-SD145-0001	SE2829-28DL		250612	18.37		86181	24.67		48077		27.84	
05	2W-SD-SD132-0001	SE2829-29DL		258100	18.35		90307	24.67		51475		27.85	
06													
07													
08													
09													
10													
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13													
14													
15													
16													
17													
18													
19													
20													

IS4 (PHN) = Phenanthrene-D10
IS5 (CRY) = Chrysene-D12
IS6 (PRY) = Perylene-D12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID (Standard): G1418 Date Analyzed: 06/07/11

Instrument ID: GCMS-G Time Analyzed: 1021

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
12 HOUR STD		82421		8.01		275347		10.74		140206		14.81	
UPPER LIMIT		164842		8.55		550694		11.28		280412		15.35	
LOWER LIMIT		41211		7.47		137674		10.20		70103		14.27	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	2W-SD-SD104-0001	SE2829-17		65521		8.03		261681		10.74		147536		14.81	
02	2W-SD-SD102-0001	SE2829-18		77775		8.04		319961		10.75		182048		14.81	
03	WG92497-LCS	WG92497-2		67202		8.03		262887		10.74		147445		14.81	
04	WG92497-LCSD	WG92497-3		74874		8.04		288039		10.74		159137		14.81	
05	WG92497-BLANK	WG92497-1		63490		8.03		263501		10.75		134669		14.82	
06															
07															
08															
09															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

IS1 (DCB) = 1,4-Dichlorobenzene-D4
IS2 (NPT) = Naphthalene-D8
IS3 (ANT) = Acenaphthene-D10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab File ID (Standard): G1418 Date Analyzed: 06/07/11

Instrument ID: GCMS-G Time Analyzed: 1021

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
12 HOUR STD		213152		18.34		98580		24.66		72572		27.82	
UPPER LIMIT		426304		18.88		197160		25.20		145144		28.36	
LOWER LIMIT		106576		17.80		49290		24.12		36286		27.28	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	2W-SD-SD104-0001	SE2829-17		230734		18.33		111211		24.65		76439		27.81	
02	2W-SD-SD102-0001	SE2829-18		293383		18.33		124642		24.65		74382		27.81	
03	WG92497-LCS	WG92497-2		229419		18.33		130567		24.65		88570		27.81	
04	WG92497-LCSD	WG92497-3		250112		18.33		171419		24.65		116946		27.81	
05	WG92497-BLANK	WG92497-1		212320		18.34		111083		24.66		76877		27.82	
06															
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18															
19															
20															

IS4 (PHN) = Phenanthrene-D10
IS5 (CRY) = Chrysene-D12
IS6 (PRY) = Perylene-D12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

Data File: \\target_server\GG\chem\gcms-g.i\G060111.b\G1349.D
Report Date: 01-Jun-2011 15:42

Katahdin Analytical Services

Data file : \\target_server\GG\chem\gcms-g.i\G060111.b\G1349.D
Lab Smp Id: SSTD1.00G0601
Inj Date : 01-JUN-2011 11:07 MS Autotune Date: 15-JUN-2004 09:29
Operator : JCG Inst ID: gcms-g.i
Smp Info : SSTD1.00G0601
Misc Info : SW846 M8270C SIM
Comment :
Method : \\target_server\GG\chem\gcms-g.i\G060111.b\gspsim86.m
Meth Date : 01-Jun-2011 15:38 gcms-g.i Quant Type: ISTD
Cal Date : 25-MAY-2011 15:03 Cal File: G1297.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Std

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	3.268	3.297	(0.407)	20925	1.00000	1.02	
	2 1,4-Dioxane	88	3.296	3.326	(0.411)	25196	1.00000	1.11	
	3 Benzaldehyde	77	7.173	7.206	(0.894)	44100	1.00000	1.06	
	4 Phenol	94	7.447	7.464	(0.928)	202328	3.00000	3.05	
	5 Bis(2-Chloroethyl)ether	93	7.576	7.593	(0.944)	59678	1.00000	0.929(Q)	
	6 2-Chlorophenol	128	7.608	7.625	(0.948)	188980	3.00000	2.97	
*	7 1,4-Dichlorobenzene-D4	152	8.027	8.028	(1.000)	47639	0.80000	(a)	
	8 2,2'-Oxybis(1-chloropropane)	45	8.676	8.691	(1.081)	77876	1.00000	1.04(Q)	
	9 2-Methylphenol	108	8.662	8.677	(1.079)	166083	3.00000	3.11	
	10 Acetophenone	105	8.893	8.922	(0.827)	86733	1.00000	1.07	
	11 N-Nitroso-di-n-propylamine	70	8.936	8.980	(1.113)	44975	1.00000	1.02(Q)	
	12 Hexachloroethane	117	9.037	9.037	(1.126)	28952	1.00000	1.02	
	13 3&4-Methylphenol	108	9.008	9.037	(1.122)	162173	3.00000	3.08	
	14 Nitrobenzene	77	9.225	9.239	(0.858)	79971	1.00000	1.19	
	15 Isophorone	82	9.802	9.839	(0.912)	113300	1.00000	1.05	
	16 2-Nitrophenol	139	9.936	9.948	(0.924)	93683	3.00000	3.21	
	17 2,4-Dimethylphenol	107	10.154	10.191	(0.945)	187194	3.00000	3.20	
	18 bis(2-Chloroethoxy)methane	93	10.360	10.409	(0.964)	66620	1.00000	1.04	
	19 2,4-Dichlorophenol	162	10.506	10.567	(0.977)	145951	3.00000	3.10	
*	20 Naphthalene-D8	136	10.749	10.749	(1.000)	163874	0.80000	(a)	
	21 Naphthalene	128	10.785	10.798	(1.003)	184928	1.00000	1.04	

Data File: \\target_server\GG\chem\gcms-g.i\G060111.b\G1349.D
Report Date: 01-Jun-2011 15:42

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	22 4-Chloroaniline	127	11.040	11.125	(1.027)	49907	1.00000	1.01	
	23 Hexachlorobutadiene	225	11.137	11.137	(1.036)	43272	1.00000	1.04	
	24 Caprolactam	113	11.919	12.154	(1.109)	12272	1.00000	0.898(Q)	
	25 4-Chloro-3-Methylphenol	107	12.236	12.295	(1.138)	149200	3.00000	3.16	
$	26 2-Methylnaphthalene-D10	152	12.318	12.354	(0.831)	114837	1.00000	1.03	
	27 2-Methylnaphthalene	142	12.400	12.424	(1.154)	122325	1.00000	0.998	
	28 1-Methylnaphthalene	142	12.611	12.636	(1.173)	114894	1.00000	1.02	
	29 Hexachlorocyclopentadiene	237	12.787	12.800	(0.863)	23807	1.00000	0.939	
$	30 2,4-Dibromophenol	252	13.069	13.140	(1.628)	31547	1.00000	0.976(aQ)	
	31 2,4,6-Trichlorophenol	196	13.128	13.164	(0.886)	106836	3.00000	3.04	
	32 2,4,5-Trichlorophenol	196	13.222	13.281	(0.892)	113412	3.00000	3.07	
	33 2-Chloronaphthalene	164	13.515	13.551	(0.912)	46191	1.00000	1.09(Q)	
	34 1,1'-Biphenyl	154	13.538	13.563	(0.913)	187032	1.00000	1.11	
	35 2-Nitroaniline	65	13.855	13.919	(0.935)	26139	1.00000	1.02	
	36 Dimethyl Phthalate	163	14.382	14.408	(0.970)	396979	3.00000	3.02	
	37 Acenaphthylene	152	14.464	14.477	(0.976)	176948	1.00000	1.00	
	38 2,6-Dinitrotoluene	165	14.478	14.518	(0.977)	27422	1.00000	0.996	
*	39 Acenaphthene-D10	164	14.823	14.821	(1.000)	84007	0.80000	(a)	
	40 Acenaphthene	153	14.892	14.904	(1.005)	111844	1.00000	1.00	
	41 3-Nitroaniline	138	14.878	15.028	(1.004)	9010	1.00000	0.806(Q)	
	42 2,4-Dinitrophenol	184	15.140	15.304	(1.021)	18363	3.00000	3.70	
	43 Dibenzofuran	168	15.319	15.345	(1.033)	155982	1.00000	1.03	
	44 2,4-Dinitrotoluene	165	15.429	15.524	(1.041)	30712	1.00000	0.968(Q)	
	45 4-Nitrophenol	139	15.484	15.731	(1.045)	44764	3.00000	3.70(Q)	
	46 2,3,4,6-Tetrachlorophenol	232	15.677	15.731	(1.058)	104668	3.00000	3.16	
$	47 Fluorene-D10	176	16.054	16.086	(1.083)	129472	1.00000	1.04	
	48 Diethylphthalate	149	16.085	16.102	(1.085)	404655	3.00000	2.93	
	49 Fluorene	166	16.117	16.149	(1.087)	118832	1.00000	0.980	
	50 4-Chlorophenyl-phenyl ether	204	16.227	16.259	(1.095)	63737	1.00000	0.985	
	51 4,6-Dinitro-2-Methylphenol	198	16.384	16.480	(0.894)	37069	3.00000	3.05	
	52 N-Nitrosodiphenylamine	169	16.526	16.574	(0.902)	96630	1.00000	1.00	
	53 4-Nitroaniline	138	16.431	16.558	(1.109)	10304	1.00000	0.877(QM)	M9
	54 4-Bromophenyl-phenylether	248	17.375	17.409	(0.948)	37357	1.00000	0.999	
	55 Hexachlorobenzene	284	17.409	17.431	(0.950)	42078	1.00000	0.953	
	56 Atrazine	200	17.942	18.009	(0.979)	39032	1.00000	1.07	
	57 Pentachlorophenol	266	17.965	18.032	(0.980)	50938	3.00000	3.05	
	58 Dibenzothiophene	184	18.078	18.111	(0.986)	140471	1.00000	1.00	
*	59 Phenanthrene-D10	188	18.328	18.361	(1.000)	129856	0.80000	(a)	
	60 Phenanthrene	178	18.384	18.417	(1.003)	151045	1.00000	1.01	
	61 Anthracene	178	18.509	18.565	(1.010)	155986	1.00000	1.06	
	62 Carbazole	167	18.999	19.089	(1.037)	114895	1.00000	1.14	
	63 Di-n-butylphthalate	149	20.042	20.065	(1.094)	618015	3.00000	2.93	
	64 Fluoranthene	202	21.215	21.269	(1.158)	157779	1.00000	1.03	
$	65 Pyrene-D10	212	21.688	21.730	(0.880)	114037	1.00000	0.981(a)	
	66 Pyrene	202	21.730	21.772	(0.882)	165432	1.00000	0.994	
	67 Butylbenzylphthalate	149	23.592	23.615	(0.957)	247001	3.00000	2.90	
	68 Benzo(a)anthracene	228	24.632	24.673	(0.999)	109471	1.00000	1.01	
*	69 Chrysene-D12	240	24.645	24.673	(1.000)	99359	0.80000	(a)	
	70 Chrysene	228	24.700	24.728	(1.002)	138689	1.00000	1.01	
	71 3,3'-Dichlorobenzidine	252	24.755	24.823	(1.004)	16337	1.00000	0.652	
	72 bis(2-Ethylhexyl)phthalate	149	25.083	25.083	(1.018)	348928	3.00000	2.97	
	73 Di-n-octylphthalate	149	26.561	26.573	(0.955)	507836	3.00000	3.05	
	74 Benzo(b)fluoranthene	252	27.021	27.067	(0.972)	82948	1.00000	0.973	
	75 Benzo(k)fluoranthene	252	27.088	27.134	(0.974)	128917	1.00000	1.03(H)	

Data File: \\target_server\GG\chem\gcms-g.i\G060111.b\G1349.D
Report Date: 01-Jun-2011 15:42

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	76 Benzo(a)pyrene	252	27.683	27.740	(0.996)	81050	1.00000	1.06	
*	77 Perylene-D12	264	27.806	27.841	(1.000)	73135	0.80000	(a)	
	~~78 Perylene~~	252	27.851	27.885	(1.002)	97957	1.00000	0.993	
	79 Indeno(1,2,3-cd)pyrene	276	29.972	30.085	(1.078)	35007	1.00000	0.998(M)	M3
	80 Dibenzo(a,h)anthracene	278	30.072	30.215	(1.081)	44584	1.00000	0.967	
	81 Benzo(g,h,i)perylene	276	30.561	30.660	(1.099)	65936	1.00000	1.09	
M	82 Total PAHs	100				2146615	17.0000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

PESTICIDE DATA

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.04 DCB: 12.21

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		EVAL	05/13/11	1632		
02		INDAB 0.05	05/13/11	1649	4.04	12.21
03		INDAB 0.005	05/13/11	1707	4.04	12.21
04		INDAB 0.01	05/13/11	1724	4.04	12.21
05		INDAB 0.025	05/13/11	1742	4.04	12.21
06		INDAB 0.1	05/13/11	1759	4.04	12.21
07		INDAB 0.25	05/13/11	1817	4.04	12.21
08		IND 0.05	05/13/11	1834		
09		EVAL	06/06/11	1023		
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000171

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :05/13/11
Time Analyzed :1632

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EE00211.D	4.63	2.87

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date(s): 05/13/11 05/13/11

Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Calibration Time(s): 1649 2204

LAB FILE ID: RF0.005: 1EE00226 RF0.01: 1EE00227 RF0.025: 1EE00228
RF0.05: 1EE00225 RF0.1: 1EE00229 RF0.25: 1EE00230

COMPOUND	RF0.005	RF0.01	RF0.025	RF0.05	RF0.1	RF0.25	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2	MAX %RSD OR R^2
4,4'-DDE	47605	102350	261390	518960	1059100	2676000	LINR	7.259e-004	9.328e-008	0.99996	0.99000
4,4'-DDD	33406	71798	186530	374990	782250	1989200	LINR	1.383e-003	1.253e-007	0.99987	0.99000
4,4'-DDT	31722	68450	181270	363730	750040	1944200	LINR	1.755e-003	1.282e-007	0.99974	0.99000
Tetrachloro-m-Xylene	54609	116830	290750	561710	1138900	2800300	LINR	-4.25e-004	8.925e-008	0.99994	0.99000
Decachlorobiphenyl	21197	44631	112600	213440	428950	1098900	LINR	4.946e-004	2.277e-007	0.99986	0.99000

FORM VI PESTICIDE

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 05/13/11 Time: 1834

Lab File ID: 1EE00218 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
alpha-BHC	5.07e-002	5.e-002	16354000	0.001	1.40	15.00	LINR
Endosulfan sulfate	4.54e-002	5.e-002	5113400.0	0.001	-9.20	15.00	LINR
beta-BHC	5.41e-002	5.e-002	6718300.0	0.001	8.20	15.00	LINR
delta-BHC	4.85e-002	5.e-002	10522000	0.001	-3.00	15.00	LINR
Heptachlor	4.92e-002	5.e-002	10426000	0.001	-1.60	15.00	LINR
Aldrin	4.98e-002	5.e-002	12199000	0.001	-0.40	15.00	LINR
Heptachlor Epoxide	5.06e-002	5.e-002	10964000	0.001	1.20	15.00	LINR
gamma-Chlordane	4.98e-002	5.e-002	10472000	0.001	-0.40	15.00	LINR
alpha-Chlordane	5.15e-002	5.e-002	10138000	0.001	3.00	15.00	LINR
4,4'-DDE	5.12e-002	5.e-002	10822000	0.001	2.40	15.00	LINR
Endosulfan I	5.08e-002	5.e-002	9680800.0	0.001	1.60	15.00	LINR
Dieldrin	4.89e-002	5.e-002	10139000	0.001	-2.20	15.00	LINR
Endrin	4.92e-002	5.e-002	8580700.0	0.001	-1.60	15.00	LINR
4,4'-DDD	4.91e-002	5.e-002	7620700.0	0.001	-1.80	15.00	LINR
Endosulfan II	4.81e-002	5.e-002	7847800.0	0.001	-3.80	15.00	LINR
4,4'-DDT	4.83e-002	5.e-002	7256700.0	0.001	-3.40	15.00	LINR
Endrin Aldehyde	4.41e-002	5.e-002	5195000.0	0.001	-11.80	15.00	LINR
Methoxychlor	5.03e-002	5.e-002	3347900.0	0.001	0.60	15.00	LINR
Endrin Ketone	4.54e-002	5.e-002	5566000.0	0.001	-9.20	15.00	LINR
gamma-BHC	4.92e-002	5.e-002	14560000	0.001	-1.60	15.00	LINR

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.02 DCB: 12.16

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	06/06/11	1040	4.02	12.16
02	WG91999-BLAN	WG91999-1	06/06/11	1148	4.02	12.16
03	WG91999-LCS	WG91999-2	06/06/11	1205	4.02	12.16
04	WG91999-LCSD	WG91999-3	06/06/11	1223	4.02	12.16
05		INDAB 0.025	06/06/11	1442	4.02	12.16
06		EVAL	06/07/11	0936		
07		INDAB 0.025	06/07/11	1056	4.02	12.16
08	2W-SD-SD153-	SE2829-1	06/07/11	1159	4.01	12.16
09	2W-SD-SD156-	SE2829-2	06/07/11	1216	4.02	12.16
10	2W-SD-SD155-	SE2829-3	06/07/11	1234	4.03	12.16
11	2W-SD-SD157-	SE2829-4	06/07/11	1251	4.02	12.16
12	2W-SD-SD160-	SE2829-5	06/07/11	1308	4.02	12.16
13	2W-SD-SD128-	SE2829-8	06/07/11	1343	4.03	12.16
14	2W-SD-SD124-	SE2829-9	06/07/11	1401	4.03	12.17
15		INDAB 0.05	06/07/11	1453	4.02	12.16
16	2W-SD-SD133-	SE2829-24	06/07/11	1511	4.02	12.16
17	2W-SD-SD131-	SE2829-25	06/07/11	1528	4.02	12.16
18	2W-SD-SD129-	SE2829-26	06/07/11	1546	4.02	12.16
19	2W-SD-SD114-	SE2829-31	06/07/11	1713	4.03	12.16
20		INDAB 0.025	06/07/11	1806	4.02	12.16

QC LIMITS

TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.02 DCB: 12.16

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
01	2W-SD-SD137-	SE2829-7DL	06/07/11	1823				
02	2W-SD-SD128-	SE2829-8DL	06/07/11	1841				
03	2W-SD-SD124-	SE2829-9DL	06/07/11	1858				
04	2W-SD-SD125-	SE2829-10DL	06/07/11	1916				
05	2W-SD-SD141-	SE2829-11DL	06/07/11	1933				
06	2W-SD-SD143-	SE2829-27DL	06/07/11	2008				
07	2W-SD-SD139-	SE2829-30DL	06/07/11	2101				
08		INDAB 0.05	06/07/11	2118	4.02		12.16	
09		EVAL	06/08/11	1015				
10		INDAB 0.05	06/08/11	1033	4.02		12.16	
11	2W-SD-SD129-	SE2829-26DL2	06/08/11	1111				
12	2W-SD-SD132-	SE2829-29DL2	06/08/11	1128				
13		INDAB 0.025	06/08/11	1406	4.02		12.16	
14		EVAL	06/10/11	1126				
15		INDAB 0.05	06/10/11	1143	4.02		12.16	
16	WG92619-BLAN	WG92619-1	06/10/11	1247	4.01		12.15	
17	WG92619-LCS	WG92619-2	06/10/11	1304	4.02		12.16	
18	WG92619-LCSD	WG92619-3	06/10/11	1322	4.02		12.16	
19	2W-SD-SD145-	SE2829-28DL	06/10/11	1449				
20		INDAB 0.025	06/10/11	1507	4.02		12.16	

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :06/06/11
Time Analyzed :1023

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EF00040.D	3.69	1.73

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/06/11 Time: 1040

Lab File ID: 1EF00041 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	5.27e-002	5.e-002	11152000	0.001	5.40	20.00	LINR
4,4'-DDD	5.05e-002	5.e-002	7849100.0	0.001	1.00	20.00	LINR
4,4'-DDT	5.4e-002	5.e-002	8153100.0	0.001	8.00	20.00	LINR
Tetrachloro-m-Xylene	5.93e-002	5.e-002	13384000	0.001	18.60	20.00	LINR
Decachlorobiphenyl	5.35e-002	5.e-002	4650700.0	0.001	7.00	20.00	LINR

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/06/11 Time: 1442

Lab File ID: 1EF00053 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	2.49e-002	2.5e-002	10348000	0.001	-0.40	20.00	LINR
4,4'-DDD	2.54e-002	2.5e-002	7673600.0	0.001	1.60	20.00	LINR
4,4'-DDT	2.55e-002	2.5e-002	7421400.0	0.001	2.00	20.00	LINR
Tetrachloro-m-Xylene	2.79e-002	2.5e-002	12674000	0.001	11.60	20.00	LINR
Decachlorobiphenyl	2.6e-002	2.5e-002	4487100.0	0.001	4.00	20.00	LINR

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :06/07/11
Time Analyzed :0936

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EF00064.D	4.96	1.82

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/07/11 Time: 1056

Lab File ID: 1EF00068 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	2.46e-002	2.5e-002	10254000	0.001	-1.60	20.00	LINR
4,4'-DDD	2.65e-002	2.5e-002	8032400.0	0.001	6.00	20.00	LINR
4,4'-DDT	2.5e-002	2.5e-002	7240600.0	0.001	0.00	20.00	LINR
Tetrachloro-m-Xylene	2.59e-002	2.5e-002	11798000	0.001	3.60	20.00	LINR
Decachlorobiphenyl	2.7e-002	2.5e-002	4662100.0	0.001	8.00	20.00	LINR

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/07/11 Time: 1453

Lab File ID: 1EF00079 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
4,4'-DDE	4.69e-002	5.e-002	9899400.0	0.001	-6.20	20.00	LINR	
4,4'-DDD	5.35e-002	5.e-002	8327600.0	0.001	7.00	20.00	LINR	
4,4'-DDT	3.72e-002	5.e-002	5522500.0	0.001	-25.60	20.00	LINR	<-
Tetrachloro-m-Xylene	5.19e-002	5.e-002	11719000	0.001	3.80	20.00	LINR	
Decachlorobiphenyl	5.36e-002	5.e-002	4665800.0	0.001	7.20	20.00	LINR	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/07/11 Time: 1806

Lab File ID: 1EF00090 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
4,4'-DDE	2.32e-002	2.5e-002	9629300.0	0.001	-7.20	20.00	LINR	
4,4'-DDD	2.72e-002	2.5e-002	8234700.0	0.001	8.80	20.00	LINR	
4,4'-DDT	1.77e-002	2.5e-002	4979300.0	0.001	-29.20	20.00	LINR	<-
Tetrachloro-m-Xylene	2.57e-002	2.5e-002	11712000	0.001	2.80	20.00	LINR	
Decachlorobiphenyl	2.61e-002	2.5e-002	4495300.0	0.001	4.40	20.00	LINR	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/07/11 Time: 2118

Lab File ID: 1EF00101 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	5.06e-002	5.e-002	10698000	0.001	1.20	20.00	LINR
4,4'-DDD	5.27e-002	5.e-002	8187000.0	0.001	5.40	20.00	LINR
4,4'-DDT	4.58e-002	5.e-002	6869800.0	0.001	-8.40	20.00	LINR
Tetrachloro-m-Xylene	5.47e-002	5.e-002	12353000	0.001	9.40	20.00	LINR
Decachlorobiphenyl	5.37e-002	5.e-002	4671900.0	0.001	7.40	20.00	LINR

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :06/08/11
Time Analyzed :1015

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EF00103.D	5.90	2.11

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/08/11 Time: 1033

Lab File ID: 1EF00104 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	4.91e-002	5.e-002	10371000	0.001	-1.80	20.00	LINR
4,4'-DDD	5.22e-002	5.e-002	8117700.0	0.001	4.40	20.00	LINR
4,4'-DDT	4.67e-002	5.e-002	7002600.0	0.001	-6.60	20.00	LINR
Tetrachloro-m-Xylene	5.41e-002	5.e-002	12216000	0.001	8.20	20.00	LINR
Decachlorobiphenyl	5.26e-002	5.e-002	4577600.0	0.001	5.20	20.00	LINR

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/08/11 Time: 1406

Lab File ID: 1EF00115 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	2.47e-002	2.5e-002	10281000	0.001	-1.20	20.00	LINR
4,4'-DDD	2.57e-002	2.5e-002	7767000.0	0.001	2.80	20.00	LINR
4,4'-DDT	2.47e-002	2.5e-002	7168700.0	0.001	-1.20	20.00	LINR
Tetrachloro-m-Xylene	2.63e-002	2.5e-002	11958000	0.001	5.20	20.00	LINR
Decachlorobiphenyl	2.71e-002	2.5e-002	4673500.0	0.001	8.40	20.00	LINR

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :06/10/11
Time Analyzed :1126

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EF00147.D	6.81	1.89

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/10/11 Time: 1143

Lab File ID: 1EF00148 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	5.14e-002	5.e-002	10862000	0.001	2.80	20.00	LINR
4,4'-DDD	5.12e-002	5.e-002	7955300.0	0.001	2.40	20.00	LINR
4,4'-DDT	4.86e-002	5.e-002	7298400.0	0.001	-2.80	20.00	LINR
Tetrachloro-m-Xylene	5.55e-002	5.e-002	12528000	0.001	11.00	20.00	LINR
Decachlorobiphenyl	5.28e-002	5.e-002	4590200.0	0.001	5.60	20.00	LINR

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/10/11 Time: 1507

Lab File ID: 1EF00157 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
4,4'-DDE	2.34e-002	2.5e-002	9736900.0	0.001	-6.40	20.00	LINR	
4,4'-DDD	2.54e-002	2.5e-002	7653700.0	0.001	1.60	20.00	LINR	
4,4'-DDT	2.e-002	2.5e-002	5690800.0	0.001	-20.00	20.00	LINR	<-
Tetrachloro-m-Xylene	2.54e-002	2.5e-002	11585000	0.001	1.60	20.00	LINR	
Decachlorobiphenyl	2.6e-002	2.5e-002	4485800.0	0.001	4.00	20.00	LINR	

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 3.79 DCB: 12.04

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT	TCX #	DCB RT	DCB #
01		EVAL	05/13/11	1632				
02		INDAB 0.05	05/13/11	1649	3.79		12.05	
03		INDAB 0.005	05/13/11	1707	3.79		12.05	
04		INDAB 0.01	05/13/11	1724	3.79		12.05	
05		INDAB 0.025	05/13/11	1742	3.79		12.05	
06		INDAB 0.1	05/13/11	1759	3.79		12.05	
07		INDAB 0.25	05/13/11	1817	3.79		12.04	
08		IND 0.05	05/13/11	1834				
09		EVAL	06/06/11	1023				
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

QC LIMITS

TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

Katahdin Analytical Services A0000168

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :05/13/11
Time Analyzed :1632

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EE00211.D	4.92	4.43

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date(s): 05/13/11 05/13/11

Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Calibration Time(s): 1649 2204

LAB FILE ID: RF0.005: 1EE00226 RF0.01: 1EE00227 RF0.025: 1EE00228
RF0.05: 1EE00225 RF0.1: 1EE00229 RF0.25: 1EE00230

								COEFFICENTS		%RSD	MAX %RSD
COMPOUND	RF0.005	RF0.01	RF0.025	RF0.05	RF0.1	RF0.25	CURVE	A0	A1	OR R^2	OR R^2
4,4'-DDE	32731	385170	181980	371610	775070	1953100	LINR	1.221e-003	1.275e-007	0.99991	0.99000
4,4'-DDD	22656	260490	130060	264240	555100	1455500	LINR	2.464e-003	1.71e-007	0.99950	0.99000
4,4'-DDT	20492	247380	123290	238490	524880	1369700	LINR	2.792e-003	1.815e-007	0.99930	0.99000
Tetrachloro-m-Xylene	36256	76768	191820	380330	777430	1947200	LINR	4.422e-004	1.282e-007	0.99998	0.99000
Decachlorobiphenyl	16361	34927	82913	155570	324240	804980	LINR	5.766e-005	3.104e-007	0.99991	0.99000

FORM VI PESTICIDE

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 05/13/11 Time: 1834

Lab File ID: 1EE00218 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
alpha-BHC	5.02e-002	5.e-002	11745000	0.001	0.40	15.00	LINR
Endosulfan sulfate	4.35e-002	5.e-002	3325900.0	0.001	-13.00	15.00	LINR
beta-BHC	5.45e-002	5.e-002	4815000.0	0.001	9.00	15.00	LINR
delta-BHC	4.67e-002	5.e-002	7276700.0	0.001	-6.60	15.00	LINR
Heptachlor	5.04e-002	5.e-002	7379200.0	0.001	0.80	15.00	LINR
Aldrin	4.96e-002	5.e-002	8847300.0	0.001	-0.80	15.00	LINR
Heptachlor Epoxide	4.95e-002	5.e-002	7836900.0	0.001	-1.00	15.00	LINR
gamma-Chlordane	5.05e-002	5.e-002	7733700.0	0.001	1.00	15.00	LINR
alpha-Chlordane	5.05e-002	5.e-002	7272000.0	0.001	1.00	15.00	LINR
4,4'-DDE	5.03e-002	5.e-002	7703400.0	0.001	0.60	15.00	LINR
Endosulfan I	4.99e-002	5.e-002	6882100.0	0.001	-0.20	15.00	LINR
Dieldrin	4.96e-002	5.e-002	7511900.0	0.001	-0.80	15.00	LINR
Endrin	4.79e-002	5.e-002	5978300.0	0.001	-4.20	15.00	LINR
4,4'-DDD	4.7e-002	5.e-002	5209800.0	0.001	-6.00	15.00	LINR
Endosulfan II	4.75e-002	5.e-002	5663500.0	0.001	-5.00	15.00	LINR
4,4'-DDT	4.77e-002	5.e-002	4947700.0	0.001	-4.60	15.00	LINR
Endrin Aldehyde	4.33e-002	5.e-002	3612500.0	0.001	-13.40	15.00	LINR
Methoxychlor	5.01e-002	5.e-002	2225700.0	0.001	0.20	15.00	LINR
Endrin Ketone	4.43e-002	5.e-002	4054000.0	0.001	-11.40	15.00	LINR
gamma-BHC	4.88e-002	5.e-002	10546000	0.001	-2.40	15.00	LINR

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.02 DCB: 12.16

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		INDAB 0.05	06/06/11	1040	4.02	12.16
02	WG91999-BLAN	WG91999-1	06/06/11	1148	4.02	12.16
03	WG91999-LCS	WG91999-2	06/06/11	1205	4.02	12.16
04	WG91999-LCSD	WG91999-3	06/06/11	1223	4.02	12.16
05		INDAB 0.025	06/06/11	1442	4.02	12.16
06		EVAL	06/07/11	0936		
07		INDAB 0.025	06/07/11	1056	4.02	12.16
08	2W-SD-SD153-	SE2829-1	06/07/11	1159	4.01	12.16
09	2W-SD-SD156-	SE2829-2	06/07/11	1216	4.02	12.16
10	2W-SD-SD155-	SE2829-3	06/07/11	1234	4.03	12.16
11	2W-SD-SD157-	SE2829-4	06/07/11	1251	4.02	12.16
12	2W-SD-SD160-	SE2829-5	06/07/11	1308	4.02	12.16
13	2W-SD-SD128-	SE2829-8	06/07/11	1343	4.03	12.16
14	2W-SD-SD124-	SE2829-9	06/07/11	1401	4.03	12.17
15		INDAB 0.05	06/07/11	1453	4.02	12.16
16	2W-SD-SD133-	SE2829-24	06/07/11	1511	4.02	12.16
17	2W-SD-SD131-	SE2829-25	06/07/11	1528	4.02	12.16
18	2W-SD-SD129-	SE2829-26	06/07/11	1546	4.02	12.16
19	2W-SD-SD114-	SE2829-31	06/07/11	1713	4.03	12.16
20		INDAB 0.025	06/07/11	1806	4.02	12.16

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Instrument ID: GC01 2

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.02 DCB: 12.16

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	2W-SD-SD137-	SE2829-7DL	06/07/11	1823		
02	2W-SD-SD128-	SE2829-8DL	06/07/11	1841		
03	2W-SD-SD124-	SE2829-9DL	06/07/11	1858		
04	2W-SD-SD125-	SE2829-10DL	06/07/11	1916		
05	2W-SD-SD141-	SE2829-11DL	06/07/11	1933		
06	2W-SD-SD143-	SE2829-27DL	06/07/11	2008		
07	2W-SD-SD139-	SE2829-30DL	06/07/11	2101		
08		INDAB 0.05	06/07/11	2118	4.02	12.16
09		EVAL	06/08/11	1015		
10		INDAB 0.05	06/08/11	1033	4.02	12.16
11	2W-SD-SD129-	SE2829-26DL2	06/08/11	1111		
12	2W-SD-SD132-	SE2829-29DL2	06/08/11	1128		
13		INDAB 0.025	06/08/11	1406	4.02	12.16
14		EVAL	06/10/11	1126		
15		INDAB 0.05	06/10/11	1143	4.02	12.16
16	WG92619-BLAN	WG92619-1	06/10/11	1247	4.01	12.15
17	WG92619-LCS	WG92619-2	06/10/11	1304	4.02	12.16
18	WG92619-LCSD	WG92619-3	06/10/11	1322	4.02	12.16
19	2W-SD-SD145-	SE2829-28DL	06/10/11	1449		
20		INDAB 0.025	06/10/11	1507	4.02	12.16

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

Katahdin Analytical Services A0000170

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :06/06/11
Time Analyzed :1023

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EF00040.D	3.49	1.66

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/06/11 Time: 1040

Lab File ID: 1EF00041 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	5.01e-002	5.e-002	7660700.0	0.001	0.20	20.00	LINR
4,4'-DDD	4.99e-002	5.e-002	5545300.0	0.001	-0.20	20.00	LINR
4,4'-DDT	5.3e-002	5.e-002	5534200.0	0.001	6.00	20.00	LINR
Tetrachloro-m-Xylene	5.49e-002	5.e-002	8493800.0	0.001	9.80	20.00	LINR
Decachlorobiphenyl	5.12e-002	5.e-002	3296600.0	0.001	2.40	20.00	LINR

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/06/11 Time: 1442

Lab File ID: 1EF00053 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	2.36e-002	2.5e-002	7010600.0	0.001	-5.60	20.00	LINR
4,4'-DDD	2.43e-002	2.5e-002	5116900.0	0.001	-2.80	20.00	LINR
4,4'-DDT	2.53e-002	2.5e-002	4964200.0	0.001	1.20	20.00	LINR
Tetrachloro-m-Xylene	2.65e-002	2.5e-002	8131400.0	0.001	6.00	20.00	LINR
Decachlorobiphenyl	2.56e-002	2.5e-002	3284800.0	0.001	2.40	20.00	LINR

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :06/07/11
Time Analyzed :0936

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EF00064.D	4.80	1.92

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/07/11 Time: 1056

Lab File ID: 1EF00068 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	2.31e-002	2.5e-002	6853800.0	0.001	-7.60	20.00	LINR
4,4'-DDD	2.51e-002	2.5e-002	5291600.0	0.001	0.40	20.00	LINR
4,4'-DDT	2.48e-002	2.5e-002	4857800.0	0.001	-0.80	20.00	LINR
Tetrachloro-m-Xylene	2.49e-002	2.5e-002	7641600.0	0.001	-0.40	20.00	LINR
Decachlorobiphenyl	2.54e-002	2.5e-002	3267000.0	0.001	1.60	20.00	LINR

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/07/11 Time: 1453

Lab File ID: 1EF00079 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
4,4'-DDE	4.64e-002	5.e-002	7084900.0	0.001	-7.20	20.00	LINR	
4,4'-DDD	5.23e-002	5.e-002	5825400.0	0.001	4.60	20.00	LINR	
4,4'-DDT	3.73e-002	5.e-002	3806000.0	0.001	-25.40	20.00	LINR	<-
Tetrachloro-m-Xylene	4.96e-002	5.e-002	7670400.0	0.001	-0.80	20.00	LINR	
Decachlorobiphenyl	4.83e-002	5.e-002	3107500.0	0.001	-3.40	20.00	LINR	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/07/11 Time: 1806

Lab File ID: 1EF00090 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
4,4'-DDE	2.22e-002	2.5e-002	6586900.0	0.001	-11.20	20.00	LINR	
4,4'-DDD	2.67e-002	2.5e-002	5672500.0	0.001	6.80	20.00	LINR	
4,4'-DDT	1.83e-002	2.5e-002	3428200.0	0.001	-26.80	20.00	LINR	<-
Tetrachloro-m-Xylene	2.47e-002	2.5e-002	7552600.0	0.001	-1.20	20.00	LINR	
Decachlorobiphenyl	2.44e-002	2.5e-002	3141000.0	0.001	-2.40	20.00	LINR	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/07/11 Time: 2118

Lab File ID: 1EF00101 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	4.93e-002	5.e-002	7540100.0	0.001	-1.40	20.00	LINR
4,4'-DDD	5.25e-002	5.e-002	5854400.0	0.001	5.00	20.00	LINR
4,4'-DDT	4.53e-002	5.e-002	4686700.0	0.001	-9.40	20.00	LINR
Tetrachloro-m-Xylene	5.23e-002	5.e-002	8092700.0	0.001	4.60	20.00	LINR
Decachlorobiphenyl	5.13e-002	5.e-002	3302700.0	0.001	2.60	20.00	LINR

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :06/08/11
Time Analyzed :1015

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EF00103.D	5.64	2.19

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/08/11 Time: 1033

Lab File ID: 1EF00104 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	4.81e-002	5.e-002	7349800.0	0.001	-3.80	20.00	LINR
4,4'-DDD	4.96e-002	5.e-002	5515200.0	0.001	-0.80	20.00	LINR
4,4'-DDT	4.68e-002	5.e-002	4849300.0	0.001	-6.40	20.00	LINR
Tetrachloro-m-Xylene	5.14e-002	5.e-002	7948600.0	0.001	2.80	20.00	LINR
Decachlorobiphenyl	4.98e-002	5.e-002	3204200.0	0.001	-0.40	20.00	LINR

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/08/11 Time: 1406

Lab File ID: 1EF00115 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	2.43e-002	2.5e-002	7227800.0	0.001	-2.80	20.00	LINR
4,4'-DDD	2.58e-002	2.5e-002	5455900.0	0.001	3.20	20.00	LINR
4,4'-DDT	2.56e-002	2.5e-002	5020300.0	0.001	2.40	20.00	LINR
Tetrachloro-m-Xylene	2.5e-002	2.5e-002	7676800.0	0.001	0.00	20.00	LINR
Decachlorobiphenyl	2.59e-002	2.5e-002	3324400.0	0.001	3.60	20.00	LINR

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 05/13/11 05/13/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :06/10/11
Time Analyzed :1126

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EF00147.D	6.58	2.10

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/10/11 Time: 1143

Lab File ID: 1EF00148 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	4.99e-002	5.e-002	7641900.0	0.001	-0.20	20.00	LINR
4,4'-DDD	5.21e-002	5.e-002	5798800.0	0.001	4.20	20.00	LINR
4,4'-DDT	4.96e-002	5.e-002	5163000.0	0.001	-0.80	20.00	LINR
Tetrachloro-m-Xylene	5.28e-002	5.e-002	8160800.0	0.001	5.60	20.00	LINR
Decachlorobiphenyl	5.26e-002	5.e-002	3385000.0	0.001	5.20	20.00	LINR

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC01 Calibration Date: 06/10/11 Time: 1507

Lab File ID: 1EF00157 Init. Calib. Date(s): 05/13/11 05/13/11

Init. Calib. Times: 1649 2204

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	2.3e-002	2.5e-002	6822800.0	0.001	-8.00	20.00	LINR
4,4'-DDD	2.6e-002	2.5e-002	5501400.0	0.001	4.00	20.00	LINR
4,4'-DDT	2.06e-002	2.5e-002	3929400.0	0.001	-17.60	20.00	LINR
Tetrachloro-m-Xylene	2.42e-002	2.5e-002	7412000.0	0.001	-3.20	20.00	LINR
Decachlorobiphenyl	2.56e-002	2.5e-002	3293600.0	0.001	2.40	20.00	LINR

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG91999-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab Sample ID: WG91999-1 Lab File ID: 1EF00043

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3550

Sulfur Cleanup: (Y/N) N Date Extracted: 05/26/11

Date Analyzed (1): 06/06/11 Date Analyzed (2): 06/06/11

Time Analyzed (1): 1148 Time Analyzed (2): 1148

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column (1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	WG91999-LCS	WG91999-2	1EF00044	06/06/11	06/06/11
02	WG91999-LCSD	WG91999-3	1EF00045	06/06/11	06/06/11
03	2W-SD-SD153-0001	SE2829-1	1EF00069	06/07/11	06/07/11
04	2W-SD-SD156-0001	SE2829-2	1EF00070	06/07/11	06/07/11
05	2W-SD-SD155-0001	SE2829-3	1EF00071	06/07/11	06/07/11
06	2W-SD-SD157-0001	SE2829-4	1EF00072	06/07/11	06/07/11
07	2W-SD-SD160-0001	SE2829-5	1EF00073	06/07/11	06/07/11
08	2W-SD-SD128-0001	SE2829-8	1EF00075	06/07/11	06/07/11
09	2W-SD-SD124-0001	SE2829-9	1EF00076	06/07/11	06/07/11
10	2W-SD-SD133-0001	SE2829-24	1EF00080	06/07/11	06/07/11
11	2W-SD-SD131-0001	SE2829-25	1EF00081	06/07/11	06/07/11
12	2W-SD-SD129-0001	SE2829-26	1EF00082	06/07/11	06/07/11
13	2W-SD-SD114-0001	SE2829-31	1EF00087	06/07/11	06/07/11
14	2W-SD-SD137-0001	SE2829-7DL	1EF00091	06/07/11	06/07/11
15	2W-SD-SD128-0001	SE2829-8DL	1EF00092	06/07/11	06/07/11
16	2W-SD-SD124-0001	SE2829-9DL	1EF00093	06/07/11	06/07/11
17	2W-SD-SD125-0001	SE2829-10DL	1EF00094	06/07/11	06/07/11
18	2W-SD-SD141-0001	SE2829-11DL	1EF00095	06/07/11	06/07/11
19	2W-SD-SD143-0001	SE2829-27DL	1EF00097	06/07/11	06/07/11
20	2W-SD-SD139-0001	SE2829-30DL	1EF00100	06/07/11	06/07/11
21	2W-SD-SD129-0001	SE2829-26DL2	1EF00105	06/08/11	06/08/11
22	2W-SD-SD132-0001	SE2829-29DL2	1EF00106	06/08/11	06/08/11
23					
24					

COMMENTS: _____

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG91999-1
Client ID: Method Blank Sample
Project:
SDG: WE55-4

Sample Date:
Received Date: 26-MAY-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 06-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: NA
Report Date: 08-jun-2011 13:28

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	U	1.6	ug/Kgdrywt	1	3.3	3.3	0.19	1.6
4,4'-DDD	J	2.0	ug/Kgdrywt	1	3.3	3.3	0.20	1.6
4,4'-DDT	U	1.6	ug/Kgdrywt	1	3.3	3.3	0.31	1.6
Tetrachloro-M-Xylene		55.2	%					
Decachlorobiphenyl		87.1	%					

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Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG91999-2
LCSD ID: WG91999-3
Project:
SDG: WE55-4
Report Date: 08-jun-2011 13:28

Received Date: 26-MAY-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG91999

Analysis Date: 06-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
4,4'-DDE	16.7	13.5	80.8	13.8	82.6	ug/Kgdrywt	2	50	52-103
4,4'-DDD	16.7	13.8	82.6	14.9	89.2	ug/Kgdrywt	8	50	48-111
4,4'-DDT	16.7	14.2	85.0	14.6	87.4	ug/Kgdrywt	3	50	39-112
Tetrachloro-M-Xylene			69.4		67.6				32-89
Decachlorobiphenyl			85.3		87.1				44-99

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FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG92619-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab Sample ID: WG92619-1 Lab File ID: 1EF00149

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3550

Sulfur Cleanup: (Y/N) N Date Extracted: 06/09/11

Date Analyzed (1): 06/10/11 Date Analyzed (2): 06/10/11

Time Analyzed (1): 1247 Time Analyzed (2): 1247

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column (1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	WG92619-LCS	WG92619-2	1EF00150	06/10/11	06/10/11
02	WG92619-LCSD	WG92619-3	1EF00151	06/10/11	06/10/11
03	2W-SD-SD145-0001	SE2829-28DL	1EF00156	06/10/11	06/10/11
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

COMMENTS: _____

Katahdin Analytical Services A0000133

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG92619-1
Client ID: Method Blank Sample
Project:
SDG: WE55-4

Sample Date:
Received Date: 09-JUN-11
Extract Date: 09-JUN-11
Extracted By: JS
Extraction Method: SW846 3550
Lab Prep Batch: WG92619

Analysis Date: 10-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: NA
Report Date: 14-jun-2011 16:46

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	U	1.6	ug/Kgdrywt	1	3.3	3.3	0.19	1.6
4,4'-DDD	U	1.6	ug/Kgdrywt	1	3.3	3.3	0.20	1.6
4,4'-DDT	U	1.6	ug/Kgdrywt	1	3.3	3.3	0.31	1.6
Tetrachloro-M-Xylene		33.9	%					
Decachlorobiphenyl		50.4	%					

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Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG92619-2
LCSD ID: WG92619-3
Project:
SDG: WE55-4
Report Date: 13-jun-2011 11:58

Received Date: 09-JUN-11
Extract Date: 09-JUN-11
Extracted By: JS
Extraction Method: SW846 3550
Lab Prep Batch: WG92619

Analysis Date: 10-JUN-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
4,4'-DDE	16.7	10.1	60.5	11.7	70.0	ug/Kgdrywt	15	50	52-103
4,4'-DDD	16.7	10.5	62.9	12.3	73.6	ug/Kgdrywt	16	50	48-111
4,4'-DDT	16.7	10.2	61.1	11.6	69.5	ug/Kgdrywt	13	50	39-112
Tetrachloro-M-Xylene			39.6		40.8				32-89
Decachlorobiphenyl			66.7		74.5				44-99

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FORM 2
SOIL PESTICIDE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column(1): ZB-MULTIRESIDUE-2ID: 0.53 (mm)GC Column(2): ZB-MULTIRESIDUE-1ID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	DCB1 REC#	DCB2 REC#	OTHR (1)	OTHR (2)	TOT OUT
01	WG91999-BLANK	WG91999-1	53	55	82	87			0
02	WG91999-LCS	WG91999-2	68	69	83	85			0
03	WG91999-LCSD	WG91999-3	65	67	81	87			0
04	2W-SD-SD153-0001	SE2829-1	50	48	68	70			0
05	2W-SD-SD156-0001	SE2829-2	55	56	64	68			0
06	2W-SD-SD155-0001	SE2829-3	51	52	63	65			0
07	2W-SD-SD157-0001	SE2829-4	58	58	61	68			0
08	2W-SD-SD160-0001	SE2829-5	56	52	54	64			0
09	2W-SD-SD128-0001	SE2829-8	46	47	56	58			0
10	2W-SD-SD124-0001	SE2829-9	46	46	59	60			0
11	2W-SD-SD133-0001	SE2829-24	60	60	67	67			0
12	2W-SD-SD131-0001	SE2829-25	42	42	44	47			0
13	2W-SD-SD129-0001	SE2829-26	52	52	60	62			0
14	2W-SD-SD114-0001	SE2829-31	39	39	47	46			0
15	2W-SD-SD137-0001	SE2829-7DL	D	D	D	D			0
16	2W-SD-SD128-0001	SE2829-8DL	D	D	D	D			0
17	2W-SD-SD124-0001	SE2829-9DL	D	D	D	D			0
18	2W-SD-SD125-0001	SE2829-10DL	D	D	D	D			0
19	2W-SD-SD141-0001	SE2829-11DL	D	D	D	D			0
20	2W-SD-SD143-0001	SE2829-27DL	D	D	D	D			0
21	2W-SD-SD139-0001	SE2829-30DL	D	D	D	D			0
22	2W-SD-SD129-0001	SE2829-26DL2	D	D	D	D			0
23	2W-SD-SD132-0001	SE2829-29DL2	D	D	D	D			0
24	WG92619-BLANK	WG92619-1	34	32	50	50			0
25	WG92619-LCS	WG92619-2	38	40	65	67			0
26	WG92619-LCSD	WG92619-3	39	41	72	74			0
27	2W-SD-SD145-0001	SE2829-28DL	D	D	D	D			0
28									

ADVISORY QC LIMITS

S1 (TCX) = Tetrachloro-m-Xylene (32- 89)
S2 (DCB) = Decachlorobiphenyl (44- 99)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 114-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-31 Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	17.5	
	2	7.71	7.64	7.78	17.2	1.7
4,4'-DDD	1	8.35	8.28	8.42	112	
	2	8.47	8.40	8.54	113	0.9
4,4'-DDT	1	8.73	8.66	8.80	38.9	
	2	8.92	8.85	8.99	27.4	34.7
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

| 2W-SD-SD
124-0001 |
|---|

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-9 Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	1300	
	2	7.71	7.64	7.78	1400	7.4
4,4'-DDD	1	8.35	8.28	8.42	7260	
	2	8.48	8.40	8.54	6320	13.8
4,4'-DDT	1	8.73	8.66	8.80	17.8	
	2	8.91	8.85	8.99	19.2	7.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD
124-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO WE-55 NEW

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-9DL Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	2540	
	2	7.70	7.64	7.78	2710	6.5
4,4'-DDD	1	8.34	8.28	8.42	24700	
	2	8.46	8.40	8.54	25400	2.8
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD 125-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-10DL Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	494	
	2	7.71	7.64	7.78	527	6.5
4,4'-DDD	1	8.34	8.28	8.42	3360	
	2	8.46	8.40	8.54	3390	0.9
4,4'-DDT	1	8.73	8.66	8.80	376	
	2	8.92	8.85	8.99	340	10.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 128-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-8 Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	62.8	
	2	7.71	7.64	7.78	68.8	9.1
4,4'-DDD	1	8.35	8.28	8.42	476	
	2	8.47	8.40	8.54	499	4.7
4,4'-DDT	1	8.73	8.66	8.80	5.32	
	2	8.92	8.85	8.99	2.47	73.2
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD
128-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO WE-55 NEW

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-8DL Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	76.8	
	2	7.71	7.64	7.78	77.7	1.2
4,4'-DDD	1	8.34	8.28	8.42	485	
	2	8.46	8.40	8.54	485	0.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD
129-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-26 Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	64.0	
	2	7.71	7.64	7.78	73.0	13.1
4,4'-DDD	1	8.35	8.28	8.42	748	
	2	8.46	8.40	8.54	744	0.5
4,4'-DDT	1	8.73	8.66	8.80	26.9	
	2	8.92	8.85	8.99	16.3	49.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD
129-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO WE-55 NEW

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-26DL2 Date(s) Analyzed: 06/08/11 06/08/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDD	1	8.35	8.27	8.41	2570	
	2	8.46	8.39	8.53	1840	33.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD
131-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-25 Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	27.5	
	2	7.71	7.64	7.78	28.5	3.6
4,4'-DDD	1	8.34	8.28	8.42	135	
	2	8.46	8.40	8.54	141	4.3
4,4'-DDT	1	8.73	8.66	8.80	32.7	
	2	8.92	8.85	8.99	26.5	20.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD
132-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-29DL2 Date(s) Analyzed: 06/08/11 06/08/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	2140	
	2	7.71	7.64	7.78	2140	0.0
4,4'-DDD	1	8.35	8.28	8.42	19300	
	2	8.46	8.39	8.53	20400	5.5
4,4'-DDT	1	8.73	8.66	8.80	2840	
	2	8.92	8.85	8.99	2170	26.7
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD 133-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-24 Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	21.8	
	2	7.71	7.64	7.78	23.7	8.4
4,4'-DDD	1	8.34	8.28	8.42	40.5	
	2	8.46	8.40	8.54	54.4	29.3
4,4'-DDT	1	8.73	8.66	8.80	36.2	
	2	8.92	8.85	8.99	20.0	57.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD
137-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-7DL Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	1210	
	2	7.71	7.64	7.78	1400	14.6
4,4'-DDD	1	8.34	8.28	8.42	7980	
	2	8.47	8.40	8.54	8290	3.8
4,4'-DDT	1	8.73	8.66	8.80	470	
	2	8.92	8.85	8.99	373	23.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 139-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-30DL Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	4620	
	2	7.71	7.64	7.78	4400	4.9
4,4'-DDD	1	8.34	8.28	8.42	37000	
	2	8.46	8.40	8.54	39200	5.8
4,4'-DDT	1	8.73	8.66	8.80	6460	
	2	8.92	8.85	8.99	4780	29.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 141-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-11DL Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	177	
	2	7.71	7.64	7.78	165	7.0
4,4'-DDD	1	8.34	8.28	8.42	2170	
	2	8.46	8.40	8.54	2190	0.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD
143-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: . SDG No.: WE55-4

Lab Sample ID: SE2829-27DL Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	9790	
	2	7.71	7.64	7.78	10300	5.1
4,4'-DDD	1	8.34	8.28	8.42	112000	
	2	8.46	8.40	8.54	116000	3.5
4,4'-DDT	1	8.73	8.66	8.80	15000	
	2	8.92	8.85	8.99	12900	15.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 145-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-28DL Date(s) Analyzed: 06/10/11 06/10/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	2410	
	2	7.71	7.63	7.77	2060	15.7
4,4'-DDD	1	8.34	8.27	8.41	13300	
	2	8.46	8.39	8.53	13900	4.4
4,4'-DDT	1	8.73	8.66	8.80	3520	
	2	8.92	8.84	8.98	2240	44.4
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 153-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-1 Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.50	7.42	7.56	9.23	
	2	7.70	7.64	7.78	9.58	3.7
4,4'-DDD	1	8.36	8.28	8.42	46.4	
	2	8.46	8.40	8.54	50.4	8.3
4,4'-DDT	1	8.74	8.66	8.80	9.76	
	2	8.91	8.85	8.99	4.34	76.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 155-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-3 Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	5.80	
	2	7.71	7.64	7.78	5.96	2.7
4,4'-DDD	1	8.35	8.28	8.42	86.5	
	2	8.47	8.40	8.54	95.2	9.6
4,4'-DDT	1	8.73	8.66	8.80	12.3	
	2	8.92	8.85	8.99	4.10	100.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD
156-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-2 Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	7.31	
	2	7.71	7.64	7.78	7.89	7.6
4,4'-DDD	1	8.35	8.28	8.42	33.2	
	2	8.46	8.40	8.54	37.6	12.4
4,4'-DDT	1	8.73	8.66	8.80	18.7	
	2	8.92	8.85	8.99	11.8	45.2
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD
157-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-4 Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	3.66	
	2	7.71	7.64	7.78	3.88	5.8
4,4'-DDD	1	8.34	8.28	8.42	12.0	
	2	8.46	8.40	8.54	12.8	6.4
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD
160-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-5 Date(s) Analyzed: 06/07/11 06/07/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.49	7.42	7.56	13.4	
	2	7.71	7.64	7.78	13.2	1.5
4,4'-DDD	1	8.34	8.28	8.42	93.0	
	2	8.47	8.40	8.54	109	15.8
4,4'-DDT	1	8.73	8.66	8.80	19.1	
	2	8.87	8.85	8.99	13.4	35.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

PCB DATA

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 14.52 TCX: 4.13

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		AR1660 1.0	02/04/11	1440	14.52	4.13
02		AR1660 0.05	02/04/11	1506	14.53	4.13
03		AR1660 0.1	02/04/11	1532	14.53	4.14
04		AR1660 0.25	02/04/11	1558	14.53	4.14
05		AR1660 2.5	02/04/11	1624	14.53	4.14
06		AR1660 10	02/04/11	1650	14.52	4.14
07		AR1016 1.0	02/04/11	1716		
08		AR1260 1.0	02/04/11	1742		
09		AR1242 1.0	02/04/11	1808		
10		AR1248 1.0	02/04/11	2043		
11		AR1254 1.0	02/04/11	2319		
12		AR1221 1.0	02/05/11	0155		
13		AR1232 1.0	02/05/11	0431		
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

Katahdin Analytical Services A0000238

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date(s): 02/04/11 02/05/11

Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm) Calibration Time(s): 1440 1152

LAB FILE ID: RF0.05: 7EB079 RF0.1: 7EB080 RF0.25: 7EB081
RF1: 7EB078 RF2.5: 7EB082 RF10: 7EB083

COMPOUND	RF0.05	RF0.1	RF0.25	RF1	RF2.5	RF10	CURVE	COEFFICENTS A0	COEFFICENTS A1	COEFFICENTS A2	%RSD OR R^2	MAX %RSD OR R^2
Aroclor-1016	2e+007	2e+007	2e+007	2e+007	2.e+007	2e+007	AVRG		20486731.2		10.518	20.000
(2)	4e+007	4e+007	4e+007	4e+007	4e+007	3e+007	AVRG		37618686.1		6.469	20.000
(3)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		20888256.2		5.924	20.000
(4)	2e+007	2e+007	2e+007	2e+007	2e+007	1e+007	AVRG		15404363.7		3.740	20.000
(5)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		17968177.2		3.266	20.000
Aroclor-1221	1768800	1630900	2113600	2685900	7757700	3e+007	2ORDR	-0.2682737	3.364e-007	1.756e-015	0.99557	0.99000
(2)	410990	814040	2060800	7112800	2e+007	6e+007	2ORDR	-5.54e-003	1.338e-007	4.604e-016	0.99998	0.99000
(3)	1037400	2024300	5055000	2e+007	4e+007	1e+008	2ORDR	-7.68e-003	5.379e-008	1.594e-016	0.99999	0.99000
(4)	132350	262740	677200	2482700	6152300	2e+007	2ORDR	1.026e-003	3.812e-007	4.356e-015	0.99999	0.99000
Aroclor-1232	2e+007	2e+007	2e+007	1e+007	1e+007	1e+007	AVRG		14979275.1		12.448	20.000
(2)	1e+007	1e+007	9991900	9596400	9245400	8112600	AVRG		9898193.25		12.199	20.000
(3)	2.e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		18197358.0		7.654	20.000
(4)	1e+007	1e+007	1e+007	9934800	9780000	9258200	AVRG		10469351.7		9.396	20.000
(5)	9484000	8863200	8587200	7759600	7569300	7487700	AVRG		8291841.25		9.778	20.000
Aroclor-1242	2e+007	2e+007	2e+007	2e+007	2e+007	1e+007	AVRG		17472265.6		15.601	20.000
(2)	4e+007	3e+007	3e+007	3e+007	3e+007	3e+007	AVRG		31969283.8		9.191	20.000
(3)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		18125896.9		10.234	20.000
(4)	2e+007	2e+007	2e+007	2e+007	2e+007	1e+007	AVRG		16019371.2		6.404	20.000
(5)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		17257137.6		4.661	20.000
Aroclor-1248	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		17455594.6		6.804	20.000
(2)	2e+007	2e+007	2e+007	2e+007	2.e+007	2e+007	AVRG		20516931.7		4.258	20.000
(3)	3e+007	3e+007	3e+007	3e+007	3e+007	2e+007	AVRG		26489435.3		5.367	20.000
(4)	3e+007	3e+007	3e+007	3e+007	3e+007	3.e+007	AVRG		32123470.6		3.936	20.000
(5)	1e+007	1e+007	1e+007	1e+007	1e+007	1e+007	AVRG		13868712.5		1.560	20.000
Aroclor-1254	2e+007	3e+007	3e+007	2e+007	3e+007	2e+007	AVRG		24602597.6		6.804	20.000
(2)	3e+007	4e+007	4e+007	3e+007	4e+007	3e+007	AVRG		34208794.7		5.848	20.000
(3)	4.e+007	4e+007	4e+007	4e+007	5e+007	4e+007	AVRG		42081695.9		5.406	20.000
(4)	3e+007	3e+007	3e+007	3e+007	3e+007	3.e+007	AVRG		30541884.2		4.978	20.000
(5)	3e+007	3e+007	3e+007	3e+007	3.e+007	3e+007	AVRG		28341452.5		5.321	20.000
Aroclor-1260	3e+007	3e+007	3e+007	3e+007	3e+007	3e+007	AVRG		28281617.7		2.523	20.000
(2)	4e+007	4e+007	4e+007	4e+007	4e+007	4e+007	AVRG		37204029.3		3.411	20.000
(3)	3e+007	3e+007	3e+007	3e+007	3e+007	3e+007	AVRG		32277606.1		1.985	20.000
(4)	5e+007	5e+007	5e+007	5e+007	6e+007	5e+007	AVRG		53984860.5		3.984	20.000
(5)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		24056199.5		2.206	20.000
Tetrachloro-m-xylene	7e+008	7e+008	7e+008	8e+008	7e+008	7e+008	AVRG		726350611		3.695	20.000
Decachlorobiphenyl	4e+008	5e+008	4.e+008	4e+008	4e+008	4e+008	AVRG		408613948		12.742	20.000

Katahdin Analytical Services A0000208

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Included
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m
Cal Date : 08-Feb-2011 13:56 rthomas

Calibration File Names:
Level 1: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB079.D
Level 2: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB080.D
Level 3: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB081.D
Level 4: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB078.D
Level 5: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB082.D
Level 6: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB083.D

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2500000 Level 3	1.0000 Level 4	2.5000 Level 5	10.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
1 Total PCBs	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
2 Aroclor-1221 (1)	1768818	1630936	2113620	2685863	7757723	26789391	QUAD	-0.26827	3.364e-007	1.756e-015	0.99557
(2)	410991	814040	2060758	7112842	17734958	61693984	QUAD	-0.00554	1.338e-007	4.604e-016	0.99998
(3)	1037386	2024274	5054952	17533640	41592811	133362297	QUAD	-0.00768	5.379e-008	1.594e-016	0.99999
(4)	132354	262735	677197	2482676	6152330	21128077	QUAD	0.00103	3.812e-007	4.356e-015	0.99999
4 Aroclor-1232 (1)	16442520	16350690	16453472	14721789	14161365	11745815	AVRG		14979275		12.44858
(2)	11413080	11029790	9991864	9596410	9245446	8112570	AVRG		9898193		12.19877
(3)	20207620	19385000	18086868	17533478	17641199	16329983	AVRG		18197358		7.65446
(4)	11874800	11213440	10754756	9934859	9780021	9258234	AVRG		10469352		9.39575
(5)	9483960	8863200	8587252	7759601	7569308	7487726	AVRG		8291841		9.77801
5 Aroclor-1242 (1)	21144840	19002170	18664144	17116932	15330835	13574673	AVRG		17472266		15.60120
(2)	36102220	32893420	32946464	31707537	31025834	27140228	AVRG		31969284		9.19105
(3)	21251480	18448020	18235976	17305218	17961446	15553242	AVRG		18125897		10.23372
(4)	17479020	16371330	16226616	15125243	16332256	14581762	AVRG		16019371		6.40359

Katahdin Analytical Services A0000209

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Included
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m
Cal Date : 08-Feb-2011 13:56 rthomas

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2500000 Level 3	1.0000 Level 4	2.5000 Level 5	10.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
(5)	18009640	17959780	17463152	16444265	17578829	16087159	AVRG		17257138		4.66141
6 Aroclor-1016 (1)	22641200	21748160	21734512	20565714	19559621	16671180	AVRG		20486731		10.51764
(2)	39025560	38918290	39323904	37783174	37834588	32826601	AVRG		37618686		6.46932
(3)	21826140	21784430	21635556	20853951	20656593	18572867	AVRG		20888256		5.92440
(4)	15858180	16037730	15687128	15073477	15287110	14482558	AVRG		15404364		3.74048
(5)	18361880	18122800	18680280	17770897	17901135	16972071	AVRG		17968177		3.26575
7 Aroclor-1248 (1)	15593880	16610780	18541224	18461945	18259220	17266519	AVRG		17455595		6.80385
(2)	21336520	20880260	21137520	20595573	20227667	18924050	AVRG		20516932		4.25801
(3)	27092840	27941860	27250924	26637673	26153918	23859397	AVRG		26489435		5.36678
(4)	33527720	32414430	32674260	32314455	32050801	29759157	AVRG		32123471		3.93560
(5)	13927420	14097050	14006124	13545390	13660164	13976127	AVRG		13868713		1.55998
8 Aroclor-1254 (1)	24012660	26296840	25542556	22092489	26158670	23512371	AVRG		24602598		6.80446
(2)	32969400	36483490	35053424	32010620	36330214	32405620	AVRG		34208795		5.84756
(3)	40346700	43506030	43605384	40547085	45080473	39404504	AVRG		42081696		5.40589
(4)	29020840	31276090	31242424	28747945	32752639	30211367	AVRG		30541884		4.97813
(5)	26446540	29411260	28879324	26709549	30260552	28341490	AVRG		28341453		5.32088
9 Aroclor-1260 (1)	28557480	28599970	28786440	27694796	28930343	27120677	AVRG		28281618		2.52278
(2)	38121920	37767040	38050432	36277467	37976220	35031097	AVRG		37204029		3.41103
(3)	32930880	32238670	32577884	31370456	32870018	31677729	AVRG		32277606		1.98482
(4)	51929440	53330380	54307920	54221263	57888255	52231905	AVRG		53984860		3.98348
(5)	23595500	23992290	23897660	23469555	24781539	24600653	AVRG		24056200		2.20604
10 Aroclor-1262 (1)	29822000	30921410	32334820	31875938	30722965	29519160	AVRG		30866049		3.57990

Katahdin Analytical Services A000210

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Included
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m
Cal Date : 08-Feb-2011 13:56 rthomas

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2500000 Level 3	1.0000 Level 4	2.5000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
(2)	42729620	39409430	41483408	41795309	40820552	38314340	AVRG		40758776		3.99899
(3)	28765620	29968550	30929144	31236470	30844467	29421841	AVRG		30194349		3.22381
(4)	68063400	68497110	72820660	75741301	73771790	64493487	AVRG		70564625		5.99781
(5)	22718040	21077880	21348644	21535977	21775098	22094323	AVRG		21758327		2.69129
11 Aroclor-1268 (1)	89661060	88334500	89754132	89937818	90475663	+++++	AVRG		89632635		0.88281
(2)	76096280	75562070	78295940	78626975	79232937	+++++	AVRG		77562840		2.10007
(3)	63006120	62322430	63806116	64576018	66770074	+++++	AVRG		64096152		2.67949
(4)	165098840	161070530	168221924	169919482	165270052	+++++	AVRG		165916166		2.04187
(5)	23341300	26918480	26037728	25486543	26396744	+++++	AVRG		25636159		5.40251
3 Tetrachloro-m-xylene	685050000	714807500	744615800	763660450	720869860	729100055	AVRG		726350611		3.69534
12 Decachlorobiphenyl	443665000	494424500	403648200	354943500	369755600	385246890	AVRG		408613948		12.74156

Katahdin Analytical Services A000211

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Included
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m
Cal Date : 08-Feb-2011 13:56 rthomas

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Katahdin Analytical Services A000212

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 02/04/11 Time: 1716

Lab File ID: 7EB040 Init. Calib. Date(s): 02/04/11 02/05/11

Init. Calib. Times: 1440 1152

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	20487000	21660000	0.001	5.72	20.00	AVRG
(2)	37619000	40473000	0.001	7.59	20.00	AVRG
(3)	20888000	22066000	0.001	5.64	20.00	AVRG
(4)	15404000	16109000	0.001	4.58	20.00	AVRG
(5)	17968000	18342000	0.001	2.08	20.00	AVRG
Average %D: 5.1200						

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 02/04/11 Time: 1742

Lab File ID: 7EB041 Init. Calib. Date(s): 02/04/11 02/05/11

Init. Calib. Times: 1440 1152

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1260	28282000	27910000	0.001	-1.32	20.00	AVRG
(2)	37204000	37381000	0.001	0.48	20.00	AVRG
(3)	32278000	34770000	0.001	7.72	20.00	AVRG
(4)	53985000	48832000	0.001	-9.54	20.00	AVRG
(5)	24056000	23066000	0.001	-4.12	20.00	AVRG
Average %D: -1.360						

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.70 DCB: 18.53

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		AR1660 1.0	02/04/11	1440	4.70	18.53
02		AR1660 0.05	02/04/11	1506	4.70	18.53
03		AR1660 0.1	02/04/11	1532	4.70	18.53
04		AR1660 0.25	02/04/11	1558	4.71	18.54
05		AR1660 2.5	02/04/11	1624	4.70	18.54
06		AR1660 10	02/04/11	1650	4.71	18.54
07		AR1016 1.0	02/04/11	1716		
08		AR1260 1.0	02/04/11	1742		
09		AR1242 1.0	02/04/11	1808		
10		AR1248 1.0	02/04/11	2043		
11		AR1254 1.0	02/04/11	2319		
12		AR1221 1.0	02/05/11	0155		
13		AR1232 1.0	02/05/11	0431		
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000239

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date(s): 02/04/11 02/05/11

Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm) Calibration Time(s): 1440 1152

LAB FILE ID: RF0.05: 7EB079 RF0.1: 7EB080 RF0.25: 7EB081
RF1: 7EB078 RF2.5: 7EB082 RF10: 7EB083

COMPOUND	RF0.05	RF0.1	RF0.25	RF1	RF2.5	RF10	CURVE	COEFF. A1	%RSD OR R^2	MAX %RSD OR R^2
Aroclor-1016	4080400	4278900	4279100	4016600	3889900	3461600	AVRG	4001089.55	7.617	20.000
(2)	7759600	7811300	7789800	7382100	7471300	6602600	AVRG	7469455.83	6.172	20.000
(3)	4659000	4647200	4482400	4152700	4199900	3834000	AVRG	4329209.13	7.496	20.000
(4)	3257000	3186500	3104200	2948300	3008100	2840100	AVRG	3057334.82	5.072	20.000
(5)	3709700	3676800	3542800	3341100	3386000	3197900	AVRG	3475712.35	5.798	20.000
Aroclor-1221	1039200	1051900	1052200	899640	885540	840780	AVRG	961555.900	10.042	20.000
(2)	1814900	1836700	1833500	1645700	1652600	1473100	AVRG	1709432.57	8.512	20.000
(3)	1220300	1231600	1229700	1085300	1071500	926270	AVRG	1127455.90	10.886	20.000
(4)	4345500	4177900	4097900	3666400	3546800	3066500	AVRG	3816841.87	12.550	20.000
Aroclor-1232	3667600	3431500	3467900	3137000	3011200	2643000	AVRG	3226366.78	11.511	20.000
(2)	2157700	2085800	2178900	1955400	1879700	1697600	AVRG	1992512.92	9.303	20.000
(3)	3706100	3541200	3754400	3505700	3426600	3216000	AVRG	3525002.38	5.548	20.000
(4)	2345500	2136000	2239600	1997800	1968200	1829000	AVRG	2086005.67	9.124	20.000
(5)	1598700	1462300	1585400	1414200	1432100	1366900	AVRG	1476596.45	6.415	20.000
Aroclor-1242	3861400	3638700	3604700	3378200	3331000	2882400	AVRG	3449408.78	9.790	20.000
(2)	7073700	6449200	6554300	6347300	6434600	5550600	AVRG	6401615.55	7.670	20.000
(3)	3924000	3787600	3776600	3577400	3602900	3193900	AVRG	3643732.97	7.000	20.000
(4)	3237700	3072200	3037600	2905400	2988400	2706900	AVRG	2991359.50	5.936	20.000
(5)	3221900	2996600	2910400	2851100	3000800	2760800	AVRG	2956951.68	5.359	20.000
Aroclor-1248	4164800	4309500	4135100	3922300	3835500	3611400	AVRG	3996429.57	6.381	20.000
(2)	5112700	5298400	5145000	4958000	4849200	4467000	AVRG	4971729.55	5.875	20.000
(3)	4092600	4335700	4257100	4125700	4083100	3858000	AVRG	4125362.50	3.997	20.000
(4)	5684100	5898000	5826000	5590000	5490500	5096100	AVRG	5597443.47	5.134	20.000
(5)	5122300	5249000	5207600	5082400	5016400	4721900	AVRG	5066598.40	3.722	20.000
Aroclor-1254	5055600	5175500	4960600	4947000	4854400	4460200	AVRG	4908922.30	4.998	20.000
(2)	5623400	5753900	5498600	5456600	5342600	4876100	AVRG	5425208.12	5.603	20.000
(3)	7271900	7516000	7198200	7078600	7055100	6298600	AVRG	7069741.38	5.837	20.000
(4)	4710900	5023500	4873000	4202900	4788000	4348100	AVRG	4657746.13	6.807	20.000
(5)	4407100	4573300	4479400	3977000	4505900	4182500	AVRG	4354190.70	5.250	20.000
Aroclor-1260	4598000	4729600	4758500	4450600	4566400	4278300	AVRG	4563563.23	3.931	20.000
(2)	5626700	5723000	5737600	5368300	5474000	5028500	AVRG	5493034.22	4.900	20.000
(3)	4343800	4315400	4390600	4073900	4273400	4000300	AVRG	4232895.70	3.735	20.000
(4)	8710100	8438400	8395900	7844800	8038200	7350400	AVRG	8129649.60	6.026	20.000
(5)	3571000	3753600	3864900	3617200	3820900	3674500	AVRG	3716993.10	3.116	20.000
Tetrachloro-m-xylene	2e+008	2e+008	2e+008	2e+008	2e+008	2e+008	AVRG	165867068	1.743	20.000
Decachlorobiphenyl	6e+007	6e+007	6e+007	5e+007	6e+007	5e+007	AVRG	55352153.3	2.400	20.000

Katahdin Analytical Services A0000215

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Disabled
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m\PCB041.
Cal Date : 07-Feb-2011 08:18 rthomas
Curve Type : Average

Calibration File Names:
Level 1: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB079.D
Level 2: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB080.D
Level 3: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB081.D
Level 4: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB078.D
Level 5: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB082.D
Level 6: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB083.D

Compound	0.05000 Level 1	0.10000 Level 2	0.25000 Level 3	1.000 Level 4	2.500 Level 5	10.000 Level 6	___ RRF	% RSD
M 1 Total PCBs	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Aroclor-1221 (1)	1039220	1051920	1052232	899642	885544	840778	961556	10.042
(2)	1814880	1836720	1833548	1645708	1652638	1473101	1709433	8.512
(3)	1220340	1231630	1229704	1085329	1071463	926270	1127456	10.886
(4)	4345480	4177940	4097868	3666449	3546812	3066503	3816842	12.551
4 Aroclor-1232 (1)	3667580	3431480	3467876	3137029	3011206	2643030	3226367	11.511
(2)	2157660	2085810	2178864	1955454	1879735	1697555	1992513	9.303
(3)	3706100	3541220	3754424	3505693	3426626	3215951	3525002	5.548
(4)	2345460	2136000	2239600	1997762	1968196	1829016	2086006	9.124
(5)	1598680	1462260	1585444	1414192	1432111	1366892	1476596	6.415
5 Aroclor-1016 (1)	4080380	4278910	4279120	4016561	3889935	3461632	4001090	7.617
(2)	7759620	7811310	7789756	7382125	7471324	6602600	7469456	6.172
(3)	4658960	4647250	4482424	4152730	4199926	3833965	4329209	7.495
(4)	3256960	3186460	3104152	2948265	3008100	2840072	3057335	5.072
(5)	3709740	3676790	3542812	3341071	3385968	3197893	3475712	5.798
6 Aroclor-1242 (1)	3861380	3638720	3604680	3378206	3331034	2882433	3449409	9.790
(2)	7073700	6449250	6554280	6347310	6434570	5550583	6401616	7.670
(3)	3924000	3787640	3776552	3577381	3602878	3193947	3643733	7.000
(4)	3237680	3072240	3037580	2905355	2988400	2706902	2991360	5.936
(5)	3221940	2996580	2910384	2851125	3000826	2760856	2956952	5.359
7 Aroclor-1248 (1)	4164760	4309480	4135060	3922326	3835512	3611439	3996430	6.381
(2)	5112660	5298440	5145000	4958008	4849256	4467013	4971730	5.875
(3)	4092600	4335690	4257116	4125670	4083074	3858025	4125363	3.997
(4)	5684080	5898000	5826008	5590008	5490469	5096096	5597443	5.134
(5)	5122340	5248990	5207564	5082441	5016364	4721892	5066598	3.722
8 Aroclor-1254 (1)	5055600	5175510	4960656	4947058	4854458	4460252	4908922	4.998
(2)	5623420	5753880	5498636	5456568	5342621	4876124	5425208	5.603
(3)	7271880	7516000	7198208	7078589	7055148	6298623	7069741	5.837

Report Date : 17-Feb-2011 11:16

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 04-FEB-2011 14:40
End Cal Date : 05-FEB-2011 11:52
Quant Method : ESTD
Origin : Disabled
Target Version : 4.12
Integrator : Falcon
Method file : \\target_server\gg\chem\gc07.i\GC07EB04.b\PCB041.m\PCB041.
Cal Date : 07-Feb-2011 08:18 rthomas
Curve Type : Average

Compound	0.05000 Level 1	0.10000 Level 2	0.25000 Level 3	1.000 Level 4	2.500 Level 5	10.000 Level 6	RRF	% RSD
(4)	4710920	5023460	4873044	4202910	4788026	4348116	4657746	6.807
(5)	4407080	4573260	4479432	3976967	4505894	4182511	4354191	5.250
9 Aroclor-1260 (1)	4598040	4729600	4758512	4450600	4566352	4278276	4563563	3.931
(2)	5626680	5723040	5737636	5368336	5474016	5028498	5493034	4.900
(3)	4343760	4315370	4390640	4073908	4273381	4000315	4232896	3.735
(4)	8710080	8438420	8395948	7844828	8038218	7350403	8129650	6.026
(5)	3570980	3753550	3864872	3617212	3820878	3674466	3716993	3.116
10 Aroclor-1262 (1)	5488240	4787810	4879024	4671957	4479292	4179446	4747628	9.268
(2)	6608580	6165700	6290816	6075326	5854975	5329926	6054221	7.164
(3)	5464700	5209670	5272876	5192256	4961269	4651357	5125355	5.519
(4)	11193360	10107000	10437584	10227262	9899018	8741464	10100948	7.934
(5)	5499260	4565170	5197664	5090975	4919062	4688767	4993483	6.872
11 Aroclor-1268 (1)	12705680	12371630	12526056	12077161	11865761	10252861	11966525	7.458
(2)	10730440	10518950	10550172	10216764	10072694	8842331	10155225	6.756
(3)	8817940	8421000	8471000	8279377	8195481	7491050	8279308	5.335
(4)	24405840	23826440	24342748	23117328	22182297	17901631	22629381	10.881
(5)	4155240	4001960	3968276	3745560	3688117	3557650	3852800	5.836
$ 2 Tetrachloro-m-xylene	164229000	162632000	168882200	169544750	166432940	163481515	165867068	1.743
$ 12 Decachlorobiphenyl	55282000	56253500	56951400	53107350	55703980	54814690	55352153	2.400

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 02/04/11 Time: 1716

Lab File ID: 7EB040 Init. Calib. Date(s): 02/04/11 02/05/11

Init. Calib. Times: 1440 1152

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	4001100.0	4200200.0	0.001	4.98	20.00	AVRG
(2)	7469400.0	7974600.0	0.001	6.76	20.00	AVRG
(3)	4329200.0	4447000.0	0.001	2.72	20.00	AVRG
(4)	3057400.0	3120300.0	0.001	2.06	20.00	AVRG
(5)	3475700.0	3485200.0	0.001	0.27	20.00	AVRG
Average %D: 3.3600						

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 02/04/11 Time: 1742

Lab File ID: 7EB041 Init. Calib. Date(s): 02/04/11 02/05/11

Init. Calib. Times: 1440 1152

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1260	4563600.0	4516800.0	0.001	-1.02	20.00	AVRG
(2)	5493000.0	5430500.0	0.001	-1.14	20.00	AVRG
(3)	4232900.0	4611800.0	0.001	8.95	20.00	AVRG
(4)	8129600.0	7165100.0	0.001	-11.86	20.00	AVRG
(5)	3717000.0	3493300.0	0.001	-6.02	20.00	AVRG
Average %D: -2.220						

FORM VII PEST

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 13.12 TCX: 3.60

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		AR1660 1.0	06/03/11	1247	13.11	3.59
02	WG92000-BLAN	WG92000-1	06/03/11	1614	13.13	3.60
03	WG92000-LCS	WG92000-2	06/03/11	1640	13.11	3.59
04	WG92000-LCSD	WG92000-3	06/03/11	1706	13.12	3.60
05	2W-SD-SD153-	SE2829-1	06/03/11	1733	13.11	3.60
06	2W-SD-SD156-	SE2829-2	06/03/11	1758	13.11	3.60
07		AR1660 0.25	06/03/11	1851	13.12	3.60
08	2W-SD-SD155-	SE2829-3	06/03/11	1916	13.11	3.60
09	2W-SD-SD157-	SE2829-4	06/03/11	1942	13.11	3.60
10	2W-SD-SD160-	SE2829-5	06/03/11	2008	13.11	3.60
11	2W-SD-SD137-	SE2829-7	06/03/11	2034	13.11	3.60
12	2W-SD-SD128-	SE2829-8	06/03/11	2100	13.11	3.60
13	2W-SD-SD124-	SE2829-9	06/03/11	2126	13.11	3.60
14	2W-SD-SD125-	SE2829-10	06/03/11	2152	13.11	3.60
15	2W-SD-SD141-	SE2829-11	06/03/11	2218	13.10	3.60
16	2W-SD-SD133-	SE2829-24	06/03/11	2244	13.11	3.60
17		AR1660 1.0	06/04/11	0002	13.11	3.59
18		AR1660 1.0	06/06/11	1140	13.11	3.59
19	2W-SD-SD129-	SE2829-26	06/06/11	1342	13.12	3.59
20	2W-SD-SD143-	SE2829-27	06/06/11	1408	13.10	3.59

QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000240

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 13.12 TCX: 3.60

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		AR1660 0.25	06/06/11	1829	13.10	3.59
02		AR1660 1.0	06/10/11	1212	13.06	3.58
03	WG92620-BLAN	WG92620-1	06/10/11	1407	13.08	3.58
04	WG92620-LCS	WG92620-2	06/10/11	1433	13.06	3.58
05	WG92620-LCSD	WG92620-3	06/10/11	1459	13.06	3.58
06	2W-SD-SD131-	SE2829-25	06/10/11	1525	13.06	3.58
07	2W-SD-SD143-	SE2829-27RE	06/10/11	1551	13.06	3.58
08	2W-SD-SD145-	SE2829-28	06/10/11	1617	13.07	3.58
09	2W-SD-SD132-	SE2829-29	06/10/11	1644	13.06	3.58
10	2W-SD-SD139-	SE2829-30	06/10/11	1710	13.06	3.58
11	2W-SD-SD114-	SE2829-31	06/10/11	1736	13.06	3.58
12		AR1660 0.25	06/10/11	1854	13.07	3.58
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS

DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

Katahdin Analytical Services A0000241

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 06/03/11 Time: 1247

Lab File ID: 7EF002 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	20487000	27558000	0.001	34.51	20.00	AVRG	<-
(2)	37619000	47910000	0.001	27.36	20.00	AVRG	<-
(3)	20888000	25993000	0.001	24.44	20.00	AVRG	<-
(4)	15404000	18498000	0.001	20.09	20.00	AVRG	<-
(5)	17968000	22039000	0.001	22.66	20.00	AVRG	<-
Average %D: 25.810							
Aroclor-1260	28282000	36852000	0.001	30.30	20.00	AVRG	<-
(2)	37204000	51888000	0.001	39.47	20.00	AVRG	<-
(3)	32278000	38675000	0.001	19.82	20.00	AVRG	
(4)	53985000	68505000	0.001	26.90	20.00	AVRG	<-
(5)	24056000	24333000	0.001	1.15	20.00	AVRG	
Average %D: 23.530							
Decachlorobiphenyl	408610000	422780000	0.001	3.47	20.00	AVRG	
Tetrachloro-m-xylene	726350000	1.12e+009	0.001	54.20	20.00	AVRG	<-

AVG >20%

AVG >20%

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 06/03/11 Time: 1851

Lab File ID: 7EF014 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	20487000	27528000	0.001	34.37	20.00	AVRG	<-
(2)	37619000	46002000	0.001	22.28	20.00	AVRG	<-
(3)	20888000	25774000	0.001	23.39	20.00	AVRG	<-
(4)	15404000	17878000	0.001	16.06	20.00	AVRG	
(5)	17968000	22052000	0.001	22.73	20.00	AVRG	<-
Average %D: 23.760							
Aroclor-1260	28282000	35099000	0.001	24.10	20.00	AVRG	<-
(2)	37204000	49737000	0.001	33.69	20.00	AVRG	<-
(3)	32278000	36896000	0.001	14.31	20.00	AVRG	
(4)	53985000	62529000	0.001	15.83	20.00	AVRG	
(5)	24056000	24160000	0.001	0.43	20.00	AVRG	
Average %D: 17.680							
Decachlorobiphenyl	408610000	438860000	0.001	7.40	20.00	AVRG	
Tetrachloro-m-xylene	726350000	1.04e+009	0.001	43.18	20.00	AVRG	<-

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 06/04/11 Time: 0002

Lab File ID: 7EF026 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	20487000	30147000	0.001	47.15	20.00	AVRG	<-
(2)	37619000	52439000	0.001	39.40	20.00	AVRG	<-
(3)	20888000	28804000	0.001	37.90	20.00	AVRG	<-
(4)	15404000	20612000	0.001	33.81	20.00	AVRG	<-
(5)	17968000	23784000	0.001	32.37	20.00	AVRG	<-
Average %D: 38.120							
Aroclor-1260	28282000	38984000	0.001	37.84	20.00	AVRG	<-
(2)	37204000	55721000	0.001	49.77	20.00	AVRG	<-
(3)	32278000	43189000	0.001	33.80	20.00	AVRG	<-
(4)	53985000	77375000	0.001	43.33	20.00	AVRG	<-
(5)	24056000	29491000	0.001	22.59	20.00	AVRG	<-
Average %D: 37.470							
Decachlorobiphenyl	408610000	458860000	0.001	12.30	20.00	AVRG	
Tetrachloro-m-xylene	726350000	1.22e+009	0.001	67.96	20.00	AVRG	<-

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 06/06/11 Time: 1140

Lab File ID: 7EF028 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	20487000	28239000	0.001	37.84	20.00	AVRG	<-
(2)	37619000	49426000	0.001	31.39	20.00	AVRG	<-
(3)	20888000	26829000	0.001	28.44	20.00	AVRG	<-
(4)	15404000	19148000	0.001	24.30	20.00	AVRG	<-
(5)	17968000	22136000	0.001	23.20	20.00	AVRG	<-
Average %D: 29.030							
Aroclor-1260	28282000	36126000	0.001	27.74	20.00	AVRG	<-
(2)	37204000	51229000	0.001	37.70	20.00	AVRG	<-
(3)	32278000	39396000	0.001	22.05	20.00	AVRG	<-
(4)	53985000	69058000	0.001	27.92	20.00	AVRG	<-
(5)	24056000	25667000	0.001	6.70	20.00	AVRG	
Average %D: 24.420							
Decachlorobiphenyl	408610000	421390000	0.001	3.13	20.00	AVRG	
Tetrachloro-m-xylene	726350000	1.13e+009	0.001	55.57	20.00	AVRG	<-

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 06/06/11 Time: 1829

Lab File ID: 7EF043 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	20487000	27834000	0.001	35.86	20.00	AVRG	<-
(2)	37619000	48904000	0.001	30.00	20.00	AVRG	<-
(3)	20888000	27250000	0.001	30.46	20.00	AVRG	<-
(4)	15404000	19498000	0.001	26.58	20.00	AVRG	<-
(5)	17968000	22102000	0.001	23.01	20.00	AVRG	<-
Average %D: 29.200							
Aroclor-1260	28282000	34771000	0.001	22.94	20.00	AVRG	<-
(2)	37204000	49326000	0.001	32.58	20.00	AVRG	<-
(3)	32278000	38266000	0.001	18.55	20.00	AVRG	
(4)	53985000	65748000	0.001	21.79	20.00	AVRG	<-
(5)	24056000	26677000	0.001	10.90	20.00	AVRG	
Average %D: 21.360							
Decachlorobiphenyl	408610000	425730000	0.001	4.19	20.00	AVRG	
Tetrachloro-m-xylene	726350000	1.2e+009	0.001	65.21	20.00	AVRG	<-

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 06/10/11 Time: 1212

Lab File ID: 7EF133 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	20487000	28558000	0.001	39.40	20.00	AVRG	<-
(2)	37619000	49249000	0.001	30.92	20.00	AVRG	<-
(3)	20888000	27225000	0.001	30.34	20.00	AVRG	<-
(4)	15404000	16457000	0.001	6.84	20.00	AVRG	
(5)	17968000	22969000	0.001	27.83	20.00	AVRG	<-
Average %D: 27.060							
Aroclor-1260	28282000	39008000	0.001	37.92	20.00	AVRG	<-
(2)	37204000	56893000	0.001	52.92	20.00	AVRG	<-
(3)	32278000	45930000	0.001	42.30	20.00	AVRG	<-
(4)	53985000	82090000	0.001	52.06	20.00	AVRG	<-
(5)	24056000	31566000	0.001	31.22	20.00	AVRG	<-
Average %D: 43.290							
Decachlorobiphenyl	408610000	522930000	0.001	27.98	20.00	AVRG	<-
Tetrachloro-m-xylene	726350000	1.01e+009	0.001	39.05	20.00	AVRG	<-

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 06/10/11 Time: 1854

Lab File ID: 7EF148 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE1 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	20487000	29893000	0.001	45.91	20.00	AVRG	<-
(2)	37619000	50202000	0.001	33.45	20.00	AVRG	<-
(3)	20888000	28933000	0.001	38.52	20.00	AVRG	<-
(4)	15404000	18037000	0.001	17.09	20.00	AVRG	
(5)	17968000	24528000	0.001	36.51	20.00	AVRG	<-
Average %D: 34.280							
Aroclor-1260	28282000	41735000	0.001	47.57	20.00	AVRG	<-
(2)	37204000	57676000	0.001	55.03	20.00	AVRG	<-
(3)	32278000	44522000	0.001	37.93	20.00	AVRG	<-
(4)	53985000	78084000	0.001	44.64	20.00	AVRG	<-
(5)	24056000	30624000	0.001	27.30	20.00	AVRG	<-
Average %D: 42.480							
Decachlorobiphenyl	408610000	539830000	0.001	32.11	20.00	AVRG	<-
Tetrachloro-m-xylene	726350000	1.08e+009	0.001	48.69	20.00	AVRG	<-

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.15 DCB: 17.06

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		AR1660 1.0	06/03/11	1247	4.15	17.07
02	WG92000-BLAN	WG92000-1	06/03/11	1614	4.15	17.07
03	WG92000-LCS	WG92000-2	06/03/11	1640	4.15	17.07
04	WG92000-LCSD	WG92000-3	06/03/11	1706	4.15	17.07
05	2W-SD-SD153-	SE2829-1	06/03/11	1733	4.15	17.07
06	2W-SD-SD156-	SE2829-2	06/03/11	1758	4.15	17.07
07		AR1660 0.25	06/03/11	1851	4.15	17.07
08	2W-SD-SD155-	SE2829-3	06/03/11	1916	4.15	17.07
09	2W-SD-SD157-	SE2829-4	06/03/11	1942	4.15	17.07
10	2W-SD-SD160-	SE2829-5	06/03/11	2008	4.15	17.06
11	2W-SD-SD137-	SE2829-7	06/03/11	2034	4.16	17.07
12	2W-SD-SD128-	SE2829-8	06/03/11	2100	4.15	17.06
13	2W-SD-SD124-	SE2829-9	06/03/11	2126	4.15	17.07
14	2W-SD-SD125-	SE2829-10	06/03/11	2152	4.15	17.06
15	2W-SD-SD141-	SE2829-11	06/03/11	2218	4.15	17.06
16	2W-SD-SD133-	SE2829-24	06/03/11	2244	4.15	17.06
17		AR1660 1.0	06/04/11	0002	4.15	17.06
18		AR1660 1.0	06/06/11	1140	4.14	17.05
19	2W-SD-SD129-	SE2829-26	06/06/11	1342	4.14	17.06
20	2W-SD-SD143-	SE2829-27	06/06/11	1408	4.14	17.06

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000242

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm) Init. Calib. Date(s): 02/04/11 02/05/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.15 DCB: 17.06

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		AR1660 0.25	06/06/11	1829	4.14	17.06
02		AR1660 1.0	06/10/11	1212	4.13	17.01
03	WG92620-BLAN	WG92620-1	06/10/11	1407	4.13	17.01
04	WG92620-LCS	WG92620-2	06/10/11	1433	4.13	17.00
05	WG92620-LCSD	WG92620-3	06/10/11	1459	4.13	17.00
06	2W-SD-SD131-	SE2829-25	06/10/11	1525	4.13	17.00
07	2W-SD-SD143-	SE2829-27RE	06/10/11	1551	4.13	17.00
08	2W-SD-SD145-	SE2829-28	06/10/11	1617	4.13	17.01
09	2W-SD-SD132-	SE2829-29	06/10/11	1644	4.13	17.00
10	2W-SD-SD139-	SE2829-30	06/10/11	1710	4.13	17.00
11	2W-SD-SD114-	SE2829-31	06/10/11	1736	4.13	17.00
12		AR1660 0.25	06/10/11	1854	4.14	17.01
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS

TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000243

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 06/03/11 Time: 1247

Lab File ID: 7EF002 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	4001100.0	4658600.0	0.001	16.43	20.00	AVRG	
(2)	7469400.0	8426900.0	0.001	12.82	20.00	AVRG	
(3)	4329200.0	4720200.0	0.001	9.03	20.00	AVRG	
(4)	3057400.0	3368200.0	0.001	10.17	20.00	AVRG	
(5)	3475700.0	3976300.0	0.001	14.40	20.00	AVRG	
Average %D: -0.480							
Aroclor-1260	4563600.0	5122000.0	0.001	12.24	20.00	AVRG	
(2)	5493000.0	5750400.0	0.001	4.69	20.00	AVRG	
(3)	4232900.0	4332600.0	0.001	2.36	20.00	AVRG	
(4)	8129600.0	8174700.0	0.001	0.55	20.00	AVRG	
(5)	3717000.0	3885500.0	0.001	4.53	20.00	AVRG	
Average %D: -8.250							
Tetrachloro-m-xylene	165860000	208550000	0.001	25.74	20.00	AVRG	<-
Decachlorobiphenyl	55352000	64573000	0.001	16.66	20.00	AVRG	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 06/03/11 Time: 1851

Lab File ID: 7EF014 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	4001100.0	4460300.0	0.001	11.48	20.00	AVRG
(2)	7469400.0	7718900.0	0.001	3.34	20.00	AVRG
(3)	4329200.0	4427400.0	0.001	2.27	20.00	AVRG
(4)	3057400.0	3108500.0	0.001	1.67	20.00	AVRG
(5)	3475700.0	3809600.0	0.001	9.61	20.00	AVRG
Average %D: 5.6800						
Aroclor-1260	4563600.0	4785700.0	0.001	4.87	20.00	AVRG
(2)	5493000.0	5333100.0	0.001	-2.91	20.00	AVRG
(3)	4232900.0	3932500.0	0.001	-7.10	20.00	AVRG
(4)	8129600.0	7131900.0	0.001	-12.27	20.00	AVRG
(5)	3717000.0	3447600.0	0.001	-7.25	20.00	AVRG
Average %D: -4.920						
Tetrachloro-m-xylene	165860000	188060000	0.001	13.38	20.00	AVRG
Decachlorobiphenyl	55352000	64094000	0.001	15.79	20.00	AVRG

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 06/04/11 Time: 0002

Lab File ID: 7EF026 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	4001100.0	4658600.0	0.001	16.43	20.00	AVRG	
(2)	7469400.0	8426900.0	0.001	12.82	20.00	AVRG	
(3)	4329200.0	4720200.0	0.001	9.03	20.00	AVRG	
(4)	3057400.0	3368200.0	0.001	10.17	20.00	AVRG	
(5)	3475700.0	3976300.0	0.001	14.40	20.00	AVRG	
Average %D: 12.570							
Aroclor-1260	4563600.0	5122000.0	0.001	12.24	20.00	AVRG	
(2)	5493000.0	5750400.0	0.001	4.69	20.00	AVRG	
(3)	4232900.0	4332600.0	0.001	2.36	20.00	AVRG	
(4)	8129600.0	8174700.0	0.001	0.55	20.00	AVRG	
(5)	3717000.0	3885500.0	0.001	4.53	20.00	AVRG	
Average %D: 4.8700							
Tetrachloro-m-xylene	165860000	208550000	0.001	25.74	20.00	AVRG	<-
Decachlorobiphenyl	55352000	64573000	0.001	16.66	20.00	AVRG	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 06/06/11 Time: 1140

Lab File ID: 7EF028 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	4001100.0	4179200.0	0.001	4.45	20.00	AVRG
(2)	7469400.0	7545500.0	0.001	1.02	20.00	AVRG
(3)	4329200.0	4192600.0	0.001	-3.16	20.00	AVRG
(4)	3057400.0	2964800.0	0.001	-3.03	20.00	AVRG
(5)	3475700.0	3561700.0	0.001	2.47	20.00	AVRG
Average %D: 0.3500						
Aroclor-1260	4563600.0	4624100.0	0.001	1.32	20.00	AVRG
(2)	5493000.0	5207500.0	0.001	-5.20	20.00	AVRG
(3)	4232900.0	3925800.0	0.001	-7.26	20.00	AVRG
(4)	8129600.0	7282800.0	0.001	-10.42	20.00	AVRG
(5)	3717000.0	3461600.0	0.001	-6.87	20.00	AVRG
Average %D: -5.680						
Tetrachloro-m-xylene	165860000	185340000	0.001	11.74	20.00	AVRG
Decachlorobiphenyl	55352000	58698000	0.001	6.04	20.00	AVRG

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 06/06/11 Time: 1829

Lab File ID: 7EF043 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	4001100.0	4447900.0	0.001	11.17	20.00	AVRG
(2)	7469400.0	7773700.0	0.001	4.07	20.00	AVRG
(3)	4329200.0	4376400.0	0.001	1.09	20.00	AVRG
(4)	3057400.0	3051700.0	0.001	-0.19	20.00	AVRG
(5)	3475700.0	3674800.0	0.001	5.73	20.00	AVRG
Average %D: 4.3600						
Aroclor-1260	4563600.0	4754100.0	0.001	4.17	20.00	AVRG
(2)	5493000.0	5460900.0	0.001	-0.58	20.00	AVRG
(3)	4232900.0	3923800.0	0.001	-7.30	20.00	AVRG
(4)	8129600.0	7451700.0	0.001	-8.34	20.00	AVRG
(5)	3717000.0	3567000.0	0.001	-4.04	20.00	AVRG
Average %D: -3.200						
Tetrachloro-m-xylene	165860000	194870000	0.001	17.49	20.00	AVRG
Decachlorobiphenyl	55352000	61556000	0.001	11.21	20.00	AVRG

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 06/10/11 Time: 1212

Lab File ID: 7EF133 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	4001100.0	4637100.0	0.001	15.90	20.00	AVRG	
(2)	7469400.0	8380000.0	0.001	12.19	20.00	AVRG	
(3)	4329200.0	4695600.0	0.001	8.46	20.00	AVRG	
(4)	3057400.0	3298200.0	0.001	7.88	20.00	AVRG	
(5)	3475700.0	3977500.0	0.001	14.44	20.00	AVRG	
Average %D: 11.770							
Aroclor-1260	4563600.0	5264000.0	0.001	15.35	20.00	AVRG	
(2)	5493000.0	6053500.0	0.001	10.20	20.00	AVRG	
(3)	4232900.0	4484200.0	0.001	5.94	20.00	AVRG	
(4)	8129600.0	8533000.0	0.001	4.96	20.00	AVRG	
(5)	3717000.0	4062100.0	0.001	9.28	20.00	AVRG	
Average %D: 9.1500							
Tetrachloro-m-xylene	165860000	195550000	0.001	17.90	20.00	AVRG	
Decachlorobiphenyl	55352000	67325000	0.001	21.63	20.00	AVRG	<-

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GC07 Calibration Date: 06/10/11 Time: 1854

Lab File ID: 7EF148 Init. Calib. Date(s): 02/04/11 02/04/11

Init. Calib. Times: 1440 1650

GC Column: ZB-MULTIRESIDUE2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	4001100.0	4844600.0	0.001	21.08	20.00	AVRG	<-
(2)	7469400.0	8575100.0	0.001	14.80	20.00	AVRG	
(3)	4329200.0	4853900.0	0.001	12.12	20.00	AVRG	
(4)	3057400.0	3384600.0	0.001	10.70	20.00	AVRG	
(5)	3475700.0	4028800.0	0.001	15.91	20.00	AVRG	
Average %D: 14.920							
Aroclor-1260	4563600.0	5321900.0	0.001	16.62	20.00	AVRG	
(2)	5493000.0	6121200.0	0.001	11.44	20.00	AVRG	
(3)	4232900.0	4449400.0	0.001	5.11	20.00	AVRG	
(4)	8129600.0	8325200.0	0.001	2.41	20.00	AVRG	
(5)	3717000.0	4040700.0	0.001	8.71	20.00	AVRG	
Average %D: 8.8400							
Tetrachloro-m-xylene	165860000	205400000	0.001	23.84	20.00	AVRG	<-
Decachlorobiphenyl	55352000	72042000	0.001	30.15	20.00	AVRG	<-

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG92000-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab Sample ID: WG92000-1 Lab File ID: 7EF008

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3550

Sulfur Cleanup: (Y/N) N Date Extracted: 05/26/11

Date Analyzed (1): 06/03/11 Date Analyzed (2): 06/03/11

Time Analyzed (1): 1614 Time Analyzed (2): 1614

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column (1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	WG92000-LCS	WG92000-2	7EF009	06/03/11	06/03/11
02	WG92000-LCSD	WG92000-3	7EF010	06/03/11	06/03/11
03	2W-SD-SD153-0001	SE2829-1	7EF011	06/03/11	06/03/11
04	2W-SD-SD156-0001	SE2829-2	7EF012	06/03/11	06/03/11
05	2W-SD-SD155-0001	SE2829-3	7EF015	06/03/11	06/03/11
06	2W-SD-SD157-0001	SE2829-4	7EF016	06/03/11	06/03/11
07	2W-SD-SD160-0001	SE2829-5	7EF017	06/03/11	06/03/11
08	2W-SD-SD137-0001	SE2829-7	7EF018	06/03/11	06/03/11
09	2W-SD-SD128-0001	SE2829-8	7EF019	06/03/11	06/03/11
10	2W-SD-SD124-0001	SE2829-9	7EF020	06/03/11	06/03/11
11	2W-SD-SD125-0001	SE2829-10	7EF021	06/03/11	06/03/11
12	2W-SD-SD141-0001	SE2829-11	7EF022	06/03/11	06/03/11
13	2W-SD-SD133-0001	SE2829-24	7EF023	06/03/11	06/03/11
14	2W-SD-SD129-0001	SE2829-26	7EF032	06/06/11	06/06/11
15	2W-SD-SD143-0001	SE2829-27	7EF033	06/06/11	06/06/11
16					
17					
18					
19					
20					
21					
22					
23					
24					

COMMENTS: _____

FORM IVPCB

Katahdin Analytical Services A0000206

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: -
Lab ID: WG92000-1
Client ID: Method Blank Sample
Project:
SDG: WE55-4

Sample Date:
Received Date: 26-MAY-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG92000

Analysis Date: 03-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: NA
Report Date: 08-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	8.5	ug/Kgdrywt	1	17	17.	6.0	8.5
Aroclor-1221	U	8.5	ug/Kgdrywt	1	17	17.	7.9	8.5
Aroclor-1232	U	10.	ug/Kgdrywt	1	17	17.	9.3	10.
Aroclor-1242	U	8.5	ug/Kgdrywt	1	17	17.	5.8	8.5
Aroclor-1248	U	8.5	ug/Kgdrywt	1	17	17.	6.1	8.5
Aroclor-1254	U	8.5	ug/Kgdrywt	1	17	17.	4.7	8.5
Aroclor-1260	U	8.5	ug/Kgdrywt	1	17	17.	6.0	8.5
Tetrachloro-M-Xylene		66.1	%					
Decachlorobiphenyl		87.7	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG92000-2
LCSD ID: WG92000-3
Project:
SDG: WE55-4
Report Date: 08-JUN-11

Received Date: 26-MAY-11
Extract Date: 26-MAY-11
Extracted By: KD
Extraction Method: SW846 3550
Lab Prep Batch: WG92000

Analysis Date: 03-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Aroclor-1016	167.	131.	78.4	141.	84.4	ug/Kgdrywt	7	50	53-123
Aroclor-1260	167.	140.	83.8	139.	83.2	ug/Kgdrywt	1	50	58-120
Tetrachloro-M-Xylene			65.5		89.2				56-115
Decachlorobiphenyl			85.0		85.6				59-124

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG92620-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Lab Sample ID: WG92620-1 Lab File ID: 7EF137

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3550

Sulfur Cleanup: (Y/N) N Date Extracted: 06/09/11

Date Analyzed (1): 06/10/11 Date Analyzed (2): 06/10/11

Time Analyzed (1): 1407 Time Analyzed (2): 1407

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column (1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	WG92620-LCS	WG92620-2	7EF138	06/10/11	06/10/11
02	WG92620-LCSD	WG92620-3	7EF139	06/10/11	06/10/11
03	2W-SD-SD131-0001	SE2829-25	7EF140	06/10/11	06/10/11
04	2W-SD-SD143-0001	SE2829-27RE	7EF141	06/10/11	06/10/11
05	2W-SD-SD145-0001	SE2829-28	7EF142	06/10/11	06/10/11
06	2W-SD-SD132-0001	SE2829-29	7EF143	06/10/11	06/10/11
07	2W-SD-SD139-0001	SE2829-30	7EF144	06/10/11	06/10/11
08	2W-SD-SD114-0001	SE2829-31	7EF145	06/10/11	06/10/11
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

COMMENTS: _____

FORM IVPCB

Katahdin Analytical Services A0000207

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG92620-1
Client ID: Method Blank Sample
Project:
SDG: WE55-4

Sample Date:
Received Date: 09-JUN-11
Extract Date: 09-JUN-11
Extracted By: JS
Extraction Method: SW846 3550
Lab Prep Batch: WG92620

Analysis Date: 10-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: NA
Report Date: 13-JUN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	8.5	ug/Kgdrywt	1	17	17.	6.0	8.5
Aroclor-1221	U	8.5	ug/Kgdrywt	1	17	17.	7.9	8.5
Aroclor-1232	U	10.	ug/Kgdrywt	1	17	17.	9.3	10.
Aroclor-1242	U	8.5	ug/Kgdrywt	1	17	17.	5.8	8.5
Aroclor-1248	U	8.5	ug/Kgdrywt	1	17	17.	6.1	8.5
Aroclor-1254	U	8.5	ug/Kgdrywt	1	17	17.	4.7	8.5
Aroclor-1260	U	8.5	ug/Kgdrywt	1	17	17.	6.0	8.5
Tetrachloro-M-Xylene	*	42.6	%					
Decachlorobiphenyl		65.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG92620-2
LCSD ID: WG92620-3
Project:
SDG: WE55-4
Report Date: 13-JUN-11

Received Date: 09-JUN-11
Extract Date: 09-JUN-11
Extracted By: JS
Extraction Method: SW846 3550
Lab Prep Batch: WG92620

Analysis Date: 10-JUN-11
Analyst: EKC
Analysis Method: SW846 8082A
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Aroclor-1016	167.	122.	73.0	124.	74.2	ug/Kgdrywt	2	50	53-123
Aroclor-1260	167.	146.	87.4	153.	91.6	ug/Kgdrywt	5	50	58-120
Tetrachloro-M-Xylene			67.9		70.6				56-115
Decachlorobiphenyl			91.6		98.8				59-124

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

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FORM 2
SOIL PCB SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

GC Column(1): ZB-MULTIRESIDUE1ID: 0.53 (mm)GC Column(2): ZB-MULTIRESIDUE2ID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	DCB1 REC#	DCB2 REC#	OTHR (1)	OTHR (2)	TOT OUT
01	WG92000-BLANK	WG92000-1	66	56	88	83			0
02	WG92000-LCS	WG92000-2	65	54*	85	82			1
03	WG92000-LCSD	WG92000-3	89	74	86	83			0
04	2W-SD-SD153-0001	SE2829-1	46*	59	69	74			1
05	2W-SD-SD156-0001	SE2829-2	71	64	69	70			0
06	2W-SD-SD155-0001	SE2829-3	53*	60	59	68			1
07	2W-SD-SD157-0001	SE2829-4	71	66	59	66			0
08	2W-SD-SD160-0001	SE2829-5	56	60	59	63			0
09	2W-SD-SD137-0001	SE2829-7	56	72	65	81			0
10	2W-SD-SD128-0001	SE2829-8	50*	55*	49*	62			3
11	2W-SD-SD124-0001	SE2829-9	44*	56	45*	65			2
12	2W-SD-SD125-0001	SE2829-10	53*	63	51*	67			2
13	2W-SD-SD141-0001	SE2829-11	58	66	63	73			0
14	2W-SD-SD133-0001	SE2829-24	75	70	65	72			0
15	2W-SD-SD129-0001	SE2829-26	55*	60	57*	67			2
16	2W-SD-SD143-0001	SE2829-27	37*	45*	47*	53*			4
17	WG92620-BLANK	WG92620-1	43*	39*	66	60			2
18	WG92620-LCS	WG92620-2	68	63	92	80			0
19	WG92620-LCSD	WG92620-3	70	62	99	86			0
20	2W-SD-SD131-0001	SE2829-25	61	56	70	64			0
21	2W-SD-SD143-0001	SE2829-27RE	35*	39*	45*	45*			4
22	2W-SD-SD145-0001	SE2829-28	38*	50*	49*	64			3
23	2W-SD-SD132-0001	SE2829-29	53*	59	56*	66			2
24	2W-SD-SD139-0001	SE2829-30	50*	58	56*	67			2
25	2W-SD-SD114-0001	SE2829-31	52*	49*	60	58*			3
26									
27									
28									

ADVISORY QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (56-115)
S2 (DCB) = Decachlorobiphenyl (59-124)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

Katahdin Analytical Services A0000199

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 129-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-26 Date(s) Analyzed: 06/06/11 06/06/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.11	7.03	7.17	224		
Aroclor-1260	2	7.99	7.91	8.04	233		
	3	9.31	9.23	9.37	251		
COLUMN 1	4	9.99	9.91	10.05	254		
	5					240	
	1	8.77	8.70	8.84	243		
	2	9.21	9.14	9.28	186		
	3	10.11	10.04	10.18	577		
COLUMN 2	4	11.90	11.82	11.96	238		
	5	13.03	12.96	13.10	309	310	25.4
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

Katahdin Analytical Services A0000189

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 132-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-29 Date(s) Analyzed: 06/10/11 06/10/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.08	7.01	7.15	661		
Aroclor-1260	2	7.95	7.88	8.02	663		
	3	9.26	9.19	9.33	749		
COLUMN 1	4	9.95	9.88	10.02	744		
	5					704	
	1	8.73	8.66	8.80	674		
	2	9.18	9.11	9.25	623		
	3	10.07	10.00	10.14	935		
COLUMN 2	4	11.85	11.78	11.92	746		
	5	12.99	12.92	13.06	865	769	8.8
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

Katahdin Analytical Services A0000194

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 133-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-24 Date(s) Analyzed: 06/03/11 06/03/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.11	7.04	7.18	400		
Aroclor-1260	2	7.56	7.45	7.59	835		
	3	7.98	7.92	8.06	343		
COLUMN 1	4	9.30	9.24	9.38	266		
	5	9.98	9.93	10.07	394	448	
	1	8.77	8.70	8.84	258		
	2	9.21	9.14	9.28	257		
	3	10.11	10.04	10.18	712		
COLUMN 2	4	11.90	11.83	11.97	293		
	5	13.04	12.96	13.10	339	372	18.5
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

Katahdin Analytical Services A0000186

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 155-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: WE55-4

Lab Sample ID: SE2829-3 Date(s) Analyzed: 06/03/11 06/03/11

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column(1): ZB-MULTIRESIDUE1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	7.11	7.04	7.18	198		
Aroclor-1260	2	7.98	7.92	8.06	135		
	3	9.30	9.24	9.38	125		
COLUMN 1	4	9.99	9.93	10.07	120		
	5					144	
	1	8.77	8.70	8.84	158		
	2	9.22	9.14	9.28	107		
	3	10.12	10.04	10.18	192		
COLUMN 2	4	11.90	11.83	11.97	126		
	5	13.04	12.96	13.10	153	147	2.1
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

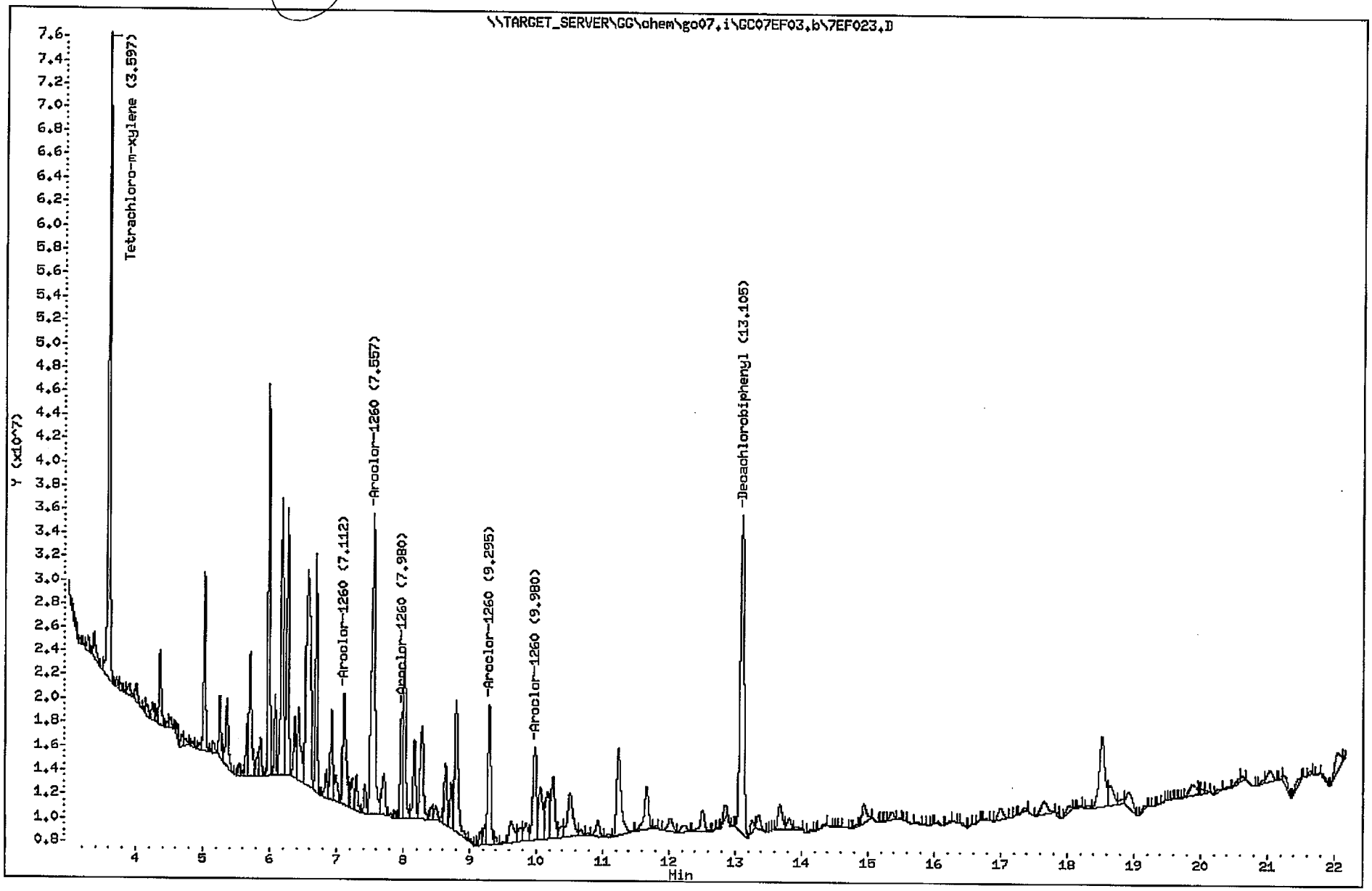
Katahdin Analytical Services A0000177

Data File: \\TARGET_SERVER\GC\chem\gc07.i\GC07EF03.b\7EF023.D
Date : 03-JUN-2011 22:44
Client ID: 2W-SD-SD133-0001
Sample Info: SE2829-24

Instrument: gc07.i

Operator: EKC
Column diameter: 0.53

Column phase: ZB-Multiresidue1

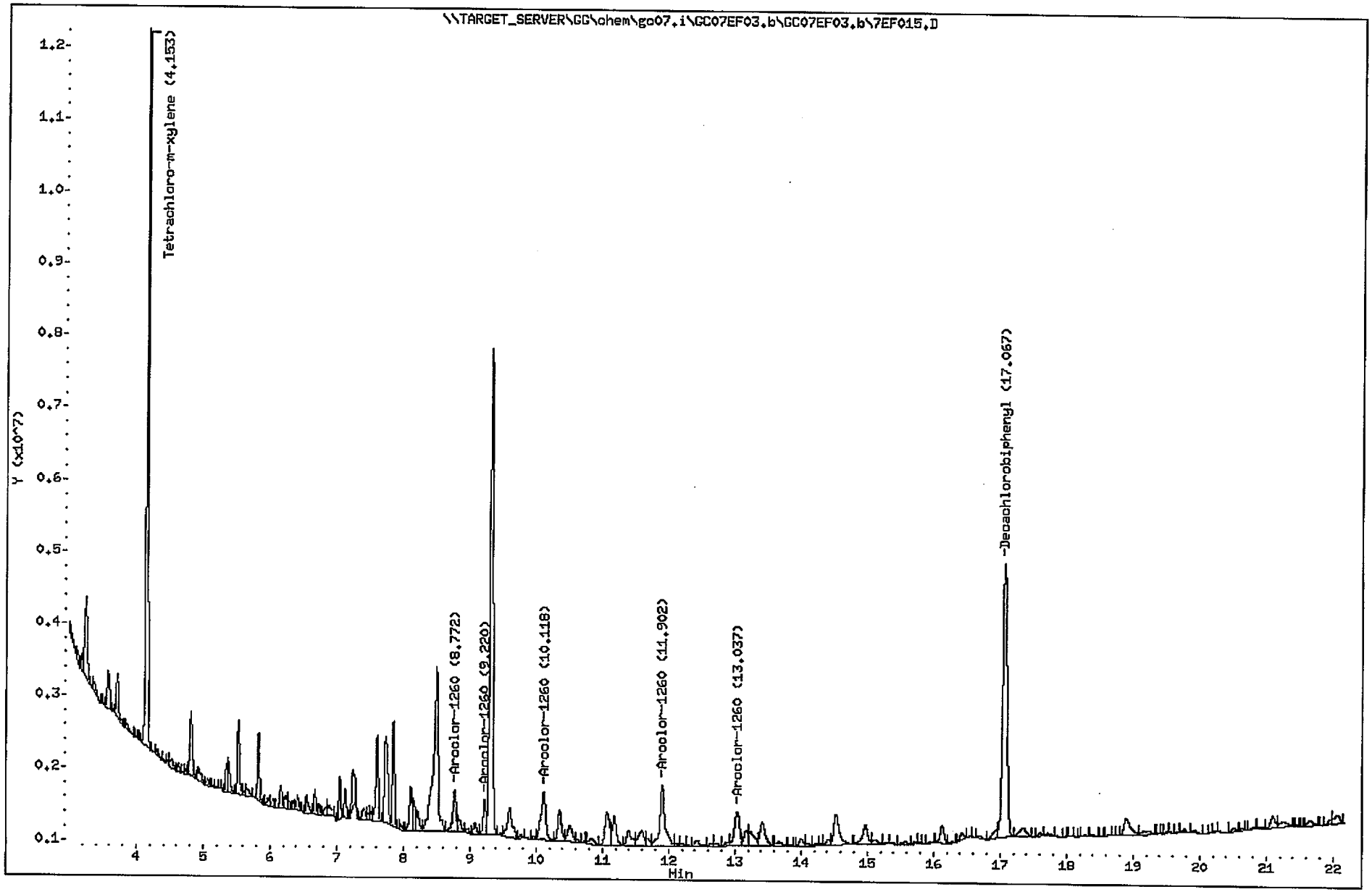


Katahdin Analytical Services 3000071

Data File: \\TARGET_SERVER\GC\chem\gc07.i\GC07EF03.b\GC07EF03.b\7EF015.D
Date : 03-JUN-2011 19:16
Client ID: 2W-SD-SD155-0001
Sample Info: SE2829-3

Instrument: gc07.i
Operator: EKC
Column diameter: 0.53

Column phase: ZB-Multiresidue2

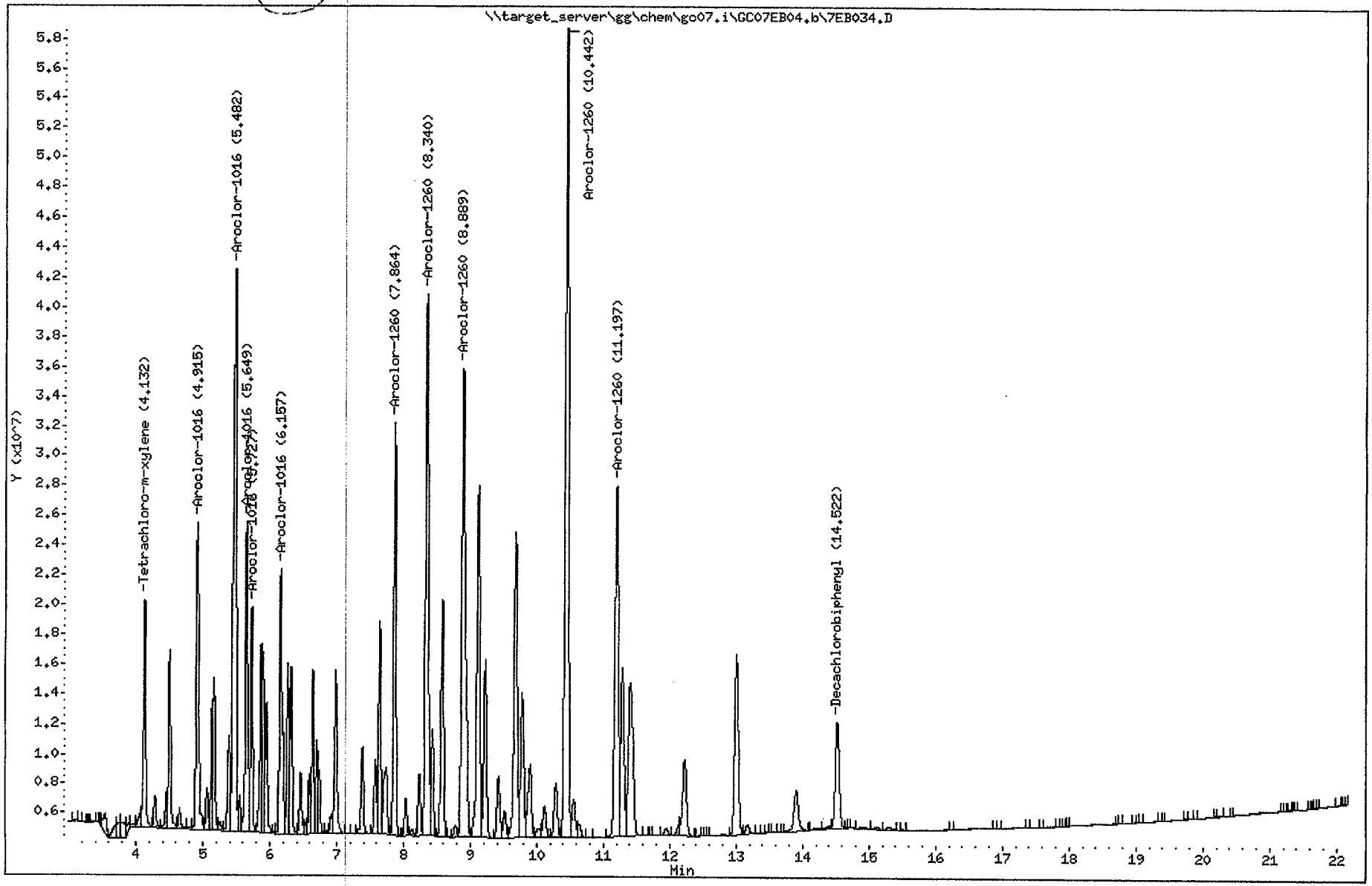


Katahdin Analytical Services 3000030

Data File: \\target_server\gg\chem\go07.i\GC07EB04.b\7EB034.D
Date : 04-FEB-2011 14:40
Client ID:
Sample Info: AR1660 1.0
Purge Volume: 1.0
Column phase: ZB-Multiresidue1

Instrument: go07.i
Operator: RCT
Column diameter: 0.53

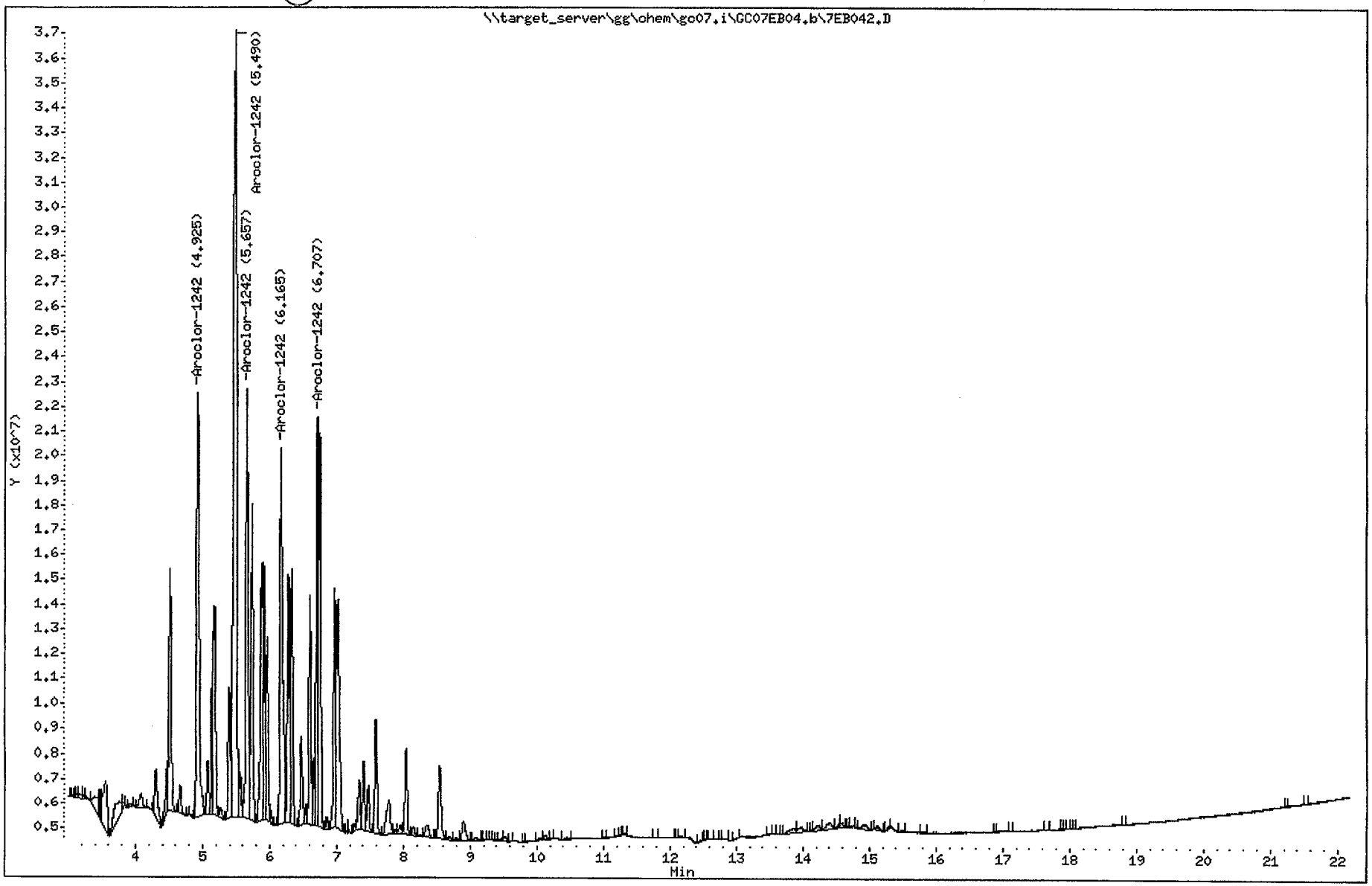
AFTER
MANUAL INTEGRATION



Katahdin Analytical Services 3000136

Data File: \\target_server\gg\ohem\go07.i\GC07EB04.b\7EB042.D
Date : 04-FEB-2011 18:08
Client ID:
Sample Info: AR1242 1.0
Purge Volume: 1.0
Column phase: ZB-Multiresidue1

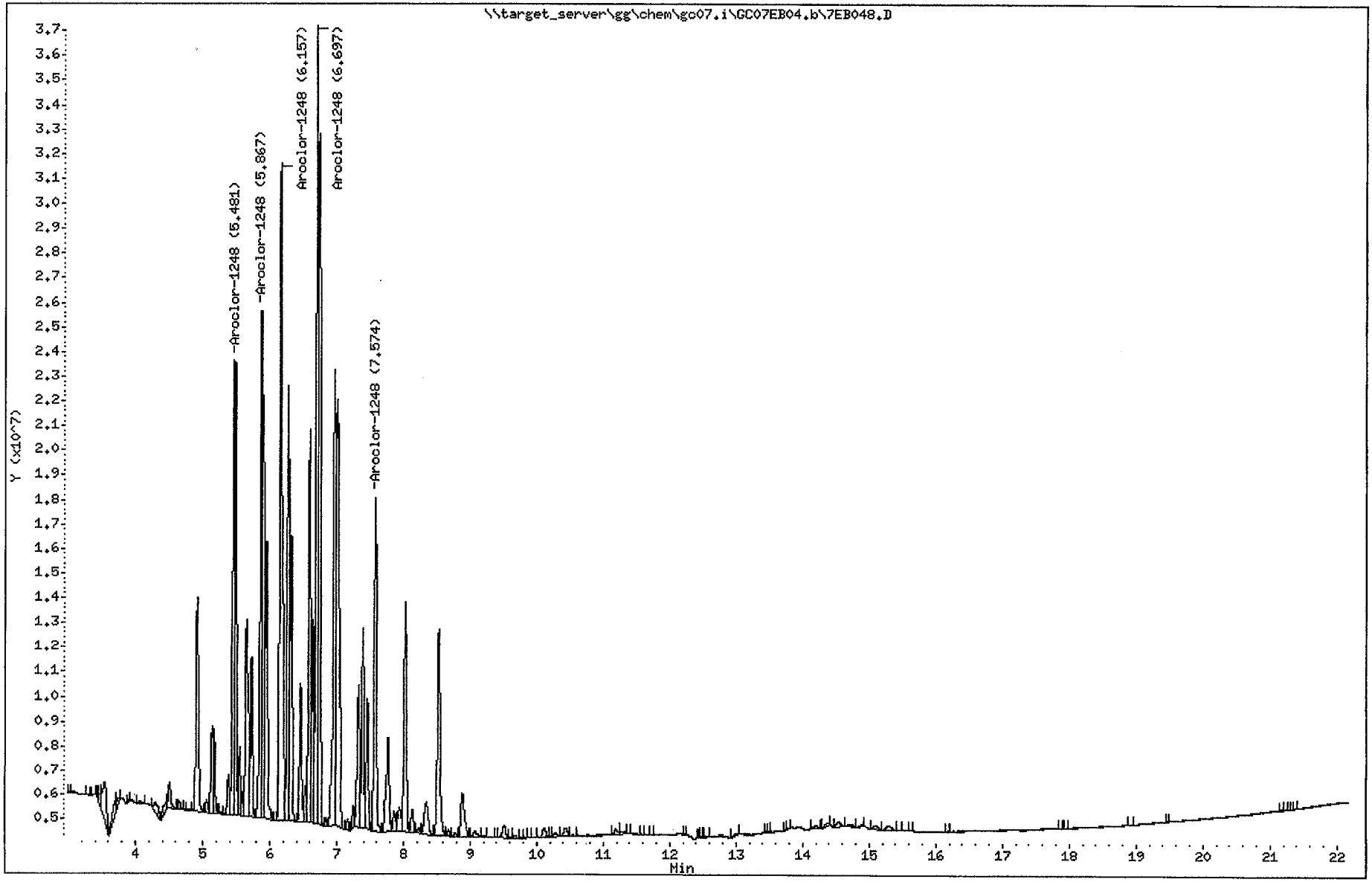
Instrument: go07.i
Operator: RCT
Column diameter: 0.53



Katahdin Analytical Services 3000172

Data File: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB048.D
Date : 04-FEB-2011 20:43
Client ID:
Sample Info: AR1248 1.0
Purge Volume: 1.0
Column phase: ZB-Multiresidue1

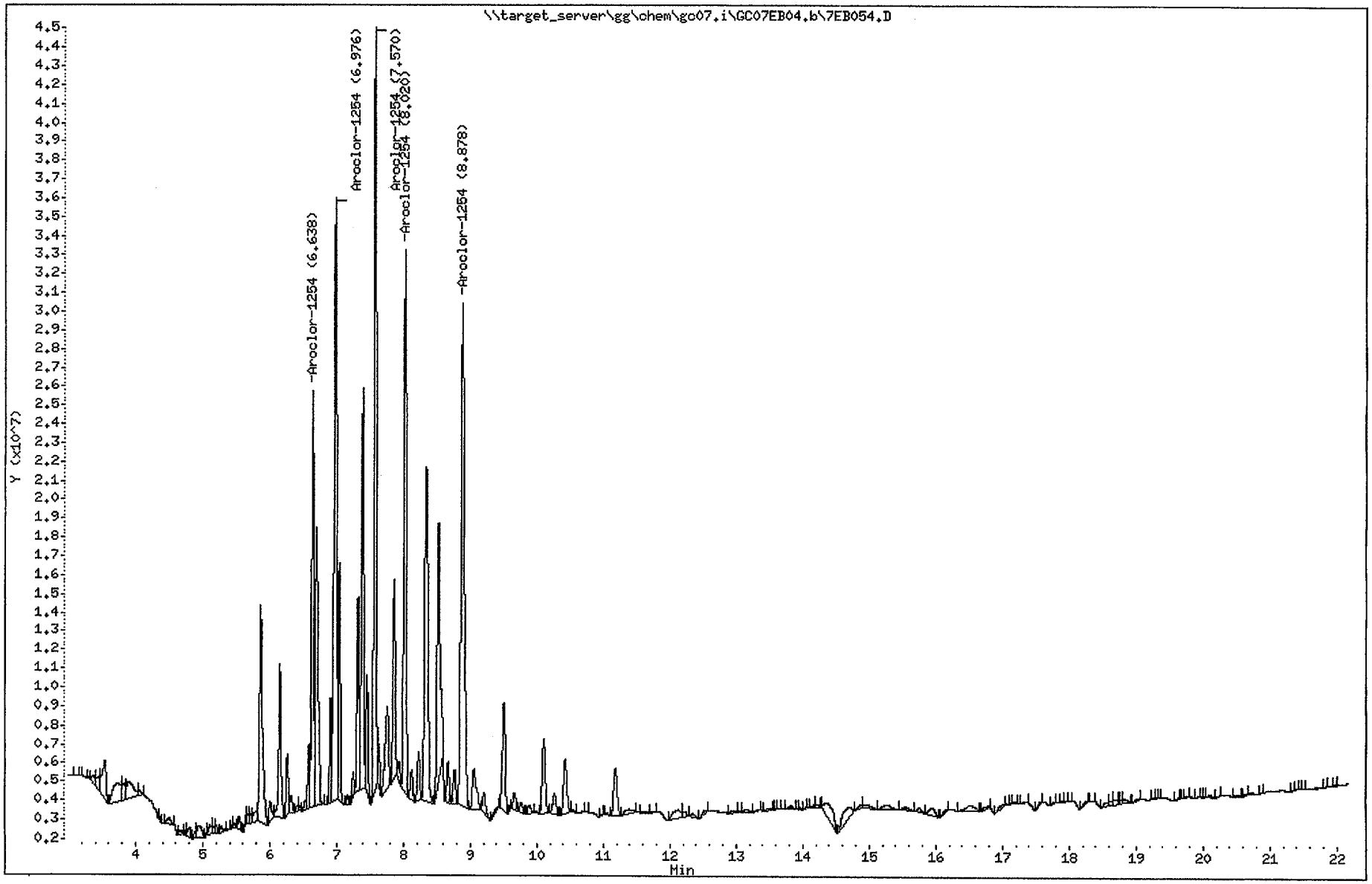
Instrument: gc07.i
Operator: RCT
Column diameter: 0.53



Katahdin Analytical Services 3000176

Data File: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB054.D
Date : 04-FEB-2011 23:19
Client ID:
Sample Info: AR1254 1.0
Purge Volume: 1.0
Column phase: ZB-Multiresidue1

Instrument: gc07.i
Operator: RCT
Column diameter: 0.53

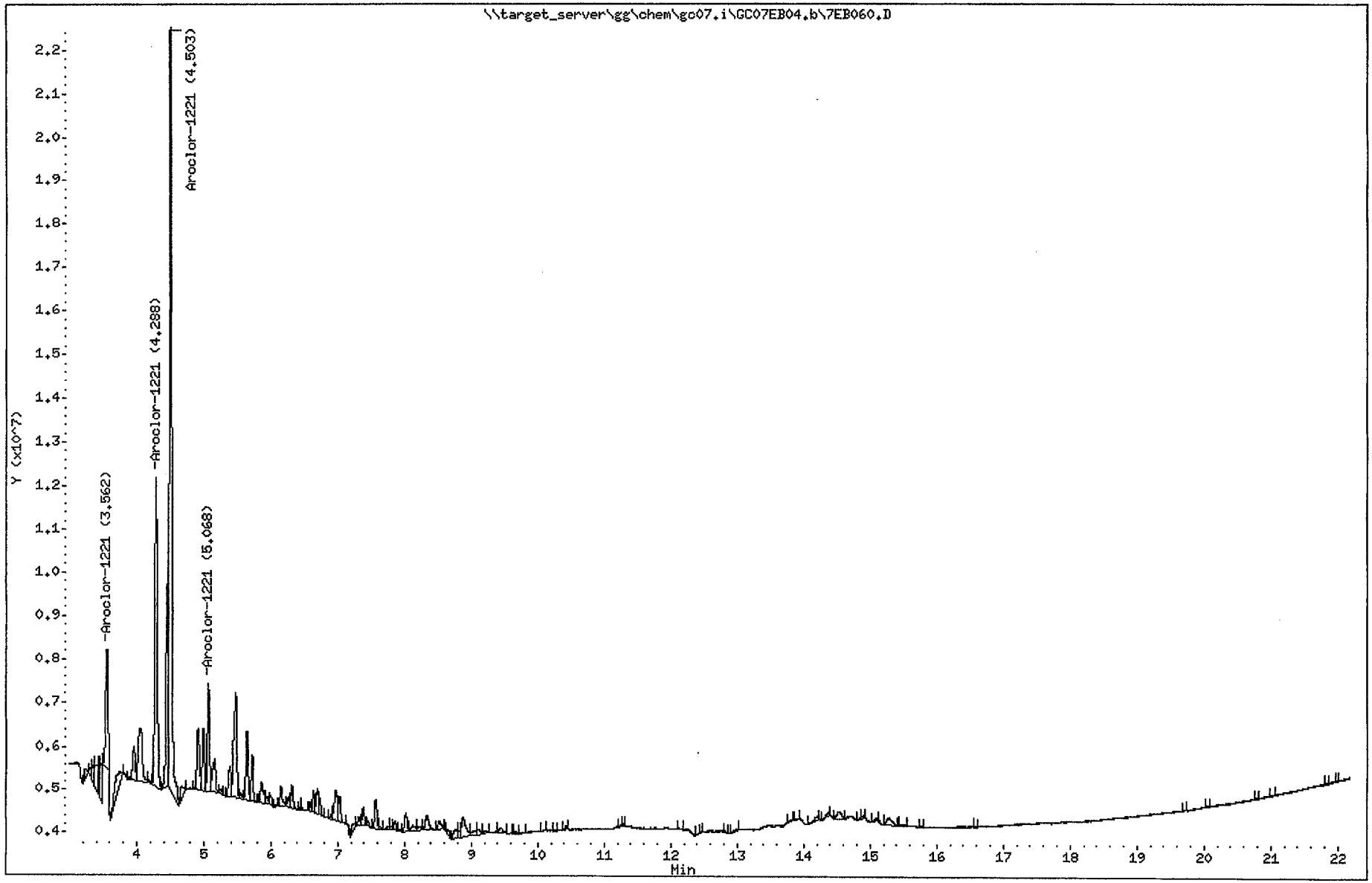


Katahdin Analytical Services 3000180

Data File: \\target_server\gg\chem\go07.i\GC07EB04.b\7EB060.D
Date : 05-FEB-2011 01:55
Client ID:
Sample Info: AR1221 1.0
Purge Volume: 1.0
Column phase: ZB-Multiresidue1

Instrument: go07.i
Operator: RCT
Column diameter: 0.53

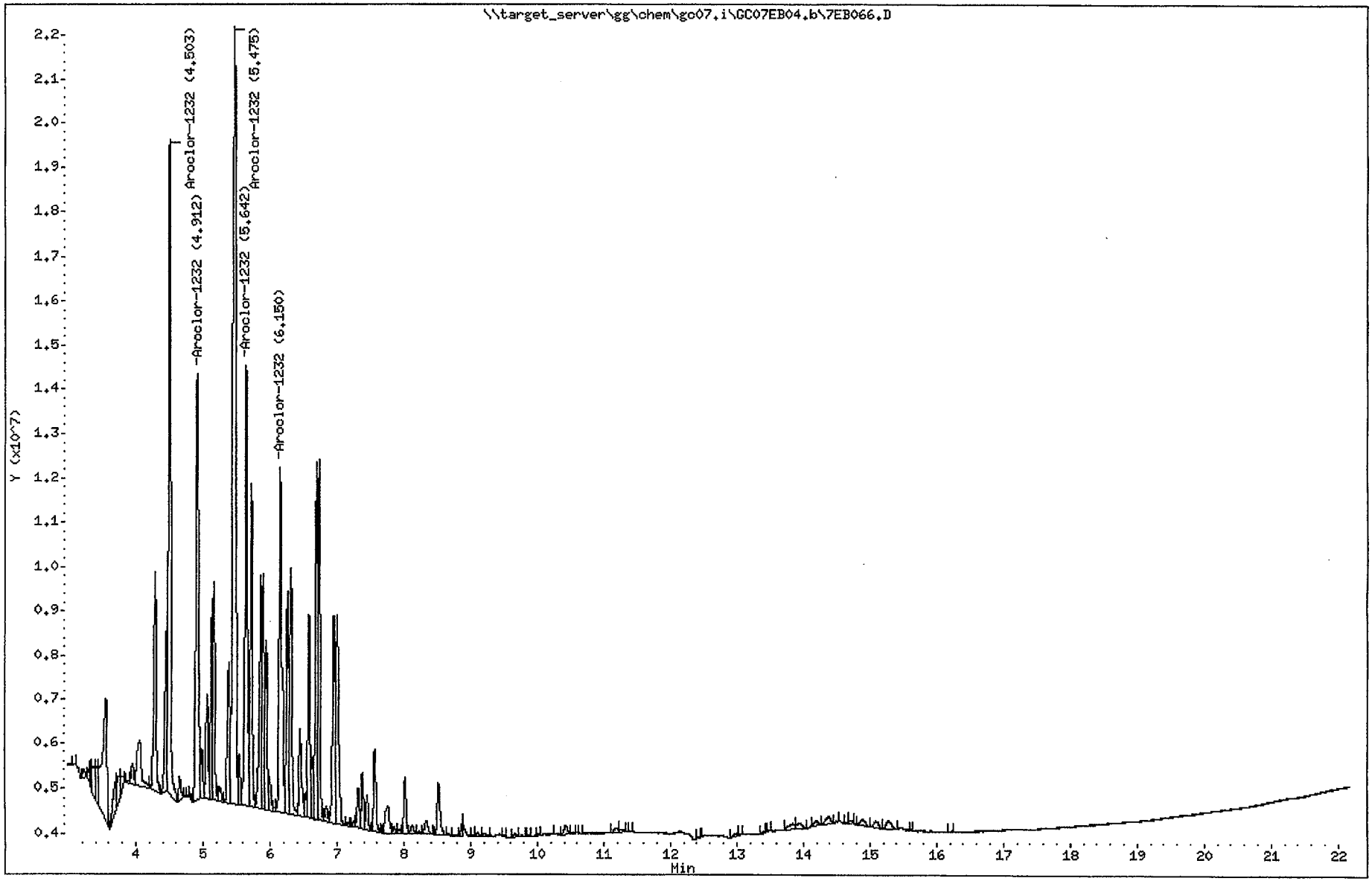
AFTER
MANUAL INTEGRATION



Katahdin Analytical Services 3000185

Data File: \\target_server\gg\chem\gc07.i\GC07EB04.b\7EB066.D
Date : 05-FEB-2011 04:31
Client ID:
Sample Info: AR1232 1.0
Purge Volume: 1.0
Column phase: ZB-Multiresidue1

Instrument: gc07.i
Operator: RCT
Column diameter: 0.53



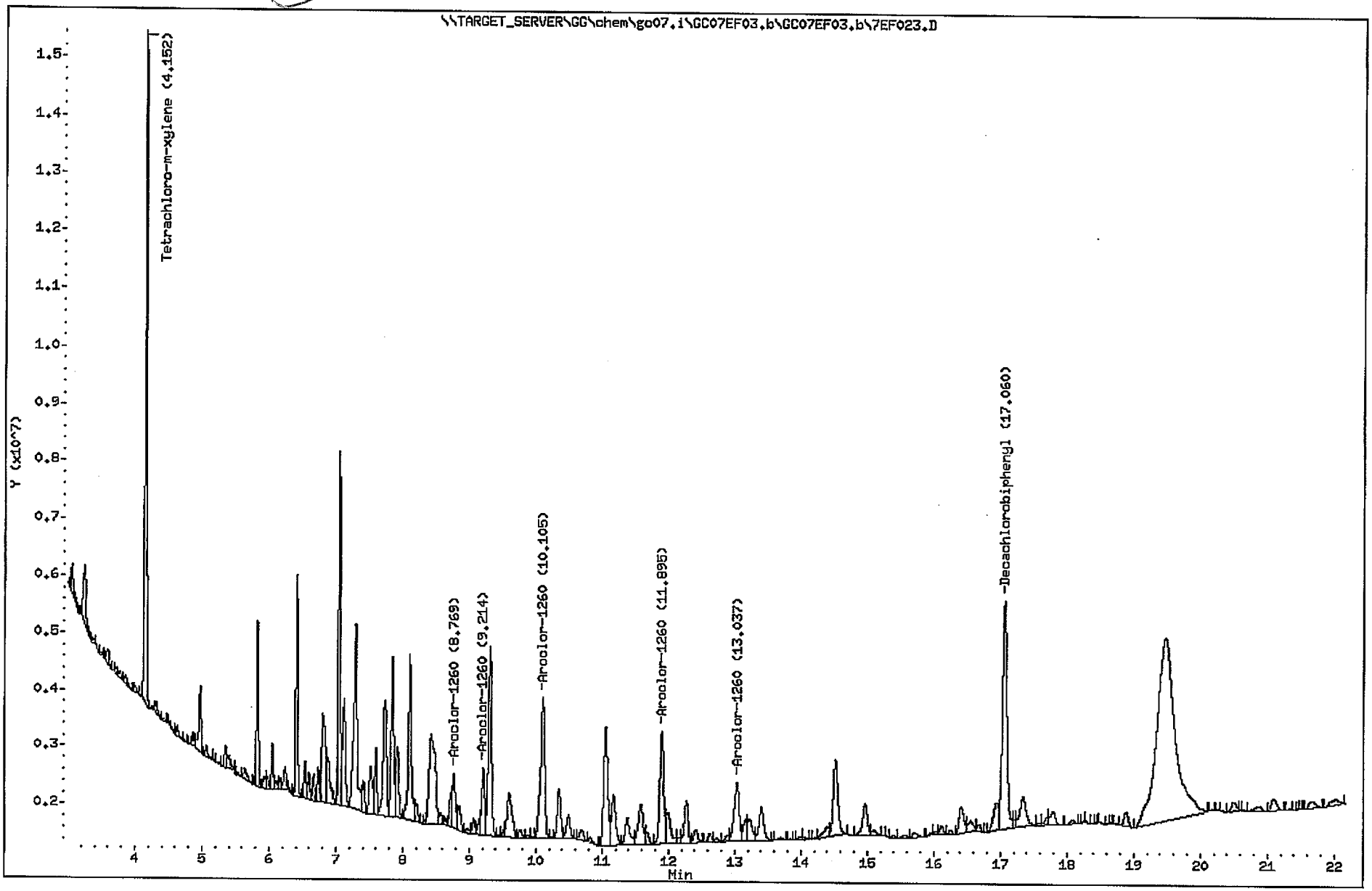
Katahdin Analytical Services 3000189

Data File: \\TARGET_SERVER\GG\chem\go07.i\GC07EF03.b\GC07EF03.b\7EF023.D
Date : 03-JUN-2011 22:44
Client ID: 2W-SD-SD133-0001
Sample Info: SE2829-24

Instrument: go07.i

Operator: EKC
Column diameter: 0.53

Column phase: ZB-Multiresidue2



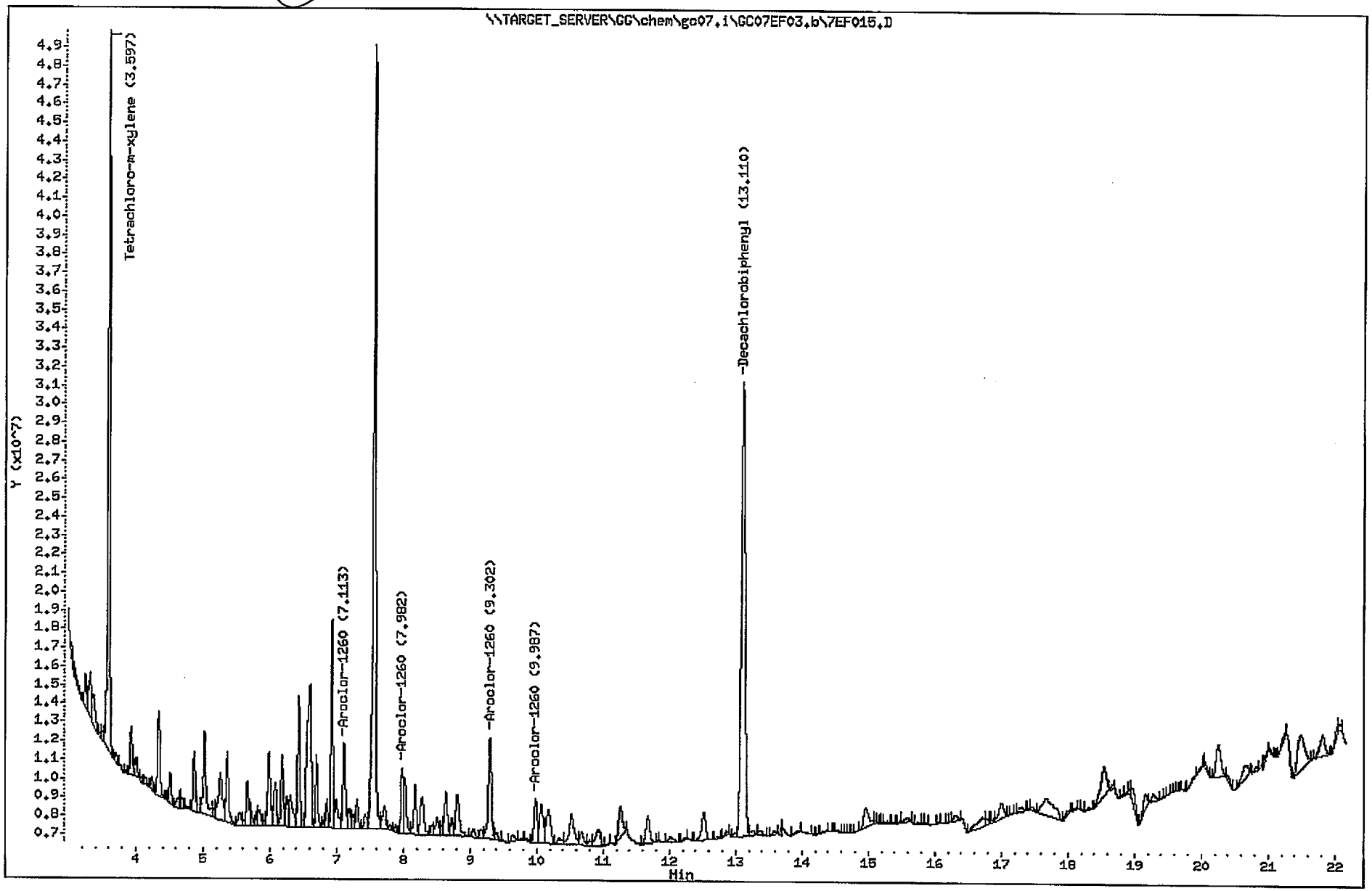
Katahdin Analytical Services 3000073

Data File: \\TARGET_SERVER\GC\chem\go07.i\GC07EF03.b\7EF015.D
Date : 03-JUN-2011 19:16
Client ID: 2W-SD-SD155-0001
Sample Info: SE2829-3

Instrument: go07.i

Operator: EKC
Column diameter: 0.53

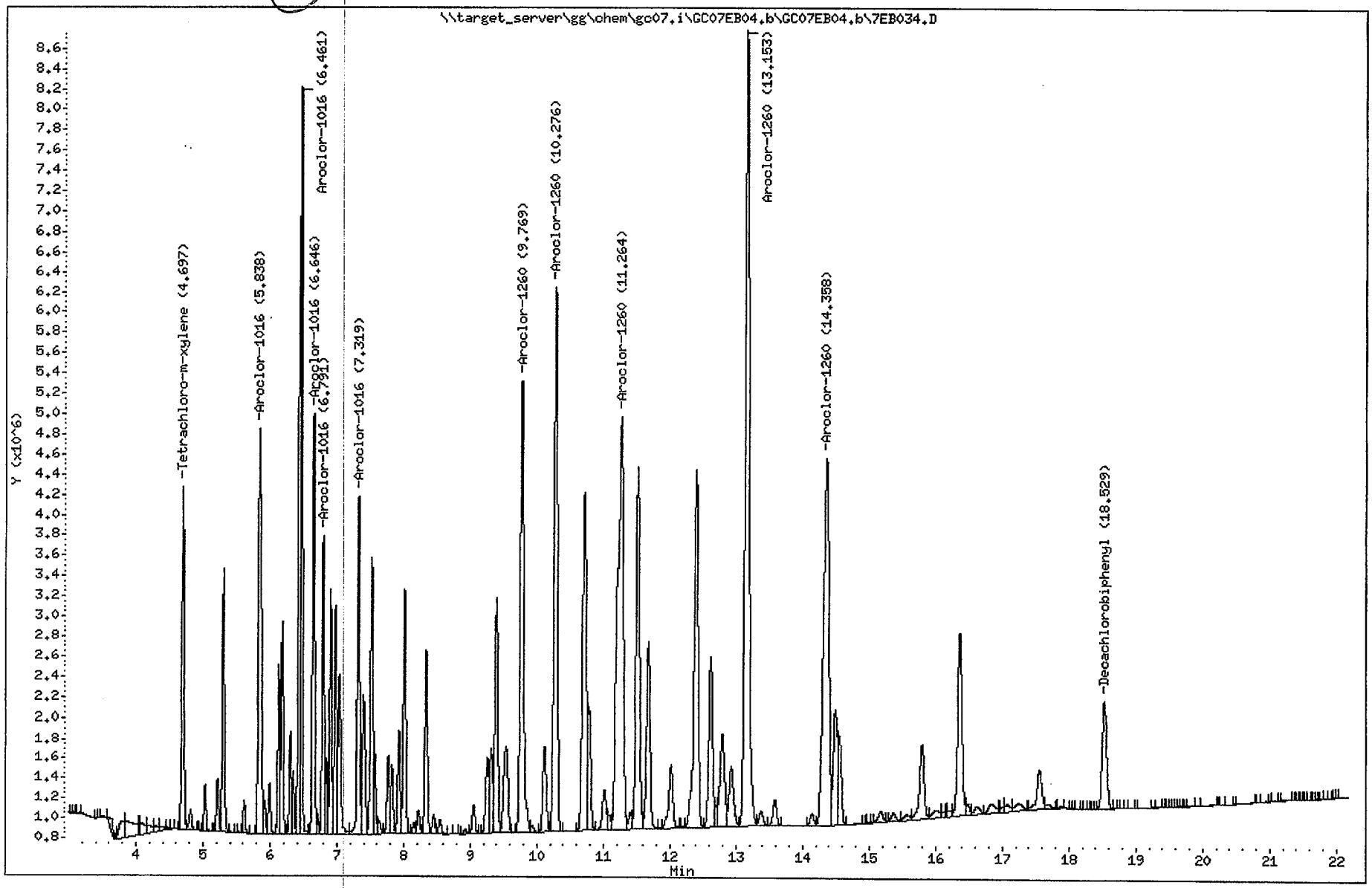
Column phase: ZB-Multiresidue1



Katahdin Analytical Services 3000028

Data File: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB034.D
Date : 04-FEB-2011 14:40
Client ID:
Sample Info: AR1660 1.0
Purge Volume: 1.0
Column phase: ZB-Multiresidue2

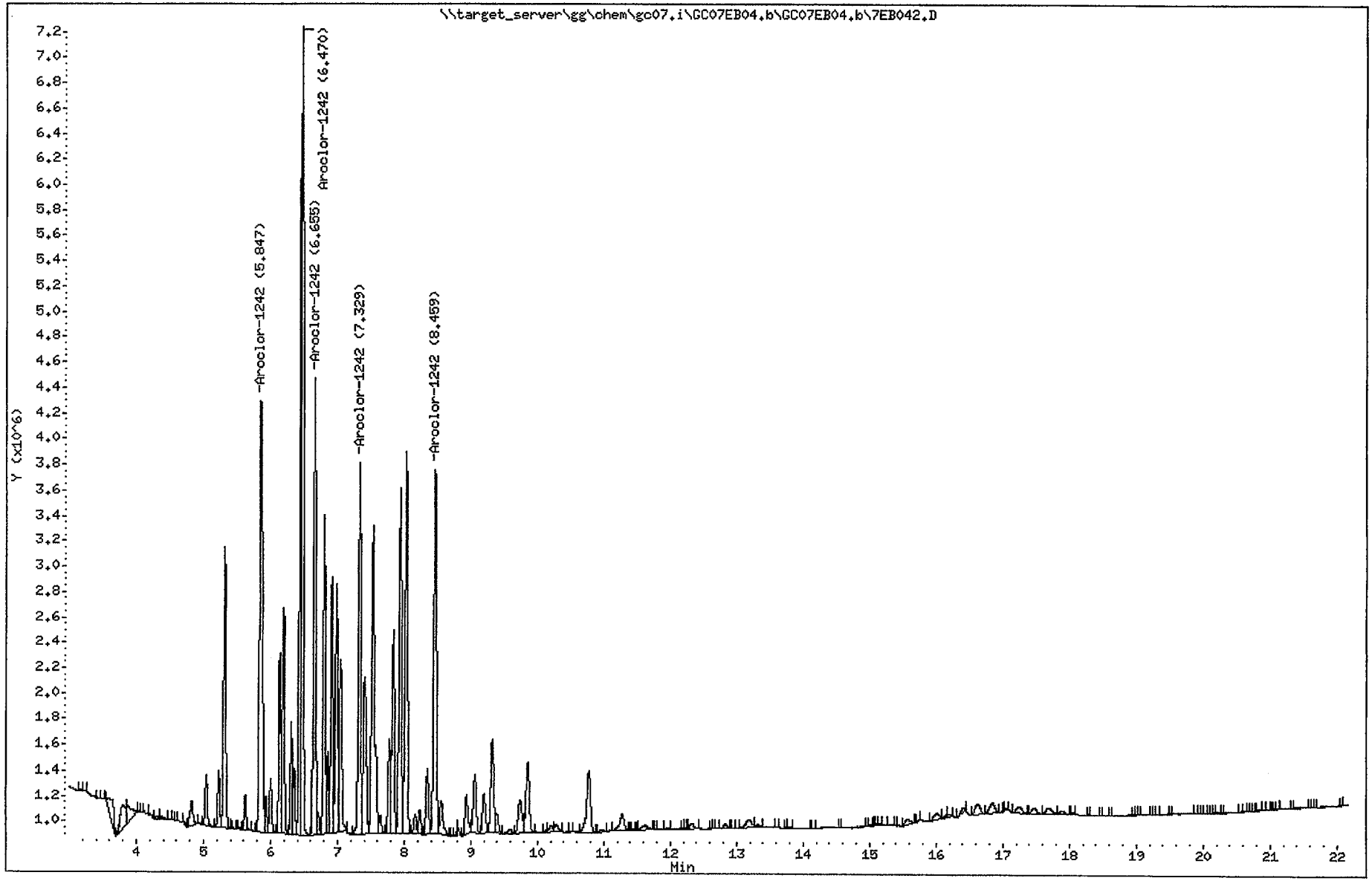
Instrument: gc07.i
Operator: RCT
Column diameter: 0.53



Katahdin Analytical Services 3000138

Data File: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB042.D
Date : 04-FEB-2011 18:08
Client ID:
Sample Info: AR1242 1.0
Purge Volume: 1.0
Column phase: ZB-Multiresidue2

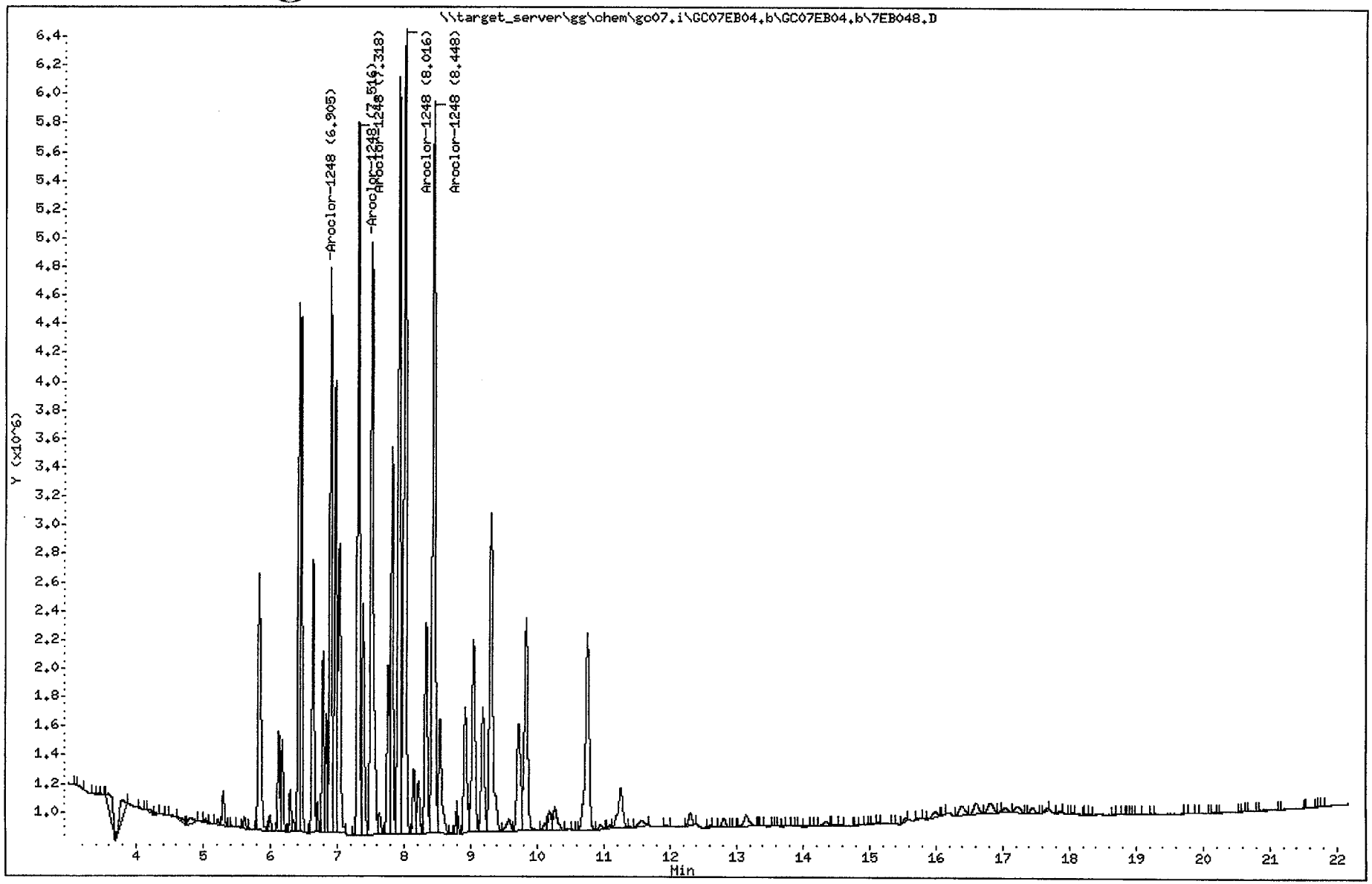
Instrument: gc07.i
Operator: RCT
Column diameter: 0.53



Katahdin Analytical Services 3000174

Data File: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB048.D
Date : 04-FEB-2011 20:43
Client ID:
Sample Info: AR1248 1.0
Purge Volume: 1.0
Column phase: ZB-Multires due2

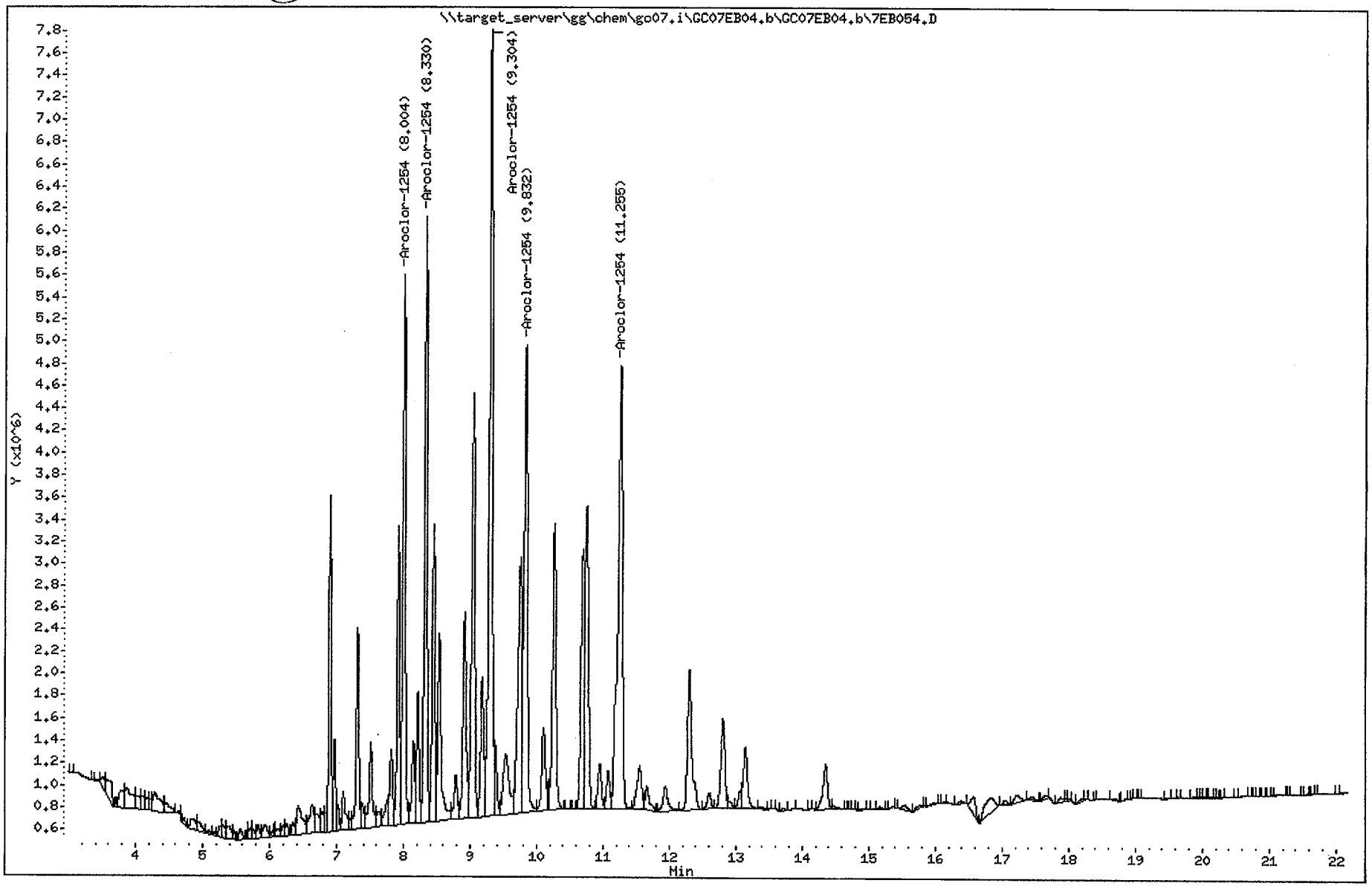
Instrument: gc07.i
Operator: RCT
Column diameter: 0.53



Katahdin Analytical Services 3000178

Data File: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB054.D
Date : 04-FEB-2011 23:19
Client ID:
Sample Info: AR1254 1.0
Purge Volume: 1.0
Column phase: ZB-Multiresidue2

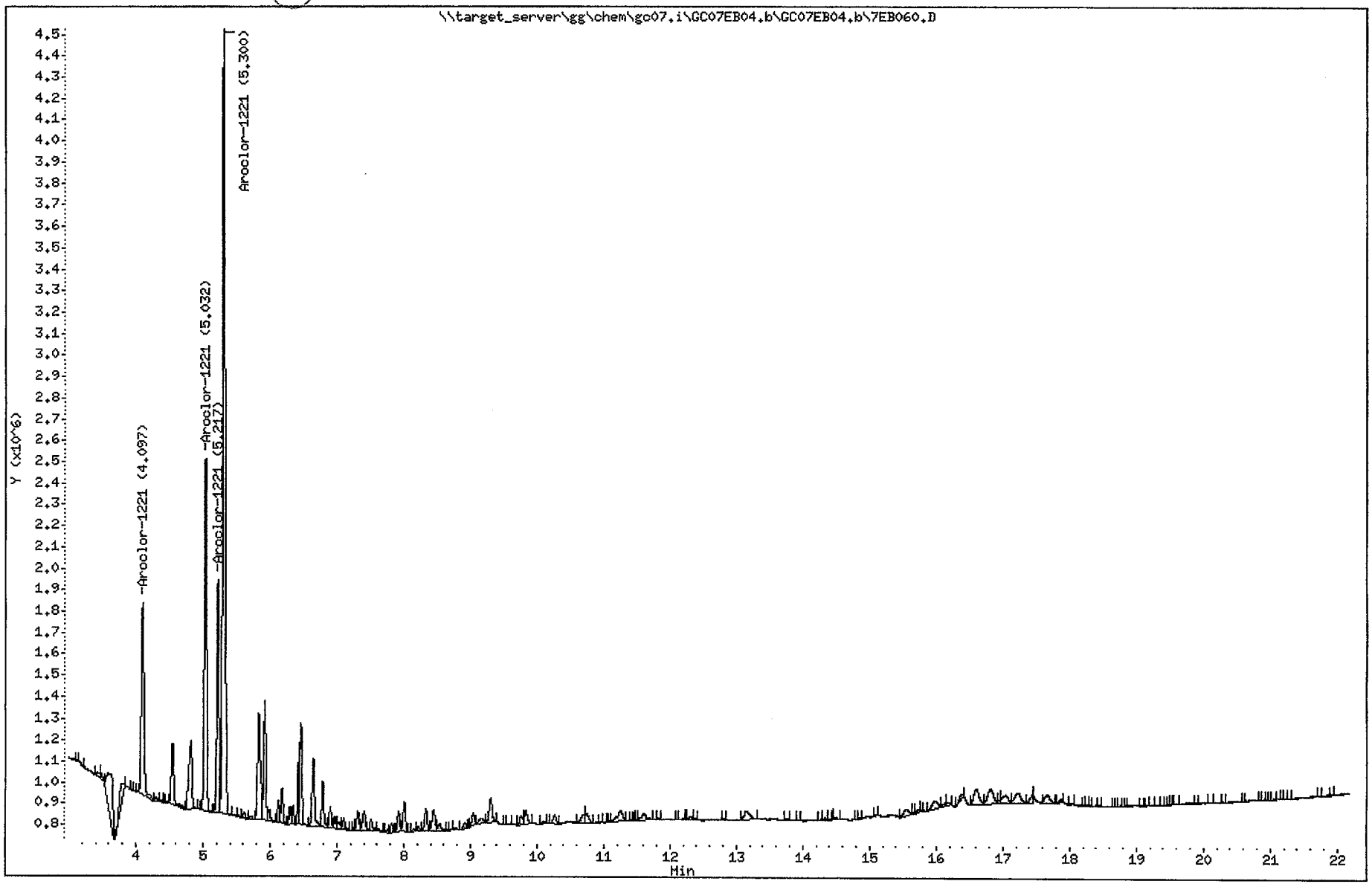
Instrument: gc07.i
Operator: RCT
Column diameter: 0.53



Katahdin Analytical Services 3000182

Data File: \\target_server\gg\chem\go07.i\GC07EB04.b\GC07EB04.b\7EB060.D
Date : 05-FEB-2011 01:55
Client ID:
Sample Info: AR1221 1.0
Purge Volume: 1.0
Column phase: ZB-Multiresidue2

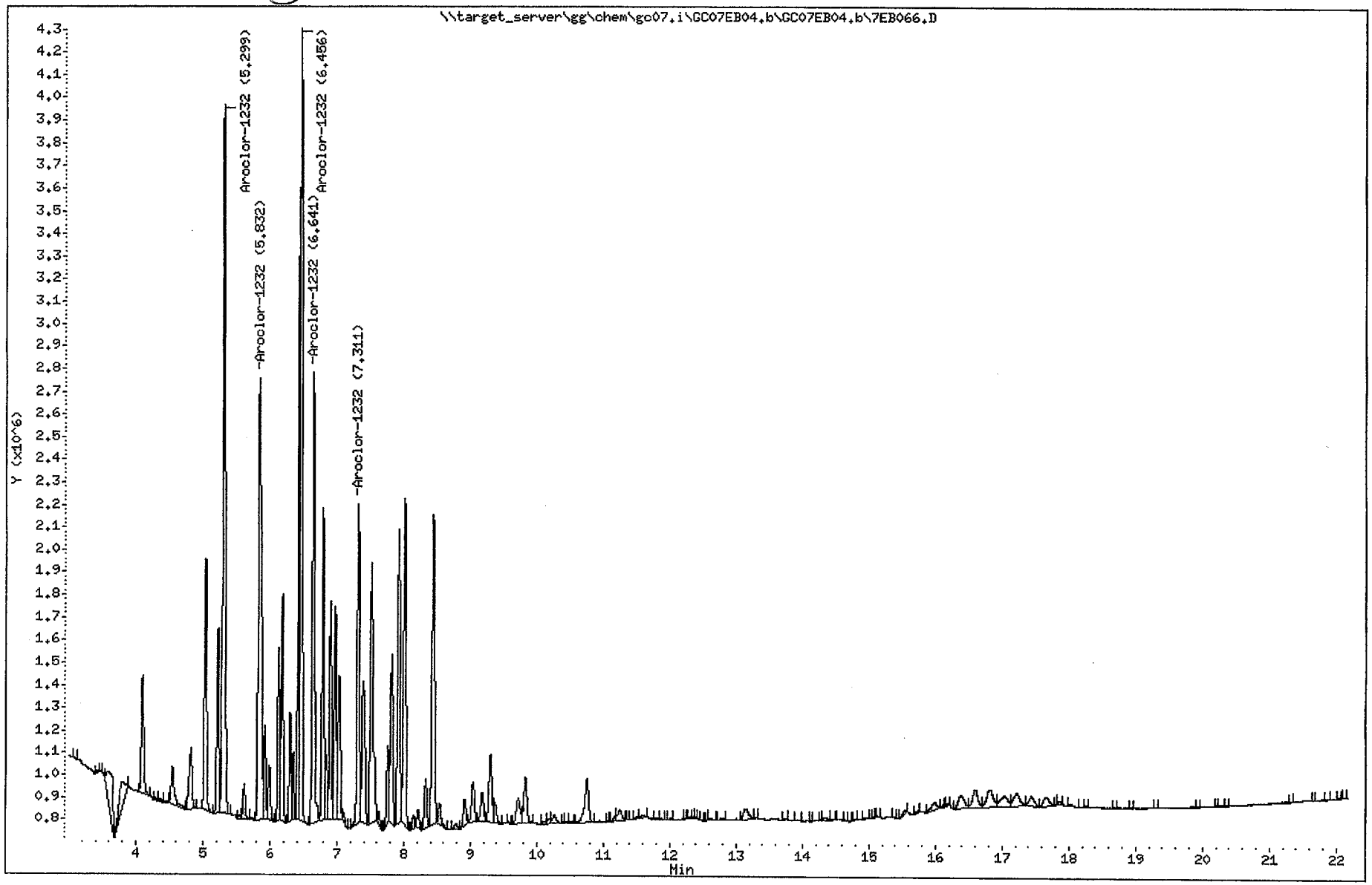
Instrument: go07.i
Operator: RCT
Column diameter: 0.53



Katahdin Analytical Services 3000187

Data File: \\target_server\gg\chem\gc07.i\GC07EB04.b\GC07EB04.b\7EB066.D
Date : 05-FEB-2011 04:31
Client ID:
Sample Info: AR1232 1.0
Purge Volume: 1.0
Column phase: ZB-Multiresidue2

Instrument: gc07.i
Operator: RCT
Column diameter: 0.53



Katahdin Analytical Services 3000191

TETRA TECH NUS, INC. **CALCULATION WORKSHEET** PAGE 1 OF 1

CLIENT	JOB NUMBER		
NSB New London	02625		
SUBJECT	Calculation Check		
BASED ON		DRAWING NUMBER	
BY J. Kalyak	CHECKED BY	APPROVED BY	DATE 07/11/11

PAH - benzo(K)fluoranthene Sample - 2W-SD91-00001

$$\frac{162894 \times 08\ ng/ml \times 25 \times 0.001 \times 10000}{67807 \times 1.364 \times 0.0302 \times 1ml \times 0.2196} \simeq 5311\ ug/kg$$

Data File: \\target_server\GG\chem\gcms-g.i\G060611.b\G1411.D
Report Date: 07-Jun-2011 15:58

Katahdin Analytical Services

Data file : \\target_server\GG\chem\gcms-g.i\G060611.b\G1411.D
Lab Smp Id: SE2829-16DL Client Smp ID: 2W-SD-SD91-0001
Inj Date : 06-JUN-2011 18:20 MS Autotune Date: 15-JUN-2004 09:29
Operator : JCG Inst ID: gcms-g.i
Smp Info : SE2829-16DL
Misc Info : WG92531,WG91997,G1349
Comment :
Method : \\target_server\GG\chem\gcms-g.i\G060611.b\gspsim86.m
Meth Date : 06-Jun-2011 13:05 gcms-g.i Quant Type: ISTD
Cal Date : 01-JUN-2011 14:50 Cal File: G1354.D
Als bottle: 10
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: sw8270sim+1mn.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariabl

Name	Value	Description
DF	25.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03020	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	78.040	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kgdrywt)	REVIEW
*	7 1,4-Dichlorobenzene-D4	152	8.027	8.028	(1.000)	70204	0.80000	(Q)	
*	20 Naphthalene-D8	136	10.773	10.748	(1.000)	274089	0.80000		
$	26 2-Methylnaphthalene-D10	152	12.401	12.330	(0.835)	4409	0.02345	88.4(a)	
*	39 Acenaphthene-D10	164	14.850	14.822	(1.000)	142293	0.80000		
$	47 Fluorene-D10	176	16.007	16.071	(1.078)	633	0.00299	11.3(aQR)	
*	59 Phenanthrene-D10	188	18.351	18.362	(1.000)	232540	0.80000		
	60 Phenanthrene	178	18.407	18.419	(1.003)	78353	0.29321	1100(a)	
	61 Anthracene	178	18.532	18.543	(1.010)	11857	0.04484	169(a)	
	64 Fluoranthene	202	21.226	21.247	(1.157)	892703	3.24667	12200	
$	65 Pyrene-D10	212	21.698	21.719	(0.880)	6959	0.05123	193	
	66 Pyrene	202	21.740	21.751	(0.882)	886290	4.55468	17200	
	68 Benzo(a)anthracene	228	24.645	24.645	(0.999)	295158	2.26151	8520	
*	69 Chrysene-D12	240	24.658	24.673	(1.000)	116135	0.80000		
	70 Chrysene	228	24.713	24.728	(1.002)	295231	1.83775	6930	
	74 Benzo(b)fluoranthene	252	27.044	27.066	(0.972)	280383	3.22448	12200	
	75 Benzo(k)fluoranthene	252	27.100	27.122	(0.974)	162894	1.40916	5310(M)	M6
	76 Benzo(a)pyrene	252	27.694	27.717	(0.996)	212484	3.00445	11300	
*	77 Perylene-D12	264	27.817	27.840	(1.000)	67807	0.80000		
	79 Indeno(1,2,3-cd)pyrene	276	29.986	30.028	(1.078)	98653	2.80563	10600(H)	
	80 Dibenzo(a,h)anthracene	278	30.072	30.100	(1.081)	22103	0.57729	2180(a)	
	81 Benzo(g,h,i)perylene	276	30.589	30.617	(1.100)	84795	1.51722	5720	

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-4

Instrument ID: GCMS-G Calibration Date: 06/06/11 Time: 1231

Lab File ID: G1403 Init. Calib. Date(s): 06/01/11 06/01/11

Init. Calib. Times: 1107 1450

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
1-Methylnaphthalene	0.5470000	0.5835200	0.5835200	0.01	6.68	20.00	AVRG	
Naphthalene	0.8710000	0.8510200	0.8510200	0.01	-2.29	20.00	AVRG	
2-Methylnaphthalene	0.5980000	0.6973400	0.6973400	0.01	16.61	20.00	AVRG	
Acenaphthylene	1.6790000	1.6906000	1.6906000	0.01	0.69	20.00	AVRG	
Acenaphthene	1.0620000	1.0558000	1.0558000	0.01	-0.58	20.01	AVRG	
Fluorene	1.1540000	1.1996000	1.1996000	0.01	3.95	20.00	AVRG	
Phenanthrene	0.9190000	0.9264400	0.9264400	0.01	0.81	20.00	AVRG	
Anthracene	0.9100000	1.0737000	1.0737000	0.01	17.99	20.00	AVRG	
Fluoranthene	0.9460000	0.9876800	0.9876800	0.01	4.40	20.01	AVRG	
Pyrene	1.3400000	1.4250000	1.4250000	0.01	6.34	20.00	AVRG	
Benzo(a)anthracene	1.0946000	1.0000000	0.9562300	0.01	9.46	20.00	LINR	
Chrysene	1.1070000	1.1670000	1.1670000	0.01	5.42	20.00	AVRG	
Benzo(b)fluoranthene	1.1234000	1.0000000	1.0676000	0.01	12.34	20.00	LINR	
Benzo(k)fluoranthene	1.3640000	1.5723000	1.5723000	0.01	15.27	20.00	AVRG	
Benzo(a)pyrene	0.8340000	1.0342000	1.0342000	0.01	24.00	20.01	AVRG	<-
Indeno(1,2,3-cd)pyrene	1.1839000	1.0000000	0.4600700	0.01	18.39	20.00	2RDR	
Dibenzo(a,h)anthracene	1.1162000	1.0000000	0.5744900	0.01	11.62	20.00	LINR	
Benzo(g,h,i)perylene	0.6590000	0.6310400	0.6310400	0.01	-4.24	20.00	AVRG	
2-Methylnaphthalene-D10	1.0570000	1.0248000	1.0248000	0.01	-3.05	20.00	AVRG	
Fluorene-D10	1.1910000	1.1743000	1.1743000	0.01	-1.40	20.00	AVRG	
Pyrene-D10	0.9360000	0.9231100	0.9231100	0.01	-1.38	20.00	AVRG	

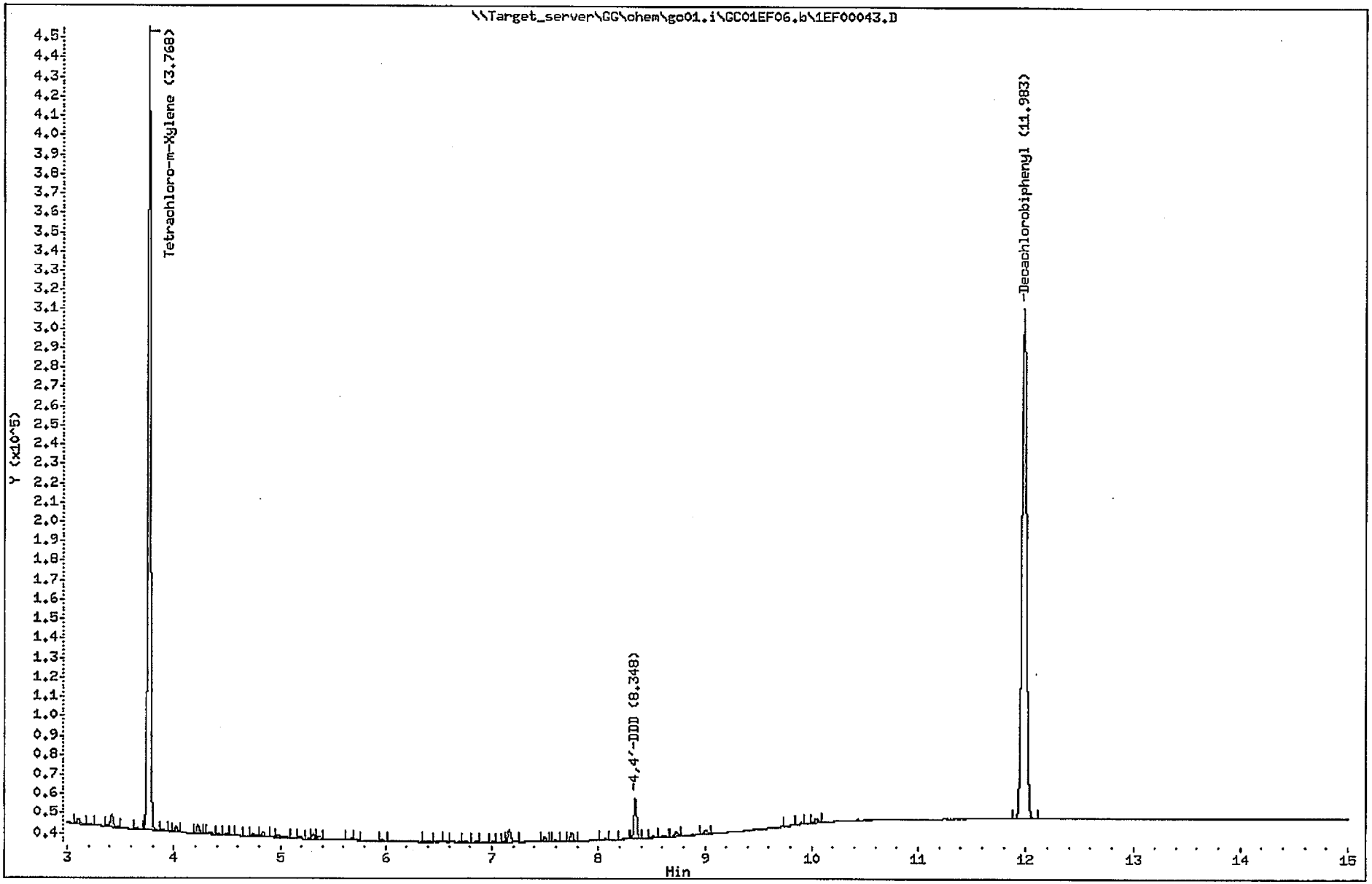
FORM VII PEST

Data File: \\Target_server\GC\ohem\go01.i\GC01EF06.b\1EF00043.D
Date : 06-JUN-2011 11:48
Client ID: WG91999-Blank
Sample Info: WG91999-1,WE55-4

Instrument: go01.i

Operator: CB
Column diameter: 0.53

Column phase: ZB-Multiresidue-2



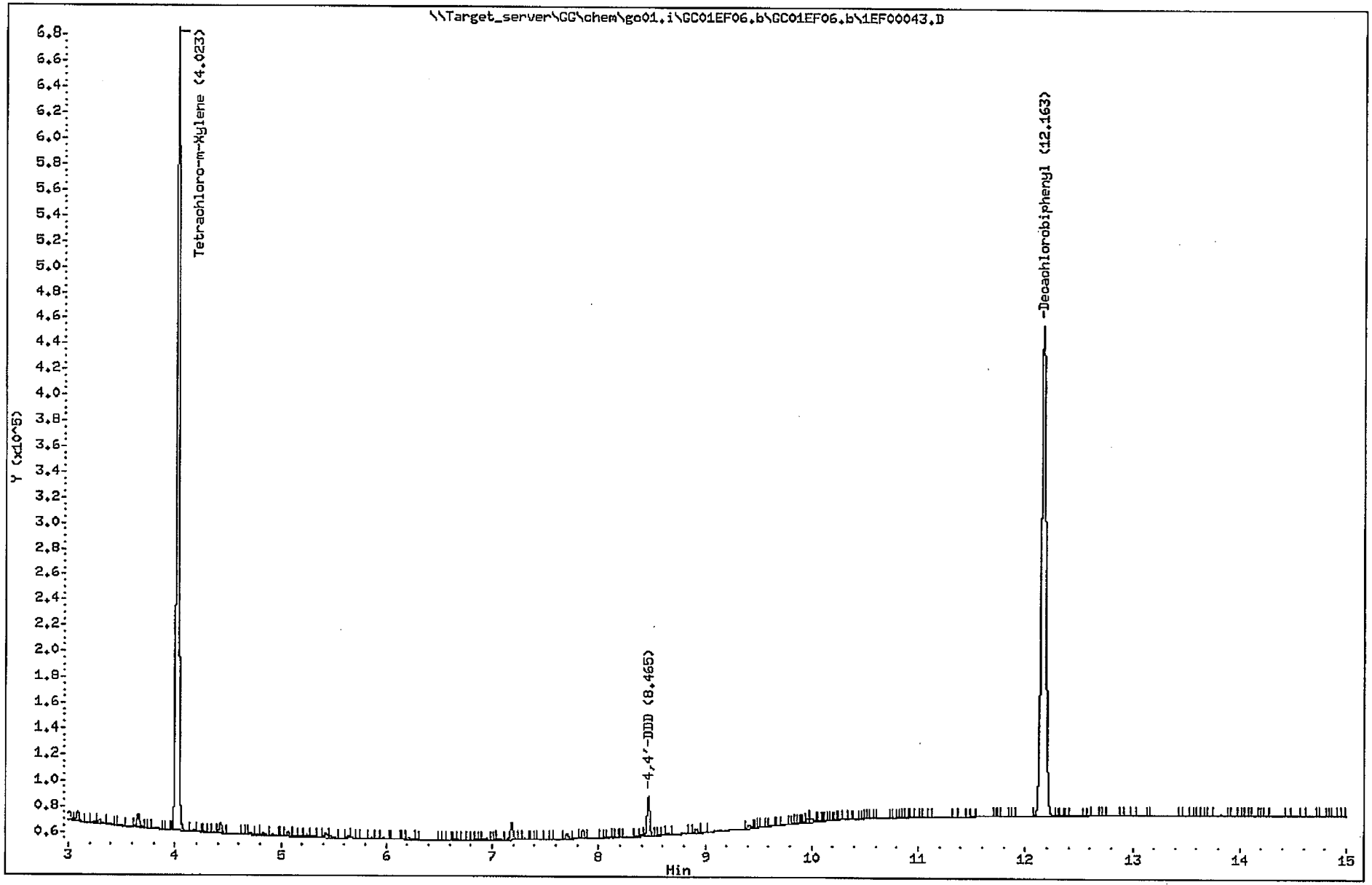
Katahdin Analytical Services 2000295

Data File: \\Target_server\GC\chem\go01.i\GC01EF06.b\GC01EF06.b\1EF00043.D
Date : 06-JUN-2011 11:48
Client ID: WG91999-Blank
Sample Info: WG91999-1,WE55-4

Column phase: ZB-Multiresidue-1

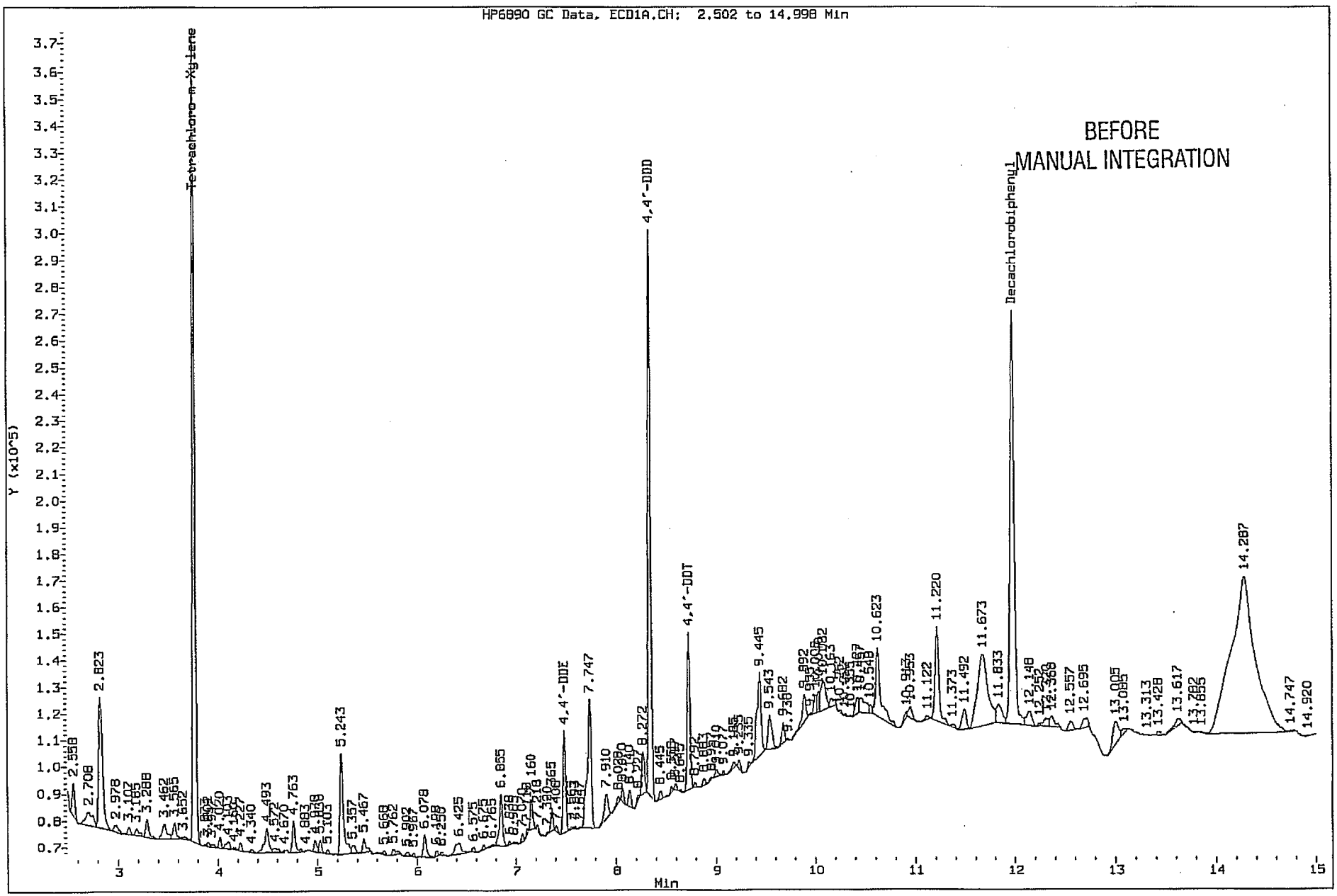
Instrument: go01.i

Operator: CB
Column diameter: 0.53



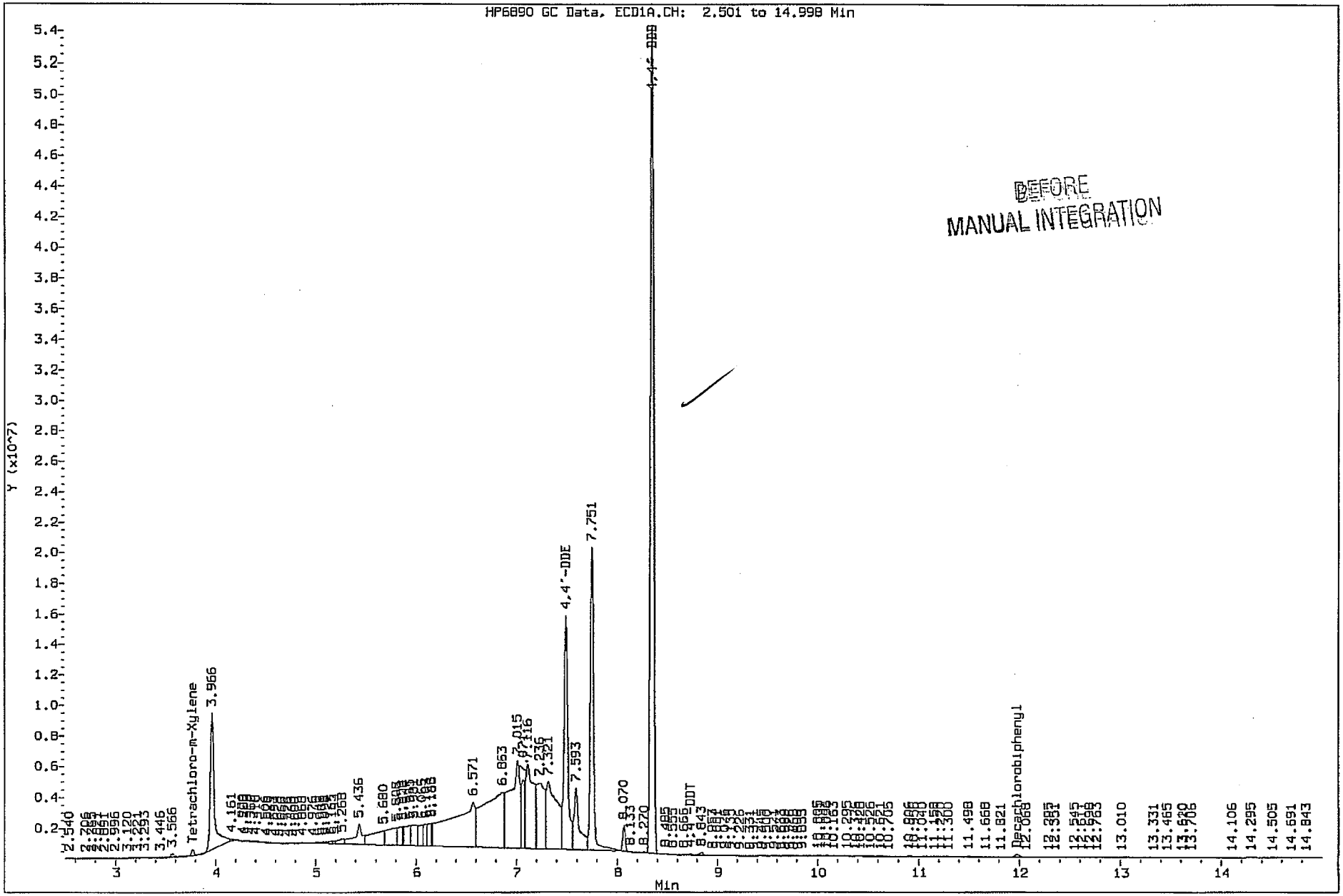
Katahdin Analytical Services 2000297

Data File: \\Target_server\GG\chem\gc01.i\GC01EF07.b\1EF00087.D
Injection Date: 07-JUN-2011 17:13
Instrument: gc01.i
Client Sample ID: 2W-SD-SD114-0001



Katahdin Analytical Services 2000144

Data File: \\Target_server\GG\chem\gc01.i\GC01EF07.b\1EF00076.D
Injection Date: 07-JUN-2011 14:01
Instrument: gc01.i
Client Sample ID: 2W-SD-SD124-0001



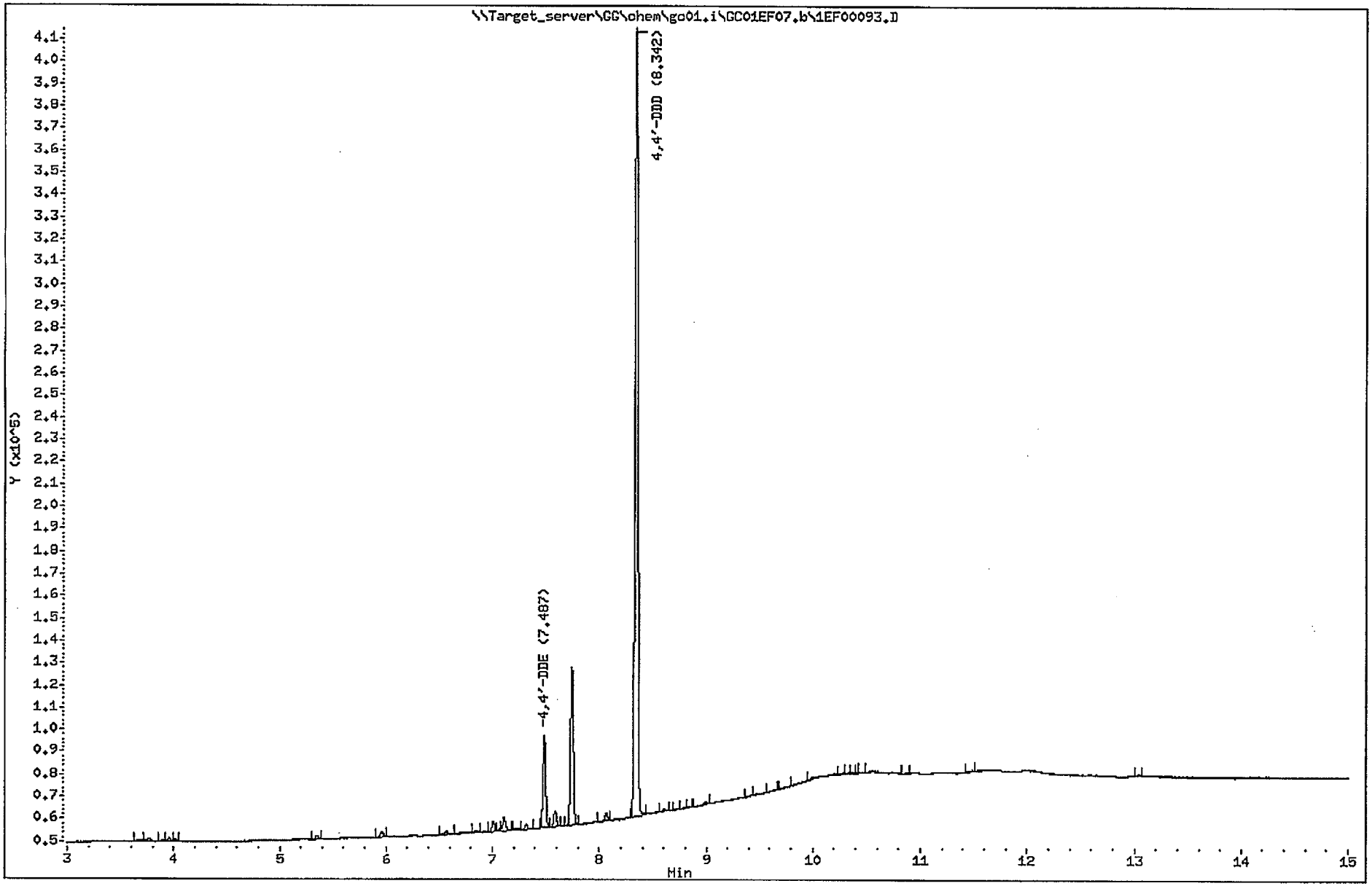
Katahdin Analytical Services 2000069

Data File: \\Target_server\GC\chem\go01.i\GC01EF07.b\1EF00093.D
Date : 07-JUN-2011 18:58
Client ID: 2W-SD-SD124-0001
Sample Info: SE2829-9DL

Instrument: go01.i

Operator: CB
Column diameter: 0.53

Column phase: ZB-Multiresidue-2



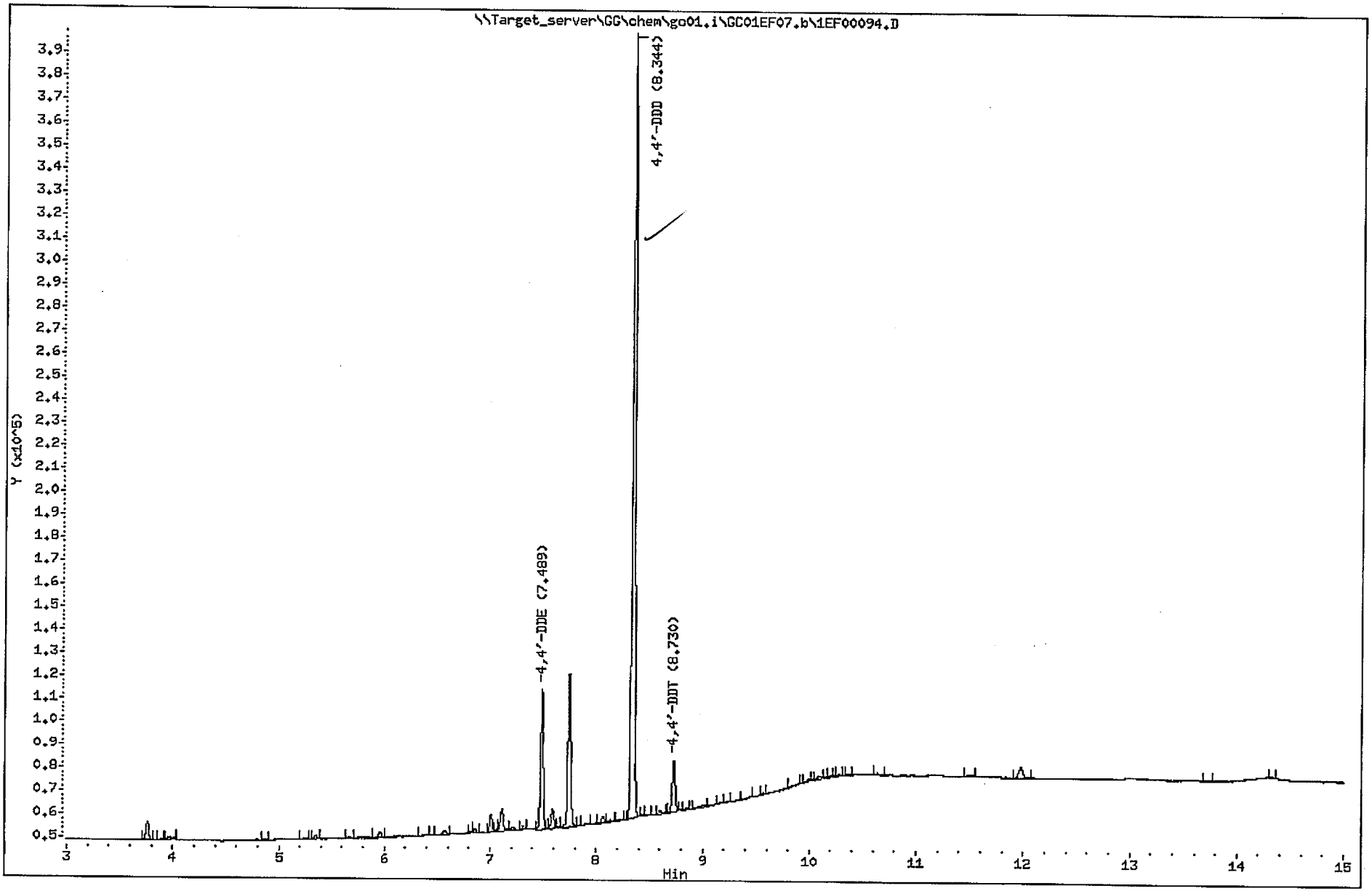
Katahdin Analytical Services 2000076

Data File: \\Target_server\GC\chem\go01.i\GC01EF07.b\1EF00094.D
Date : 07-JUN-2011 19:16
Client ID: 2W-SD-SD125-0001
Sample Info: SE2829-10DL

Instrument: go01.i

Operator: CB
Column diameter: 0.53

Column phase: ZB-Multiresidue-2



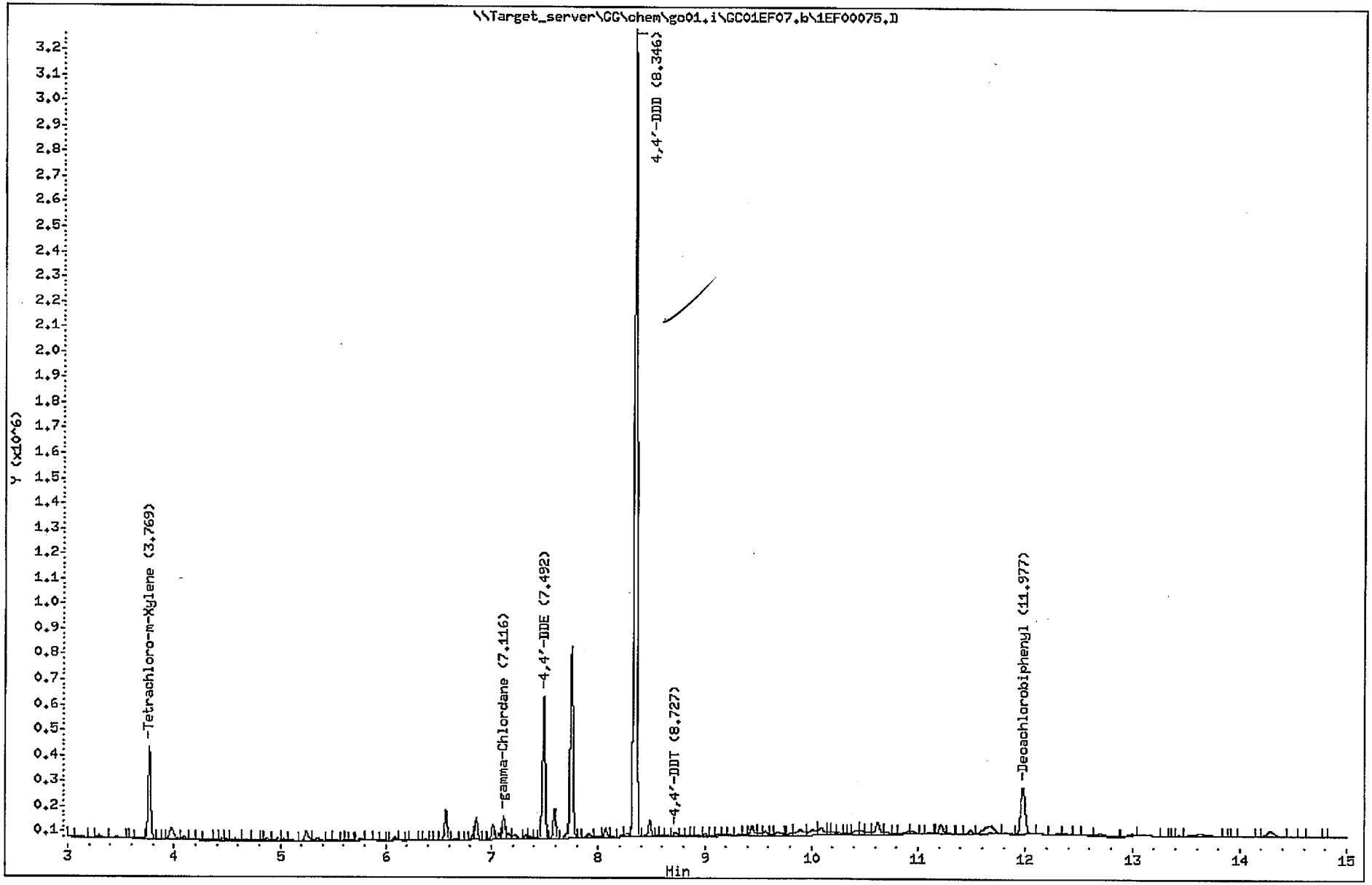
Katahdin Analytical Services 2000082

Data File: \\Target_server\GC\chem\gc01.i\GC01EF07.b\1EF00075.D
Date : 07-JUN-2011 13:43
Client ID: 2W-SD-SD128-0001
Sample Info: SE2829-B

Instrument: gc01.i

Operator: CB
Column diameter: 0.53

Column phase: ZB-Multiresidue-2



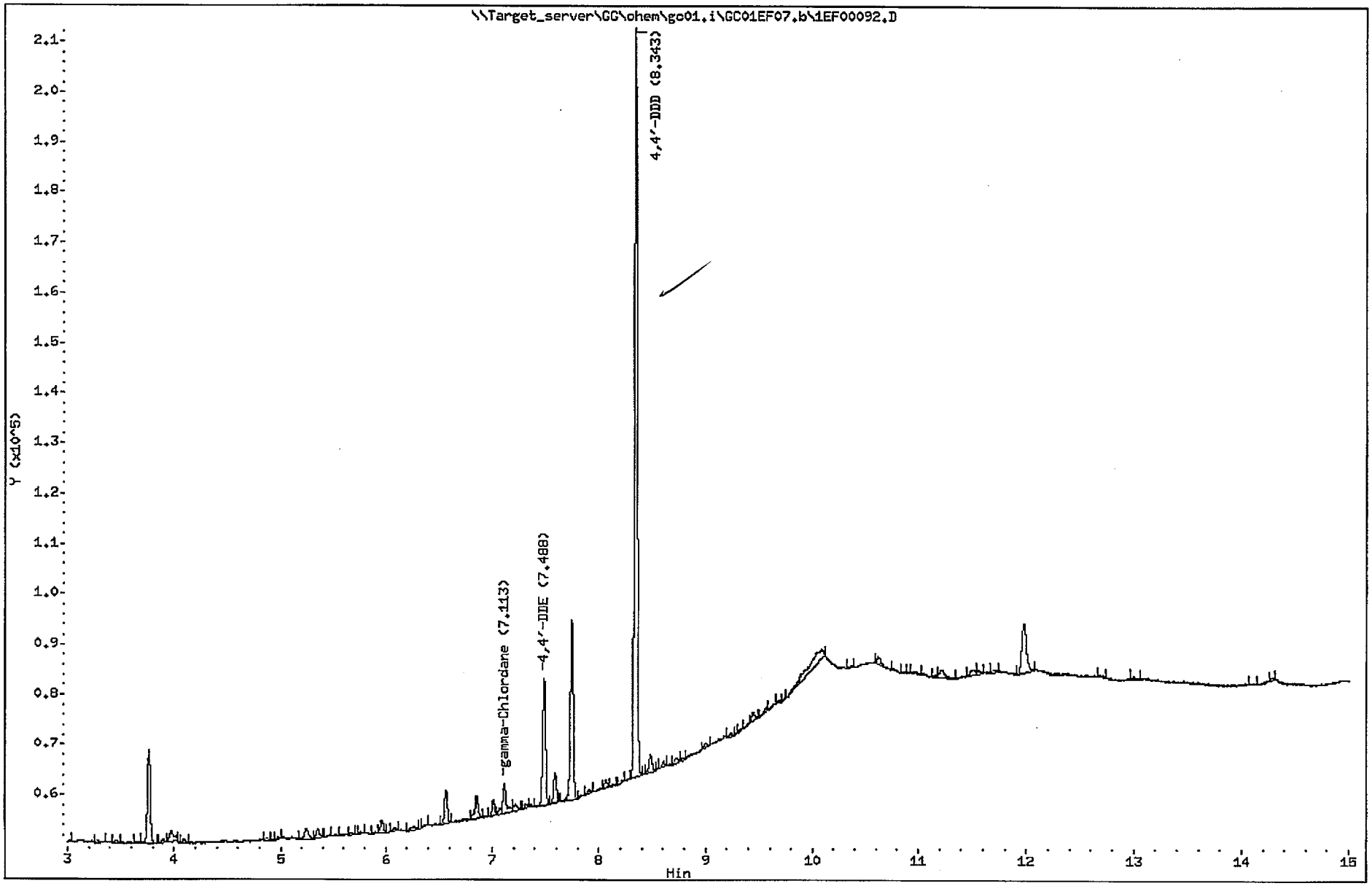
Katahdin Analytical Services 2000057

Data File: \\Target_server\GC\chem\go01.i\GC01EF07.b\1EF00092.D
Date : 07-JUN-2011 18:41
Client ID: 2W-SD-SD128-0001
Sample Info: SE2829-8DL

Instrument: go01.i

Operator: CB
Column diameter: 0.53

Column phase: ZB-Multiresidue-2



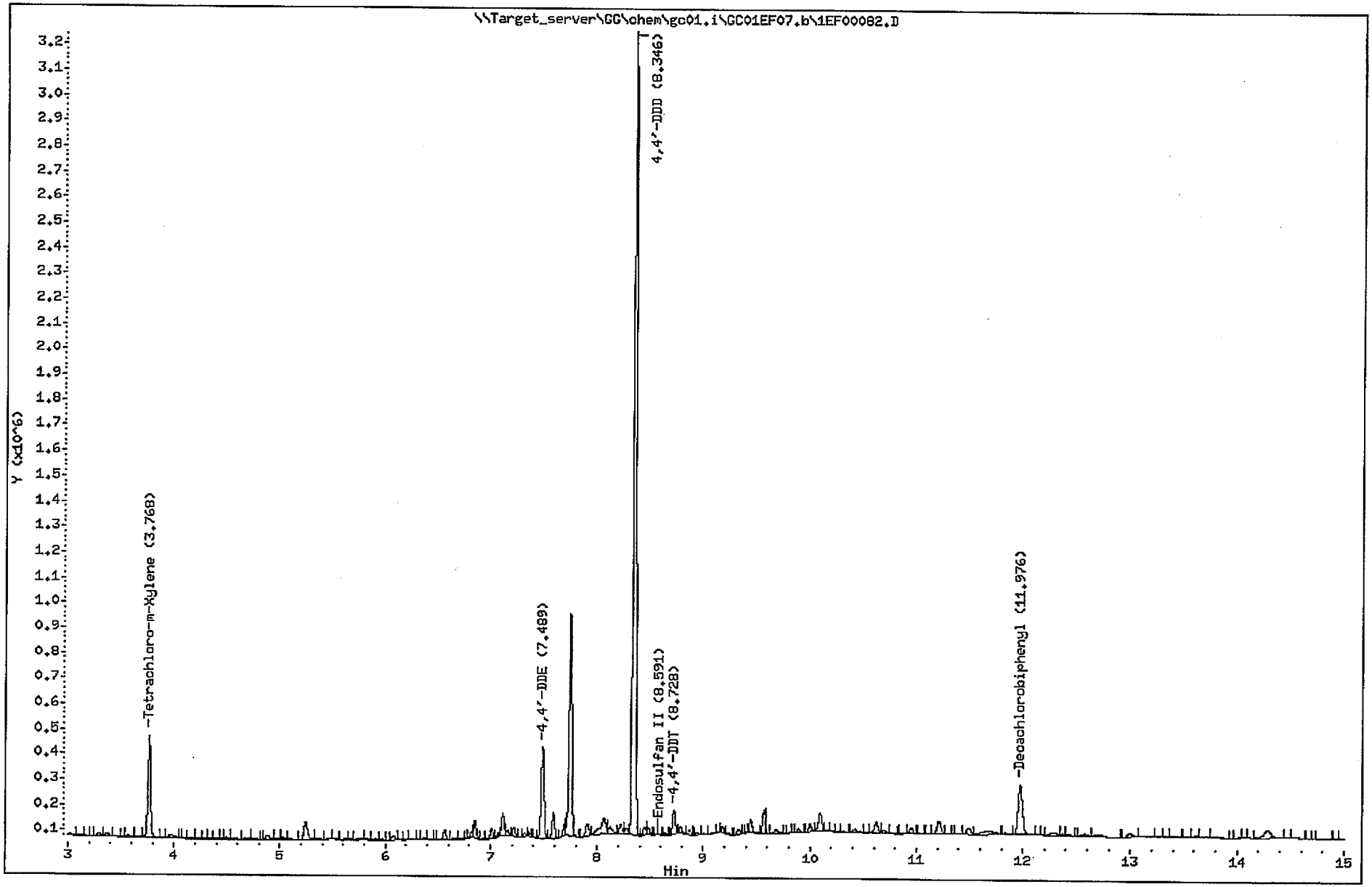
Katahdin Analytical Services 2000063

Data File: \\Target_server\GC\chem\gc01.i\GC01EF07.b\1EF00082.D
Date : 07-JUN-2011 15:46
Client ID: 2W-SD-SD129-0001
Sample Info: SE2829-26

Instrument: gc01.i

Operator: CB
Column diameter: 0.53

Column phase: ZB-Multiresidue-2



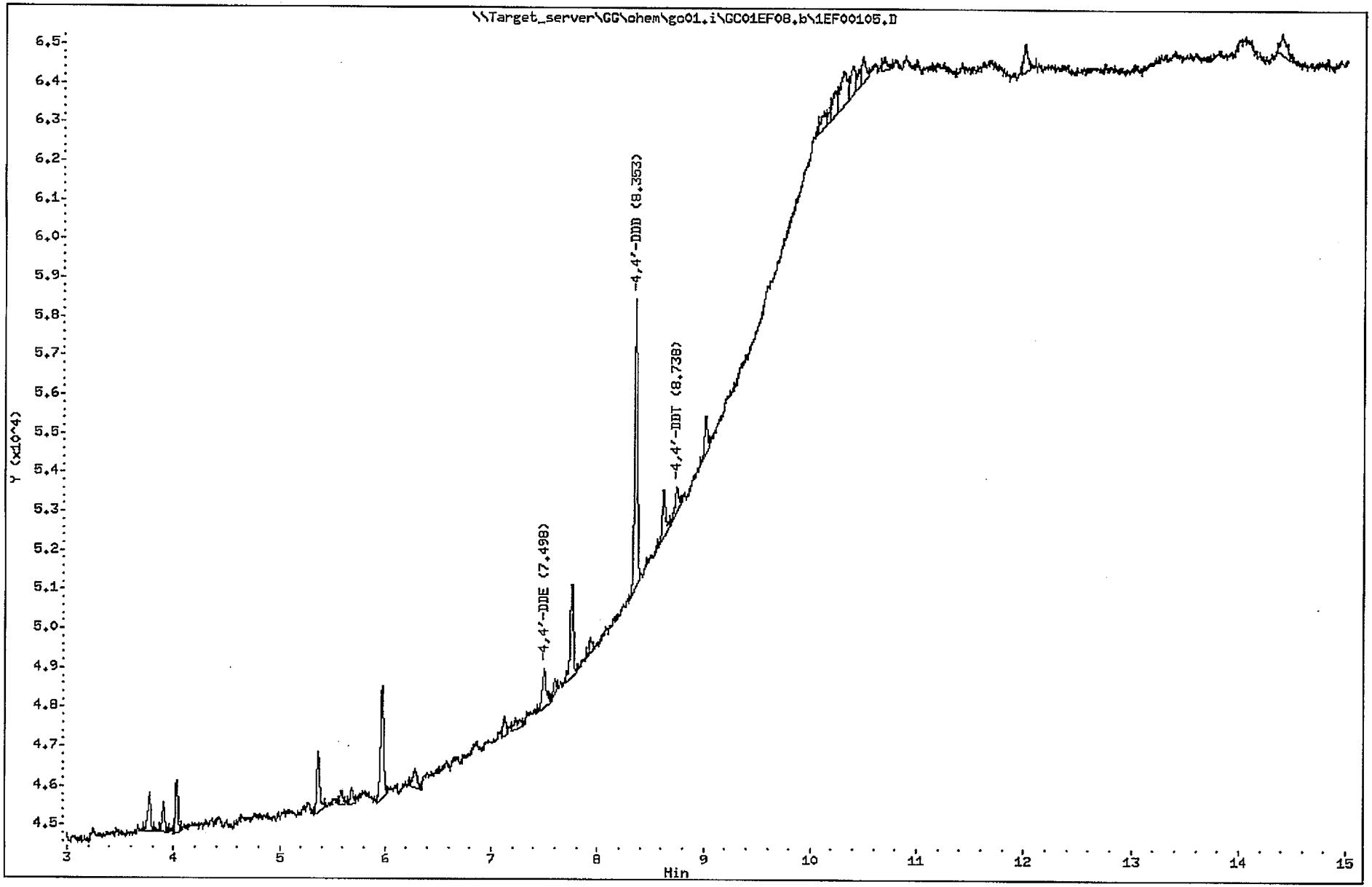
Katahdin Analytical Services 2000107

Data File: \\Target_server\GC\chem\gc01.i\GC01EF08.b\1EF00105.D
Date : 08-JUN-2011 11:11
Client ID: 2W-SD-SD129-0001
Sample Info: SE2829-26DL2

Column phase: ZB-Multiresidue-2

Instrument: gc01.i

Operator: CB
Column diameter: 0.53

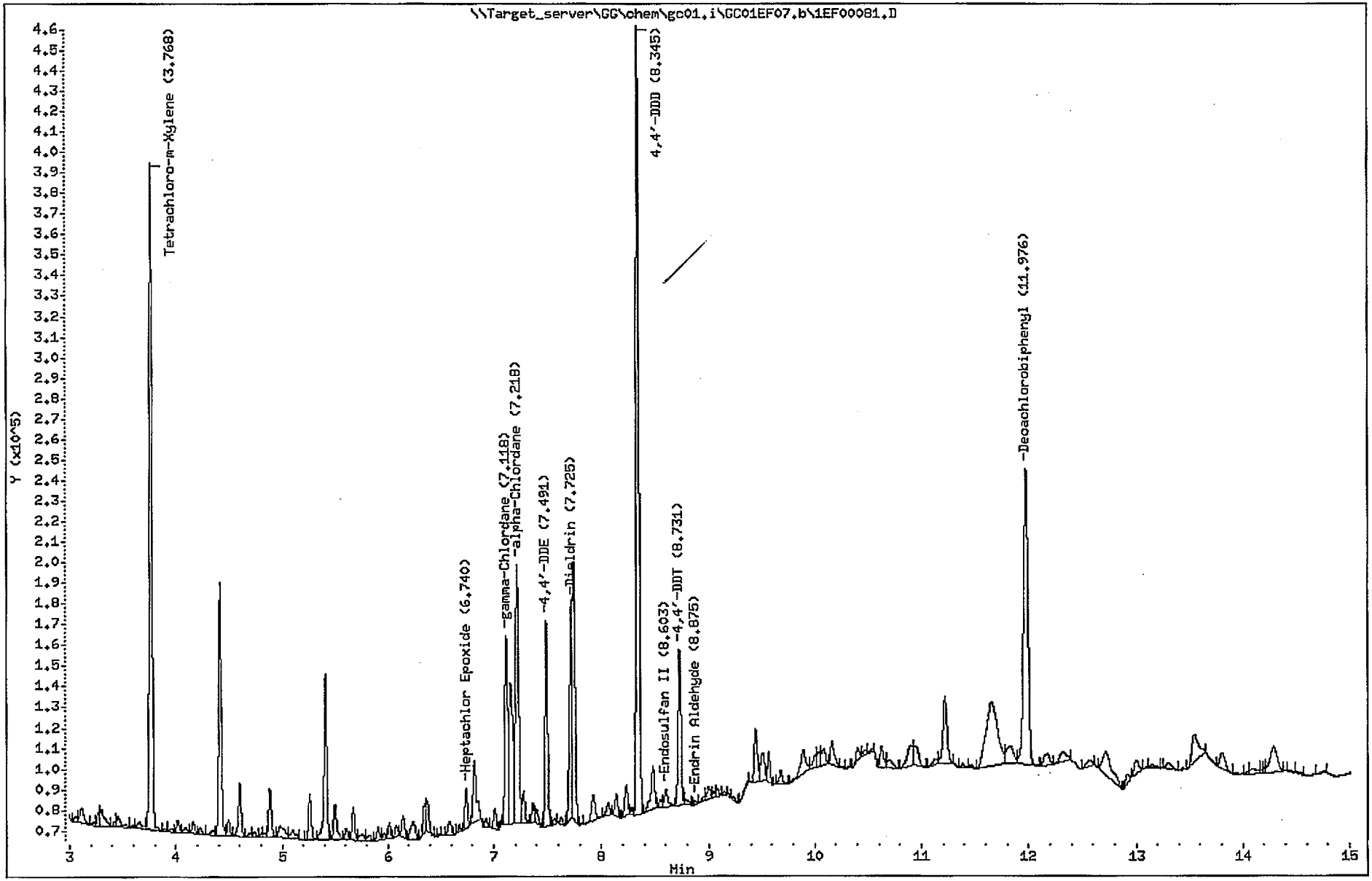


Katahdin Analytical Services 2000113

Data File: \\Target_server\GC\chem\gc01.i\GC01EF07.b\1EF00081.D
Date : 07-JUN-2011 15:28
Client ID: 2W-SD-SD131-0001
Sample Info: SE2829-25

Instrument: go01.i

Operator: CB
Column phase: ZB-Multiresidue-2
Column diameter: 0.53



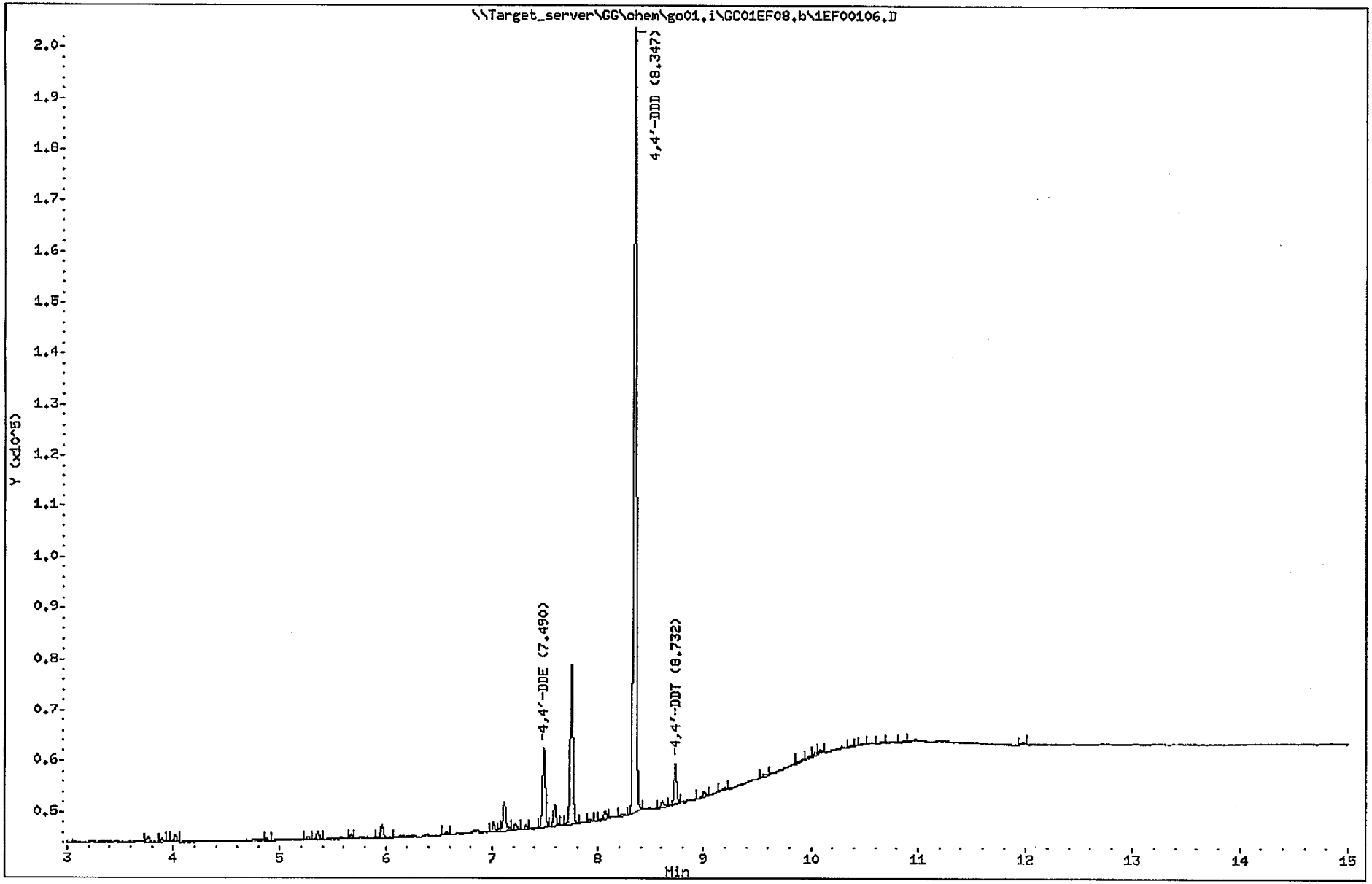
Katahdin Analytical Services 2000101

Data File: \\Target_server\GC\chem\go01.i\GC01EF08.b\1EF00106.D
Date : 08-JUN-2011 11:28
Client ID: 2W-SD-SD132-0001
Sample Info: SE2829-29DL2

Instrument: go01.i

Operator: CB
Column diameter: 0.53

Column phase: ZB-Multiresidue-2

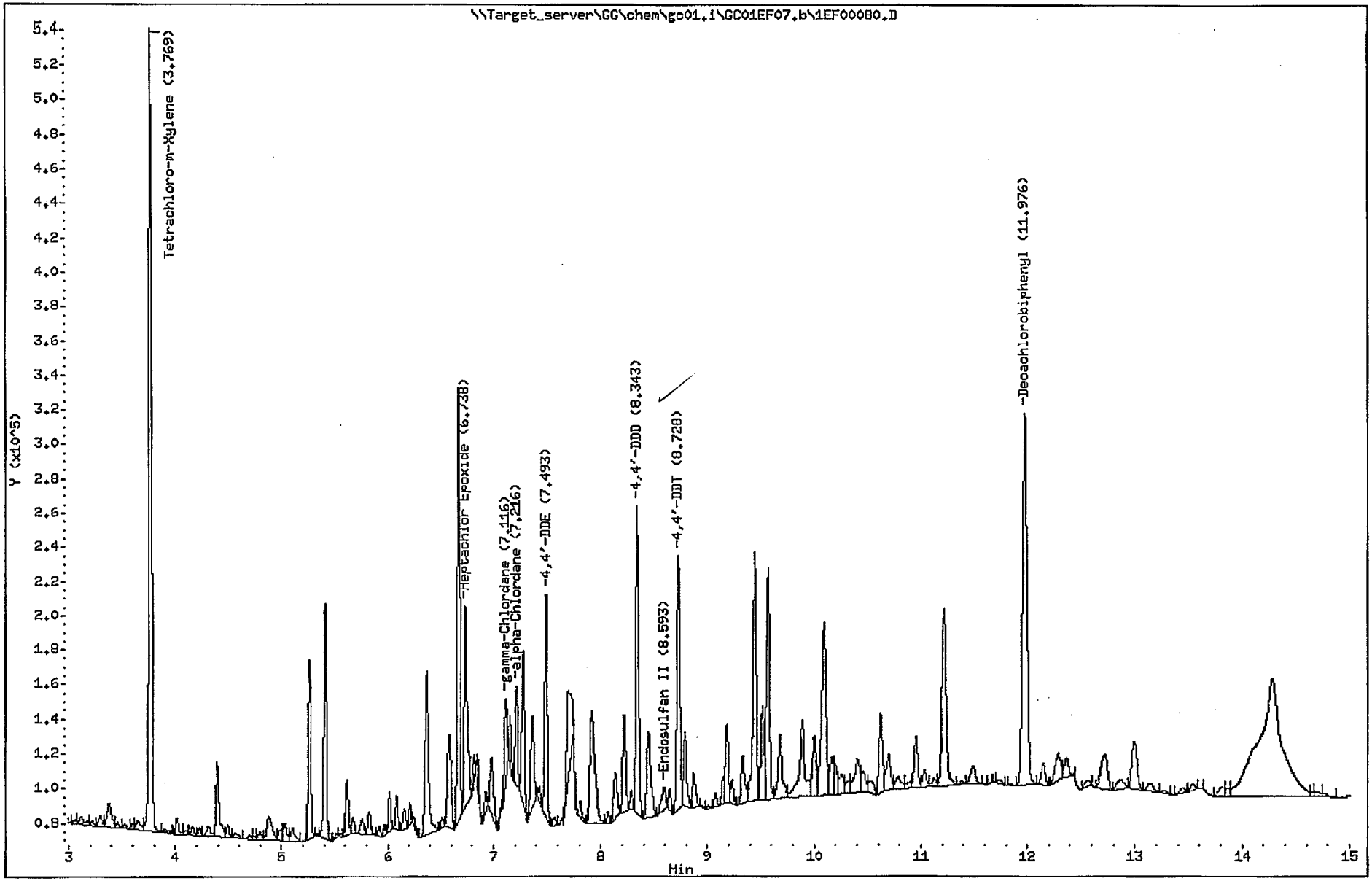


Katahdin Analytical Services 2000132

Data File: \\Target_server\GG\chem\go01.i\GC01EF07.b\1EF00080.D
Date : 07-JUN-2011 15:11
Client ID: 2W-SD-SD133-0001
Sample Info: SE2829-24

Instrument: gc01.i

Operator: CB
Column phase: ZB-Multiresidue-2
Column diameter: 0.53



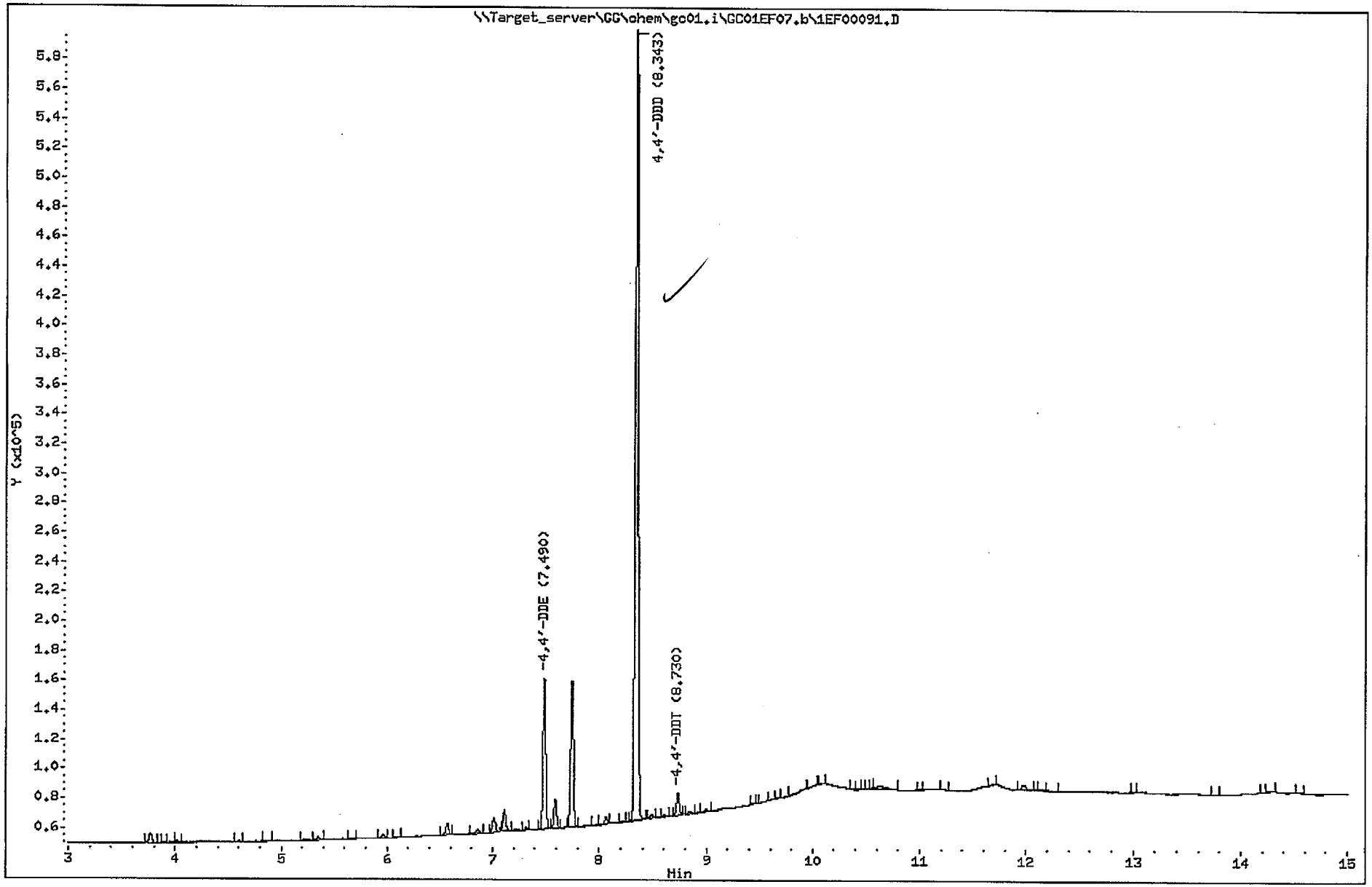
Katahdin Analytical Services 2000094

Data File: \\Target_server\GC\chem\gc01.i\GC01EF07.b\1EF00091.D
Date : 07-JUN-2011 18:23
Client ID: 2W-SD-SD137-0001
Sample Info: SE2829-7DL

Instrument: gc01.i

Operator: CB
Column diameter: 0.53

Column phase: ZB-Multiresidue-2



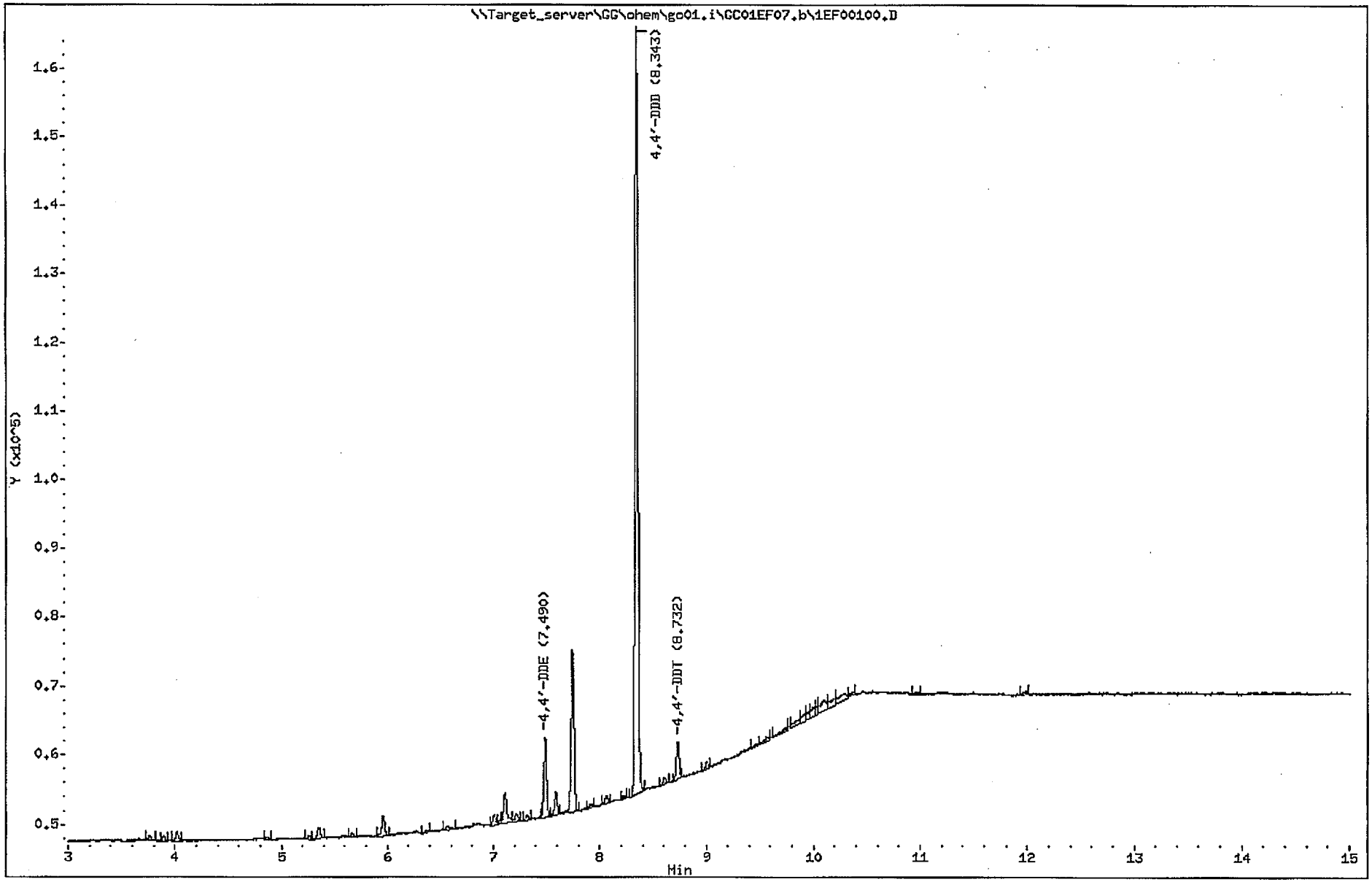
Katahdin Analytical Services 2000051

Data File: \\Target_server\GC\chem\go01.i\GC01EF07.b\1EF00100.D
Date : 07-JUN-2011 21:01
Client ID: 2W-SD-SD139-0001
Sample Info: SE2829-30DL

Instrument: go01.i

Operator: CB
Column diameter: 0.53

Column phase: ZB-Multiresidue-2



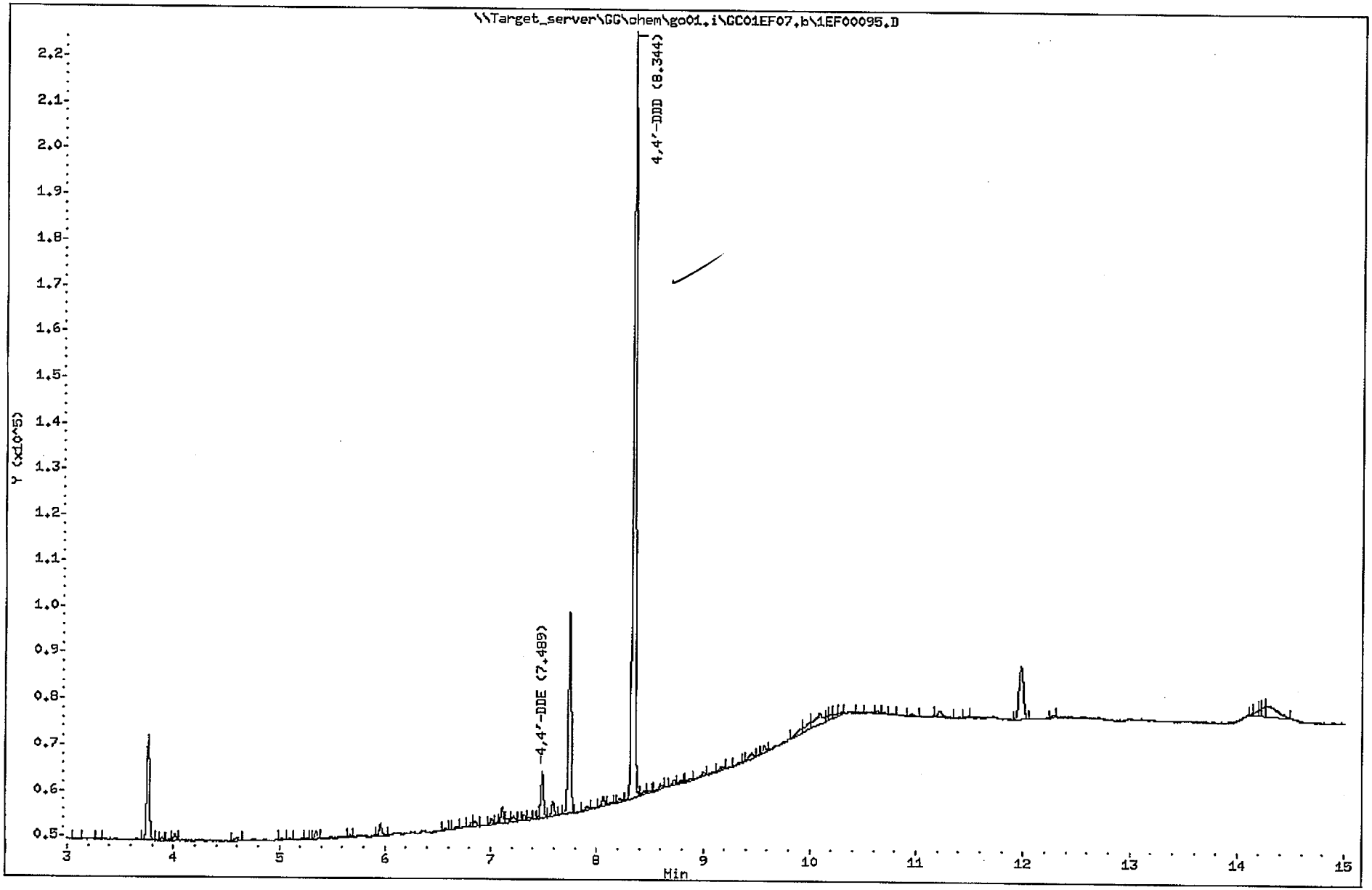
Katahdin Analytical Services 2000138

Data File: \\Target_server\GG\ohem\go01.i\GC01EF07.b\1EF00095.D
Date : 07-JUN-2011 19:33
Client ID: 2W-SD-SD141-0001
Sample Info: SE2829-11DL

Instrument: gc01.i

Operator: CB
Column diameter: 0.53

Column phase: ZB-Multiresidue-2



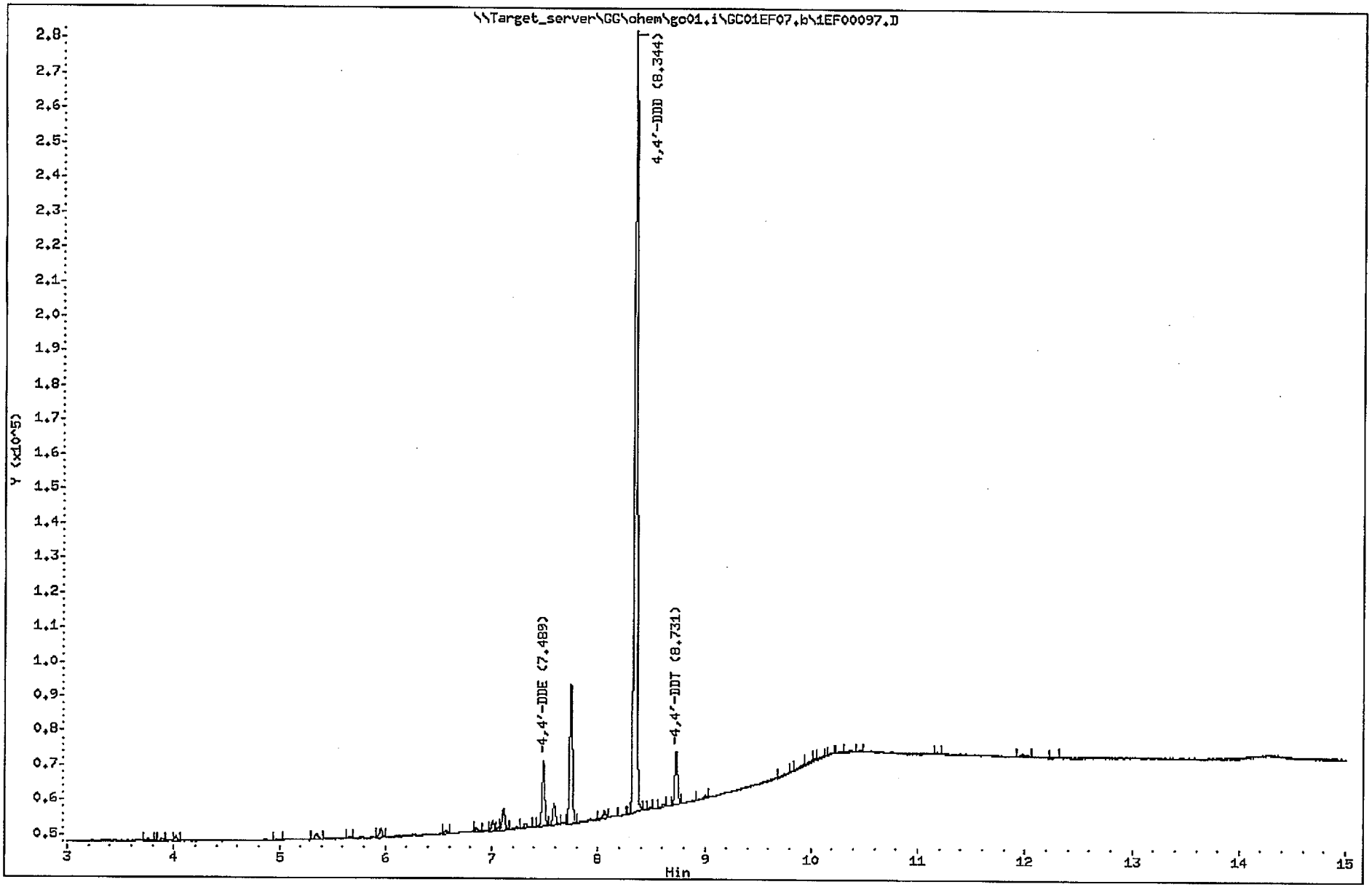
Katahdin Analytical Services 2000088

Data File: \\Target_server\GC\chem\go01.i\GC01EF07.b\1EF00097.D
Date : 07-JUN-2011 20:08
Client ID: 2W-SD-SD143-0001
Sample Info: SE2829-27DL

Column phase: ZB-Multiresidue-2

Instrument: go01.i

Operator: CB
Column diameter: 0.53



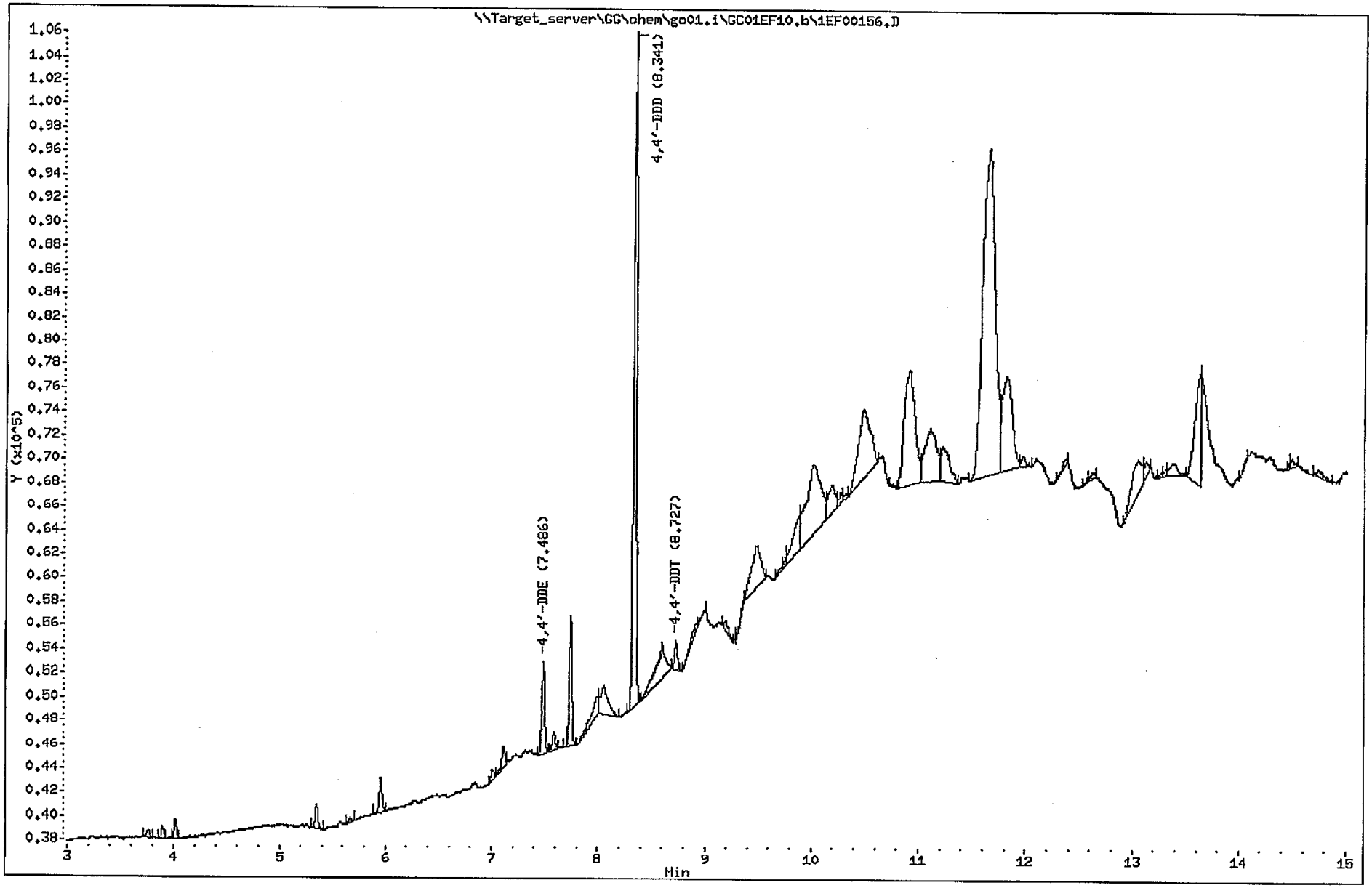
Katahdin Analytical Services 2000119

Data File: \\Target_server\GC\chem\go01.i\GC01EF10.b\1EF00156.D
Date : 10-JUN-2011 14:49
Client ID: 2W-SD-SD145-0001
Sample Info: SE2829-28DL

Instrument: go01.i

Operator: CB
Column diameter: 0.53

Column phase: ZB-Multiresidue-2



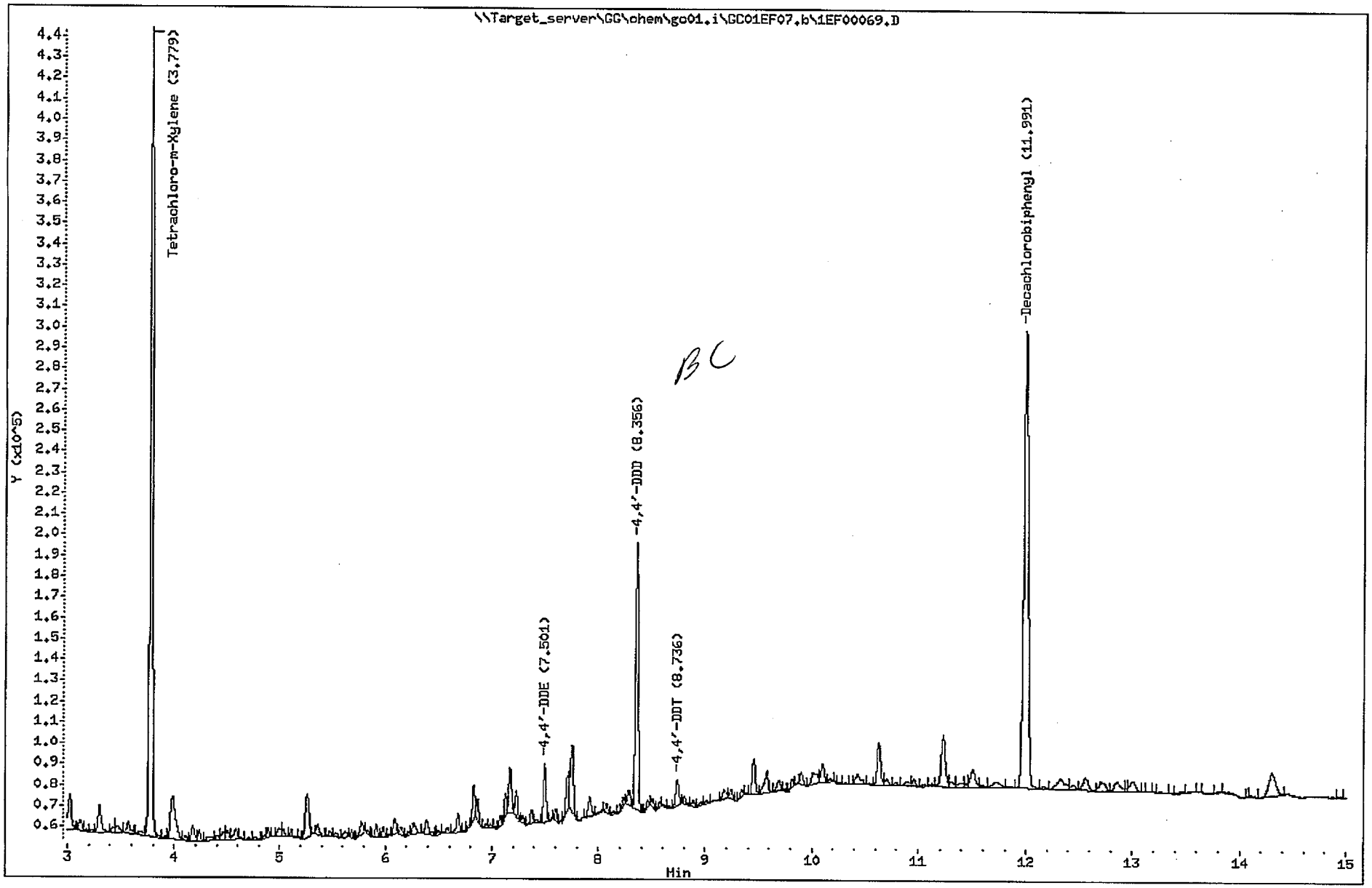
Katahdin Analytical Services 2000125

Data File: \\Target_server\GC\chem\gc01.i\GC01EF07.b\1EF00069.D
Date : 07-JUN-2011 11:59
Client ID: 2W-SD-SD153-0001
Sample Info: SE2829-1

Instrument: gc01.i

Operator: CB
Column diameter: 0.53

Column phase: ZB-Multiresidue-2

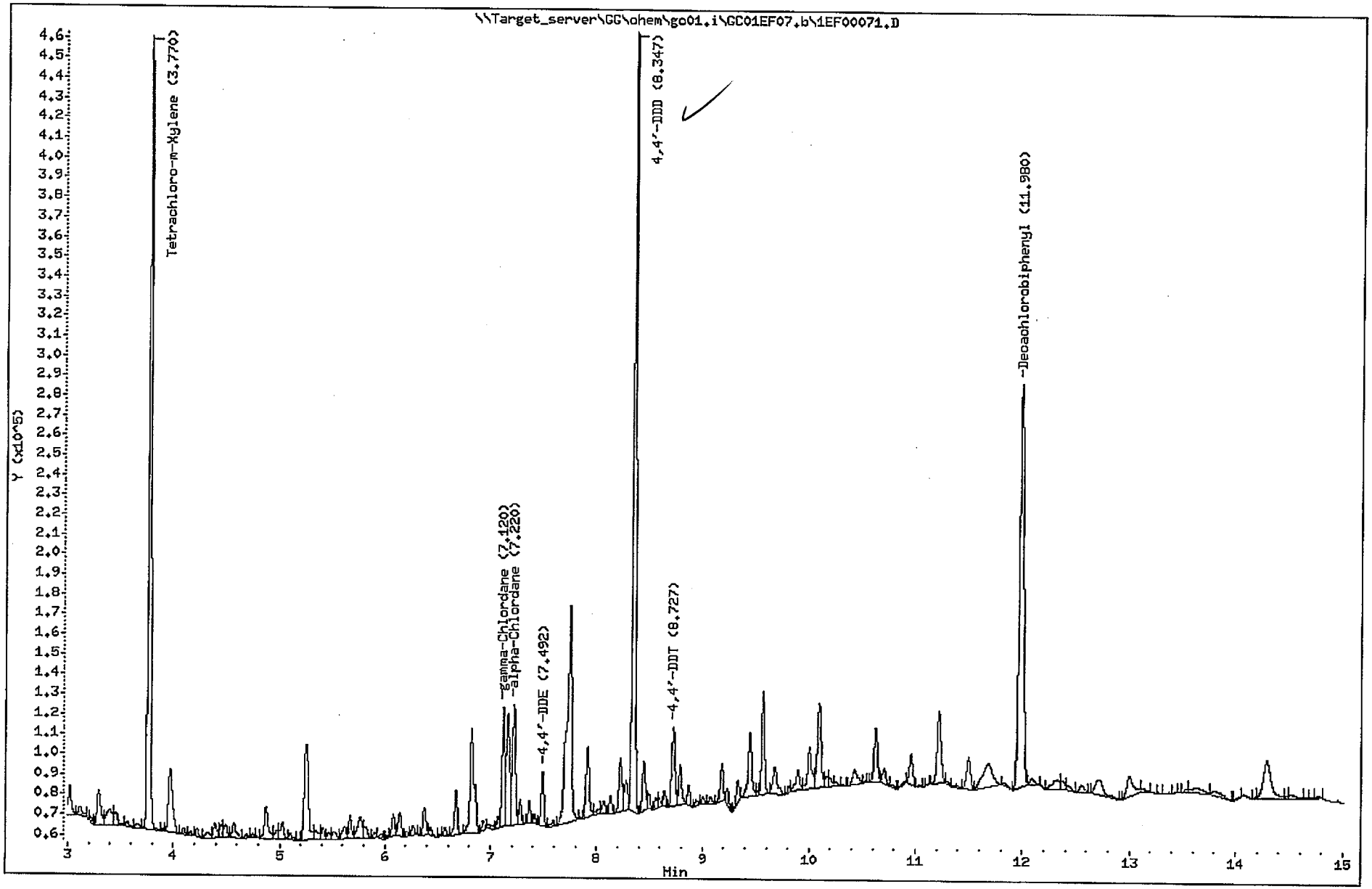


Katahdin Analytical Services 2000018

Data File: \\Target_server\GC\chem\go01.i\GC01EF07.b\1EF00071.D
Date : 07-JUN-2011 12:34
Client ID: 2W-SD-SD155-0001
Sample Info: SE2829-3

Instrument: go01.i

Operator: CB
Column phase: ZB-Multiresidue-2
Column diameter: 0.53



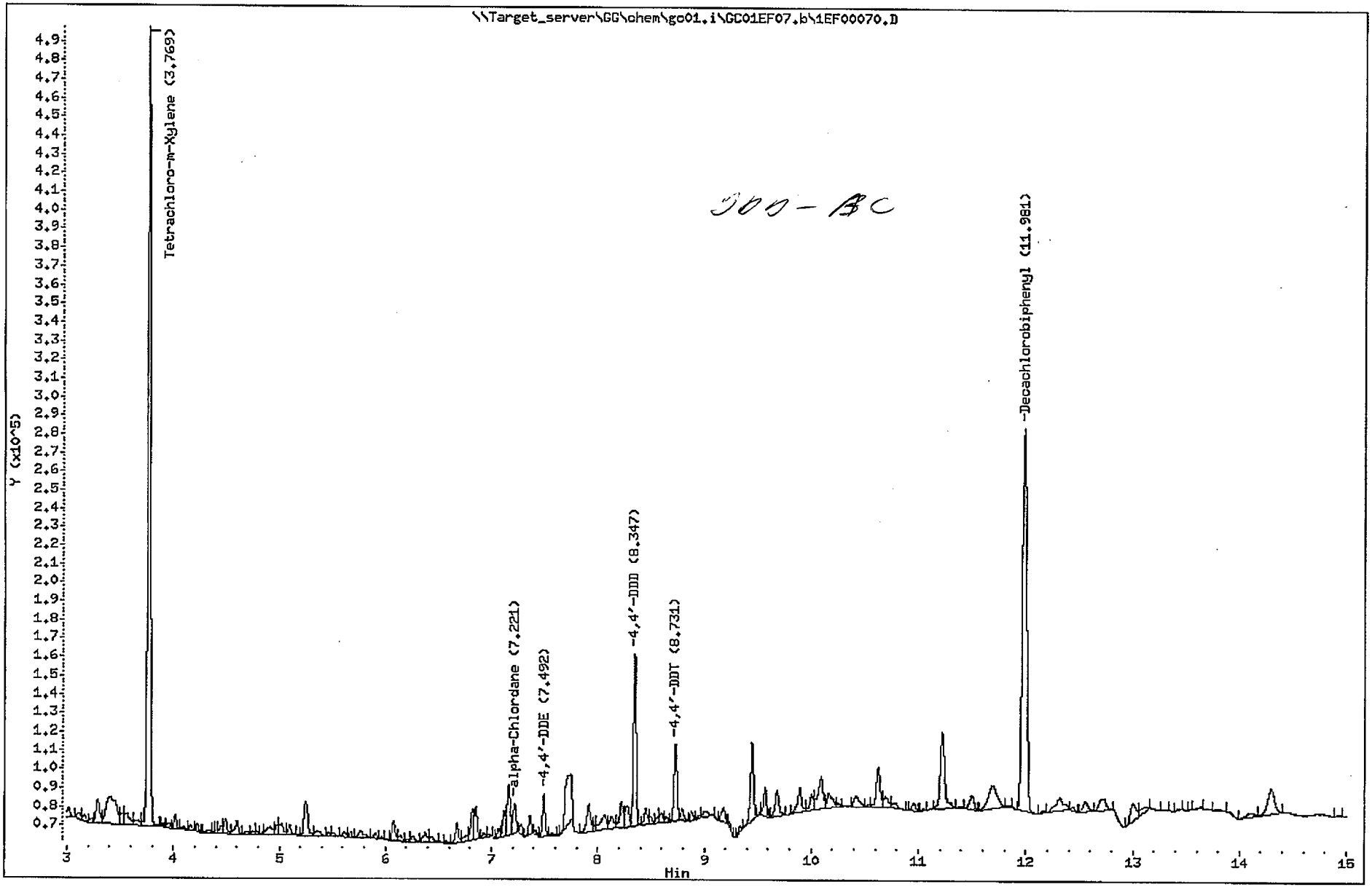
Katahdin Analytical Services 2000031

Data File: \\Target_server\GG\chem\go01.i\GC01EF07.b\1EF00070.D
Date : 07-JUN-2011 12:16
Client ID: 2W-SD-SD156-0001
Sample Info: SE2829-2

Instrument: go01.i

Operator: CB
Column diameter: 0.53

Column phase: ZB-Multiresidue-2



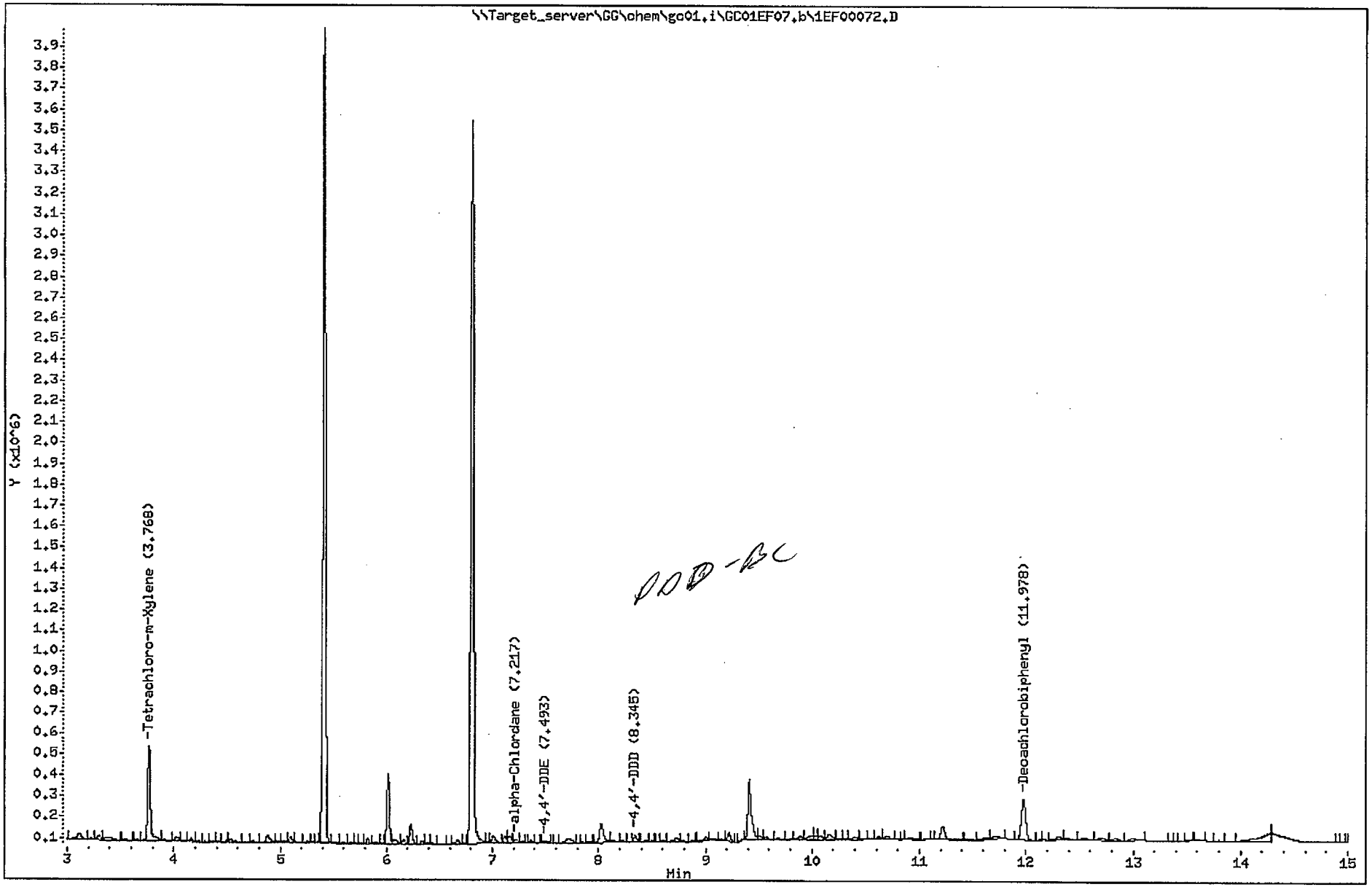
300-BC

Katahdin Analytical Services 2000025

Data File: \\Target_server\GG\chem\go01.i\GC01EF07.b\1EF00072.D
Date : 07-JUN-2011 12:51
Client ID: 2W-SD-SD157-0001
Sample Info: SE2829-4

Instrument: go01.i

Operator: CB
Column phase: ZB-Multiresidue-2
Column diameter: 0.53



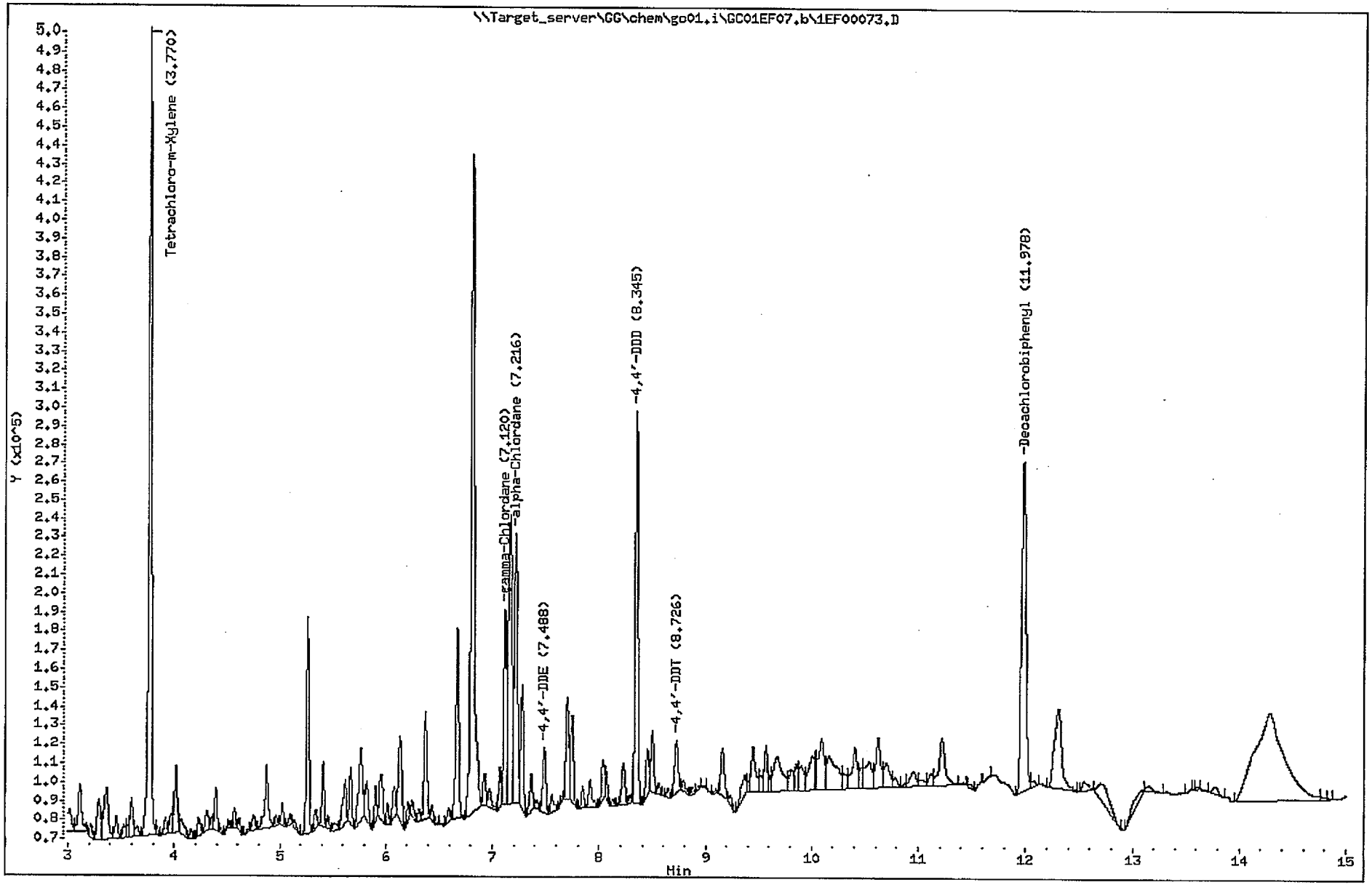
Katahdin Analytical Services 2000038

Data File: \\Target_server\GC\chem\go01.i\GC01EF07.b\1EF00073.D
Date : 07-JUN-2011 13:08
Client ID: 2W-SD-SD160-0001
Sample Info: SE2829-5

Instrument: go01.i

Operator: CB
Column diameter: 0.53

Column phase: ZB-Multiresidue-2



Katahdin Analytical Services 2000044

Laboratory Name

Sample #1 : \\ELABNSH05\TARGET\chem\ecd3.i\051211.b\031F3101.D
Sample #2 : \\ELABNSH05\TARGET\chem\ecd3.i\051211.b\031R3101.D
Inj Date : 12-MAY-2011 20:15
Sample Info: 1105030-36
Misc Info : ;;;;;;TCL2.sub
Cal Date : 16-MAY-2011 16:09
Operator : AJK
Inst ID : ecd3.i
Dil Factor : 1.000000

Method #1 : \\ELABNSH05\TARGET\chem\ecd3.i\051211.b\8081_82F.m
Method #2 : \\ELABNSH05\TARGET\chem\ecd3.i\051211.b\8081_82R.m
Sub List #1 : TCL2.sub
Sub List #2 : TCL2.sub
Col #1 Phase : ZB MR-1
Col #2 Phase : ZB MR-2

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range		Ratio
Alpha-BHC	0.000	4.583	0	193363	0.0000	6.956			
4,4'-DDD	8.407	0.000	64132	0	5.028	0.0000			100.00
4,4'-DDE	7.787	0.000	12723	0	2.471	0.0000			100.00
4,4'-DDT	0.000	7.229	0	59004	0.0000	4.008			
Dieldrin	0.000	6.498	0	25429	0.0000	0.9284			
Endosulfan I	7.661	0.000	46978	0	1.362	0.0000			100.00
Endrin	8.236	0.000	23859	0	0.7739	0.0000			100.00
Gamma-BHC	5.804	0.000	79749	0	2.098	0.0000			100.00
Gamma-Chlordane	7.524	6.144	47675	36039	1.317	1.508			100.00
Heptachlor Epoxide	7.211	0.000	14221	0	0.3860	0.0000			100.00
PCB-1260	9.509	7.889	83962	51117	20.79	21.30	80.00-	120.00	100.00
	8.086	6.651	35830	28912		23.44	35.45-	53.18	56.56
	8.407	6.889	64132	36845	37.77	25.87	35.59-	53.39	76.38
	8.744	7.033	96660	14273	48.86	14.12	40.57-	60.86	115.12
	8.842	7.296	31309	26511	19.23		32.36-	48.54	37.29
	9.116	7.583	42893	40210		33.66	38.32-	57.48	78.66
	9.859	8.294	69438	22017			36.17-	54.26	43.07
	10.594	8.904	25829	27624	26.70		18.57-	27.86	30.76
			Average of Peak Amounts =		30.67	23.68			
TCMX	5.092	4.219	1343291	967946	46.22	45.37			100.00(R)
DCB	11.191	9.499	1568091	860331	45.15	39.78			100.00(R)

QC Flag Legend

PCB 1260 (PEAK #1) $\Rightarrow \frac{83962}{4059} = 20.79 \times 5\,mL \div 15.4\,g \times \div 0.780 = 8.59\ \mu g/kg$

R - Spike/Surrogate failed recovery limits.

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **A. BERNHARDT** **DATE: JANUARY 3, 2012**

FROM: **A. COGNETTI** **COPIES: DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – PAH/PEST/PCB/SELECT METALS/TOTAL SOLIDS**
NSB NEW LONDON, CTO WE55
SAMPLE DELIVERY GROUP (SDG) – SE3870

SAMPLES: 1/Sediment /PAH/PEST/PCB/Select Metals/Total Solids

2W-SD-SD162-0001

Overview

The sample set for NSB New London, CTO WE55, SDG SE3870 consisted of one (1) sediment environmental sample. The sample was analyzed for polynuclear aromatic hydrocarbons (PAH), select pesticides, polychlorinated biphenyls (PCBs), select metals and total solids. The select pesticides were 4,4'-DDD, 4,4'-DDE and 4,4'-DDT. The select metals were arsenic, cadmium, chromium, copper, lead, nickel and zinc.

The sample was collected by Tetra Tech NUS on April 4, 2011 and analyzed by Katahdin Analytical Services. All of the samples were analyzed in accordance with USEPA SW-846 Method 8270C SIM for PAH, 8081 for pesticides, 8082 for PCB, 6010 for metals. Total solids analyses were conducted using Standard Method 2540G. analytical and reporting protocol.

Data were evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Instrument Tuning and System Performance
	•	Blank Results
	•	Initial and Continuing Calibration
	•	Surrogate Spike Recoveries
*	•	ICP Interference Check Sample Results
*	•	Internal Standard Recoveries
*	•	Laboratory Control Sample Recoveries
	•	Detection Limits
*	•	Compound Identification and Quantification

The asterisk (*) indicates that all quality control criteria were met for this parameter. Qualified (if applicable) analytical results are summarized in Appendix A. Results as reported by the laboratory are presented in Appendix B. Appendix C contains Region I worksheets, and Appendix D contains the documentation to support the findings as discussed in this data validation report. An EPA Region 1 tier III validation was performed on the data in this SDG. The text of this report has been formulated to address only those problem areas affecting data quality.

INITIAL AND CONTINUING CALIBRATION

The PCB continuing calibration percent difference (%D) for Aroclor 1260 exceeded the 20% quality control limit on July 12, 2011 @ 19:17 on column RTX-CLPESTICIDES2. No action was taken on the nondetected Aroclor 1260 result in sample 2W-SD-SD162-0001.

SURROGATE SPIKE RECOVERIES

The percent recoveries (%Rs) of PCB surrogates tetrachloro-m-xylene and decachlorobiphenyl were less than the lower quality control limit but greater than 10% on both columns in sample 2W-SD-SD162-0001. The nondetected PCB results in sample 2W-SD-SD162-0001 were qualified as estimated (UJ).

BLANK RESULTS

Contaminants were detected in the preparation and continuing calibration blanks.

Contaminant	Maximum concentration	Action Level (mg/kg)
Arsenic (1)	1.761 ug/L	3.43
Chromium (2)	0.12 mg/kg	0.60
Nickel (2)	0.084 mg/kg	0.42

(1) Maximum concentration of contaminant detected in the continuing calibration blank analyzed on July 11, 2011 @ 18:11.
(2) Maximum concentration of contaminant detected in the preparation blank.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot, dilution factors and percent solids, if applicable, were taken into consideration when evaluating for blank contamination. No validation actions were required as all sample results were greater than the action level.

PERCENT SOLIDS

Sample 2W-SD-SD162-0001 contained less than 30% solids. The positive and nondetected results were qualified as estimated (J) and (UJ), respectively in all fractions.

NOTES

Sample 2W-SD-SD162-0001 was frozen in storage. No action was taken because of hold time.

Positive results reported below the limit of quantitation (LOQ) but above the method detection limit (MDL) for the organic analyses were qualified as estimated, (J).

Nondetected results were reported to the limit of detection (LOD).

EXECUTIVE SUMMARY

Laboratory Performance: Surrogate spike noncompliances were found in the PCB fraction.

Other Factors Affecting Data Quality: Sample 2W-SD-SD162-0001 contained less than 30% solids.

The data for these analyses were reviewed with reference to the criteria for SW-846 8270C SIM, 8081 and 8082 listed in the project specific SAP, the "USEPA Region 1 Laboratory Data Validation Functional Guidelines – Part II" (12/96), EPA Region I, "National Functional Guidelines for Inorganic Review", November 2008, and the (DOD) QSM document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

Ann Cognetti

Tetra Tech NUS
Ann Cognetti
Chemist/ Data Validator

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C – Regional Worksheets
4. Appendix D - Support Documentation

APPENDIX A

QUALIFIED LABORATORY RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can be any number of issues; e.g. poor chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 02625	NSAMPLE	2W-SD-SD162-0001
SDG: SE3870	LAB_ID	SE3870-1
FRACTION: PAH	SAMP_DATE	4/4/2011
MEDIA: SOIL	QC_TYPE	NM
	UNITS	UG/KG
	PCT_SOLIDS	16.9
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE	55	UJ	~~M~~Y
2-METHYLNAPHTHALENE	55	UJ	~~M~~Y
ACENAPHTHENE	55	UJ	~~M~~Y
ACENAPHTHYLENE	55	UJ	~~M~~Y
ANTHRACENE	10	J	~~M~~PY
BENZO(A)ANTHRACENE	68	J	~~M~~PY
BENZO(A)PYRENE	86	J	~~M~~PY
BENZO(B)FLUORANTHENE	170	J	~~M~~Y
BENZO(G,H,I)PERYLENE	61	J	~~M~~PY
BENZO(K)FLUORANTHENE	51	J	~~M~~PY
CHRYSENE	110	J	~~M~~PY
DIBENZO(A,H)ANTHRACENE	17	J	~~M~~PY
FLUORANTHENE	180	J	~~M~~Y
FLUORENE	55	UJ	~~M~~Y
INDENO(1,2,3-CD)PYRENE	100	J	~~M~~PY
NAPHTHALENE	55	UJ	~~M~~Y
PHENANTHRENE	80	J	~~M~~PY
PYRENE	140	J	~~M~~Y

12-27-11
JAS

PROJ_NO: 02625 SDG: SE3870 FRACTION: PEST MEDIA: SOIL	NSAMPLE	2W-SD-SD162-0001		
	LAB_ID	SE3870-1		
	SAMP_DATE	4/4/2011		
	QC_TYPE	NM		
	UNITS	UG/KG		
	PCT_SOLIDS	16.9		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
4,4'-DDD		9.2	J	~~MPY~~
4,4'-DDE		7.4	J	~~MPY~~
4,4'-DDT		8.4	J	~~MPY~~

12-29-11
JAJ

PROJ_NO: 02625 SDG: SE3870 FRACTION: PCB MEDIA: SOIL	NSAMPLE	2W-SD-SD162-0001
	LAB_ID	SE3870-1
	SAMP_DATE	4/4/2011
	QC_TYPE	NM
	UNITS	UG/KG
	PCT_SOLIDS	16.9
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
AROCLOR-1016	47	UJ	~~J~~RY
AROCLOR-1221	47	UJ	~~J~~RY
AROCLOR-1232	56	UJ	~~J~~RY
AROCLOR-1242	47	UJ	~~J~~RY
AROCLOR-1248	47	UJ	~~J~~RY
AROCLOR-1254	47	UJ	~~J~~RY
AROCLOR-1260	47	UJ	~~J~~RY

12-29-11
JAJ

PROJ_NO: 02625 SDG: SE3870 FRACTION: M MEDIA: SOIL	NSAMPLE	2W-SD-SD162-0001
	LAB_ID	SE3870-001
	SAMP_DATE	4/4/2011
	QC_TYPE	NM
	UNITS	MG/KG
	PCT_SOLIDS	16.9
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
ARSENIC	13.6	J	Y
CADMIUM	2.3	UJ	Y
CHROMIUM	9.4	J	PY
COPPER	43.3	J	Y
LEAD	21.9	J	Y
NICKEL	15	J	PY
ZINC	753	J	Y

PROJ_NO: 02625 SDG: SE3870 FRACTION: MISC MEDIA: SOIL	NSAMPLE	2W-SD-SD162-0001		
	LAB_ID	SE3870-1		
	SAMP_DATE	4/4/2011		
	QC_TYPE	NM		
	UNITS	%		
	PCT_SOLIDS	16.9		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
TOTAL SOLIDS		17		

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE3870-1
Client ID: 2W-SD-SD162-0001
Project: CTO-WE55 New London, CT
SDG: SE3870

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 08-JUL-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG93747

Analysis Date: 12-JUL-11
Analyst: WAS
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 17.
Report Date: 14-JUL-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	55.	ug/Kgdrywt	1	20	110	14.	55.
2-Methylnaphthalene	U	55.	ug/Kgdrywt	1	20	110	12.	55.
1-Methylnaphthalene	U	55.	ug/Kgdrywt	1	20	110	9.3	55.
Acenaphthylene	U	55.	ug/Kgdrywt	1	20	110	6.6	55.
Acenaphthene	U	55.	ug/Kgdrywt	1	20	110	8.2	55.
Fluorene	U	55.	ug/Kgdrywt	1	20	110	18.	55.
Phenanthrene	J	80.	ug/Kgdrywt	1	20	110	9.8	55.
Anthracene	J	10.	ug/Kgdrywt	1	20	110	6.6	55.
Fluoranthene		180	ug/Kgdrywt	1	20	110	9.8	55.
Pyrene		140	ug/Kgdrywt	1	20	110	11.	55.
Benzo (a) anthracene	J	68.	ug/Kgdrywt	1	20	110	10.	55.
Chrysene	J	110	ug/Kgdrywt	1	20	110	9.3	55.
Benzo (b) Fluoranthene		170	ug/Kgdrywt	1	20	110	13.	55.
Benzo(k)fluoranthene	J	51.	ug/Kgdrywt	1	20	110	17.	55.
Benzo(a)pyrene	J	86.	ug/Kgdrywt	1	20	110	18.	55.
Indeno (1,2,3-cd) pyrene	J	100	ug/Kgdrywt	1	20	110	10.	55.
Dibenzo (a,h) anthracene	J	17.	ug/Kgdrywt	1	20	110	9.8	55.
Benzo(g,h,i)perylene	J	61.	ug/Kgdrywt	1	20	110	11.	55.
2-Methylnaphthalene-D10		29.0	%					
Fluorene-D10		27.7	%					
Pyrene-D10		32.3	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE3870-1
Client ID: 2W-SD-SD162-0001
Project: CTO-WE55 New London, CT
SDG: SE3870

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 08-JUL-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG93745

Analysis Date: 12-JUL-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 17.
Report Date: 13-JUL-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	7.4	ug/Kgdrywt	1	3.3	18.	1.0	9.2
4,4'-DDD	J	9.2	ug/Kgdrywt	1	3.3	18.	1.1	9.2
4,4'-DDT	J	8.4	ug/Kgdrywt	1	3.3	18.	1.7	9.2
Tetrachloro-M-Xylene		41.2	%					
Decachlorobiphenyl		51.2	%					

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ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE3870-1
Client ID: 2W-SD-SD162-0001
Project: CTO-WE55 New London, CT
SDG: SE3870

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 08-JUL-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG93746

Analysis Date: 12-JUL-11
Analyst: CB
Analysis Method: SW846 8082A
Matrix: SL
% Solids: 17.
Report Date: 13-JUL-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	47.	ug/Kgdrywt	1	17	95.	33.	47.
Aroclor-1221	U	47.	ug/Kgdrywt	1	17	95.	44.	47.
Aroclor-1232	U	56.	ug/Kgdrywt	1	17	95.	52.	56.
Aroclor-1242	U	47.	ug/Kgdrywt	1	17	95.	32.	47.
Aroclor-1248	U	47.	ug/Kgdrywt	1	17	95.	34.	47.
Aroclor-1254	U	47.	ug/Kgdrywt	1	17	95.	26.	47.
Aroclor-1260	U	47.	ug/Kgdrywt	1	17	95.	33.	47.
Tetrachloro-M-Xylene	*	39.5	%					
Decachlorobiphenyl	*	49.0	%					

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http://www.katahdinlab.com

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services
Client Field ID: 2W-SD-SD162-0001
Matrix: SOIL
SDG Name: SE3870
Percent Solids: 16.9
Lab Sample ID: SE3870-001

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	13.6			P	2	6.2	0.53	3.9
7440-43-9	CADMIUM, TOTAL	2.3	U		P	2	7.8	0.06	2.3
7440-47-3	CHROMIUM, TOTAL	9.4	J		P	2	12	0.20	3.1
7440-50-8	COPPER, TOTAL	43.3			P	2	19	1.22	7.8
7439-92-1	LEAD, TOTAL	21.9			P	2	3.9	0.68	3.1
7440-02-0	NICKEL, TOTAL	15.0	J		P	2	31	0.34	3.1
7440-66-6	ZINC, TOTAL	753			P	1	9.7	0.66	3.9

Bottle ID: A

Comments:

Report of Analytical Results

Client: Tobrena Sedlmyer
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SE3870-1
Report Date: 12-JUL-11
Client PO: 1045366 34-CTO WE55(
Project: CTO-WE55 New London,
SDG: SE3870

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD162-0001	SL	04-APR-11	06-APR-11

Parameter	Result	Adj LOQ	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	17. %	1	N/A	SM2540G	WG93859	08-JUL-11 10:50:00	ASTM D2216	07-JUL-11	

APPENDIX C

REGIONAL WORKSHEETS

EPA-NE
Data Validation Worksheet Cover Page - Page 1

Site Name NSB New London
Reference No. _____

REGION I ORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name Katahdin
Case/Project No. 112602625
SDG No. SE 3870
No. of Samples/Matrix 1 - sediment

SOW/Method No. 8270SIM, 8081, 8082
Sampling Date(s) April 4, 2011
Shipping Date(s) _____
Date Rec'd by lab April 6, 2011

Traffic Report Sample Nos. _____

Trip Blank No. _____
Equipment Blank No. _____
Bottle Blank No. _____
Field Duplicate Nos. _____

PES Nos. _____

The Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision _____ was used to evaluate the data and/or approved modifications to the EPA-NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attach modified criteria from EPA approved QAPjP or amendment to QAPjP).

A Tier II or Tier III evaluation was used to validate the data (circle one). If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc. that received partial Tier III validation

_____

The data were evaluated based upon the following parameters:

- Overall Evaluation of Data
- Data Completeness (CSF Audit - Tier I)
- Preservation & Technical Holding Times
- GC/MS & GC/ECD Instrument Performance Check
- Initial & Continuing Calibrations
- Blanks
- Surrogate Compounds
- Internal Standards
- Matrix Spike/Matrix Spike Duplicate
- Field Duplicates
- Sensitivity Check
- PE Samples/Accuracy Check
- Target Compound Identification
- Compound Quantitation and Reported Quantitation Limits
- TICs
- Semivolatile and Pesticide/PCB Cleanup
- System Performance

Region I Definitions and Qualifiers:

A - Acceptable Data
J - Numerical value associated with compound is an estimated quantity.
R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.
U - Compound not detected at that numerical sample quantitation limit.
UJ - The sample quantitation limit is an estimated quantity.
TB, BB, EB - Compound detected in aqueous trip blank, aqueous bottle blank, or aqueous equipment blank associated with soil/sediment samples.

Validator's Name Ann Cognetti Company Name TetraTech Phone Number (412) 921-8862

Date Validation Started August 1, 2011 Date Validation Completed August 1, 2011

EPA-NE
Data Validation Worksheet Cover Page - Page 2

Check if all criteria are met and no hard copy worksheet provided. Indicate NA if worksheet is not applicable to analytical method. Note: there is no standard worksheet for System Performance, however, the validator must document all system performance issues in the Data Validation Memorandum.

VOA/SV worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	✓
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	✓
VOA/SV-II	GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)	✓
VOA/SV-III	INITIAL CALIBRATION	✓
VOA/SV-IV	CONTINUING CALIBRATION	✓
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	✓
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	
VOA-VI	VOA SURROGATE SPIKE RECOVERIES	
SV-VI	SV SURROGATE SPIKE RECOVERIES	✓
VOA/SV-VII	INTERNAL STANDARD PERFORMANCE	✓
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	✓
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	✓
VOA/SV-Pest/PCB-XII	TARGET COMPOUND IDENTIFICATION	✓
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	✓
VOA/SV-XIV	TENTATIVELY IDENTIFIED COMPOUNDS	
VOA/SV-XV	SEMIVOLATILE CLEANUP	
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	✓

Pest/PCB worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	✓
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	✓
Pest/PCB-IIA	GC/ECD INSTRUMENT PERFORMANCE CHECK-RESOLUTION	✓
Pest/PCB-IIB	GC/ECD INSTRUMENT PERFORMANCE CHECK-RETENTION TIMES	✓
Pest/PCB-IIC	GC/ECD INSTRUMENT PERFORMANCE CHECK-ACCURACY CHECK OF INITIAL CALIBRATION	✓
Pest/PCB-IID	GC/ECD INSTRUMENT PERFORMANCE CHECK-PESTICIDE DEGRADATION	✓
Pest/PCB-III	INITIAL CALIBRATION	✓
Pest/PCB-IV	CONTINUING CALIBRATION	✓
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	✓
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	
Pest/PCB-VI	SURROGATE COMPOUNDS: SPIKE RECOVERIES AND RETENTION TIME SHIFT	✓
Pest/PCB-VII	PESTICIDE CLEANUP	
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	✓
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	✓
Pest/PCB-XII	COMPOUND IDENTIFICATION	✓
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	✓
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	✓

I certify that all criteria were met for the worksheets checked above.

Signature: Ann Cognetti Name: Ann Cognetti

Date: August 1, 2011

The data validator generates a Data Validation Report, applicable to Data Validation Tiers II and III, that consists of the following components in the order specified below: (Refer to Section 11 for a description of each of the Data Validation Report components).

1. Organic Regional Data Assessment/Inorganic Regional Data Assessment (ORDA/IRDA) Form
2. Data Validation Memorandum
   a. Narrative
   b. Table I-Qualifier Recommendation Summary Table
   c. Table II-Overall Evaluation of Data
   d. Table III-Tentatively Identified Compounds
   e. Data Summary Tables
3. Standard Data Validation Worksheets
   a. Manual
   b. Automated Data Review Reports (i.e., CADRE)
4. Support Documentation
   a. Copy of non-CLP analytical method, e.g., DAS methods, modified EPA methods
   b. Copies of PES Score Reports/Vendor PES QC Acceptance Limits
   c. Copies of Telephone Logs/Communication Forms for:
      - RSCC communications
      - Requests for laboratory data resubmissions/clarifications
      - Communications with samplers resolving sampling problems
      - Communications with TPO/Lead Chemist to report contractually-deficient data for rejection/reduced payment
      - Communications with EPA Site Manager concerning possible data rejection
      - EPA Site Manager authorization for alternate DV tier
   d. Copies of data supporting recommendations for reduced payment resulting from CSF Audit and/or PE sample result evaluation
   e. Original data to support recommendations for data rejection/non-payment identified from Tier II or Tier III data validation
   f. Copies of field sampling notes and/or field report supplied by field sampler
   g. Copies of EPA-approved amendments to QAPjP and/or SAP describing modified criteria to be used for validating site data
5. CSF Completeness Evidence Audit
6. DQO Summary Form

The data validator is responsible for implementing all corrective actions required by the contractor Lead Chemist in response to EPA-NE data validation oversight findings.

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

VOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

NA

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: Ann Cognetta

Date: Aug. 1, 2011

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

SEMIVOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		
	See (data) (validation) (report				

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: (Ann Cognetti)

Date: August 1, 2011

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB

COMPLETE SDG FILE (CSF) AUDIT

Organic Fractions: PAH, PCB, PEST

Missing Information	Date Lab Contacted	Date Received

Validator: Ann Cognetta Date: 8/1/11

EPA-NE - Data Validation
VOA/SV - Pest/PCB-I

Sampler: T. Rojahn Company: Tetra Tech Contacted: Yes (No) Date: _____

I. PRESERVATION AND HOLDING TIMES - Circle sample numbers with exceeded technical holding times or omitted preservation.
List all required preservation codes and circle omitted preservation codes.
Circle all exceeded technical holding times.
Identify extraction technique after "# of Days"/(*Extraction Code).

Sample No. (TR No.)	Matrix	Pres. Code	Date Sampled	VOA			BNA					PEST/PCB				
				Date Analyzed	# of Days from Samp. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action
			See data validation report													

Preservation Code:
1. Cool @ 4°C (± 2°)
2. Preserve with HCl to at least pH 2
3. Protect from light
4. Freeze
5. Room Temperature (Avoid excessive heat)

(*Extraction Code:)
L/L - Liquid/Liquid
SON - Sonication
SEP - Separatory Funnel
SOX - Soxhlet
SPE - Solid Phase Extraction

Action Code:
J - Estimate (J) Detected Values
UJ - Estimate (UJ) Non-Detected Values
R - Reject (R) Non-Detected Values

Validator: Ann Cognetti Date: August 1, 2011

II. GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)

List all Instrument Performance Checks that are outside method QC tuning acceptance criteria.

Volatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action

Comments: NA

Semivolatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action

Comments: See data validation report

If tuning compounds and criteria are different from those specified in CLP SOW OLM03.1, then the validator should include a copy of the method-specific tuning criteria with this worksheet.

Validator: Ann Cognetta

Date: August 1, 2011

EPA-NE - Data Validation Worksheet
VOA/SV-III

III. INITIAL CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Instrument	Parameter	Matrix	Compound	% RSD	$\overline{RRF}$	Samples Affected	Action

Comments: See data validation report

Validator: Ann Cognetti

Date: 8/1/11

EPA-NE - Data Validation Worksheet

VOA/SV-IV

IV. CONTINUING CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Date of CCAL	Instrument	Parameter	Matrix	Compound	%D	RRF	Samples Affected	Action

Comments:

See (data validation) report

Validator: John Cognetti

Date: 8/1/11

EPA-NE - Data Validation Worksheet

VOA/SV - Pest/PCB-V-A

V. BLANK ANALYSIS

List the blank contamination below. Concentration Level:____

Sampler: T. Rojahn Company: Tetra Tech Contacted: Yes (No) Date:____

1. Laboratory: Method, Storage and Instrument Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)
	See data validation report					

2. Field: Equipment (Rinsate), Trip and Bottle Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

Validator: Ann Coquette Date: 8/1/11

3. Blank Actions - List the maximum concentrations of blank compounds.

Compound	Type of Blank	Date Blank Sampled/Originated	Max. Conc. (units)	Action Level (units)	Sample QL	Samples Affected	Action

Comments: See data validation report

Validator: Ann Cognetta

Date: 8/1/11

VI. VOA SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Volatile Method QC Acceptance Criteria				
	Toluene-d_8	BFB	DCE-d_4	Other:	
OLM03.2	Water 88-110 Soil 84-138	Water 86-115 Soil 59-113	Water 76-114 Soil 70-121		
OLC02.1	NA	80-120	NA		
Other:					
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**
	NA				

Validator: Ann Cognetta

Date: 8/1/11

VI. SV SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Base/Neutral Method QC Acceptance Criteria					
	NBZ-d_5	2-FBP	TPH-d_{14}	1,2-DCB-d_4*	Other:	
OLM03.2	Water Soil 35-114 23-120	Water Soil 43-116 30-115	Water Soil 33-141 18-137	Water Soil 16-110 20-130		
OLC02.1	40-110	30-110	20-140	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

Method	Acid Method QC Acceptance Criteria					
	Phenol-d_5	2-FP	2,4,6-TBP	2-CP-d_4*	Other:	
OLM03.2	Water Soil 10-110 24-113	Water Soil 21-110 25-121	Water Soil 10-123 19-122	Water Soil 33-110 20-130		
OLC02.1	15-115	15-110	15-130	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

* Advisory Surrogates - OLM03.2

Validator: Ann Cognetti

Date: August 1, 2011

VII. INTERNAL STANDARD PERFORMANCE

List the internal standards that are outside the area count and retention time method QC acceptance criteria.
IS Area Count method QC acceptance criteria:_____
IS Retention Time method QC acceptance criteria:_____

Sample Number (TR#)	Date and Time Analyzed	Instrument	Parameter	IS Outside Area Count and/or RT Criteria	__IS Area	RT Shift	Acceptable Range (IS area or RT shift)	Action
	See data validation report							

Validator: Ann Cognetta

Date: August 1, 2011

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-VIII

VIII. MATRIX SPIKE/MATRIX SPIKE DUPLICATE - List all MS/MSD analytes that are outside method QC acceptance criteria.

Use a separate worksheet for each MS/MSD pair.

Sample # _____ Matrix _____ Concentration Level _____

Parameter	Compound	MS %Rec	MSD %Rec	RPD	Method QC Limits		Concentration			% RSD	Action
					% Rec	RPD	Unspiked Sample	MS	MSD		

Validator: Ann Cognetti

Date: 8/1/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-IX

IX. FIELD DUPLICATE PRECISION - List all field duplicate analytes that are outside criteria.

Use a separate worksheet for each field duplicate pair.

Sample Number _____ Duplicate Sample Number _____ Matrix _____

Parameter	Compound	Sample Conc.	Sample QL		Duplicate Conc.	Duplicate QL		RPD	QC Acceptance Criteria RPD or NA*	Action
			SQL	2xSQL		SQL	2xSQL			

* For instances where one duplicate result is ND (or reported less than the sample QL).

Does the MS/MSD data indicate acceptable laboratory precision? Y N

Comments: _____

_____

Sampler Name: _____ Contractor Name: _____ Date Contacted: _____

Reason for Contact and resolution obtained: _____

Validator: Ann Cognetta Date: August 1, 2011

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-X

X. SENSITIVITY CHECK (Method Detection Limit Study)

List all compounds, surrogates, and internal standards that are outside the MDL criteria.

- Has an appropriate MDL study been submitted with seven replicates for each compound and matrix of interest? Y N
- Date of Preparation/Analysis: _____ Within 1 year? Y N
- Instrument I.D.: _____ Same as samples? Y N
- Column I.D.: _____ Same as samples? Y N

Matrix	Compound	MDL > QL	Method QC Limits < 80% or > 120%	IS Outside Area Count and/or RT Criteria	RSD > 20%	Samples Affected	Action

If an MDL study has not been submitted, use only the LFB results to evaluate data.

(Laboratory Fortified Blank) - List all LFB compounds, surrogates and internal standards that are outside criteria.

- Has an appropriate and complete LFB been submitted at the proper frequency? Y N
- Does it contain all target compounds at the method-required QLs? Y N
- Was the LFB spiked with a standard from a source (vendor) independent of the calibration standard? Y N

Matrix	Compound	Method QC Limits < 60% or > 140% Other:	IS Outside Area Count and/or RT Criteria	Samples Affected	Action

Validator: Ann Cognetta

Date: August 1, 2011

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XI

XI. ACCURACY CHECK (Performance Evaluation Results) - List all analytes that are outside criteria.

SDG No: _____ CASE: _____

Are more than one-half of the PES analytes within criteria for each parameter. **Y N**

PE Sample Number	Ampule Number	Parameter	Type of PES	Matrix	Analyte	Conc.	Region I EPA PES Scores*	Non-EPA PES Scores**	Samples Affected	Action

* For Region I PESs indicate the Region I PES Score Report Result: Action High; Action Low; TCL MISS; TCL CONTAMINANT; TIC HIT; TIC MISS; TIC CONTAMINANT

** For Non-EPA PESs indicate the Non-EPA PES Score: PES COMPOUND MISS; PES COMPOUND CONTAMINANT; PES COMPOUND HIT (% Recovery Limits)

Validator: Ann Cognetti Date: 8/1/11

XII. TARGET COMPOUND IDENTIFICATION - List the analytes that are outside the acceptance criteria.

Sample Number	Compound	___MS Ions	_____RRT	Action

Validator: Ann Cognetti

Date: 8/1/11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XIII

XIII. SAMPLE QUANTITATION

Recalculate, from the raw data, the concentrations for one positive detect and one reported sample quantitation limit for a non-detect in a diluted sample or soil sample per fraction. (Note: Although Section XIII, C.1.a, requires that one calculation for each fraction in each sample be performed, the validator is only required to reproduce an example, for each fraction, of one positive detect and one sample quantitation limit calculation on this worksheet.)

Do all soil/sediment samples have % solids greater than 30%? **Y N**
If no, list sample numbers_____

Fraction		Calculation
VOA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
BNA		See Data Validation Report
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
Pesticide/PCB		See Data Validation Report
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		

Validator: Ann Cognetta

Date: August 1, 2011

XIV. TENTATIVELY IDENTIFIED COMPOUNDS (TICs)

List the 5 TICs having the highest concentration for each sample parameter.

Sample Number	Parameter	Compound	____RRT	__Est. Conc.	Action

Validator: John Cognetta

Date: 8-1-11

EPA-NE - Data Validation Worksheet
VOA/SV-XV

XV. SEMIVOLATILE CLEANUP - List all analytes that are outside method cleanup QC criteria.

Cleanup Procedure	Instrument # or Lot #	Date/Time GPC Calibrated or Check Solution Analyzed	Compound	% Rec	QC Limits	Samples Affected	Action

Did the GPC column meet; resolution requirements? Y or N
peak shape requirements? Y or N
retention time shift requirements? Y or N

Was the GPC calibration, Silica Gel cleanup checked at the method required frequency with correct compounds and concentrations? Y or N

Were all compounds less than QL for the GPC/Silica Gel/Acid-Partition blank? Y or N

Did the blank surrogate recoveries and IS area counts and RTs (if added) meet method QC acceptance criteria? Y or N

Comments: _____

Validator: Ann Cognetta Date: 8-1-11

EPA-NE
Data Validation Worksheet Cover Page - Page 1

Site Name NSB New London
Reference No. _____

REGION I INORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name Katahdin
Case/Project No. 1126 02625
SDG No. SE 3870
No. of Samples/Matrix 1- sediment

SOW/Method No. 6010
Sampling Date(s) April 4, 2011
Shipping Date(s) _____
Date Rec'd by lab April 6, 2011

Traffic Report Sample Nos. _____

Equipment Blank No. _____
Bottle Blank No. _____
Field Duplicate Nos. _____
PES Nos. _____

The Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision _____ was used to evaluate the data and/or approved modifications to the EPA-NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attach modified criteria from EPA approved QAPP or amendment to QAPP).

A Tier II or Tier III evaluation was used to validate the data (circle one). If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc., that received partial Tier III validation.

The data were evaluated based upon the following parameters:

- Overall Evaluation of Data
- Data Completeness (CSF Audit - Tier I)
- Preservation and Technical Holding Times
- ICP-MS Tune
- Calibrations
- Blanks
- ICP-AES Interference Check Sample (ICS)
- ICP-MS Interference Check Sample (ICS)
- ICP-MS Internal Standards
- Matrix Spikes
- Laboratory Duplicate Samples
- Field Duplicates
- ICP Serial Dilutions
- Sensitivity Check
- Performance Evaluation Samples/Accuracy Check
- Analyte Quantitation and Reported Quantitation Limits
- System Performance

Region I Definitions and Qualifiers:

A - Acceptable Data
J - Numerical value associated with analyte is an estimated quantity.
R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.
U - Analyte not detected at that numerical sample quantitation limit.
UJ - The sample quantitation limit is an estimated quantity.
BB, EB - Analyte detected in aqueous bottle blank or aqueous equipment blank associated with soil/sediment samples.

Validator's Name Ann Cognetti Company Name Tetra Tech Phone Number (412) 921-8862

Date Validation Started August 1, 2011 Date Validation Completed August 1, 2011

EPA-NE
Data Validation Worksheet Cover Page - Page 2

Check if all criteria are met and no hard copy worksheet is provided. Indicate NA if worksheet is not applicable to the analytical method. Note: there is no standard worksheet for System Performance; however, the validator must document all system performance issues in the Data Validation Memorandum.

INORG Worksheets:

INORG	COMPLETE SDG FILE (CSF) AUDIT	✓
INORG-I	PRESERVATION AND TECHNICAL HOLDING TIMES	✓
INORG-II	ICP-MS TUNE	
INORG-III-A/B	CALIBRATIONS	✓
INORG-IV-A/B	BLANKS	✓
INORG-IV-C.1	BLANKS	
INORG-IV-C.2	BLANKS	
INORG-V-A	ICP-AES INTERFERENCE CHECK SAMPLE - ICSAB	✓
INORG-V-B.1	ICP-AES INTERFERENCE CHECK SAMPLE - ICSA	✓
INORG-V-B.2	ICP-AES INTERFERENCE CHECK SAMPLE - ICSA	✓
INORG-VI-A	ICP-MS INTERFERENCE CHECK SAMPLE - ICSAB	
INORG-VI-B	ICP-MS INTERFERENCE CHECK SAMPLE - ICSA	
INORG-VII	ICP-MS INTERNAL STANDARDS	
INORG-VIII	MATRIX SPIKES	
INORG-IX	LABORATORY DUPLICATE SAMPLES	
INORG-X	FIELD DUPLICATES	
INORG-XI	ICP SERIAL DILUTIONS	
INORG-XII-A/B	SENSITIVITY CHECK	✓
INORG-XIII-A	PE SAMPLES/ACCURACY CHECK- LCS	✓
INORG-XIII-B	PE SAMPLES/ACCURACY CHECK- PE RESULTS	✓
INORG-XIV	ANALYTE QUANTITATION AND REPORTED QUANTITATION LIMITS	✓
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	✓

I certify that all criteria were met for the worksheets checked above.

Signature: Ann Cognetti

Name: Ann Cognetti

Date: August 1, 2011

The data validator generates a Data Validation Report, applicable to Data Validation Tiers II and III, that consists of the following components in the order specified below: (Refer to Part I - Data Validation Manual, Section 11 for a description of each of the Data Validation Report components).

1. Organic Regional Data Assessment/Inorganic Regional Data Assessment (ORDA/IRDA) Form
2. Data Validation Memorandum
   a. Narrative
   b. Table I-Qualifier Recommendation Summary Table
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   d. Data Summary Tables
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   b. Automated Data Review Reports
4. Support Documentation
   a. Copy of non-CLP analytical method, e.g., DAS methods, modified EPA methods
   b. Copies of PES Score Reports/Vendor PES QC Acceptance Limits
   c. Copies of Telephone Logs/Communication Forms for:
      - RSCC communications
      - Requests for laboratory data resubmissions/clarifications
      - Communications with samplers resolving sampling problems
      - Communications with PO/DV Chemist/Lead Chemist to report contractually-deficient data for rejection/reduced payment
      - Communications with EPA Site Manager concerning possible data rejection
      - EPA Site Manager authorization for alternate DV tier
   d. Copies of data supporting recommendations for reduced payment resulting from CSF Audit and/or PE sample result evaluation
   e. Original data to support recommendations for data rejection/non-payment identified from Tier II or Tier III data validation
   f. Copies of field sampling notes and/or field report supplied by field sampler
   g. Copies of EPA-approved amendments to QAPP and/or SAP describing modified criteria to be used for validating site data
5. CSF Completeness Evidence Audit
6. DQO Summary Form

The data validator is responsible for implementing all corrective actions required by the contractor Lead Chemist in response to EPA-NE data validation oversight findings.

EPA-NE - Data Validation Worksheet

Overall Evaluation of Data - Data Validation Memorandum - Table II

Site: NSB New London Case: _____ SDG: SE3870

INORGANICS					
DQO (List all DQOs)	Sampling and/or Analytical Method Appropriate? (Yes or No)	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		
See data validation report					

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: Ann Cognetta

Date: August 1, 2011

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG

COMPLETE SDG FILE (CSF) AUDIT

Inorganic Parameters: Metals; total solids

Missing Information	Date Lab Contacted	Date Received

Validator: Ann Cognetta

Date: August 1, 2011

EPA-NE - Data Validation Worksheet
INORG-I

I. PRESERVATION AND HOLDING TIMES

Circle sample numbers with exceeded technical holding times or omitted preservation.
Circle all exceeded technical holding times.

Sample No.	Matrix	Pres. Code		Date Sampled	Metals		Hg		CN		Action
		Metals	CN		Date Analyzed	# of Days from Samp. to Analysis	Date Analyzed	# of Days from Samp. to Analysis	Date Analyzed	# of Days from Samp. to Analysis	

See Data Validation Report

Preservation Code:
1. Cool (≤ 6°C)
2. pH < 2 with HNO_3
3. pH > 12 with NaOH
4. Room Temperature
5. Freeze
6. Reducing agent (for oxidants)
7. Treated for sulfides
8. Other - _____

Action Code:
J - Estimate (J) Detected Values
UJ - Estimate (UJ) Non-Detected Values
R - Reject (R) Non-Detected Values

Sampler: T. Rojahn Company: Tetra Tech Contacted: Y (N) Date: _____

Validator: Ann Cognetta Date: 8-1-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-II

II. ICP-MS TUNE

List all Tunes that are outside method QC acceptance criteria.

Method:_____

Method QC acceptance criteria for mass calibration:_____

Method QC acceptance criteria for resolution check/peak width:_____ at_____% peak height.

Method QC acceptance criteria for % RSD:_____

Analysis Date and Time	Analyte	Mass Calibration			Mass Resolution		% RSD of Absolute Signals	Analyte/Samples Affected	Action
		True Mass (amu)	Measured Mass (amu)	Absolute Difference of Masses (amu)	Peak Width (amu)	% Peak Height			

Comments:

Validator: Ann Cognetti

Date: 8-1-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-III-A/B/C

III. CALIBRATIONS

A. Instrument Calibration - List all calibration correlation coefficients that are outside the method QC acceptance criteria.
Calibration correlation QC acceptance criteria: _____ Calibration Type: _____

Date/Time	Instr.	Analyte	Corr. Coef.	Samples Affected	Action

B. Initial and Continuing Calibration Verifications - List all ICV and CCV analyte recoveries that are outside the method QC acceptance criteria.
ICV method QC acceptance criteria: _____ CCV method QC acceptance criteria: _____

Date	Instr.	Analyte	ICV/CCV #	% R	Samples Affected	Action

C. Quantitation Limit Check Standard - List all QL Check Standard analytes that are outside method QC acceptance criteria.
QL Check Standard method QC acceptance criteria: _____

Date	Instr.	Analyte	QL Check Std. #	% R	Affected Range	Samples Affected	Action

Comments: See (data) validation report

Validator: Ann Cognetti

Date: 8-1-11

EPA-NE - Data Validation Worksheet
INORG-IV-A/B

IV. BLANKS - List the blank contamination and negative blank results below.

Sampler: T. Rojahn Company: Tetra Tech Contacted: Y (N) Date: _____

A. Laboratory: Preparation (Method) and Calibration (Instrument) Blanks

Date Prepared	Date Analyzed	Blank Type (ICB/CCB#/Prep Blank)	Matrix	Instrument	Analyte	Conc. (units)

B. Field: Equipment (Rinsate) and Bottle Blanks

Date Sampled	Date Analyzed	Sample No. (Blank Type)	Matrix	Instrument	Analyte	Conc. (units)

Were the proper number of blanks analyzed at the proper frequency? Y N

For ICP MS - Are internal standard responses in all blanks within method QC acceptance criteria? Y N

Comments: See Data Validation Report

Validator: John Cognetti

Date: 8-1-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-IV-C.1
IV. BLANKS

C.1 Blank Contamination Worksheet

Circle the highest concentration of each contaminant.

Analyte	Date Analyzed	ICB	CCB							PBW	PBS	EB	BB	Max. Conc.	Action Level
			1	2	3	4	5	6	7						
Aluminum															
Antimony															
Arsenic															
Barium															
Beryllium															
Cadmium															
Calcium															
Chromium															
Cobalt															
Copper															
Iron															
Lead															
Magnesium															
Manganese															
Mercury			See data validation report												
Nickel															
Potassium															
Selenium															
Silver															
Sodium															
Thallium															
Vanadium															
Zinc															
Cyanide															

Validator: Ann Cognetta

Date: 8-1-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-IV-C.2

IV. BLANKS

C.2 Blank Actions - List the maximum concentrations of each analyte among all blanks associated with each sample.

Analyte	Type of Blank	Date Blank Originated	Max. Conc. (units)	Blank Action Level (units)	Sample QL	Samples Affected	Action

Comments: See data validation report

Validator: John Cognetta

Date: 8-1-11

DRAFT 11/08

V. A. ICP-AES INTERFERENCE CHECK SAMPLE - ICSAB

1. List all analytes in the ICSAB that are outside ICSAB percent recovery criteria.

Date	Analyte	%R	Conc. of Interferents Observed in ICSAB (ug/L)				Samples Affected	Action
			Al	Ca	Fe	Mg		

Comments: See data validation report

Validator: Ann Cognette

Date: August 1, 2011

EPA NE - Data Validation Worksheet
INORG-V-B.1

V. B.1 ICP-AES INTERFERENCE CHECK SAMPLE - ICSA

1. List all analytes in the ICSA that are outside ICSA criteria.

Date	Analyte	MDL (ug/L)	ICSA Observed Conc. (ug/L)	ICSA True Value (ug/L)	Criteria: 80-120% R or TV±2xMDL	Conc. of Interferents Observed in ICSA (ug/L)				Associated Samples
						Al	Ca	Fe	Mg	

Comments: See data validation report

Validator: Ann Cognetta

Date: 8-11

EPA NE - Data Validation Worksheet
INORG-V-B.2

V. B.2 ICP-AES INTERFERENCE CHECK SAMPLE - ICSA

2. List all affected sample results.

Affected Sample	Interferent	Conc. in Sample (ug/L)	Analyte	Conc. in Sample (ug/L)	Estimated Interference in Sample (ug/L)	Action

Comments:
See data validation report

Validator: Ann Cognetti

Date: 8-1-11

DRAFT 11/08

EPA NE - Data Validation Worksheet
INORG-VI-A

VI. A. ICP-MS INTERFERENCE CHECK SAMPLE - ICSAB

List all analytes that are outside ICSAB criteria of 80-120% R.

Date	Analyte	%R	Samples Affected	Action

Comments: See data validation report

Validator: Adm Cognetti

Date: 8-1-11

DRAFT 11/08

EPA NE - Data Validation Worksheet
INORG-VI-B

VI. B. ICP-MS INTERFERENCE CHECK SAMPLE - ICSA

List all analytes that are outside ICSA criteria.

Date	Analyte	MDL (ug/L)	ICSA Observed Conc. (ug/L)	ICSA True Value (ug/L)	Criteria: 80-120% R or TV ± 2xMDL	Samples Affected	Action
Comments:							

Validator: Ann Cognetta

Date: 8-1-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-VII

VII. ICP-MS INTERNAL STANDARDS

List all internal standards that are outside method QC acceptance criteria.

IS method QC acceptance criteria: _____

Sample Number	Date and Time Analyzed	IS, amu	% RI	Analytes Affected (amu)	Action

Comments:

Validator: Ann Cognetta

Date: 8-1-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-VIII

VIII. MATRIX SPIKES - List all matrix spike analytes that are outside method QC acceptance criteria.

Use a separate worksheet for each matrix spike sample.

Sample No.: _____ Matrix: _____

Method	Analyte	Spiked Sample Result	Sample Result	Amount of Spike Added	MS % Recovery	Method QC Limits % Recovery	Post-Digest Spike % Recovery	Action

Comments:

Validator: Ann Cognetta

Date: 8-1-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-IX

IX. LABORATORY DUPLICATE SAMPLES - List all analytes that are outside method QC acceptance criteria for the specific matrix.

Use a separate worksheet for each laboratory duplicate sample.

Sample No.:_____ Duplicate Sample No.:_____ Matrix:_____

Laboratory duplicate sample method QC acceptance criteria:_____

Method	Analyte	Sample Conc.	Sample		Duplicate Conc.	Duplicate		RPD or Abs. Diff.	QC Acceptance Criteria (RPD or Abs. Diff.)	Action
			SQL	5xSQL		SQL	5xSQL			

Do the field duplicate sample data indicate acceptable field precision? Y N

Comments:_____

Validator: Ann Cognetta

Date: 8-1-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-X

X. FIELD DUPLICATES - List all field duplicate analytes that are outside criteria.

Use a separate worksheet for each field duplicate pair.

Sample No.:_____ Duplicate Sample No.:_____ Matrix:_____

Method	Analyte	Sample Conc.	Sample		Duplicate Conc.	Duplicate		RPD or Abs. Diff.	QC Acceptance Criteria (RPD or Abs. Diff.)	Action
			SQL	5xSQL		SQL	5xSQL			

Do the laboratory duplicate sample data indicate acceptable laboratory precision? Y N

Comments: _____

_____

Sampler Name: _____ Contractor Name: _____ Date Contacted: _____

Reason for contact and resolution obtained: _____

Validator: Ann Cognetti Date: 8-1-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-XI

XI. ICP SERIAL DILUTIONS

Use a separate worksheet for each serial dilution sample.

Sample No.:_____ Matrix:_____ Method:_____

List all serial dilution analytes that are outside method QC acceptance criteria.

% Difference method QC acceptance criteria: _____
Minimum concentration required to apply the % D criteria (e.g., 50x MDL): _____

Analyte	MDL	Min. Conc. Required	Sample Result	Serial Dilution Sample Result (corrected for dilution)	% D	Action

Comments:

Validator: Ann Cognetta

Date: 8-1-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-XII-A/B

XII. SENSITIVITY CHECK

A. Method Detection Limit Study - List all analytes that are outside the MDL criteria.

- Has an appropriate MDL study been submitted with seven replicates for each analyte and matrix of interest? **Y N**
- Were samples analyzed within one year of the MDL study and on the same instrument? **Y N**

Matrix	Analyte	MDL	MDL > QL	Samples Affected	Action

If an MDL study has not been submitted, use only the LFB results to evaluate data.

B. Laboratory Fortified Blank - List all LFB analytes that are outside the LFB criteria.

- Has an appropriate and complete LFB been submitted at the proper frequency? **Y N**
- Does the LFB contain all target analytes at their QLs? **Y N**

Matrix	Method	Analyte	% R	Method QC Limits % R	Samples Affected	Action

Comments: _____

Validator: Ann Cognetti Date: 8-1-11

EPA-NE - Data Validation Worksheet
INORG-XIII-A

XIII. PERFORMANCE EVALUATION SAMPLES/ACCURACY CHECK

A. Laboratory Control Samples - List all analytes that are outside criteria.

SDG No.:_____ Case:_____

Are more than one-half of the LCS analytes within criteria for each parameter and method? **Y** **N**

Date Prepared	Date Analyzed	Parameter/ Method	Matrix	Analyte	% Recovery (or Observed Conc.)	Method QC Acceptance Criteria	Samples Affected	Action
Comments:								

Validator: Ann Cognetti

Date: 8-1-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-XIII-B

XIII. PERFORMANCE EVALUATION SAMPLES/ACCURACY CHECK

B. Performance Evaluation Results - List all analytes that are outside criteria.

SDG No.:_____ Case:_____

Indicate the source of the PES: Region 1 EPA PES Non-EPA PES

Are more than one-half of the PES analytes within criteria for each parameter and method? **Y** **N**

PE Sample Number	Ampule Number	Parameter/ Method	Type of PES	Matrix	Analyte	Conc.	PES Score*	Samples Affected	Action

* For Region I PESs indicate the Region I PES Score Report Result: Action High, Action Low, Analyte Missed, Contaminant.
For Non-EPA PESs indicate the Non-EPA PES Score: PES Analyte Missed; PES Analyte Contaminant; PES Analyte Hit (% Recovery Limits).

Comments:_____

Validator: Ann Cognetta Date: 8-1-11

DRAFT 11/08

EPA-NE - Data Validation Worksheet
INORG-XIV

XIV. ANALYTE QUANTITATION AND REPORTED QUANTITATION LIMITS

Recalculate, from the raw data, the concentrations for one positive detect and one reported sample quantitation limit for a non-detect in a diluted sample or soil sample per analytical method. (Note: Although Section XIV, C.2.a, requires that one calculation for each method in each sample be performed, the validator is only required to reproduce an example, for each method, of one positive detect and one sample quantitation limit calculation on this worksheet.)

Do all soil/sediment samples have % solids greater than 30%? Y (N)

- If no, were any steps employed to address the high moisture content? _____
- Indicate the action and list the affected sample nos.: _____

Method		Calculation
ICP-AES		See data validation report
Sample No.:		
Reported Analyte:		
Reported Value:		
Non-Detected Analyte:		
Reported Quantitation Limit:		
ICP-MS		
Sample No.:		
Reported Analyte:		
Reported Value:		
Non-Detected Analyte:		
Reported Quantitation Limit:		
Mercury		
Sample No.:		
Reported Value:		
Sample No.:		
Reported Quantitation Limit:		
Cyanide		
Sample No.:		
Reported Value:		
Sample No.:		
Reported Quantitation Limit:		

Validator: Ann Cognetta

Date: 8-1-11

APPENDIX D

SUPPORT DOCUMENTATION

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO-WE55 NEW LONDON, CT
SE3870

Sample Receipt

The following sample was received on April 6, 2011 and was logged in under Katahdin Analytical Services work order number SE3870 for a hardcopy due date of July 15, 2011.

KATAHDIN Sample No.	TTNUS Sample Identification
SE3870-1	2W-SD-SD162-0001

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

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

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

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

Organics Analysis

The sample of work order SE3870 was analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA and/or for the specific methods listed below or on the Report of Analysis.

8081 Analysis

The sample and associated QC were subjected to the GPC sample clean-up process.

Surrogate recoveries for the sample and QC, as well as spike recoveries for the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD), were evaluated using laboratory established acceptance limits.

8082 Analysis

The sample and associated QC were subjected to the GPC sample clean-up process.

Surrogate recoveries for the sample and QC, as well as spike recoveries for the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD), were evaluated using laboratory established acceptance limits.

Sample SE3870-1 had low recoveries for the extraction surrogates TCX and DCB on both channels, which were outside the laboratory established acceptance limits. The pesticide extraction aliquot had similar surrogate recoveries that are within the pesticide surrogate acceptance limits, which are wider than the PCB acceptance limits. There were no target analytes detected above the MDL in the sample and the associated QC was acceptable. For these reasons, the sample was not reextracted.

The method blank WG93746-1, LCS and LCSD, WG93746-2 and 3, had low recoveries for the surrogate TCX on channel A, which were outside of the laboratory established acceptance limits. Since the recoveries were acceptable on channel B, the associated sample was not reextracted.

The closing calibration verification standard (CV) (file 7EG172) had high responses for Aroclor 1016 on both channels, as well as a high response for the surrogate DCB on channel B. These responses resulted in %D's that were outside of the DoD QSM acceptance limits of 20%. Since a high response would indicate a high bias and there were no target analytes detected above the MDL in the associated sample, the sample was not reanalyzed.

8270 SIM Analysis

The sample and associated QC were subjected to the GPC sample clean-up process.

Surrogate recoveries for the sample and QC were evaluated using laboratory established acceptance limits. The LCS/LCSD recoveries were evaluated using nominal acceptance limits.

The LCSD WG93747-3 had high responses for the internal standards chrysene-d12 and perylene-d12 that resulted in %D's which were outside the DoD QSM acceptance limit of -50% to +100% of the response of the internal standard of the midpoint standard of the initial calibration . Since the LCS WG93747-2 had acceptable internal standard responses and the LCS/LCSD had acceptable spiked recoveries, the LCSD was not re-analyzed.

The independent check standard (file G1621) associated with the initial calibration on 06/28/2011 had a low concentration for the target analyte indeno(1,2,3-cd)pyrene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

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

Metals Analysis

The sample of Katahdin Work Order SE3870 was prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846.

2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998, & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Solid-matrix Katahdin Sample Number SE3870-1 was digested for ICP analysis on 07/11/11 (QC Batch BG11ICS0) in accordance with USEPA Method 3050B.

ICP analyses of Katahdin Work Order SE3870 sample digestates were performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010C. All samples were analyzed within holding times and all analytical run QC criteria were met.

Reporting of Metals Results

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

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

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

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

Wet Chemistry Analysis

The samples of Work Order SE3870 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Annual Book of ASTM Standards", Method D2216-98 "Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass".

All analyses were performed within analytical holding times. All quality control criteria were met.

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

Leslie Dimond
07/4/11

Leslie Dimond
Quality Assurance Officer

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4187 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Tony Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB # 8631 2526 3713		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE16845 GW

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS: PAHs & SELECT PESTICIDES	PCBs & SELECT METALS	PAHs	COMMENTS
									G	4°C				
4/04	1540	2W-SD-SD160-0001	SD 160	0	0.33	SD	G	2			*	**		SEE COMMENT
4/04	1555	2W-SD-SD162-0001	SD 162	0	0.33	SD	G	2			*	**		↓
4/04	0000	FD-040411-01	QC	0	0.33	SD	G	2			1	1		PHASE I ANALIZE
4/05	0815	2W-SD-SD138-0001	SD 138	0	0.33	SD	G	2			1	1		↓
4/05	0840	2W-SD-SD137-0001	SD 137	0	0.33	SD	G	2			*	**		SEE COMMENT
4/05	0855	2W-SD-SD128-0001	SD 128	0	0.33	SD	G	2			*	**		
4/05	0925	2W-SD-SD124-0001	SD 124	0	0.33	SD	G	2			*	**		
4/05	0950	2W-SD-SD125-0001	SD 125	0	0.33	SD	G	2			*	**		↓
4/05	1015	2W-SD-SD118-0001	SD 118	0	0.33	SD	G	2			1	1		PHASE I ANALIZE
4/05	1040	2W-SD-SD119-0001	SD 119	0	0.33	SD	G	2			1	1		
4/05	1100	2W-SD-SD120-0001	SD 120	0	0.33	SD	G	2			1	1		
4/05	1140	2W-SD-SD126-0001	SD 126	0	0.33	SD	G (TR)	2 (TR)			+ (TR)	+	1	
4/05	1150	2W-SD-SD121-0001	SD 121	0	0.33	SD	G	2			1	1		↓

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Tony Rojahn	4-05-11	1600	1. RECEIVED BY FED EX	4-05-11	1600
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	4-6-11	0930
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD " " " .

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

1100000

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 4188 | PAGE 1 OF 1

PROJECT NO: 112602625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE) Tony Rojahn		FIELD OPERATIONS LEADER T. ROJAHN	PHONE NUMBER 412 921 8857	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FED EX AB# 8631 2526 3713		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE1685 GW

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)								COMMENTS
									G	G							
									PRESERVATIVE USED		4°C	4°C					
									TYPE OF ANALYSIS		PAHs & SELECT PESTICIDES	PCBs & SELECT METALS					
4/05	1216	2W-SD-SD141-0001	SD 141	0	0.33	SD	G	2	* 1	** 1							SEE COMMENT
4/05	1235	2W-SD-SD136-0001	SD	0	0.33	SD	G	2	1	1							PHASE I ANALYZE
4/05	1250	2W-SD-SD134-0001	SD	0	0.33	SD	G	2	1	1							↓

1. RELINQUISHED BY Tony Rojahn	DATE 4-05-11	TIME 1600	1. RECEIVED BY FED EX	DATE 4-05-11	TIME 1600
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 4-6-11	TIME 0913
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS.
** REFRIGERATE CONTAINER TO 4°C & HOLD. " " " .

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

2100000

Katahdin Analytical Services, Inc. — Sample Receipt Condition Report

Client: Tetra Tech	KAS PM: ~~SMB~~ KAP	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: FedEx
KAS Work Order#: SE1684S	KIMS Review By: GN	Received By: GN
SDG #:	Cooler: 1 of 2	Date/Time Rec.: 4-6-11/0930

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 1.2
Samples received at <6 °C w/o freezing?	—				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

Katahdin Analytical Services, Inc. **Sample Receipt Condition Report**

Client: Tetra Tech	KAS PM: SM KAP	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: Fed Ex
KAS Work Order#: SE1684S	KIMS Review By: GN	Received By: GN
SDG #: GN	Cooler: 2 of 2	Date/Time Rec.: 4-6-11/09:30

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?					
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 2.0
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓			✓	The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

HOLDTIME

SDG SE3870

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	MG/KG	2W-SD-SD162-0001	SE3870-001	NM	04/04/2011	07/11/2011	07/11/2011	98	0	98
TS	%	2W-SD-SD162-0001	SE3870-1	NM	04/04/2011	07/07/2011	07/08/2011	94	1	95
SIM	%	2W-SD-SD162-0001	SE3870-1	NM	04/04/2011	07/08/2011	07/12/2011	95	4	99
SIM	UG/KG	2W-SD-SD162-0001	SE3870-1	NM	04/04/2011	07/08/2011	07/12/2011	95	4	99
PCB	%	2W-SD-SD162-0001	SE3870-1	NM	04/04/2011	07/08/2011	07/12/2011	95	4	99
PCB	UG/KG	2W-SD-SD162-0001	SE3870-1	NM	04/04/2011	07/08/2011	07/12/2011	95	4	99
PEST	%	2W-SD-SD162-0001	SE3870-1	NM	04/04/2011	07/08/2011	07/12/2011	95	4	99
PEST	UG/KG	2W-SD-SD162-0001	SE3870-1	NM	04/04/2011	07/08/2011	07/12/2011	95	4	99

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Lab File ID: GD797 DFTPP Injection Date: 06/28/11

Instrument ID: GCMS-G DFTPP Injection Time: 1233

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	36.8
68	Less than 2.0% of mass 69	0.3 (0.6)1
69	Less than 100.0% of mass 198	48.0
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	40.0 - 60.0% of mass 198	59.8
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	24.0
365	1.0 - 100.0% of mass 198	4.0
441	0.0 - 100.0% of mass 443	9.9 (75.9)2
442	40.0 - 100.0% of mass 198	67.5
443	17.0 - 23.0% of mass 442	13.0 (19.2)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00G0628	G1614	06/28/11	1254
02		SSTD8.00G0628	G1615	06/28/11	1345
03		SSTD5.00G0628	G1616	06/28/11	1429
04		SSTD2.00G0628	G1617	06/28/11	1512
05		SSTD0.50G0628	G1618	06/28/11	1555
06		SSTD0.20G0628	G1619	06/28/11	1639
07		SIM IND CHECK	G1621	06/28/11	1806
08					
09					
10					
11					
12					
13					
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15					
16					
17					
18					
19					
20					

Katahdin Analytical Services A0000010

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GCMS-G Calibration Date(s): 06/28/11 06/28/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 1254 1639

LAB FILE ID: RF0.2: G1619 RF0.5: G1618 RF1: G1614
RF2: G1617 RF5: G1616 RF8: G1615

								COEFFICENTS		%RSD	MAX %RSD
COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	A0	A1	OR R^2	OR R^2
1-Methylnaphthalene	0.564	0.584	0.560	0.549	0.517	0.511	AVRG		0.54754572	5.165	15.000
Naphthalene	0.876	0.904	0.890	0.859	0.809	0.801	AVRG		0.85649311	4.972	15.000
2-Methylnaphthalene	29325	60225	110440	219420	496900	957090	LINR	-0.1934740	1.93340921	0.99869	0.99000
Acenaphthylene	1.696	1.733	1.681	1.643	1.635	1.670	AVRG		1.67638405	2.141	15.000
Acenaphthene	1.052	1.086	1.089	1.037	1.013	1.027	AVRG		1.05069170	2.944	15.000
Fluorene	1.123	1.187	1.192	1.147	1.152	1.218	AVRG		1.16987671	2.998	15.000
Phenanthrene	0.957	1.008	1.043	0.994	0.972	0.991	AVRG		0.99433957	2.986	15.000
Anthracene	0.952	0.950	1.011	0.926	0.892	0.964	AVRG		0.94907756	4.155	15.000
Fluoranthene	0.886	0.915	0.895	0.926	0.882	0.957	AVRG		0.91012216	3.168	15.000
Pyrene	1.795	1.864	2.005	1.694	1.888	1.715	AVRG		1.82652043	6.388	15.000
Benzo(a)anthracene	0.845	0.997	1.075	1.026	1.000	1.027	AVRG		0.99527568	7.900	15.000
Chrysene	1.380	1.255	1.196	1.067	1.055	1.026	AVRG		1.16320880	11.922	15.000
Benzo(b)fluoranthene	0.948	1.087	1.155	1.134	1.080	1.200	AVRG		1.10068930	7.894	15.000
Benzo(k)fluoranthene	1.638	1.702	1.461	1.434	1.382	1.366	AVRG		1.49720173	9.327	15.000
Benzo(a)pyrene	0.948	1.044	1.038	1.033	1.008	1.040	AVRG		1.01852293	3.617	15.000
Indeno(1,2,3-cd)pyrene	4553	9411	21501	55733	132380	296120	LINR	0.18423987	1.54202177	0.99815	0.99000
Dibenzo(a,h)anthracene	0.512	0.565	0.706	0.661	0.710	0.679	AVRG		0.63877965	12.783	15.000
Benzo(g,h,i)perylene	0.832	0.892	0.877	0.820	0.838	0.751	AVRG		0.83471055	5.937	15.000
2-Methylnaphthalene-D10	0.970	1.022	1.045	1.014	0.993	0.982	AVRG		1.00427588	2.765	15.000
Fluorene-D10	1.422	1.322	1.260	1.118	1.011	1.062	AVRG		1.19919628	13.410	15.000
Pyrene-D10	1.136	1.216	1.281	1.091	1.225	1.119	AVRG		1.17815581	6.241	15.000

FORM VI SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Lab File ID: GD804 DFTPP Injection Date: 07/12/11

Instrument ID: GCMS-G DFTPP Injection Time: 1154

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	36.3
68	Less than 2.0% of mass 69	0.9 (1.8)1
69	Less than 100.0% of mass 198	48.2
70	Less than 2.0% of mass 69	0.3 (0.6)1
127	40.0 - 60.0% of mass 198	58.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	24.3
365	1.0 - 100.0% of mass 198	3.9
441	0.0 - 100.0% of mass 443	9.4 (81.2)2
442	40.0 - 100.0% of mass 198	59.6
443	17.0 - 23.0% of mass 442	11.6 (19.5)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00G0712	G1717	07/12/11	1212
02	WG93747-BLANK	WG93747-1	G1718	07/12/11	1256
03	2W-SD-SD162-0001	SE3870-1	G1719	07/12/11	1340
04	WG93747-LCS	WG93747-2	G1720	07/12/11	1425
05	WG93747-LCSD	WG93747-3	G1721	07/12/11	1509
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

FORM V SV

Katahdin Analytical Services A0000011

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GCMS-G Calibration Date: 07/12/11 Time: 1212

Lab File ID: G1717 Init. Calib. Date(s): 06/28/11 06/28/11

Init. Calib. Times: 1254 1639

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1-Methylnaphthalene	0.5480000	0.5913100	0.5913100	0.01	7.90	20.00	AVRG
Naphthalene	0.8560000	0.8788100	0.8788100	0.01	2.66	20.00	AVRG
2-Methylnaphthalene	1.1271000	1.0000000	0.6630300	0.01	12.71	20.00	LINR
Acenaphthylene	1.6760000	1.6692000	1.6692000	0.01	-0.40	20.00	AVRG
Acenaphthene	1.0510000	1.0402000	1.0402000	0.01	-1.03	20.01	AVRG
Fluorene	1.1700000	1.1823000	1.1823000	0.01	1.05	20.00	AVRG
Phenanthrene	0.9940000	0.9350400	0.9350400	0.01	-5.93	20.00	AVRG
Anthracene	0.9490000	0.9751800	0.9751800	0.01	2.76	20.00	AVRG
Fluoranthene	0.9100000	0.9616100	0.9616100	0.01	5.67	20.01	AVRG
Pyrene	1.8270000	1.5428000	1.5428000	0.01	-15.56	20.00	AVRG
Benzo(a)anthracene	0.9950000	0.9737100	0.9737100	0.01	-2.14	20.00	AVRG
Chrysene	1.1630000	1.2132000	1.2132000	0.01	4.32	20.00	AVRG
Benzo(b)fluoranthene	1.1010000	1.0154000	1.0154000	0.01	-7.77	20.00	AVRG
Benzo(k)fluoranthene	1.4970000	1.4564000	1.4564000	0.01	-2.71	20.00	AVRG
Benzo(a)pyrene	1.0180000	0.9722900	0.9722900	0.01	-4.49	20.01	AVRG
Indeno(1,2,3-cd)pyrene	1.0293000	1.0000000	0.5719400	0.01	2.93	20.00	LINR
Dibenzo(a,h)anthracene	0.6390000	0.6923000	0.6923000	0.01	8.34	20.00	AVRG
Benzo(g,h,i)perylene	0.8350000	0.8444200	0.8444200	0.01	1.13	20.00	AVRG
2-Methylnaphthalene-D10	1.0040000	1.0252000	1.0252000	0.01	2.11	20.00	AVRG
Fluorene-D10	1.1990000	1.1434000	1.1434000	0.01	-4.64	20.00	AVRG
Pyrene-D10	1.1780000	1.0307000	1.0307000	0.01	-12.50	20.00	AVRG

FORM VII PEST

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG93747-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Lab File ID: G1718 Lab Sample ID: WG93747-1

Instrument ID: GCMS-G Date Extracted: 07/08/11

Matrix: (soil/water) SOIL Date Analyzed: 07/12/11

Level: (low/med) LOW Time Analyzed: 1256

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	2W-SD-SD162-0001	SE3870-1	G1719	07/12/11	1340
02	WG93747-LCS	WG93747-2	G1720	07/12/11	1425
03	WG93747-LCSD	WG93747-3	G1721	07/12/11	1509
04					
05					
06					
07					
08					
09					
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11					
12					
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30					

COMMENTS:

FORM IVSV

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG93747-1
Client ID: Method Blank Sample
Project:
SDG: SE3870

Sample Date:
Received Date: 08-JUL-11
Extract Date: 08-JUL-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG93747

Analysis Date: 12-JUL-11
Analyst: WAS
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 14-JUL-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.6	10.
2-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.2	10.
1-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Acenaphthylene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10.	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10.	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	U	10.	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo (a) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo (b) Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	U	10.	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno (1,2,3-cd) pyrene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo (a,h) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	U	10.	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene-D10		49.6	%					
Fluorene-D10		40.1	%					
Pyrene-D10		49.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

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FORM 2
SOIL SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Level:(low/med) LOW

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	WG93747-BLANK	WG93747-1	50	40	49						0
02	2W-SD-SD162-0001	SE3870-1	29	28	32						0
03	WG93747-LCS	WG93747-2	49	60	52						0
04	WG93747-LCSD	WG93747-3	48	58	46						0
05											
06											
07											
08											
09											
10											
11											
12											
13											
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22											
23											
24											
25											
26											
27											
28											

		QC LIMITS
S1	= 2-Methylnaphthalene-D1	(19- 94)
S2	= Fluorene-D10	(20- 96)
S3	= Pyrene-D10	(31-128)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

Katahdin Analytical Services A0000007

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG93747-2
LCSD ID: WG93747-3
Project:
SDG: SE3870
Report Date: 14-JUL-11

Received Date: 08-JUL-11
Extract Date: 08-JUL-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG93747

Analysis Date: 12-JUL-11
Analyst: WAS
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Naphthalene	66.7	37.6	56.4	36.5	54.7	ug/Kgdrywt	3	50	40-100
2-Methylnaphthalene	66.7	41.0	61.5	40.2	60.3	ug/Kgdrywt	2	50	40-100
1-Methylnaphthalene	66.7	37.6	56.4	35.6	53.4	ug/Kgdrywt	5	50	40-100
Acenaphthylene	66.7	33.3	49.9	31.0	46.5	ug/Kgdrywt	7	50	40-100
Acenaphthene	66.7	35.2	52.8	32.9	49.3	ug/Kgdrywt	7	50	40-100
Fluorene	66.7	36.2	54.3	33.6	50.4	ug/Kgdrywt	7	50	40-100
Phenanthrene	66.7	37.4	56.1	35.4	53.1	ug/Kgdrywt	5	50	40-100
Anthracene	66.7	37.6	56.4	36.0	54.0	ug/Kgdrywt	4	50	40-100
Fluoranthene	66.7	44.6	66.9	40.4	60.6	ug/Kgdrywt	10	50	40-100
Pyrene	66.7	34.2	51.3	30.9	46.3	ug/Kgdrywt	10	50	40-100
Benzo (a) anthracene	66.7	41.3	61.9	36.6	54.9	ug/Kgdrywt	12	50	40-100
Chrysene	66.7	41.1	61.6	36.4	54.6	ug/Kgdrywt	12	50	40-100
Benzo (b) Fluoranthene	66.7	42.2	63.3	38.6	57.9	ug/Kgdrywt	9	50	40-100
Benzo(k)fluoranthene	66.7	38.8	58.2	34.6	51.9	ug/Kgdrywt	11	50	40-100
Benzo(a)pyrene	66.7	42.0	63.0	39.2	58.8	ug/Kgdrywt	7	50	40-100
Indeno (1,2,3-cd) pyrene	66.7	41.0	61.5	35.4	53.1	ug/Kgdrywt	15	50	40-100
Dibenzo (a,h) anthracene	66.7	48.7	73.0	43.1	64.6	ug/Kgdrywt	12	50	40-100
Benzo(g,h,i)perylene	66.7	39.0	58.5	36.0	54.0	ug/Kgdrywt	8	50	40-100
2-Methylnaphthalene-D10			49.2		47.9				19-94
Fluorene-D10			59.8		58.0				20-96
Pyrene-D10			52.2		46.4				31-128

600 Technology Way
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Tel:(207) 874-2400 Fax:(207) 775-4029

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FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Lab File ID (Standard): G1614 Date Analyzed: 06/28/11

Instrument ID: GCMS-G Time Analyzed: 1254

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
12 HOUR STD		39019		7.96		140610		10.69		68422		14.77	
UPPER LIMIT		78038		8.50		281220		11.23		136844		15.31	
LOWER LIMIT		19510		7.42		70305		10.15		34211		14.23	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01		SSTD1.00G0712		27402		7.95		103768		10.68		55942		14.75	
02	WG93747-BLANK	WG93747-1		33692		7.96		115051		10.71		63770		14.77	
03	2W-SD-SD162-0001	SE3870-1		35373		7.96		132515		10.69		72412		14.75	
04	WG93747-LCS	WG93747-2		30801		7.96		124151		10.68		72333		14.75	
05	WG93747-LCSD	WG93747-3		33980		7.96		135436		10.68		79119		14.75	
06															
07															
08															
09															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

IS1 (DCB) = 1,4-Dichlorobenzene-D4
IS2 (NPT) = Naphthalene-D8
IS3 (ANT) = Acenaphthene-D10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

Katahdin Analytical Services A0000014

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Lab File ID (Standard): G1614 Date Analyzed: 06/28/11

Instrument ID: GCMS-G Time Analyzed: 1254

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
12 HOUR STD		98283		18.27		43807		24.59		31823		27.75	
UPPER LIMIT		196566		18.81		87614		25.13		63646		28.29	
LOWER LIMIT		49142		17.73		21904		24.05		15912		27.21	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01		SSTD1.00G0712		92413	18.27		60069		24.59		42951		27.75
02	WG93747-BLANK	WG93747-1		111776	18.29		64612		24.59		44969		27.76
03	2W-SD-SD162-0001	SE3870-1		121756	18.26		69061		24.56		41071		27.73
04	WG93747-LCS	WG93747-2		126271	18.26		86278		24.56		62669		27.74
05	WG93747-LCSD	WG93747-3		134328	18.26		94148	*	24.56		66588	*	27.73
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													

IS4 (PHN) = Phenanthrene-D10
IS5 (CRY) = Chrysene-D12
IS6 (PRY) = Perylene-D12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 06/24/11 06/24/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 3.74 DCB: 11.93

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		EVAL	06/24/11	1435		
02		ICAL 0.05	06/24/11	1453	3.75	11.94
03		ICAL 0.005	06/24/11	1510	3.74	11.94
04		ICAL 0.01	06/24/11	1528	3.74	11.93
05		ICAL 0.025	06/24/11	1545	3.74	11.94
06		ICAL 0.1	06/24/11	1603	3.74	11.93
07		ICAL 0.25	06/24/11	1620	3.74	11.93
08		IND 0.05	06/24/11	1638		
09		EVAL	07/12/11	1343		
10		INDAB 0.05	07/12/11	1400	3.73	11.88
11	WG93745-BLAN	WG93745-1	07/12/11	1528	3.74	11.89
12	WG93745-LCS	WG93745-2	07/12/11	1546	3.73	11.88
13	WG93745-LCSD	WG93745-3	07/12/11	1603	3.73	11.87
14	2W-SD-SD162-	SE3870-1	07/12/11	1638	3.73	11.87
15		INDAB 0.025	07/12/11	1656	3.73	11.87
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000040

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC01 Calibration Date(s): 06/24/11 06/24/11

Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Calibration Time(s): 1453 2007

LAB FILE ID: RF0.005: 1EF00294 RF0.01: 1EF00295 RF0.025: 1EF00296
RF0.05: 1EF00293 RF0.1: 1EF00297 RF0.25: 1EF00298

								COEFFICENTS			%RSD	MAX %RSD
COMPOUND	RF0.005	RF0.01	RF0.025	RF0.05	RF0.1	RF0.25	CURVE	A0	A1	A2	OR R^2	OR R^2
4,4'-DDE	29415	65923	173830	385600	732820	1965900	2ORDR	2.431e-004	1.383e-007	-5.68e-015	0.99976	0.99000
4,4'-DDD	20226	44512	120380	274820	530920	1409300	2ORDR	6.767e-004	1.903e-007	-9.46e-015	0.99980	0.99000
4,4'-DDT	21823	46304	125570	272140	547430	1473000	2ORDR	6.05e-004	1.882e-007	-1.28e-014	0.99995	0.99000
Tetrachloro-m-Xylene	34025	73781	184680	388860	785800	2033800	2ORDR	4.984e-004	1.293e-007	-3.25e-015	0.99998	0.99000
Decachlorobiphenyl	17530	34941	87424	169190	325460	838750	2ORDR	-8.56e-004	3.102e-007	-1.31e-014	0.99988	0.99000

FORM VI PESTICIDE

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 06/24/11 06/24/11

Client Sample ID (PEM): Date Analyzed :06/24/11
Lab Sample ID (PEM): EVAL Time Analyzed :1435

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EF00279.D	4.72	1.53

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC01 Calibration Date: 06/24/11 Time: 1638

Lab File ID: 1EF00286 Init. Calib. Date(s): 06/24/11 06/24/11

Init. Calib. Times: 1453 2007

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
alpha-BHC	4.89e-002	5.e-002	11380000	0.001	-2.20	20.00	2RDR
Endosulfan sulfate	4.26e-002	5.e-002	2404000.0	0.001	-14.80	20.00	2RDR
beta-BHC	5.14e-002	5.e-002	4599000.0	0.001	2.80	20.00	2RDR
delta-BHC	4.59e-002	5.e-002	6085000.0	0.001	-8.20	20.00	2RDR
Heptachlor	4.62e-002	5.e-002	7020000.0	0.001	-7.60	20.00	2RDR
Aldrin	4.71e-002	5.e-002	8371000.0	0.001	-5.80	20.00	2RDR
Heptachlor Epoxide	4.74e-002	5.e-002	7310000.0	0.001	-5.20	20.00	2RDR
gamma-Chlordane	4.69e-002	5.e-002	7086000.0	0.001	-6.20	20.00	2RDR
alpha-Chlordane	4.69e-002	5.e-002	6648000.0	0.001	-6.20	20.00	2RDR
4,4'-DDE	4.74e-002	5.e-002	7143000.0	0.001	-5.20	20.00	2RDR
Endosulfan I	4.77e-002	5.e-002	6418000.0	0.001	-4.60	20.00	2RDR
Dieldrin	4.54e-002	5.e-002	6639000.0	0.001	-9.20	20.00	2RDR
Endrin	4.61e-002	5.e-002	5731000.0	0.001	-7.80	20.00	2RDR
4,4'-DDD	4.66e-002	5.e-002	5011000.0	0.001	-6.80	20.00	2RDR
Endosulfan II	4.41e-002	5.e-002	5034000.0	0.001	-11.80	20.00	2RDR
4,4'-DDT	4.47e-002	5.e-002	4943000.0	0.001	-10.60	20.00	2RDR
Endrin Aldehyde	4.17e-002	5.e-002	2722000.0	0.001	-16.60	20.00	2RDR
Methoxychlor	4.77e-002	5.e-002	2316000.0	0.001	-4.60	20.00	2RDR
Endrin Ketone	4.29e-002	5.e-002	3163000.0	0.001	-14.20	20.00	2RDR
gamma-BHC	4.7e-002	5.e-002	10150000	0.001	-6.00	20.00	2RDR

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 06/24/11 06/24/11

Client Sample ID (PEM): Date Analyzed :07/12/11
Lab Sample ID (PEM): EVAL Time Analyzed :1343

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EG00020.D	5.88	1.09

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC01 Calibration Date: 07/12/11 Time: 1400

Lab File ID: 1EG00021 Init. Calib. Date(s): 06/24/11 06/24/11

Init. Calib. Times: 1453 2007

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	5.68e-002	5.e-002	8322400.0	0.001	13.60	20.00	2RDR
4,4'-DDD	5.37e-002	5.e-002	5657600.0	0.001	7.40	20.00	2RDR
4,4'-DDT	5.52e-002	5.e-002	5920300.0	0.001	10.40	20.00	2RDR
Tetrachloro-m-Xylene	5.33e-002	5.e-002	8261200.0	0.001	6.60	20.00	2RDR
Decachlorobiphenyl	5.71e-002	5.e-002	3769400.0	0.001	14.20	20.00	2RDR

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC01 Calibration Date: 07/12/11 Time: 1656

Lab File ID: 1EG00029 Init. Calib. Date(s): 06/24/11 06/24/11

Init. Calib. Times: 1453 2007

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	2.58e-002	2.5e-002	7442600.0	0.001	3.20	20.00	2RDR
4,4'-DDD	2.57e-002	2.5e-002	5285100.0	0.001	2.80	20.00	2RDR
4,4'-DDT	2.59e-002	2.5e-002	5430100.0	0.001	3.60	20.00	2RDR
Tetrachloro-m-Xylene	2.56e-002	2.5e-002	7791900.0	0.001	2.40	20.00	2RDR
Decachlorobiphenyl	2.87e-002	2.5e-002	3820400.0	0.001	14.80	20.00	2RDR

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 06/24/11 06/24/11

Instrument ID: GC01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.00 DCB: 12.12

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		EVAL	06/24/11	1435		
02		ICAL 0.05	06/24/11	1453	4.00	12.13
03		ICAL 0.005	06/24/11	1510	4.00	12.13
04		ICAL 0.01	06/24/11	1528	4.00	12.13
05		ICAL 0.025	06/24/11	1545	4.00	12.13
06		ICAL 0.1	06/24/11	1603	4.00	12.13
07		ICAL 0.25	06/24/11	1620	4.00	12.13
08		IND 0.05	06/24/11	1638		
09		EVAL	07/12/11	1343		
10		INDAB 0.05	07/12/11	1400	3.97	12.07
11	WG93745-BLAN	WG93745-1	07/12/11	1528	3.96	12.06
12	WG93745-LCS	WG93745-2	07/12/11	1546	3.97	12.06
13	WG93745-LCSD	WG93745-3	07/12/11	1603	3.97	12.06
14	2W-SD-SD162-	SE3870-1	07/12/11	1638	3.97	12.06
15		INDAB 0.025	07/12/11	1656	3.97	12.06
16						
17						
18						
19						
20						

QC LIMITS

TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PESTICIDE

Katahdin Analytical Services A0000041

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC01 Calibration Date(s): 06/24/11 06/24/11

Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Calibration Time(s): 1453 2007

LAB FILE ID: RF0.005: 1EF00294 RF0.01: 1EF00295 RF0.025: 1EF00296
RF0.05: 1EF00293 RF0.1: 1EF00297 RF0.25: 1EF00298

								COEFFICENTS			%RSD	MAX %RSD
COMPOUND	RF0.005	RF0.01	RF0.025	RF0.05	RF0.1	RF0.25	CURVE	A0	A1	A2	OR R^2	OR R^2
4,4'-DDE	42292	91714	243670	531230	1027400	2677300	2ORDR	5.506e-004	9.757e-008	-1.63e-015	0.99988	0.99000
4,4'-DDD	30061	65269	173270	382080	761620	2016300	2ORDR	8.607e-004	1.335e-007	-4.94e-015	0.99992	0.99000
4,4'-DDT	31015	67614	179520	391590	780020	2061300	2ORDR	7.798e-004	1.303e-007	-4.58e-015	0.99993	0.99000
Tetrachloro-m-Xylene	55316	118040	300490	620260	1218500	3103800	2ORDR	1.646e-004	8.217e-008	-5.37e-016	0.99997	0.99000
Decachlorobiphenyl	24731	50719	123570	251130	477600	1183000	2ORDR	-3.82e-004	2.054e-007	5.404e-015	0.99992	0.99000

FORM VI PESTICIDE

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 06/24/11 06/24/11

Client Sample ID (PEM): Date Analyzed :06/24/11
Lab Sample ID (PEM): EVAL Time Analyzed :1435

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EF00279.D	4.87	1.36

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC01 Calibration Date: 06/24/11 Time: 1638

Lab File ID: 1EF00286 Init. Calib. Date(s): 06/24/11 06/24/11

Init. Calib. Times: 1453 2007

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
alpha-BHC	4.86e-002	5.e-002	16220000	0.001	-2.80	20.00	2RDR
Endosulfan sulfate	4.41e-002	5.e-002	4049000.0	0.001	-11.80	20.00	2RDR
beta-BHC	5.24e-002	5.e-002	6616000.0	0.001	4.80	20.00	2RDR
delta-BHC	4.67e-002	5.e-002	8622000.0	0.001	-6.60	20.00	2RDR
Heptachlor	4.81e-002	5.e-002	11620000	0.001	-3.80	20.00	2RDR
Aldrin	4.72e-002	5.e-002	11440000	0.001	-5.60	20.00	2RDR
Heptachlor Epoxide	4.86e-002	5.e-002	10250000	0.001	-2.80	20.00	2RDR
gamma-Chlordane	4.82e-002	5.e-002	9877000.0	0.001	-3.60	20.00	2RDR
alpha-Chlordane	4.78e-002	5.e-002	9204000.0	0.001	-4.40	20.00	2RDR
4,4'-DDE	4.74e-002	5.e-002	9868000.0	0.001	-5.20	20.00	2RDR
Endosulfan I	4.84e-002	5.e-002	8910000.0	0.001	-3.20	20.00	2RDR
Dieldrin	4.61e-002	5.e-002	9185000.0	0.001	-7.80	20.00	2RDR
Endrin	4.65e-002	5.e-002	7958000.0	0.001	-7.00	20.00	2RDR
4,4'-DDD	4.6e-002	5.e-002	7048000.0	0.001	-8.00	20.00	2RDR
Endosulfan II	4.51e-002	5.e-002	7154000.0	0.001	-9.80	20.00	2RDR
4,4'-DDT	4.57e-002	5.e-002	7185000.0	0.001	-8.60	20.00	2RDR
Endrin Aldehyde	4.26e-002	5.e-002	4187000.0	0.001	-14.80	20.00	2RDR
Methoxychlor	4.75e-002	5.e-002	3530000.0	0.001	-5.00	20.00	2RDR
Endrin Ketone	4.42e-002	5.e-002	4624000.0	0.001	-11.60	20.00	2RDR
gamma-BHC	4.73e-002	5.e-002	14250000	0.001	-5.40	20.00	2RDR

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 06/24/11 06/24/11

Client Sample ID (PEM):
Lab Sample ID (PEM): EVAL

Date Analyzed :07/12/11
Time Analyzed :1343

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	1EG00020.D	5.56	0.85

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC01 Calibration Date: 07/12/11 Time: 1400

Lab File ID: 1EG00021 Init. Calib. Date(s): 06/24/11 06/24/11

Init. Calib. Times: 1453 2007

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	5.63e-002	5.e-002	11539000	0.001	12.60	20.00	2RDR
4,4'-DDD	5.47e-002	5.e-002	8191700.0	0.001	9.40	20.00	2RDR
4,4'-DDT	5.59e-002	5.e-002	8594100.0	0.001	11.80	20.00	2RDR
Tetrachloro-m-Xylene	5.66e-002	5.e-002	13790000	0.001	13.20	20.00	2RDR
Decachlorobiphenyl	5.72e-002	5.e-002	5569400.0	0.001	14.40	20.00	2RDR

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC01 Calibration Date: 07/12/11 Time: 1656

Lab File ID: 1EG00029 Init. Calib. Date(s): 06/24/11 06/24/11

Init. Calib. Times: 1453 2007

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF3e-002 or AMOUNT	CCAL RRF3e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	2.64e-002	2.5e-002	10648000	0.001	5.60	20.00	2RDR
4,4'-DDD	2.67e-002	2.5e-002	7788100.0	0.001	6.80	20.00	2RDR
4,4'-DDT	2.69e-002	2.5e-002	8071200.0	0.001	7.60	20.00	2RDR
Tetrachloro-m-Xylene	2.73e-002	2.5e-002	13219000	0.001	9.20	20.00	2RDR
Decachlorobiphenyl	2.75e-002	2.5e-002	5405000.0	0.001	10.00	20.00	2RDR

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG93745-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Lab Sample ID: WG93745-1 Lab File ID: 1EG00024

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3550

Sulfur Cleanup: (Y/N) N Date Extracted: 07/08/11

Date Analyzed (1): 07/12/11 Date Analyzed (2): 07/12/11

Time Analyzed (1): 1528 Time Analyzed (2): 1528

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column (1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	WG93745-LCS	WG93745-2	1EG00025	07/12/11	07/12/11
02	WG93745-LCSD	WG93745-3	1EG00026	07/12/11	07/12/11
03	2W-SD-SD162-0001	SE3870-1	1EG00028	07/12/11	07/12/11
04					
05					
06					
07					
08					
09					
10					
11					
12					
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16					
17					
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19					
20					
21					
22					
23					
24					

COMMENTS: _____

FORM IVPESTICIDE

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG93745-1
Client ID: Method Blank Sample
Project:
SDG: SE3870

Sample Date:
Received Date: 08-JUL-11
Extract Date: 08-JUL-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG93745

Analysis Date: 12-JUL-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: NA
Report Date: 13-jul-2011 08:21

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	U	1.6	ug/Kgdrywt	1	3.3	3.3	0.19	1.6
4,4'-DDD	U	1.6	ug/Kgdrywt	1	3.3	3.3	0.20	1.6
4,4'-DDT	U	1.6	ug/Kgdrywt	1	3.3	3.3	0.31	1.6
Tetrachloro-M-Xylene		58.2	%					
Decachlorobiphenyl		76.3	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

FORM 2
SOIL PESTICIDE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

GC Column(1): ZB-MULTIRESIDUE-2ID: 0.53 (mm)GC Column(2): ZB-MULTIRESIDUE-1ID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	DCB1 REC#	DCB2 REC#	OTHR (1)	OTHR (2)	TOT OUT
01	WG93745-BLANK	WG93745-1	58	56	76	75			0
02	WG93745-LCS	WG93745-2	46	46	59	58			0
03	WG93745-LCSD	WG93745-3	64	64	84	82			0
04	2W-SD-SD162-0001	SE3870-1	41	40	51	51			0
05									
06									
07									
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-Xylene (32- 89)
S2 (DCB) = Decachlorobiphenyl (44- 99)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG93745-2
LCSD ID: WG93745-3
Project:
SDG: SE3870
Report Date: 13-jul-2011 08:22

Received Date: 08-JUL-11
Extract Date: 08-JUL-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG93745

Analysis Date: 12-JUL-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
4,4'-DDE	16.7	10.0	59.9	12.6	75.4	ug/Kgdrywt	23	50	52-103
4,4'-DDD	16.7	9.90	59.3	12.4	74.2	ug/Kgdrywt	22	50	48-111
4,4'-DDT	16.7	9.78	58.6	12.5	74.8	ug/Kgdrywt	24	50	39-112
Tetrachloro-M-Xylene			46.5		64.3				32-89
Decachlorobiphenyl			58.8		83.8				44-99

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P.O. Box 540, Scarborough, ME 04070
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FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID: 2W-SD-SD 162-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: SE3870

Lab Sample ID: SE3870-1 Date(s) Analyzed: 07/12/11 07/12/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.43	7.36	7.50	5.20	
	2	7.65	7.58	7.72	7.44	35.4
4,4'-DDD	1	8.28	8.21	8.35	6.81	
	2	8.41	8.34	8.48	9.23	30.2
4,4'-DDT	1	8.67	8.60	8.74	8.37	
	2	8.86	8.79	8.93	5.63	39.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

GC Column: RTX-CLPESTICIDES ID: 0.53 (mm) Init. Calib. Date(s): 06/21/11 06/22/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION DCB: 12.91 TCX: 3.51					
	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		AR1660 1.0	06/21/11	1417	12.91	3.51
02		AR1660 0.05	06/21/11	1443	12.90	3.50
03		AR1660 0.1	06/21/11	1509	12.90	3.50
04		AR1660 0.25	06/21/11	1536	12.90	3.51
05		AR1660 2.5	06/21/11	1602	12.90	3.51
06		AR1660 10	06/21/11	1628	12.89	3.50
07		AR1016 1.0	06/21/11	1654		
08		AR1260 1.0	06/21/11	1720		
09		AR1242 1.0	06/21/11	1746		
10		AR1248 1.0	06/21/11	2020		
11		AR1254 1.0	06/21/11	2256		
12		AR1221 1.0	06/22/11	0130		
13		AR1232 1.0	06/22/11	0403		
14						
15						
16						
17						
18						
19						
20						

QC LIMITS

DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000091

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC07 Calibration Date(s): 06/21/11 06/22/11

Column: RTX-CLPESTICIDES ID: 0.53 (mm) Calibration Time(s): 1417 1123

LAB FILE ID: RF0.05: 7EF341 RF0.1: 7EF342 RF0.25: 7EF343
RF1: 7EF340 RF2.5: 7EF344 RF10: 7EF345

COMPOUND	RF0.05	RF0.1	RF0.25	RF1	RF2.5	RF10	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2	MAX %RSD OR R^2
Aroclor-1016	3e+007	3.e+007	3e+007	3.e+007	3e+007	3.e+007	AVRG		28795430.0	4.716	20.000
(2)	1e+007	1e+007	1e+007	1e+007	1e+007	2e+007	AVRG		14745580.0	1.891	20.000
(3)	4e+007	4e+007	4e+007	5.e+007	5e+007	5e+007	AVRG		46183484.4	12.381	20.000
(4)	2e+007	2e+007	3e+007	3e+007	3e+007	3.e+007	AVRG		26395762.9	10.372	20.000
(5)	2.e+007	2e+007	2e+007	2e+007	2e+007	3e+007	AVRG		23273429.4	10.226	20.000
Aroclor-1221	8991700	9096100	1.e+007	9149900	9231600	9324400	AVRG		9320524.18	4.423	20.000
(2)	2e+007	2e+007	3e+007	2e+007	2e+007	2e+007	AVRG		23092355.6	5.424	20.000
(3)	1634400	1523000	1961300	1652100	1649300	1598200	AVRG		1669743.97	9.028	20.000
(4)	2214400	2073900	2483800	2228800	2371700	2531100	AVRG		2317281.80	7.575	20.000
Aroclor-1232	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		18076208.5	3.106	20.000
(2)	1e+007	1e+007	1e+007	1e+007	1e+007	1e+007	AVRG		12163857.8	2.999	20.000
(3)	2e+007	2e+007	2e+007	2e+007	2.e+007	2e+007	AVRG		18521650.1	8.239	20.000
(4)	1e+007	1e+007	1e+007	1e+007	1e+007	1e+007	AVRG		11666161.5	10.160	20.000
(5)	8250900	8361000	8398400	8426100	8846800	9219800	AVRG		8583830.35	4.338	20.000
Aroclor-1242	3e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		23579263.3	5.353	20.000
(2)	1e+007	1e+007	1e+007	1e+007	1e+007	1e+007	AVRG		12177771.9	6.343	20.000
(3)	4e+007	4e+007	3e+007	4e+007	4.e+007	4.e+007	AVRG		36995966.4	6.647	20.000
(4)	2.e+007	2e+007	2.e+007	2e+007	2e+007	2e+007	AVRG		20902325.9	5.406	20.000
(5)	2e+007	2e+007	2e+007	2e+007	2.e+007	2.e+007	AVRG		19111878.2	5.061	20.000
Aroclor-1248	2e+007	2e+007	2e+007	2.e+007	2.e+007	2e+007	AVRG		19377197.5	8.606	20.000
(2)	2e+007	2e+007	2e+007	3e+007	3e+007	3e+007	AVRG		24647753.1	5.516	20.000
(3)	3e+007	3e+007	3.e+007	3e+007	3e+007	3e+007	AVRG		30748564.6	8.057	20.000
(4)	2e+007	2e+007	2e+007	2e+007	2e+007	2e+007	AVRG		19841789.9	10.762	20.000
(5)	1e+007	1e+007	1e+007	2e+007	2e+007	2e+007	AVRG		14457792.4	19.960	20.000
Aroclor-1254	3e+007	4e+007	3e+007	3e+007	3e+007	4e+007	AVRG		33870448.5	4.912	20.000
(2)	4.e+007	4e+007	4e+007	4e+007	5e+007	5e+007	AVRG		42892854.1	8.066	20.000
(3)	3e+007	3.e+007	3e+007	3e+007	3e+007	4e+007	AVRG		30752530.3	10.982	20.000
(4)	3e+007	3e+007	3e+007	3e+007	3e+007	3e+007	AVRG		30944626.2	8.060	20.000
(5)	3e+007	3e+007	3.e+007	4e+007	4e+007	4e+007	AVRG		35418651.6	16.639	20.000
Aroclor-1260	1789700	3741400	9975200	4e+007	1e+008	5e+008	LINR	4.73e-002	2.097e-008	0.99981	0.99000
(2)	2215800	4682500	1e+007	6e+007	2e+008	6e+008	LINR	4.188e-002	1.564e-008	0.99990	0.99000
(3)	1519700	3156900	9519000	5e+007	1e+008	5e+008	LINR	9.041e-002	1.861e-008	0.99915	0.99000
(4)	2456500	5032200	2e+007	8.e+007	2e+008	6e+008	LINR	-0.1150574	1.541e-008	0.99445	0.99000
(5)	985210	2172200	6142100	3.e+007	8e+007	4e+008	LINR	0.12224104	2.676e-008	0.99802	0.99000
Tetrachloro-m-xylene	1e+009	1e+009	1e+009	1e+009	1e+009	1e+009	AVRG		1098014046	7.987	20.000
Decachlorobiphenyl	5e+008	5e+008	5e+008	5e+008	5e+008	6e+008	AVRG		516143273	9.717	20.000

FORM VI PCB

Report Date : 28-Jun-2011 16:45

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUN-2011 14:17
End Cal Date : 22-JUN-2011 11:23
Quant Method : ESTD
Origin : Included
Target Version : 4.12
Integrator : Falcon
Method file : \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\PCB042.m
Cal Date : 23-Jun-2011 09:14 jprescott

Calibration File Names:
Level 1: \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\7EF341.D
Level 2: \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\7EF342.D
Level 3: \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\7EF343.D
Level 4: \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\7EF340.D
Level 5: \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\7EF344.D
Level 6: \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\7EF345.D

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2500000 Level 3	1.0000 Level 4	2.5000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
1 Total PCBs	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
2 Aroclor-1221 (1)	8991660	9096130	10129316	9149946	9231659	9324434	AVRG		9320524		4.42279
(2)	22639700	22442920	25467392	22881428	23256741	21865952	AVRG		23092356		5.42362
(3)	1634440	1523030	1961284	1652145	1649344	1598221	AVRG		1669744		9.02756
(4)	2214420	2073930	2483784	2228755	2371662	2531140	AVRG		2317282		7.57480
4 Aroclor-1232 (1)	18035000	18715480	17979708	18199994	18451176	17075893	AVRG		18076209		3.10612
(2)	12234220	12708830	12376276	11756510	12132729	11774582	AVRG		12163858		2.99929
(3)	16974600	17352450	17768628	18270071	19975812	20788340	AVRG		18521650		8.23894
(4)	13937240	11622710	11036408	10551349	11191942	11657320	AVRG		11666162		10.15969
(5)	8250920	8360980	8398408	8426120	8846790	9219764	AVRG		8583830		4.33806
5 Aroclor-1242 (1)	25628020	24424960	23164624	22852182	23341406	22064387	AVRG		23579263		5.35263
(2)	13423260	12810920	11863420	11616622	11915424	11436986	AVRG		12177772		6.34313
(3)	35105200	35240490	34516748	37239832	40134817	39738711	AVRG		36995966		6.64714
(4)	19765580	20773470	19731940	20649384	22129116	22364466	AVRG		20902326		5.40650

Katahdin Analytical Services A0000072

Report Date : 28-Jun-2011 16:45

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUN-2011 14:17
End Cal Date : 22-JUN-2011 11:23
Quant Method : ESTD
Origin : Included
Target Version : 4.12
Integrator : Falcon
Method file : \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\PCB042.m
Cal Date : 23-Jun-2011 09:14 jprescott

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2500000 Level 3	1.0000 Level 4	2.5000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
(5)	17810440	19475240	18303008	18830284	19950532	20301766	AVRG		19111878		5.06134
6 Aroclor-1016 (1)	26197800	29710450	28469068	29539215	29130769	29725278	AVRG		28795430		4.71626
(2)	14505220	14382020	14827820	14740600	14845804	15172017	AVRG		14745580		1.89069
(3)	37935580	41784370	44312964	50276225	50525715	52266053	AVRG		46183484		12.38122
(4)	23111720	23745340	25582668	27624444	28091184	30219222	AVRG		26395763		10.37157
(5)	20283540	21555250	22282496	23966307	24672993	26879991	AVRG		23273429		10.22583
7 Aroclor-1248 (1)	17403480	18215180	18373560	20028888	20364090	21877987	AVRG		19377198		8.60639
(2)	22635560	23787740	24077264	25666519	25582176	26137259	AVRG		24647753		5.51645
(3)	27273860	28853820	29701180	32921570	32551753	33189205	AVRG		30748565		8.05739
(4)	16944020	18366510	18731792	21160382	21384751	22463285	AVRG		19841790		10.76157
(5)	11051740	12230420	12728260	15887697	16320002	18528635	AVRG		14457792		19.95985
8 Aroclor-1254 (1)	34439040	35001780	31173112	32837297	33928353	35843109	AVRG		33870448		4.91222
(2)	39722600	42073570	38719940	43289583	45940230	47611202	AVRG		42892854		8.06551
(3)	27343160	29881240	27300428	31020885	32934855	36034614	AVRG		30752530		10.98259
(4)	27969460	31603680	28339812	30915820	32240269	34598717	AVRG		30944626		8.05991
(5)	29497460	32881380	29962492	36099506	39355516	44715555	AVRG		35418652		16.63935
9 Aroclor-1260 (1)	1789741	3741435	9975178	42974953	112743339	475734127	LINR	0.04730	47679508		0.99981
(2)	2215817	4682523	13153625	58786827	153237799	637676096	LINR	0.04188	63920278		0.99990
(3)	1519713	3156874	9518954	45391315	118015140	535137444	LINR	0.09041	53722108		0.99915
(4)	2456541	5032237	16250870	79753529	206917638	643608533	LINR	-0.11506	64875435		0.99445
(5)	985209	2172178	6142107	30054803	76209354	371870177	LINR	0.12224	37367536		0.99802
10 Aroclor-1262 (1)	32370260	29259690	33466064	30871237	35647354	34870366	AVRG		32747495		7.38704

Katahdin Analytical Services A0000073

Report Date : 28-Jun-2011 16:45

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUN-2011 14:17
End Cal Date : 22-JUN-2011 11:23
Quant Method : ESTD
Origin : Included
Target Version : 4.12
Integrator : Falcon
Method file : \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\PCB042.m
Cal Date : 23-Jun-2011 09:14 jprescott

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2500000 Level 3	1.0000 Level 4	2.5000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
(2)	36163440	33465730	39564488	37304140	45915561	44647943	AVRG		39510217		12.40088
(3)	55988160	50641200	59442216	57262476	67324684	64355350	AVRG		59169014		10.13943
(4)	42170540	36688410	43155396	41107872	48441805	46348960	AVRG		42985497		9.58937
(5)	37237160	34525980	39984552	38646576	43846705	40884091	AVRG		39187511		8.15374
11 Aroclor-1268 (1)	21777280	22009370	22312584	24581230	25798354	+++++	AVRG		23295764		7.69166
(2)	32919780	31933360	31935704	33686769	35013640	+++++	AVRG		33097851		3.92641
(3)	19674980	18439420	18942196	20159361	20804439	+++++	AVRG		19604079		4.80464
(4)	21981280	21689870	21841560	25942556	27758284	+++++	AVRG		23842710		11.83415
(5)	31862060	31495760	31617300	33893587	35747744	+++++	AVRG		32923290		5.63934
$ 3 Tetrachloro-m-xylene	976837000	1.055e+009	1.063e+009	1.117e+009	1.143e+009	1.233e+009	AVRG		1.098e+009		7.98723
$ 12 Decachlorobiphenyl	470114000	469119500	520677200	509862000	520575180	606511755	AVRG		516143273		9.71665

Katahdin Analytical Services A0000074

Report Date : 28-Jun-2011 16:45

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUN-2011 14:17
End Cal Date : 22-JUN-2011 11:23
Quant Method : ESTD
Origin : Included
Target Version : 4.12
Integrator : Falcon
Method file : \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\PCB042.m
Cal Date : 23-Jun-2011 09:14 jprescott

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

Katahdin Analytical Services A0000075

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC07 Calibration Date: 06/21/11 Time: 1654

Lab File ID: 7EF302 Init. Calib. Date(s): 06/21/11 06/22/11

Init. Calib. Times: 1417 1123

GC Column: RTX-CLPESTICIDES ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	28795000	30165000	0.001	4.76	20.00	AVRG
(2)	14746000	15244000	0.001	3.38	20.00	AVRG
(3)	46184000	49932000	0.001	8.12	20.00	AVRG
(4)	26396000	27328000	0.001	3.53	20.00	AVRG
(5)	23273000	23654000	0.001	1.64	20.00	AVRG
Average %D: 4.3000						

Katahdin Analytical Services A0000083

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC07 Calibration Date: 06/21/11 Time: 1720

Lab File ID: 7EF303 Init. Calib. Date(s): 06/21/11 06/22/11

Init. Calib. Times: 1417 1123

GC Column: RTX-CLPESTICIDES ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1260	0.8839100	1.0000000	39889000	0.001	-11.61	20.00	LINR	
(2)	0.9153500	1.0000000	55832000	0.001	-8.46	20.00	LINR	
(3)	0.9052400	1.0000000	43774000	0.001	-9.48	20.00	LINR	
(4)	0.8338200	1.0000000	61559000	0.001	-16.62	20.00	LINR	
(5)	0.7839000	1.0000000	24724000	0.001	-21.61	20.00	LINR	<-

%D 13.56
AVG-

FORM VII PEST

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: NEW BEDFORD HARBOR SDG No.: SE3870

GC Column: RTX-CLPESTICIDES ID: 0.53 (mm) Init. Calib. Date(s): 06/21/11 06/22/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 12.99 TCX: 3.56

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		AR1660 1.0	07/12/11	1234	12.99	3.56
02	WG93746-BLAN	WG93746-1	07/12/11	1524	13.00	3.57
03	WG93746-LCS	WG93746-2	07/12/11	1550	12.99	3.56
04	WG93746-LCSD	WG93746-3	07/12/11	1616	12.99	3.56
05	2W-SD-SD162-	SE3870-1	07/12/11	1800	12.99	3.56
06		AR1660 0.25	07/12/11	1917	12.99	3.56
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000093

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC07 Calibration Date: 07/12/11 Time: 1234

Lab File ID: 7EG159 Init. Calib. Date(s): 06/21/11 06/21/11

Init. Calib. Times: 1417 1628

GC Column: RTX-CLPESTICIDES ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	28795000	30567000	30567000	0.001	6.15	20.00	AVRG	
(2)	14746000	15097000	15097000	0.001	2.38	20.00	AVRG	
(3)	46184000	49767000	49767000	0.001	7.76	20.00	AVRG	
(4)	26396000	26840000	26840000	0.001	1.68	20.00	AVRG	
(5)	23273000	23583000	23583000	0.001	1.33	20.00	AVRG	
Average %D: 3.8600								
Aroclor-1260	0.9202100	1.0000000	41620000	0.001	-7.98	20.00	LINR	
(2)	0.8576100	1.0000000	52142000	0.001	-14.24	20.00	LINR	
(3)	0.8065600	1.0000000	38473000	0.001	-19.34	20.00	LINR	
(4)	0.8748000	1.0000000	64217000	0.001	-12.52	20.00	LINR	
(5)	0.7721900	1.0000000	24287000	0.001	-22.78	20.00	LINR	<-
Decachlorobiphenyl	516140000	499540000	499540000	0.001	-3.22	20.00	AVRG	
Tetrachloro-m-xylene	1.1e+009	1.13e+009	1.13e+009	0.001	2.73	20.00	AVRG	

AVG 15.37

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC07 Calibration Date: 07/12/11 Time: 1917

Lab File ID: 7EG172 Init. Calib. Date(s): 06/21/11 06/21/11

Init. Calib. Times: 1417 1628

GC Column: RTX-CLPESTICIDES ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	28795000	32714000	32714000	0.001	13.61	20.00	AVRG	
(2)	14746000	18096000	18096000	0.001	22.72	20.00	AVRG	<-
(3)	46184000	49686000	49686000	0.001	7.58	20.00	AVRG	
(4)	26396000	29031000	29031000	0.001	9.98	20.00	AVRG	
(5)	23273000	25253000	25253000	0.001	8.51	20.00	AVRG	
Average %D: 75.600					AVG 12.48			
Aroclor-1260	0.2763600	0.2500000	42290000	0.001	10.54	20.00	LINR	
(2)	0.2490700	0.2500000	49293000	0.001	-0.37	20.00	LINR	
(3)	0.2679800	0.2500000	37079000	0.001	7.19	20.00	LINR	
(4)	0.1289200	0.2500000	63312000	0.001	48.43	20.00	LINR	<-
(5)	0.2895600	0.2500000	25009000	0.001	15.82	20.00	LINR	
					AVG 16.47			
Decachlorobiphenyl	516140000	574530000	574530000	0.001	11.31	20.00	AVRG	
Tetrachloro-m-xylene	1.1e+009	1.18e+009	1.18e+009	0.001	7.27	20.00	AVRG	

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

GC Column: RTX-CLPESTICIDES2 ID: 0.53 (mm) Init. Calib. Date(s): 06/21/11 06/22/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.05 DCB: 16.80

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		AR1660 1.0	06/21/11	1417	4.05	16.80
02		AR1660 0.05	06/21/11	1443	4.05	16.81
03		AR1660 0.1	06/21/11	1509	4.05	16.81
04		AR1660 0.25	06/21/11	1536	4.05	16.80
05		AR1660 2.5	06/21/11	1602	4.05	16.80
06		AR1660 10	06/21/11	1628	4.05	16.80
07		AR1016 1.0	06/21/11	1654		
08		AR1260 1.0	06/21/11	1720		
09		AR1242 1.0	06/21/11	1746		
10		AR1248 1.0	06/21/11	2020		
11		AR1254 1.0	06/21/11	2256		
12		AR1221 1.0	06/22/11	0130		
13		AR1232 1.0	06/22/11	0403		
14						
15						
16						
17						
18						
19						
20						

QC LIMITS

TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

Katahdin Analytical Services A0000092

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC07 Calibration Date(s): 06/21/11 06/22/11

Column: RTX-CLPESTICIDES2 ID: 0.53 (mm) Calibration Time(s): 1417 1123

LAB FILE ID: RF0.05: 7EF341 RF0.1: 7EF342 RF0.25: 7EF343
RF1: 7EF340 RF2.5: 7EF344 RF10: 7EF345

COMPOUND	RF0.05	RF0.1	RF0.25	RF1	RF2.5	RF10	CURVE	COEFF. A1	%RSD OR R^2	MAX %RSD OR R^2
Aroclor-1016	3590300	3450400	3430400	3310600	3123800	3146900	AVRG	3342070.52	5.482	20.000
(2)	4942200	5014800	4989600	4863700	4597500	4618900	AVRG	4837780.88	3.829	20.000
(3)	8046700	8319600	8498100	8605000	8279600	8179300	AVRG	8321399.33	2.457	20.000
(4)	4609700	4739600	4768900	4818700	4564100	4669400	AVRG	4695080.02	2.083	20.000
(5)	4122300	4189700	4199500	4091500	3953600	4095300	AVRG	4108632.23	2.164	20.000
Aroclor-1221	1610100	1524600	1641100	1328900	1282000	1212700	AVRG	1433223.68	12.683	20.000
(2)	2082300	1981800	2212700	1843600	1827000	1779300	AVRG	1954450.68	8.653	20.000
(3)	4905300	4592500	5003500	4159000	4150000	3956600	AVRG	4461155.63	9.778	20.000
(4)	528720	547090	636920	527640	514450	492340	AVRG	541195.217	9.290	20.000
Aroclor-1232	4738800	4371900	3920600	3500400	3500700	3260000	AVRG	3882071.35	14.814	20.000
(2)	2403400	2460800	2325800	2096300	2096400	1992400	AVRG	2229166.73	8.622	20.000
(3)	3784900	3863700	3686500	3455600	3553800	3466000	AVRG	3635087.53	4.681	20.000
(4)	2104300	2171600	2093600	1938000	1970400	1918300	AVRG	2032707.05	5.115	20.000
(5)	1953200	1874500	1708400	1534100	1532800	1498300	AVRG	1683544.67	11.553	20.000
Aroclor-1242	3252900	3061700	2772500	2550000	2573500	2443100	AVRG	2775618.58	11.529	20.000
(2)	4453500	4283800	3968600	3728900	3762000	3538800	AVRG	3955931.00	8.890	20.000
(3)	7268400	6979000	6715700	6558700	6684000	6347800	AVRG	6758921.92	4.792	20.000
(4)	4092100	3980000	3763500	3639100	3695300	3584200	AVRG	3792369.55	5.302	20.000
(5)	3797200	3621100	3398000	3220700	3250300	3136400	AVRG	3403932.73	7.554	20.000
Aroclor-1248	3835200	3845800	3810400	3819400	3651600	3677100	AVRG	3773251.57	2.269	20.000
(2)	4390200	4422200	4361700	4284800	4043600	3956100	AVRG	4243106.35	4.615	20.000
(3)	5554900	5572700	5508400	5480600	5270400	5170800	AVRG	5426307.33	3.054	20.000
(4)	4547300	4618400	4607800	4643200	4470300	4436500	AVRG	4553912.38	1.860	20.000
(5)	4200400	4289900	4434600	4874300	4795900	4927000	AVRG	4586998.43	6.913	20.000
Aroclor-1254	3911800	3941400	3413600	3397800	3237400	3327200	AVRG	3538206.40	8.688	20.000
(2)	6193000	6096100	5384200	5411600	5292200	5419600	AVRG	5632789.88	7.104	20.000
(3)	6636600	6665900	5857100	5950800	5837800	5962200	AVRG	6151720.22	6.342	20.000
(4)	7672200	7857000	7126300	7546900	7574200	7665000	AVRG	7573592.77	3.230	20.000
(5)	4493300	4530200	4056300	4248000	4361000	4550400	AVRG	4373191.70	4.419	20.000
Aroclor-1260	5328700	5327800	5503200	5388700	5246000	5394800	AVRG	5364875.02	1.612	20.000
(2)	5386300	5583800	5971000	6119300	5907100	6077900	AVRG	5840925.42	5.007	20.000
(3)	3920800	3971300	4346900	4467400	4394900	4602400	AVRG	4283943.02	6.443	20.000
(4)	6901300	6868000	7960900	8548800	8444900	8722200	AVRG	7907692.90	10.519	20.000
(5)	3360800	3327600	3813200	3970200	3932300	4268700	AVRG	3778812.47	9.757	20.000
Tetrachloro-m-xylene	2e+008	2.e+008	2e+008	2e+008	2e+008	2e+008	AVRG	206955117	4.267	20.000
Decachlorobiphenyl	7e+007	7.e+007	7e+007	7e+007	7e+007	7e+007	AVRG	69309604.2	4.346	20.000

Katahdin Analytical Services A0000078

Report Date : 28-Jun-2011 16:45

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUN-2011 14:17
End Cal Date : 22-JUN-2011 11:23
Quant Method : ESTD
Origin : Disabled
Target Version : 4.12
Integrator : Falcon
Method file : \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\PCB042.m\PCB042.
Cal Date : 23-Jun-2011 09:18 jprescott
Curve Type : Average

Calibration File Names:
Level 1: \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\GC07EF21.b\7EF341.D
Level 2: \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\GC07EF21.b\7EF342.D
Level 3: \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\GC07EF21.b\7EF343.D
Level 4: \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\GC07EF21.b\7EF340.D
Level 5: \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\GC07EF21.b\7EF344.D
Level 6: \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\GC07EF21.b\7EF345.D

Compound	0.05000 Level 1	0.10000 Level 2	0.25000 Level 3	1.000 Level 4	2.500 Level 5	10.000 Level 6	RRF	% RSD
M 1 Total PCBs	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Aroclor-1221 (1)	1610060	1524610	1641076	1328935	1281962	1212699	1433224	12.683
(2)	2082300	1981830	2212704	1843569	1826966	1779335	1954451	8.653
(3)	4905260	4592490	5003544	4159037	4149959	3956644	4461156	9.778
(4)	528720	547090	636920	527644	514455	492343	541195	9.290
4 Aroclor-1232 (1)	4738840	4371930	3920616	3500381	3500680	3259982	3882071	14.814
(2)	2403380	2460800	2325768	2096295	2096361	1992397	2229167	8.622
(3)	3784860	3863720	3686504	3455622	3553810	3466009	3635088	4.681
(4)	2104300	2171550	2093652	1938013	1970445	1918282	2032707	5.115
(5)	1953180	1874500	1708416	1534065	1532797	1498310	1683545	11.553
5 Aroclor-1016 (1)	3590260	3450440	3430408	3310570	3123809	3146936	3342071	5.482
(2)	4942180	5014760	4989644	4863698	4597540	4618864	4837781	3.829
(3)	8046660	8319650	8498128	8605028	8279586	8179344	8321399	2.457
(4)	4609720	4739600	4768908	4818708	4564090	4669454	4695080	2.083
(5)	4122280	4189670	4199460	4091541	3953574	4095268	4108632	2.164
6 Aroclor-1242 (1)	3252940	3061660	2772540	2549983	2573520	2443069	2775619	11.529
(2)	4453480	4283830	3968568	3728927	3761968	3538813	3955931	8.890
(3)	7268360	6978950	6715704	6558670	6684004	6347844	6758922	4.792
(4)	4092120	3979980	3763488	3639112	3695301	3584217	3792370	5.302
(5)	3797160	3621140	3397952	3220701	3250266	3136378	3403933	7.554
7 Aroclor-1248 (1)	3835240	3845770	3810428	3819372	3651608	3677091	3773252	2.269
(2)	4390240	4422170	4361744	4284843	4043570	3956071	4243106	4.615
(3)	5554900	5572710	5508448	5480626	5270399	5170761	5426307	3.054
(4)	4547340	4618380	4607828	4643174	4470277	4436475	4553912	1.860
(5)	4200400	4289860	4434580	4874322	4795873	4926955	4586998	6.913
8 Aroclor-1254 (1)	3911820	3941420	3413628	3397790	3237393	3327188	3538206	8.688
(2)	6193020	6096110	5384208	5411649	5292159	5419594	5632790	7.104
(3)	6636600	6665860	5857112	5950756	5837825	5962169	6151720	6.342

Report Date : 28-Jun-2011 16:45

Katahdin Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUN-2011 14:17
End Cal Date : 22-JUN-2011 11:23
Quant Method : ESTD
Origin : Disabled
Target Version : 4.12
Integrator : Falcon
Method file : \\TARGET_SERVER\GG\chem\gc07.i\GC07EF21.b\PCB042.m\PCB042.
Cal Date : 23-Jun-2011 09:18 jprescott
Curve Type : Average

Compound	0.05000 Level 1	0.10000 Level 2	0.25000 Level 3	1.000 Level 4	2.500 Level 5	10.000 Level 6	___ RRF	% RSD
(4)	7672160	7856950	7126300	7546913	7574178	7665056	7573593	3.230
(5)	4493280	4530190	4056280	4248044	4360974	4550382	4373192	4.419
9 Aroclor-1260 (1)	5328720	5327820	5503180	5388724	5245985	5394821	5364875	1.612
(2)	5386340	5583840	5971052	6119332	5907108	6077881	5840925	5.007
(3)	3920780	3971340	4346864	4467382	4394887	4602405	4283943	6.443
(4)	6901340	6868040	7960916	8548761	8444900	8722200	7907693	10.519
(5)	3360840	3327620	3813180	3970229	3932290	4268716	3778812	9.757
10 Aroclor-1262 (1)	4381620	4266160	4664356	4073248	4426242	4046196	4309637	5.410
(2)	5863260	4455420	4972272	4395767	4831055	4434061	4825306	11.625
(3)	7105320	5964360	6679256	5862962	6372951	5709304	6282359	8.567
(4)	10673560	8458720	9930252	9050147	10437958	9407751	9659731	8.765
(5)	5785920	4885120	5425232	4850917	5411427	5069612	5238038	6.978
11 Aroclor-1268 (1)	3818060	3611860	3488548	3331773	3256790	3200353	3451231	6.817
(2)	12893740	12405530	12240752	12607272	12549008	11907093	12433899	2.716
(3)	10912680	10411040	10352804	10716930	10583436	10178928	10525970	2.524
(4)	9565020	9118960	9066396	9050270	9048365	8738583	9097932	2.922
(5)	4799940	4547540	4394004	4251117	4067487	4071202	4355215	6.580
$ 2 Tetrachloro-m-xylene	193108000	201735000	206016200	217537600	209061620	214272280	206955117	4.267
$ 12 Decachlorobiphenyl	70873000	70450000	73879000	67713600	65452000	67490025	69309604	4.346

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC07 Calibration Date: 06/21/11 Time: 1654

Lab File ID: 7EF302 Init. Calib. Date(s): 06/21/11 06/22/11

Init. Calib. Times: 1417 1123

GC Column: RTX-CLPESTICIDES2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	3342100.0	3154300.0	0.001	-5.62	20.00	AVRG
(2)	4837800.0	4887400.0	0.001	1.02	20.00	AVRG
(3)	8321400.0	8620500.0	0.001	3.59	20.00	AVRG
(4)	4695100.0	4769900.0	0.001	1.59	20.00	AVRG
(5)	4108600.0	4095500.0	0.001	-0.32	20.00	AVRG
Average %D: 0.0600						

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC07 Calibration Date: 06/21/11 Time: 1720

Lab File ID: 7EF303 Init. Calib. Date(s): 06/21/11 06/22/11

Init. Calib. Times: 1417 1123

GC Column: RTX-CLPESTICIDES2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1260	5364900.0	5098600.0	0.001	-4.96	20.00	AVRG
(2)	5840900.0	5618300.0	0.001	-3.81	20.00	AVRG
(3)	4284000.0	4560200.0	0.001	6.45	20.00	AVRG
(4)	7907700.0	7039200.0	0.001	-10.98	20.00	AVRG
(5)	3778800.0	3396600.0	0.001	-10.11	20.00	AVRG
Average %D: -4.690						

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: NEW BEDFORD HARBOR SDG No.: SE3870

GC Column: RTX-CLPESTICIDES2 ID: 0.53 (mm) Init. Calib. Date(s): 06/21/11 06/22/11

Instrument ID: GC07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 16.86 TCX: 4.10

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		AR1660 1.0	07/12/11	1234	16.86	4.10
02	WG93746-BLAN	WG93746-1	07/12/11	1524	16.85	4.10
03	WG93746-LCS	WG93746-2	07/12/11	1550	16.85	4.10
04	WG93746-LCSD	WG93746-3	07/12/11	1616	16.86	4.10
05	2W-SD-SD162-	SE3870-1	07/12/11	1800	16.85	4.10
06		AR1660 0.25	07/12/11	1917	16.86	4.10
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services A0000094

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC07 Calibration Date: 07/12/11 Time: 1234

Lab File ID: 7EG159 Init. Calib. Date(s): 06/21/11 06/21/11

Init. Calib. Times: 1417 1628

GC Column: RTX-CLPESTICIDES2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Aroclor-1016	3342100.0	3500000.0	0.001	4.72	20.00	AVRG
(2)	4837800.0	5349100.0	0.001	10.57	20.00	AVRG
(3)	8321400.0	9041600.0	0.001	8.65	20.00	AVRG
(4)	4695100.0	5039400.0	0.001	7.33	20.00	AVRG
(5)	4108600.0	4329900.0	0.001	5.39	20.00	AVRG
Average %D: 7.3300						
Aroclor-1260	5364900.0	5614000.0	0.001	4.64	20.00	AVRG
(2)	5840900.0	6062300.0	0.001	3.79	20.00	AVRG
(3)	4284000.0	4511000.0	0.001	5.30	20.00	AVRG
(4)	7907700.0	8559200.0	0.001	8.24	20.00	AVRG
(5)	3778800.0	4042900.0	0.001	6.99	20.00	AVRG
Average %D: 5.7900						
Decachlorobiphenyl	69310000	72190000	0.001	4.16	20.00	AVRG
Tetrachloro-m-xylene	206960000	227690000	0.001	10.02	20.00	AVRG

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC07 Calibration Date: 07/12/11 Time: 1917

Lab File ID: 7EG172 Init. Calib. Date(s): 06/21/11 06/21/11

Init. Calib. Times: 1417 1628

GC Column: RTX-CLPESTICIDES2 ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF0.2500 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Aroclor-1016	3342100.0	4010800.0	0.001	20.01	20.00	AVRG	<-
(2)	4837800.0	6247600.0	0.001	29.14	20.00	AVRG	<-
(3)	8321400.0	10002000	0.001	20.20	20.00	AVRG	<-
(4)	4695100.0	5743100.0	0.001	22.32	20.00	AVRG	<-
(5)	4108600.0	4904400.0	0.001	19.37	20.00	AVRG	
Average %D: 22.200				AVG 22.21			
Aroclor-1260	5364900.0	6393700.0	0.001	19.18	20.00	AVRG	
(2)	5840900.0	6638700.0	0.001	13.66	20.00	AVRG	
(3)	4284000.0	4953500.0	0.001	15.63	20.00	AVRG	
(4)	7907700.0	9419300.0	0.001	19.12	20.00	AVRG	
(5)	3778800.0	4528800.0	0.001	19.85	20.00	AVRG	
Average %D: 17.480							
Decachlorobiphenyl	69310000	87648000	0.001	26.46	20.00	AVRG	<-
Tetrachloro-m-xylene	206960000	240290000	0.001	16.10	20.00	AVRG	

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG93746-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Lab Sample ID: WG93746-1 Lab File ID: 7EG163

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3550

Sulfur Cleanup: (Y/N) N Date Extracted: 07/08/11

Date Analyzed (1): 07/12/11 Date Analyzed (2): 07/12/11

Time Analyzed (1): 1524 Time Analyzed (2): 1524

Instrument ID (1): GC07 Instrument ID (2): GC07

GC Column (1): RTX-CLPESTICIDES ID: 0.53(mm) GC Column (2): RTX-CLPESTICIDES2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	WG93746-LCS	WG93746-2	7EG164	07/12/11	07/12/11
02	WG93746-LCSD	WG93746-3	7EG165	07/12/11	07/12/11
03	2W-SD-SD162-0001	SE3870-1	7EG169	07/12/11	07/12/11
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

COMMENTS: _____

FORM IVPCB

Katahdin Analytical Services A0000070

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG93746-1
Client ID: Method Blank Sample
Project:
SDG: SE3870

Sample Date:
Received Date: 08-JUL-11
Extract Date: 08-JUL-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG93746

Analysis Date: 12-JUL-11
Analyst: CB
Analysis Method: SW846 8082A
Matrix: SL
% Solids: NA
Report Date: 13-jul-2011 10:09

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Aroclor-1016	U	8.5	ug/Kgdrywt	1	17	17.	6.0	8.5
Aroclor-1221	U	8.5	ug/Kgdrywt	1	17	17.	7.9	8.5
Aroclor-1232	U	10.	ug/Kgdrywt	1	17	17.	9.3	10.
Aroclor-1242	U	8.5	ug/Kgdrywt	1	17	17.	5.8	8.5
Aroclor-1248	U	8.5	ug/Kgdrywt	1	17	17.	6.1	8.5
Aroclor-1254	U	8.5	ug/Kgdrywt	1	17	17.	4.7	8.5
Aroclor-1260	U	8.5	ug/Kgdrywt	1	17	17.	6.0	8.5
Tetrachloro-M-Xylene		59.4	%					
Decachlorobiphenyl		74.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

FORM 2
SOIL PCB SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

GC Column(1): RTX-CLPESTICIDESID: 0.53 (mm) GC Column(2): RTX-CLPESTICIDES2 ID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	DCB1 REC#	DCB2 REC#	OTHR (1)	OTHR (2)	TOT OUT
01	WG93746-BLANK	WG93746-1	50*	59	74	73			1
02	WG93746-LCS	WG93746-2	49*	60	77	77			1
03	WG93746-LCSD	WG93746-3	54*	63	83	81			1
04	2W-SD-SD162-0001	SE3870-1	34*	40*	47*	49*			4
05									
06									
07									
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (56-115)
S2 (DCB) = Decachlorobiphenyl (59-124)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

Katahdin Analytical Services A0000066

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG93746-2
LCSD ID: WG93746-3
Project:
SDG: SE3870
Report Date: 13-jul-2011 10:10

Received Date: 08-JUL-11
Extract Date: 08-JUL-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG93746

Analysis Date: 12-JUL-11
Analyst: CB
Analysis Method: SW846 8082A
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Aroclor-1016	167.	115.	68.9	120.	71.8	ug/Kgdrywt	4	50	53-123
Aroclor-1260	167.	131.	78.4	136.	81.4	ug/Kgdrywt	4	50	58-120
Tetrachloro-M-Xylene			60.1		63.4				56-115
Decachlorobiphenyl			77.5		83.5				59-124

600 Technology Way
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Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SE3870

Instrument ID: THERMO ICAP 6500 **File Name:** IBG11A

Date: 7/11/2011 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
Blank		1	14:50	AL	AS	CD CA CR	CU FE PB MG	NI		ZN
Std 1		1	14:54	AL	AS	CD CA CR	CU FE PB MG	NI		ZN
ICV		1	14:59	AL	AS	CD CA CR	CU FE PB MG	NI		ZN
ICB		1	15:03	AL	AS	CD CA CR	CU FE PB MG	NI		ZN
PQL		1	15:08	AL	AS	CD CA CR	CU FE PB MG	NI		ZN
ICSA		1	15:12	AL	AS	CD CA CR	CU FE PB MG	NI		ZN
ICSAB		1	15:17	AL	AS	CD CA CR	CU FE PB MG	NI		ZN
CCV		1	15:22	AL	AS	CD CA CR	CU FE PB MG	NI		ZN
CCB		1	15:26	AL	AS	CD CA CR	CU FE PB MG	NI		ZN
ZZZZZZ		1	15:31							
ZZZZZZ		1	15:36							
ZZZZZZ		5	15:40							
ZZZZZZ		1	15:45							
ZZZZZZ		2	15:50							
ZZZZZZ		3	15:54							
PBSBG11ICS0		1	15:59		AS	CD CR	CU PB	NI		ZN
LCSOBG11ICS0		1	16:03		AS	CD CR	CU PB	NI		ZN
LC2OBG11ICS0		1	16:08		AS	CD CR	CU PB	NI		ZN
ZZZZZZ		1	16:12							
CCV		1	16:17	AL	AS	CD CA CR	CU FE PB MG	NI		ZN
CCB		1	16:21	AL	AS	CD CA CR	CU FE PB MG	NI		ZN
ZZZZZZ		1	16:26							
ZZZZZZ		1	16:30							
ZZZZZZ		1	16:35							
ZZZZZZ		1	16:40							
ZZZZZZ		5	16:44							
ZZZZZZ		1	16:49							
ZZZZZZ		1	16:53							
ZZZZZZ		1	16:58							
SE3870-001	2W-SD-SD162-0001	1	17:02							ZN
ZZZZZZ		1	17:07							
CCV		1	17:12	AL	AS	CD CA CR	CU FE PB MG	NI		ZN
CCB		1	17:16	AL	AS	CD CA CR	CU FE PB MG	NI		ZN
ZZZZZZ		1	17:21							
SE3870-001	2W-SD-SD162-0001	2	17:25		AS	CD CR	CU PB	NI		
ZZZZZZ		1	17:30							
ZZZZZZ		1	17:35							
ZZZZZZ		1	17:39							
ZZZZZZ		1	17:44							
ZZZZZZ		1	17:49							
ZZZZZZ		1	17:53							
ZZZZZZ		1	17:58							
ZZZZZZ		1	18:02							
CCV		1	18:07	AL	AS	CD CA CR	CU FE PB MG	NI		ZN
CCB		1	18:11	AL	AS	CD CA CR	CU FE PB MG	NI		ZN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name: SE3870**

Concentration Units: ug/L

SAMPLE: ICV

File: IBG11A Jul 11, 2011 14:59

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	9938.00	99.4
ARSENIC	400.0	387.90	97.0
CADMIUM	400.0	402.90	100.7
CALCIUM	10000.0	9988.00	99.9
CHROMIUM	400.0	402.10	100.5
COPPER	400.0	397.40	99.3
IRON	10000.0	10030.00	100.3
LEAD	400.0	406.30	101.6
MAGNESIUM	10000.0	10030.00	100.3
NICKEL	400.0	400.80	100.2
ZINC	400.0	404.00	101.0

SAMPLE: CCV

File: IBG11A Jul 11, 2011 15:22

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12570.00	100.6
ARSENIC	500.0	497.80	99.6
CADMIUM	500.0	505.90	101.2
CALCIUM	12500.0	12360.00	98.9
CHROMIUM	500.0	495.90	99.2
COPPER	500.0	513.20	102.6
IRON	12500.0	12490.00	99.9
LEAD	500.0	507.20	101.4
MAGNESIUM	12500.0	13270.00	106.2
NICKEL	500.0	510.40	102.1
ZINC	500.0	492.50	98.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SE3870

Concentration Units: ug/L

SAMPLE: CCV

File: IBG11A Jul 11, 2011 16:17

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12500.00	100.0
ARSENIC	500.0	497.40	99.5
CADMIUM	500.0	507.10	101.4
CALCIUM	12500.0	12290.00	98.3
CHROMIUM	500.0	485.30	97.1
COPPER	500.0	511.80	102.4
IRON	12500.0	12290.00	98.3
LEAD	500.0	499.00	99.8
MAGNESIUM	12500.0	13390.00	107.1
NICKEL	500.0	509.30	101.9
ZINC	500.0	484.30	96.9

SAMPLE: CCV

File: IBG11A Jul 11, 2011 17:12

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12510.00	100.1
ARSENIC	500.0	495.60	99.1
CADMIUM	500.0	513.80	102.8
CALCIUM	12500.0	12500.00	100.0
CHROMIUM	500.0	481.00	96.2
COPPER	500.0	506.20	101.2
IRON	12500.0	12220.00	97.8
LEAD	500.0	490.80	98.2
MAGNESIUM	12500.0	13480.00	107.8
NICKEL	500.0	512.00	102.4
ZINC	500.0	481.20	96.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SE3870

Concentration Units: ug/L

SAMPLE: CCV

File: IBG11A Jul 11, 2011 18:07

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12460.00	99.7
ARSENIC	500.0	501.40	100.3
CADMIUM	500.0	505.80	101.2
CALCIUM	12500.0	12150.00	97.2
CHROMIUM	500.0	482.60	96.5
COPPER	500.0	513.00	102.6
IRON	12500.0	12170.00	97.4
LEAD	500.0	499.90	100.0
MAGNESIUM	12500.0	13410.00	107.3
NICKEL	500.0	509.10	101.8
ZINC	500.0	485.70	97.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SE3870

Concentration Units: ug/L

SAMPLE: PQL

File: IBG11A Jul 11, 2011 15:08

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	308.20	102.7
ARSENIC	8.0	6.45	80.6
CADMIUM	5.0	5.15	103.0
CALCIUM	100.0	100.20	100.2
CHROMIUM	10.0	10.21	102.1
COPPER	25.0	26.34	105.4
IRON	100.0	103.40	103.4
LEAD	5.0	5.90	118.0
MAGNESIUM	100.0	109.80	109.8
NICKEL	10.0	11.05	110.5
ZINC	25.0	20.21	80.8

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SE3870

Concentration Units: ug/L

SAMPLE: ICB
File: IBG11A Jul 11, 2011 15:03

Analyte	Result	C
ALUMINUM	14.400	U
ARSENIC	1.580	U
CADMIUM	0.870	U
CALCIUM	11.400	U
CHROMIUM	0.340	U
COPPER	0.640	U
IRON	3.020	U
LEAD	1.330	U
MAGNESIUM	5.500	U
NICKEL	0.330	U
ZINC	0.190	U

SAMPLE: CCB
File: IBG11A Jul 11, 2011 15:26

Analyte	Result	C
ALUMINUM	14.400	U
ARSENIC	1.580	U
CADMIUM	0.870	U
CALCIUM	11.400	U
CHROMIUM	0.340	U
COPPER	0.640	U
IRON	3.508	J
LEAD	1.330	U
MAGNESIUM	5.500	U
NICKEL	0.330	U
ZINC	0.190	U

SAMPLE: CCB
File: IBG11A Jul 11, 2011 16:21

Analyte	Result	C
ALUMINUM	14.400	U
ARSENIC	1.580	U
CADMIUM	0.870	U
CALCIUM	11.400	U
CHROMIUM	0.356	J
COPPER	0.640	U
IRON	3.020	U
LEAD	1.420	J
MAGNESIUM	5.500	U
NICKEL	0.330	U
ZINC	0.190	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SE3870

Concentration Units: ug/L

SAMPLE: CCB

File: IBG11A Jul 11, 2011 17:16

Analyte	Result	C
ALUMINUM	14.400	U
ARSENIC	-1.743	J
CADMIUM	0.870	U
CALCIUM	11.400	U
CHROMIUM	0.340	U
COPPER	0.640	U
IRON	6.005	J
LEAD	1.330	U
MAGNESIUM	5.500	U
NICKEL	0.330	U
ZINC	0.190	U

SAMPLE: CCB

File: IBG11A Jul 11, 2011 18:11

Analyte	Result	C
ALUMINUM	14.400	U
ARSENIC	-1.761	J
CADMIUM	0.870	U
CALCIUM	11.400	U
CHROMIUM	0.340	U
COPPER	0.640	U
IRON	3.020	U
LEAD	1.330	U
MAGNESIUM	5.500	U
NICKEL	0.330	U
ZINC	0.190	U

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SE3870

Concentration Units: ug/L

SAMPLE: ICSA

File: IBG11A Jul 11, 2011 15:12

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	497300	99.5
ARSENIC	0	3	
CADMIUM	0	0	
CALCIUM	500000	455100	91.0
CHROMIUM	3	5	
COPPER	0	0	
IRON	200000	173500	86.8
LEAD	0	-1	
MAGNESIUM	500000	465500	93.1
NICKEL	0	2	
ZINC	0	2	

SAMPLE: ICSAB

File: IBG11A Jul 11, 2011 15:17

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	513300	102.7
ARSENIC	100	104	104.0
CADMIUM	1000	925	92.5
CALCIUM	500000	458300	91.7
CHROMIUM	500	472	94.4
COPPER	500	542	108.4
IRON	200000	178600	89.3
LEAD	50	44	88.0
MAGNESIUM	500000	474500	94.9
NICKEL	1000	897	89.7
ZINC	1000	896	89.6

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LC2OBG11ICS0

Matrix: SOIL **SDG Name:** SE3870

QC Batch ID: BG11ICS0

Concentration Units : mg/Kgdrywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ARSENIC	10.0	9.49	94.9	80	120
CADMIUM	25.0	25.20	100.8	80	120
CHROMIUM	20.0	19.85	99.3	80	120
COPPER	25.0	26.04	104.2	80	120
LEAD	10.0	9.93	99.3	80	120
NICKEL	50.0	51.94	103.9	80	120
ZINC	50.0	49.63	99.3	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSOBG11ICS0

Matrix: SOIL **SDG Name:** SE3870

QC Batch ID: BG11ICS0

Concentration Units : mg/Kgdrywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ARSENIC	10.0	9.45	94.5	80	120
CADMIUM	25.0	25.17	100.7	80	120
CHROMIUM	20.0	19.11	95.5	80	120
COPPER	25.0	25.25	101.0	80	120
LEAD	10.0	9.71	97.1	80	120
NICKEL	50.0	50.24	100.5	80	120
ZINC	50.0	47.48	95.0	80	120

7D

LABORATORY CONTROL SAMPLE DUPLICATES

Lab Name: Katahdin Analytical Services

Matrix: SOIL **SDG Name:** SE3870

QC Batch ID: BG11ICS0 **Lab Sample ID:** LCSOBG11ICS0

Concentration Units: mg/Kgdrywt

Analyte	Control Limit (%)	LCS Result	LCS Dup. Result	RPD(%)	Q
ARSENIC	20.0	9.45	9.49	0.4	
CADMIUM	20.0	25.17	25.20	0.1	
CHROMIUM	20.0	19.11	19.85	3.8	
COPPER	20.0	25.25	26.04	3.1	
LEAD	20.0	9.71	9.93	2.3	
NICKEL	20.0	50.24	51.94	3.3	
ZINC	20.0	47.48	49.63	4.4	

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** BG11ICS0

Matrix: SOIL **SDG Name:** SE3870

Method: P **Prep Date:** 07/11/2011

Client ID	Lab Sample ID	Initial (g)	Final (L)
LC2OBG11ICS0	LC2OBG11ICS0	1	0.1
LCSOBG11ICS0	LCSOBG11ICS0	1	0.1
PBSBG11ICS0	PBSBG11ICS0	1	0.1
2W-SD-SD162-0001	SE3870-001	1.52	0.1

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 6/9/2011

Concentration Units: ug/L

Analyte	CRDL	IDL	M
ALUMINUM	300	14.40	P
ARSENIC	8.0	1.58	P
CADMIUM	10	0.87	P
CALCIUM	100	11.40	P
CHROMIUM	15	0.34	P
COPPER	25	0.64	P
IRON	100	3.02	P
LEAD	5.0	1.33	P
MAGNESIUM	100	5.50	P
NICKEL	40	0.33	P
ZINC	25	0.19	P

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code: I**

Instrument Name: THERMO ICAP 6500 **Date:** 1/20/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ARSENIC	0.50	mg/Kg	P	SW846 3050B / SW846 6010C
CADMIUM	0.30	mg/Kg	P	SW846 3050B / SW846 6010C
CHROMIUM	0.40	mg/Kg	P	SW846 3050B / SW846 6010C
COPPER	1.00	mg/Kg	P	SW846 3050B / SW846 6010C
LEAD	0.40	mg/Kg	P	SW846 3050B / SW846 6010C
NICKEL	0.40	mg/Kg	P	SW846 3050B / SW846 6010C
ZINC	1.00	mg/Kg	P	SW846 3050B / SW846 6010C

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code: I**

Instrument Name: THERMO ICAP 6500 **Date:** 1/20/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ARSENIC	0.07	mg/Kg	P	SW846 3050B / SW846 6010C
CADMIUM	0.008	mg/Kg	P	SW846 3050B / SW846 6010C
CHROMIUM	0.03	mg/Kg	P	SW846 3050B / SW846 6010C
COPPER	0.16	mg/Kg	P	SW846 3050B / SW846 6010C
LEAD	0.09	mg/Kg	P	SW846 3050B / SW846 6010C
NICKEL	0.04	mg/Kg	P	SW846 3050B / SW846 6010C
ZINC	0.17	mg/Kg	P	SW846 3050B / SW846 6010C

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG93859	ASTM D2216	08-JUL-11	07-JUL-11	U 1 %	1 %	N/A

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG93859-2	LCS	WG93859	08-JUL-11	07-JUL-11	%	90	90.	100	80-120	

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sales@katahdinlab.com

TETRA TECH NUS, INC. **CALCULATION WORKSHEET** PAGE ____ OF ____

CLIENT		JOB NUMBER	
NSB New London		SDG SE3870	
SUBJECT			
Sample Calculations			
BASED ON		DRAWING NUMBER	
BY	CHECKED BY	APPROVED BY	DATE
Ann Cognetta			August 1, 2011

I. PAH; ZW-SD-SD162-0001; fluoranthene

$$\frac{137848}{121756} * 1 * \frac{0.001}{0.0325 * 1} * \frac{0.80}{0.91012216} * \frac{1}{0.17} * 1000 = 180.1 \text{ ug/kg}$$

II. PEST; ZW-SD-SD162-0001;

III. Metals; ZW-SD-SD162-0001

$$1932 \frac{ug}{L} * \frac{0.1L}{1.52g} * \frac{1000g}{1kg} * \frac{1mg}{1000ug} * \frac{1}{0.169} = 752.1 \text{ mg/kg}$$

Sample Calculation

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE3870-1
Client ID: 2W-SD-SD162-0001
Project: CTO-WE55 New London, CT
SDG: SE3870

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 08-JUL-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG93747

Analysis Date: 12-JUL-11
Analyst: WAS
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 17.
Report Date: 13-JUL-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	55.	ug/Kgdrywt	1	20	110	14.	55.
2-Methylnaphthalene	U	55.	ug/Kgdrywt	1	20	110	12.	55.
1-Methylnaphthalene	U	55.	ug/Kgdrywt	1	20	110	9.3	55.
Acenaphthylene	U	55.	ug/Kgdrywt	1	20	110	6.6	55.
Acenaphthene	U	55.	ug/Kgdrywt	1	20	110	8.2	55.
Fluorene	U	55.	ug/Kgdrywt	1	20	110	18.	55.
Phenanthrene	J	80.	ug/Kgdrywt	1	20	110	9.8	55.
Anthracene	J	10.	ug/Kgdrywt	1	20	110	6.6	55.
Fluoranthene		180	ug/Kgdrywt	1	20	110	9.8	55.
Pyrene		140	ug/Kgdrywt	1	20	110	11.	55.
Benzo (a) anthracene	J	68.	ug/Kgdrywt	1	20	110	10.	55.
Chrysene	J	110	ug/Kgdrywt	1	20	110	9.3	55.
Benzo (b) Fluoranthene		170	ug/Kgdrywt	1	20	110	13.	55.
Benzo(k)fluoranthene	J	51.	ug/Kgdrywt	1	20	110	17.	55.
Benzo(a)pyrene	J	86.	ug/Kgdrywt	1	20	110	18.	55.
Indeno (1,2,3-cd) pyrene	J	100	ug/Kgdrywt	1	20	110	10.	55.
Dibenzo (a,h) anthracene	J	17.	ug/Kgdrywt	1	20	110	9.8	55.
Benzo(g,h,i)perylene	J	61.	ug/Kgdrywt	1	20	110	11.	55.
2-Methylnaphthalene-D10		29.0	%					
Fluorene-D10		27.7	%					
Pyrene-D10		32.3	%					

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Sample Calculation

Data File: \\target_server\GG\chem\gcms-g.i\G071211.b\G1719.D
Report Date: 13-Jul-2011 09:16

Katahdin Analytical Services

Data file : \\target_server\GG\chem\gcms-g.i\G071211.b\G1719.D
Lab Smp Id: SE3870-1 Client Smp ID: 2W-SD-SD162-0001
Inj Date : 12-JUL-2011 13:40 MS Autotune Date: 15-JUN-2004 09:29
Operator : WAS Inst ID: gcms-g.i
Smp Info : SE3870-1
Misc Info : WG93941,WG93747,G1614
Comment :
Method : \\target_server\GG\chem\gcms-g.i\G071211.b\gspsim92.m
Meth Date : 12-Jul-2011 12:49 gcms-g.i Quant Type: ISTD
Cal Date : 28-JUN-2011 16:39 Cal File: G1619.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sw8270sim+1mn.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03250	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	83.128	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kgdrywt)	REVIEW
* 7	1,4-Dichlorobenzene-D4	152	7.961	7.945	(1.000)	35373	0.80000	(Q)	
* 20	Naphthalene-D8	136	10.687	10.675	(1.000)	132515	0.80000		
$ 26	2-Methylnaphthalene-D10	152	12.276	12.261	(0.832)	53085	0.58398	106	
* 39	Acenaphthene-D10	164	14.752	14.752	(1.000)	72412	0.80000		
$ 47	Fluorene-D10	176	15.990	15.991	(1.084)	59960	0.55240	101(Q)	
* 59	Phenanthrene-D10	188	18.258	18.271	(1.000)	121756	0.80000		
60	Phenanthrene	178	18.312	18.326	(1.003)	66474	0.43925	80.1(a)	
61	Anthracene	178	18.449	18.449	(1.010)	8351	0.05781	10.5(a)	
64	Fluoranthene	202	21.146	21.156	(1.158)	137848	0.99518	181	
$ 65	Pyrene-D10	212	21.618	21.628	(0.880)	66026	0.64919	118	
66	Pyrene	202	21.649	21.670	(0.881)	124738	0.79110	144	
68	Benzo(a)anthracene	228	24.550	24.563	(0.999)	32009	0.37255	67.9(a)	
* 69	Chrysene-D12	240	24.564	24.590	(1.000)	69061	0.80000		
70	Chrysene	228	24.632	24.645	(1.003)	59122	0.58877	107(a)	
74	Benzo(b)fluoranthene	252	26.964	26.975	(0.972)	53821	0.95245	174	
75	Benzo(k)fluoranthene	252	27.008	27.031	(0.974)	21382	0.27818	50.7(aQ)	
76	Benzo(a)pyrene	252	27.603	27.636	(0.996)	24716	0.47267	86.2(a)	
* 77	Perylene-D12	264	27.726	27.749	(1.000)	41071	0.80000		
79	Indeno(1,2,3-cd)pyrene	276	29.870	29.912	(1.077)	13942	0.56616	103(aH)	
80	Dibenzo(a,h)anthracene	278	29.956	29.999	(1.080)	3014	0.09191	16.8(a)	
81	Benzo(g,h,i)perylene	276	30.473	30.487	(1.099)	14257	0.33270	60.7(a)	

Sample Calculation

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GCMS-G Calibration Date(s): 06/28/11 06/28/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 1254 1639

LAB FILE ID: RF0.2: G1619 RF0.5: G1618 RF1: G1614
RF2: G1617 RF5: G1616 RF8: G1615

								COEFFICENTS		%RSD	MAX %RSD
COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	A0	A1	OR R^2	OR R^2
1-Methylnaphthalene	0.564	0.584	0.560	0.549	0.517	0.511	AVRG		0.54754572	5.165	15.000
Naphthalene	0.876	0.904	0.890	0.859	0.809	0.801	AVRG		0.85649311	4.972	15.000
2-Methylnaphthalene	29325	60225	110440	219420	496900	957090	LINR	-0.1934740	1.93340921	0.99869	0.99000
Acenaphthylene	1.696	1.733	1.681	1.643	1.635	1.670	AVRG		1.67638405	2.141	15.000
Acenaphthene	1.052	1.086	1.089	1.037	1.013	1.027	AVRG		1.05069170	2.944	15.000
Fluorene	1.123	1.187	1.192	1.147	1.152	1.218	AVRG		1.16987671	2.998	15.000
Phenanthrene	0.957	1.008	1.043	0.994	0.972	0.991	AVRG		0.99433957	2.986	15.000
Anthracene	0.952	0.950	1.011	0.926	0.892	0.964	AVRG		0.94907756	4.155	15.000
Fluoranthene	0.886	0.915	0.895	0.926	0.882	0.957	AVRG		0.91012216	3.168	15.000
Pyrene	1.795	1.864	2.005	1.694	1.888	1.715	AVRG		1.82652043	6.388	15.000
Benzo(a)anthracene	0.845	0.997	1.075	1.026	1.000	1.027	AVRG		0.99527568	7.900	15.000
Chrysene	1.380	1.255	1.196	1.067	1.055	1.026	AVRG		1.16320880	11.922	15.000
Benzo(b)fluoranthene	0.948	1.087	1.155	1.134	1.080	1.200	AVRG		1.10068930	7.894	15.000
Benzo(k)fluoranthene	1.638	1.702	1.461	1.434	1.382	1.366	AVRG		1.49720173	9.327	15.000
Benzo(a)pyrene	0.948	1.044	1.038	1.033	1.008	1.040	AVRG		1.01852293	3.617	15.000
Indeno(1,2,3-cd)pyrene	4553	9411	21501	55733	132380	296120	LINR	0.18423987	1.54202177	0.99815	0.99000
Dibenzo(a,h)anthracene	0.512	0.565	0.706	0.661	0.710	0.679	AVRG		0.63877965	12.783	15.000
Benzo(g,h,i)perylene	0.832	0.892	0.877	0.820	0.838	0.751	AVRG		0.83471055	5.937	15.000
2-Methylnaphthalene-D10	0.970	1.022	1.045	1.014	0.993	0.982	AVRG		1.00427588	2.765	15.000
Fluorene-D10	1.422	1.322	1.260	1.118	1.011	1.062	AVRG		1.19919628	13.410	15.000
Pyrene-D10	1.136	1.216	1.281	1.091	1.225	1.119	AVRG		1.17815581	6.241	15.000

FORM VI SV

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE3870-1
Client ID: 2W-SD-SD162-0001
Project: CTO-WE55 New London, CT
SDG: SE3870

Sample Date: 04-APR-11
Received Date: 06-APR-11
Extract Date: 08-JUL-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG93745

Analysis Date: 12-JUL-11
Analyst: CB
Analysis Method: SW846 8081B
Matrix: SL
% Solids: 17.
Report Date: 13-JUL-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,4'-DDE	J	7.4	ug/Kgdrywt	1	3.3	18.	1.0	9.2
4,4'-DDD	J	9.2	ug/Kgdrywt	1	3.3	18.	1.1	9.2
4,4'-DDT	J	8.4	ug/Kgdrywt	1	3.3	18.	1.7	9.2
Tetrachloro-M-Xylene		41.2	%					
Decachlorobiphenyl		51.2	%					

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FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD 162-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO-WE55 NEW L

Lab Code: KAS PO No.: SDG No.: SE3870

Lab Sample ID: SE3870-1 Date(s) Analyzed: 07/12/11 07/12/11

Instrument ID (1): GC01 Instrument ID (2): GC01

GC Column(1): ZB-MULTIRESIDUE-2 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-1 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	7.43	7.36	7.50	5.20	
	2	7.65	7.58	7.72	7.44	35.4
4,4'-DDD	1	8.28	8.21	8.35	6.81	
	2	8.41	8.34	8.48	9.23	30.2
4,4'-DDT	1	8.67	8.60	8.74	8.37	
	2	8.86	8.79	8.93	5.63	39.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

Data File: 1EG00028.D
Report Date: 13-Jul-2011 08:15

Katahdin Analytical Services

Data file : \\Target_server\GG\chem\gc01.i\GC01EG11.b\GC01EG11.b\1EG00028.D
Lab Smp Id: SE3870-1 Client Smp ID: 2W-SD-SD162-0001
Inj Date : 12-JUL-2011 16:38
Operator : CB Inst ID: gc01.i
Smp Info : SE3870-1
Misc Info : WG93936,WG93745,1EF
Comment :
Method : \\Target_server\GG\chem\gc01.i\GC01EG11.b\PEST063.m\PEST063.m
Meth Date : 13-Jul-2011 07:45 cbyrne Quant Type: ESTD
Cal Date : 24-JUN-2011 18:58 Cal File: 1EF00294.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tetratnl-we55.sub
Target Version: 4.12
Processing Host: V200T5

Concentration Formula: Amt * DF * 1000*Vt*(1/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Final Volume (L)
Ws	0.03190	Weight of Sample (Kg)
M	83.128	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kgdrywt)	REVIEW CODE
19	4,4'-DDE	7.645	7.645	0.000	35413	0.00400	7.44(a)	
24	4,4'-DDD	8.409	8.407	0.002	30778	0.00497	9.23(a)	
27	4,4'-DDT	8.857	8.857	0.000	17267	0.00303	5.63(a)	
$ 4	Tetrachloro-m-Xylene	3.974	3.972	0.002	484124	0.03982	74.0	
$ 34	Decachlorobiphenyl	12.064	12.064	0.000	249785	0.05125	95.2	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE3870

Instrument ID: GC01 Calibration Date: 06/24/11 Time: 1638

Lab File ID: 1EF00286 Init. Calib. Date(s): 06/24/11 06/24/11

Init. Calib. Times: 1453 2007

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
alpha-BHC	4.86e-002	5.e-002	16220000	0.001	-2.80	20.00	2RDR
Endosulfan sulfate	4.41e-002	5.e-002	4049000.0	0.001	-11.80	20.00	2RDR
beta-BHC	5.24e-002	5.e-002	6616000.0	0.001	4.80	20.00	2RDR
delta-BHC	4.67e-002	5.e-002	8622000.0	0.001	-6.60	20.00	2RDR
Heptachlor	4.81e-002	5.e-002	11620000	0.001	-3.80	20.00	2RDR
Aldrin	4.72e-002	5.e-002	11440000	0.001	-5.60	20.00	2RDR
Heptachlor Epoxide	4.86e-002	5.e-002	10250000	0.001	-2.80	20.00	2RDR
gamma-Chlordane	4.82e-002	5.e-002	9877000.0	0.001	-3.60	20.00	2RDR
alpha-Chlordane	4.78e-002	5.e-002	9204000.0	0.001	-4.40	20.00	2RDR
4,4'-DDE	4.74e-002	5.e-002	9868000.0	0.001	-5.20	20.00	2RDR
Endosulfan I	4.84e-002	5.e-002	8910000.0	0.001	-3.20	20.00	2RDR
Dieldrin	4.61e-002	5.e-002	9185000.0	0.001	-7.80	20.00	2RDR
Endrin	4.65e-002	5.e-002	7958000.0	0.001	-7.00	20.00	2RDR
4,4'-DDD	4.6e-002	5.e-002	7048000.0	0.001	-8.00	20.00	2RDR
Endosulfan II	4.51e-002	5.e-002	7154000.0	0.001	-9.80	20.00	2RDR
4,4'-DDT	4.57e-002	5.e-002	7185000.0	0.001	-8.60	20.00	2RDR
Endrin Aldehyde	4.26e-002	5.e-002	4187000.0	0.001	-14.80	20.00	2RDR
Methoxychlor	4.75e-002	5.e-002	3530000.0	0.001	-5.00	20.00	2RDR
Endrin Ketone	4.42e-002	5.e-002	4624000.0	0.001	-11.60	20.00	2RDR
gamma-BHC	4.73e-002	5.e-002	14250000	0.001	-5.40	20.00	2RDR

Sample Calculation

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD162-0001

Matrix: SOIL **SDG Name:** SE3870

Percent Solids: 16.9 **Lab Sample ID:** SE3870-001

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-38-2	ARSENIC, TOTAL	13.6			P	2	6.2	0.53	3.9
7440-43-9	CADMIUM, TOTAL	2.3	U		P	2	7.8	0.06	2.3
7440-47-3	CHROMIUM, TOTAL	9.4	J		P	2	12	0.20	3.1
7440-50-8	COPPER, TOTAL	43.3			P	2	19	1.22	7.8
7439-92-1	LEAD, TOTAL	21.9			P	2	3.9	0.68	3.1
7440-02-0	NICKEL, TOTAL	15.0	J		P	2	31	0.34	3.1
7440-66-6	ZINC, TOTAL	753			P	1	9.7	0.66	3.9

Bottle ID: A

Comments:

Sample Calculation

SE3870-001 ZW-SD-SD162-0001

Method Name: K6010-2010+Pd
Method Revision: 210
Analyst Name: EAM
Acquire Date: 11/07/2011 17:02:50
Sample Type: Unknown

Elem	Avg	Units	Stddev	%RSD	Intensity Ratio
Mo2020_A	5.732	ug/L	0.1482	2.5863	10.20
Na5895_R	4221.	ug/L	5.0366	0.1193	13,464.69
Ni2316_A	37.82	ug/L	0.4143	1.0955	30.30
Pb2203_A	52.42	ug/L	0.2912	0.5555	38.21
Sb2068_A	-.5658	ug/L	0.7479	132.1932	0.58
Se1960_A	2.332	ug/L	0.1487	6.3760	1.51
Si2516_R	4576.	ug/L	6.8214	0.1491	2,101.51
Sn1899_A	45.33	ug/L	1.6338	3.6040	14.75
Sr4215_R	87.62	ug/L	0.1789	0.2042	10,241.74
Ti3349_A	1545.	ug/L	1.2529	0.0811	31,886.26
Tl1908_A	-1.845	ug/L	0.4515	24.4687	-3.06
V_2924_A	89.80	ug/L	0.4690	0.5223	877.64
Zn2062_A	1932.	ug/L	3.8133	0.1974	3,329.78
Pd3404	-6.776	ug/L	0.8265	12.1989	-155.36
Y_3600_R	31020.	Cts/S	11.3683	0.0366	31,019.64
Y_2243_A	5072.3	Cts/S	6.7685	0.1334	5,072.29
Y_3600_A	193010.	Cts/S	561.9339	0.2911	193,009.30

PBWBG08ICW0

Method Name: K6010-2010+Pd
Method Revision: 210
Analyst Name: EAM
Acquire Date: 11/07/2011 17:07:28
Sample Type: Unknown

Elem	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	-.4046	ug/L	0.0227	5.6140	-11.82
Al3961_R	2.678	ug/L	7.2729	271.6047	-2.69
As1891_A	.4116	ug/L	0.3309	80.3898	-0.59
Au2427_A	.0724	ug/L	0.3391	468.3078	-0.91
B_2089_A	-.3341	ug/L	0.0589	17.6147	1.11
Ba4554_R	.1062	ug/L	0.0211	19.8204	21.50
Be3130_R	.0183	ug/L	0.0206	112.4037	-1.77
Ca3158_R	4.894	ug/L	0.0360	0.7353	-21.35
Cd2265_A	-.0625	ug/L	0.0239	38.2474	-0.73
Co2286_A	-.0397	ug/L	0.0877	220.9096	1.11
Cr2677_A	.0668	ug/L	0.0249	37.2890	0.94
Cu3273_A	.0122	ug/L	0.3423	2,800.9301	14.01
Fe2599_R	34.70	ug/L	7.1229	20.5252	75.66
K_7664_R	7.056	ug/L	4.1807	59.2531	2.83
Li6707_R	.7491	ug/L	0.1999	26.6883	3.43
Mg2025_A	8.743	ug/L	1.9299	22.0751	-0.09
Mn2576_R	.3040	ug/L	0.1598	52.5689	1.70
Mo2020_A	.1757	ug/L	0.1749	99.5675	0.33
Na5895_R	8.252	ug/L	2.8342	34.3467	131.81
Ni2316_A	-.0157	ug/L	0.1287	821.0027	-0.22
Pb2203_A	.3174	ug/L	0.0488	15.3730	-1.15
Sb2068_A	-.1579	ug/L	1.8105	1,146.5557	-0.23
Se1960_A	.1040	ug/L	0.1648	158.4888	0.38
Si2516_R	19.14	ug/L	8.4602	44.1984	17.84
Sn1899_A	-.1808	ug/L	0.1576	87.1663	0.50
Sr4215_R	.0983	ug/L	0.0053	5.3441	-8.42
Ti3349_A	-.0181	ug/L	0.0580	319.6248	-7.71
Tl1908_A	1.176	ug/L	0.6861	58.3520	-0.28
V_2924_A	.0200	ug/L	0.0124	62.0291	0.95
Zn2062_A	.5905	ug/L	0.0905	15.3295	1.32
Pd3404	.8070	ug/L	0.5740	71.1330	0.65
Y_3600_R	30159.	Cts/S	90.0423	0.2986	30,159.04
Y_2243_A	5059.6	Cts/S	14.5951	0.2885	5,059.58
Y_3600_A	194180.	Cts/S	290.3615	0.1495	194,180.02

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **A. BERNHARDT** **DATE:** **DECEMBER 23, 2011**

FROM: **LEANNE GANSER** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – PAH**
CTO WE55, NSB NEW LONDON
SDG SE7042

SAMPLES: 6/Sediment/PAH

2W-SD-SD166-0001	2W-SD-SD167-0001	2W-SD-SD168-0001
2W-SD-SD169-0001	2W-SD-SD170-0001	2W-SD-SD171-0001

Overview

The sample set for NSB New London, CTO WE55, SDG SE7042 consisted of six (6) sediment environmental samples. The samples were analyzed for polycyclic aromatic hydrocarbons (PAHs). No field duplicate pairs were included in this sample delivery group (SDG).

The samples were collected by Tetra Tech on September 8, 2011 and analyzed by Katahdin Analytical Services. All analyses were conducted in accordance with SW-846 Method 8270D SIM analytical and reporting protocols. The data was evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • GC/MS Instrument Tuning and System Performance
* • Laboratory Method Blank Results
• Initial and Continuing Calibration
• Surrogate Spike Recoveries
• Internal Standard Areas
* • Laboratory Control Sample/Laboratory Control Sample Duplicate Results
* • Detection Limits
* • Compound Identification and Quantification

The asterisk (*) indicates that all quality control criteria were met for this parameter. Qualified (if applicable) analytical results are summarized in Appendix A. Results as reported by the laboratory are presented in Appendix B. Appendix C contains Region I worksheets, and Appendix D contains the documentation to support the findings as discussed in this data validation report. An EPA Region 1 tier III validation was performed on the data in this SDG. The text of this report has been formulated to address only those areas affecting data quality.

INITIAL AND CONTINUING CALIBRATION

The continuing calibration performed on instrument GCMS-G on 11/01/11 at 06:48 had Percent Drifts (%Drifts) greater than 20% for benzo(b)fluoranthene. Samples 2W-SD-SD166-0001, 2W-SD-SD168-0001, 2W-SD-SD169-0001, 2W-SD-SD170-0001, and 2W-SD-SD171-0001 were affected. Sample 2W-SD-SD167-0001 analyzed at dilution, was not affected because the result from the undiluted analysis was reported. The positive results reported for benzo(b)fluoranthene in samples 2W-SD-SD166-0001, 2W-SD-SD168-0001, 2W-SD-SD169-0001, 2W-SD-SD170-0001, and 2W-SD-SD171-0001 were qualified as estimated, (J).

SURROGATE SPIKE RECOVERIES

The Percent Recovery (%R) for the PAH surrogate spike compound, fluorene-d10, was greater the upper quality control limit in samples 2W-SD-SD166-0001, 2W-SD-SD167-0001, 2W-SD-SD168-0001, 2W-SD-SD169-0001, and 2W-SD-SD171-0001. Samples 2W-SD-SD166-0001, 2W-SD-SD167-0001, and 2W-SD-SD169-0001 were re-analyzed at dilution. The surrogate was diluted out in sample 2W-SD-SD167-0001 and was greater than the upper quality control limit in 2W-SD-SD166-0001 (diluted) and 2W-SD-SD169-0001 (diluted). The positive results reported for the PAH compounds in samples 2W-SD-SD166-0001, 2W-SD-SD167-0001, 2W-SD-SD168-0001, 2W-SD-SD169-0001, 2W-SD-SD171-0001, 2W-SD-SD166-0001 (diluted), and 2W-SD-SD169-0001 (diluted) were qualified as estimated, (J).

The Percent Recovery (%R) for the PAH surrogate spike compound, pyrene-d10, was greater the upper quality control limit in sample 2W-SD-SD166-0001. The surrogate recovery was compliance in sample 2W-SD-SD166-0001 was re-analyzed at dilution. The positive results reported for the PAH compounds in the undiluted sample 2W-SD-SD166-0001 were qualified as estimated, (J).

INTERNAL STANDARD RESULTS

The internal standard area for perylene-d12 was below the lower quality control limit in samples 2W-SD-SD166-0001, 2W-SD-SD167-0001, 2W-SD-SD169-0001, 2W-SD-SD170-0001, 2W-SD-SD166-0001 (diluted), and 2W-SD-SD169-0001 (diluted) affecting results for benzo(b)fluoranthene, benzo(a)pyrene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene. The positive results reported for benzo(b)fluoranthene, benzo(a)pyrene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene were qualified as estimated, (J) in the affected samples.

NOTES

Percent solids were less than 30 percent in samples 2W-SD-SD167-0001, 2W-SD-SD168-0001, 2W-SD-SD170-0001, AND 2W-SD-SD171-0001. Positive and nondetected results in these samples were qualified as estimated, (J) and (UJ), respectively.

The samples were held frozen until extraction 49 days after sample collection. The data were not qualified on this basis.

The result for benzo(b)fluoranthene in sample 2W-SD-SD170-0001 was reported as a nondetect because the result could not be properly quantified. Therefore, the result was reported from 2W-SD-SD170-0001 analyzed at dilution was used in the validation of the data.

The following samples were reanalyzed at dilution because results for some compounds exceeded the instrument's linear calibration range:

Sample	Dilution
2W-SD-SD166-0001	7X
2W-SD-SD167-0001	10X
2W-SD-SD169-0001	3X
2W-SD-SD170-0001	12X

The results for these compounds from the dilutions were used in the validation of the data.

Positive results reported below the LOQ but above the Method Detection Limit (MDL) were qualified as estimated, (J). Non-detected results are reported to the Limit of Detection (LOD).

EXECUTIVE SUMMARY

Laboratory Performance: Continuing calibration %Drifts were noted in the PAH fractions. Surrogate noncompliances were noted. Internal standard areas were noncompliant in the some samples.

Other Factors Affecting Data Quality: Many samples required dilutions. Positive results reported below the LOQ but above the MDL were qualified as estimated, (J). Non-detected results were reported to the LOD.

The data for these analyses were reviewed with reference to the criteria for SW-846 Method 8270D SIM listed in the project specific SAP, the "USEPA Region 1 Laboratory Data Validation Functional Guidelines – Part II" (12/96), and the Department of Defense (DOD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

Tetra Tech NUS
Leanne Ganser
Environmental Scientist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C – Regional Worksheets
4. Appendix D - Support Documentation

APPENDIX A

QUALIFIED LABORATORY RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS-GFAA MSA's r < 0.995 / ICP PDS Recovery Noncompliance
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 02625 SDG: SE7042 FRACTION: PAH MEDIA: SEDIMENT	NSAMPLE	2W-SD-SD166-0001			2W-SD-SD166-0001DL			2W-SD-SD167-0001			2W-SD-SD167-0001DL		
	LAB_ID	SE7042-1			SE7042-1DL			SE7042-2			SE7042-2DL		
	SAMP_DATE	9/8/2011			9/8/2011			9/8/2011			9/8/2011		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	32.0			32.0			27.0			27.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		6	J	PR				37	UJ	Y			
2-METHYLNAPHTHALENE		31	U					37	UJ	Y			
ACENAPHTHENE		17	J	PR				26	J	PRY			
ACENAPHTHYLENE		27	J	PR				24	J	PRY			
ANTHRACENE		60	J	PR				73	J	PRY			
BENZO(A)ANTHRACENE		780	J	R							1800	J	Y
BENZO(A)PYRENE					960	J	RN				2200	J	Y
BENZO(B)FLUORANTHENE					1500	J	CRN	130	J	RNY			
BENZO(G,H,I)PERYLENE		700	J	RN							1500	J	Y
BENZO(K)FLUORANTHENE					920	J	RN				2200	J	Y
CHRYSENE					910	J	R				1900	J	Y
DIBENZO(A,H)ANTHRACENE		180	J	RN				360	J	RNY			
FLUORANTHENE					1600	J	R				3500	J	Y
FLUORENE		26	J	PR				26	J	PRY			
INDENO(1,2,3-CD)PYRENE		720	J	RN							1500	J	Y
NAPHTHALENE		31	U					37	UJ	Y			
PHENANTHRENE		700	J	R				940	J	RY			
PYRENE					1900	J	R				4000	J	Y

PROJ_NO: 02625 SDG: SE7042 FRACTION: PAH MEDIA: SEDIMENT	NSAMPLE	2W-SD-SD168-0001			2W-SD-SD169-0001			2W-SD-SD169-0001DL			2W-SD-SD170-0001		
	LAB_ID	SE7042-3			SE7042-4			SE7042-4DL			SE7042-5		
	SAMP_DATE	9/8/2011			9/8/2011			9/8/2011			9/8/2011		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	24.0			38.2			38.2			24.6		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		41	UJ	Y	5.6	J	PR				39	UJ	Y
2-METHYLNAPHTHALENE		41	UJ	Y	26	U					39	UJ	Y
ACENAPHTHENE		9.3	J	PRY	12	J	PR				30	J	PY
ACENAPHTHYLENE		37	J	PRY	35	J	PR				28	J	PY
ANTHRACENE		33	J	PRY	44	J	PR				99	J	Y
BENZO(A)ANTHRACENE		280	J	RY	480	J	R						
BENZO(A)PYRENE		320	J	RY	580	J	RN						
BENZO(B)FLUORANTHENE		440	J	CRY				890	J	CRN			
BENZO(G,H,I)PERYLENE		220	J	RY	300	J	RN						
BENZO(K)FLUORANTHENE		280	J	RY	580	J	RN						
CHRYSENE		300	J	RY	530	J	R						
DIBENZO(A,H)ANTHRACENE		76	J	PRY	92	J	RN				340	J	NY
FLUORANTHENE		510	J	RY				920	J	R			
FLUORENE		19	J	PRY	20	J	PR				34	J	PY
INDENO(1,2,3-CD)PYRENE		240	J	RY	340	J	RN						
NAPHTHALENE		41	UJ	Y	6.8	J	PR				39	UJ	Y
PHENANTHRENE		300	J	RY	460	J	R						
PYRENE		690	J	RY				1100	J	R			

PROJ_NO: 02625 SDG: SE7042 FRACTION: PAH MEDIA: SEDIMENT	NSAMPLE	2W-SD-SD170-0001DL			2W-SD-SD171-0001		
	LAB_ID	SE7042-5DL			SE7042-6		
	SAMP_DATE	9/8/2011			9/8/2011		
	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	24.6			19.8		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE					49	UJ	Y
2-METHYLNAPHTHALENE					49	UJ	Y
ACENAPHTHENE					49	UJ	Y
ACENAPHTHYLENE					12	J	PRY
ANTHRACENE					22	J	PRY
BENZO(A)ANTHRACENE		2400	J	Y	380	J	RY
BENZO(A)PYRENE		3000	J	Y	490	J	RY
BENZO(B)FLUORANTHENE		4200	J	CY	760	J	CRY
BENZO(G,H,I)PERYLENE		1700	J	Y	370	J	RY
BENZO(K)FLUORANTHENE		2800	J	Y	420	J	RY
CHRYSENE		2500	J	Y	380	J	RY
DIBENZO(A,H)ANTHRACENE					110	J	RY
FLUORANTHENE		4500	J	Y	790	J	RY
FLUORENE					49	UJ	Y
INDENO(1,2,3-CD)PYRENE		1800	J	Y	410	J	RY
NAPHTHALENE					49	UJ	Y
PHENANTHRENE		1100	J	Y	260	J	RY
PYRENE		5200	J	Y	990	J	RY

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7042-1
Client ID: 2W-SD-SD166-0001
Project: CTO-WE55 New London, CT
SDG: SE7042

Sample Date: 08-SEP-11
Received Date: 09-SEP-11
Extract Date: 27-OCT-11
Extracted By: EC
Extraction Method: SW846 3540
Lab Prep Batch: WG99906

Analysis Date: 31-OCT-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 32.
Report Date: 28-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	31.	ug/Kgdrywt	1	20	62.	8.0	31.
2-Methylnaphthalene	U	31.	ug/Kgdrywt	1	20	62.	6.8	31.
1-Methylnaphthalene	J	6.0	ug/Kgdrywt	1	20	62.	5.3	31.
Acenaphthylene	J	27.	ug/Kgdrywt	1	20	62.	3.7	31.
Acenaphthene	J	17.	ug/Kgdrywt	1	20	62.	4.6	31.
Fluorene	J	26.	ug/Kgdrywt	1	20	62.	9.9	31.
Phenanthrene		700	ug/Kgdrywt	1	20	62.	5.6	31.
Anthracene	J	60.	ug/Kgdrywt	1	20	62.	3.7	31.
Fluoranthene	E	1400	ug/Kgdrywt	1	20	62.	5.6	31.
Pyrene	E	2900	ug/Kgdrywt	1	20	62.	6.5	31.
Benzo (a) anthracene		780	ug/Kgdrywt	1	20	62.	5.9	31.
Chrysene	E	870	ug/Kgdrywt	1	20	62.	5.3	31.
Benzo (b) Fluoranthene	E	920	ug/Kgdrywt	1	20	62.	7.4	31.
Benzo(k)fluoranthene	E	880	ug/Kgdrywt	1	20	62.	9.6	31.
Benzo(a)pyrene	E	910	ug/Kgdrywt	1	20	62.	10.	31.
Indeno (1,2,3-cd) pyrene		720	ug/Kgdrywt	1	20	62.	5.9	31.
Dibenzo (a,h) anthracene		180	ug/Kgdrywt	1	20	62.	5.6	31.
Benzo(g,h,i)perylene		700	ug/Kgdrywt	1	20	62.	6.2	31.
2-Methylnaphthalene-D10		74.3	%					
Fluorene-D10	*	90.8	%					
Pyrene-D10	*	161.	%					

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Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7042-1DL
Client ID: 2W-SD-SD166-0001
Project: CTO-WE55 New London, CT
SDG: SE7042

Sample Date: 08-SEP-11
Received Date: 09-SEP-11
Extract Date: 27-OCT-11
Extracted By: EC
Extraction Method: SW846 3540
Lab Prep Batch: WG99906

Analysis Date: 01-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 32.
Report Date: 28-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	220	ug/Kgdrywt	7	20	430	56.	220
2-Methylnaphthalene	U	220	ug/Kgdrywt	7	20	430	48.	220
1-Methylnaphthalene	U	220	ug/Kgdrywt	7	20	430	37.	220
Acenaphthylene	J	39.	ug/Kgdrywt	7	20	430	26.	220
Acenaphthene	U	220	ug/Kgdrywt	7	20	430	32.	220
Fluorene	U	220	ug/Kgdrywt	7	20	430	69.	220
Phenanthrene		590	ug/Kgdrywt	7	20	430	39.	220
Anthracene	J	100	ug/Kgdrywt	7	20	430	26.	220
Fluoranthene		1600	ug/Kgdrywt	7	20	430	39.	220
Pyrene		1900	ug/Kgdrywt	7	20	430	46.	220
Benzo (a) anthracene		730	ug/Kgdrywt	7	20	430	41.	220
Chrysene		910	ug/Kgdrywt	7	20	430	37.	220
Benzo (b) Fluoranthene		1500	ug/Kgdrywt	7	20	430	52.	220
Benzo(k)fluoranthene		920	ug/Kgdrywt	7	20	430	67.	220
Benzo(a)pyrene		960	ug/Kgdrywt	7	20	430	72.	220
Indeno (1,2,3-cd) pyrene		690	ug/Kgdrywt	7	20	430	41.	220
Dibenzo (a,h) anthracene	J	270	ug/Kgdrywt	7	20	430	39.	220
Benzo(g,h,i)perylene		710	ug/Kgdrywt	7	20	430	43.	220
2-Methylnaphthalene-D10		72.3	%					
Fluorene-D10	*	104.	%					
Pyrene-D10		114.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7042-2
Client ID: 2W-SD-SD167-0001
Project: CTO-WE55 New London, CT
SDG: SE7042

Sample Date: 08-SEP-11
Received Date: 09-SEP-11
Extract Date: 27-OCT-11
Extracted By: EC
Extraction Method: SW846 3540
Lab Prep Batch: WG99906

Analysis Date: 31-OCT-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 27.
Report Date: 28-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	37.	ug/Kgdrywt	1	20	74.	9.6	37.
2-Methylnaphthalene	U	37.	ug/Kgdrywt	1	20	74.	8.1	37.
1-Methylnaphthalene	U	37.	ug/Kgdrywt	1	20	74.	6.2	37.
Acenaphthylene	J	24.	ug/Kgdrywt	1	20	74.	4.4	37.
Acenaphthene	J	26.	ug/Kgdrywt	1	20	74.	5.5	37.
Fluorene	J	26.	ug/Kgdrywt	1	20	74.	12.	37.
Phenanthrene		940	ug/Kgdrywt	1	20	74.	6.6	37.
Anthracene	J	73.	ug/Kgdrywt	1	20	74.	4.4	37.
Fluoranthene	E	3300	ug/Kgdrywt	1	20	74.	6.6	37.
Pyrene	E	4900	ug/Kgdrywt	1	20	74.	7.7	37.
Benzo (a) anthracene	E	1900	ug/Kgdrywt	1	20	74.	7.0	37.
Chrysene	E	1800	ug/Kgdrywt	1	20	74.	6.2	37.
Benzo (b) Fluoranthene		130	ug/Kgdrywt	1	20	74.	8.8	37.
Benzo(k)fluoranthene	E	2000	ug/Kgdrywt	1	20	74.	11.	37.
Benzo(a)pyrene	E	2200	ug/Kgdrywt	1	20	74.	12.	37.
Indeno (1,2,3-cd) pyrene	E	1600	ug/Kgdrywt	1	20	74.	7.0	37.
Dibenzo (a,h) anthracene		360	ug/Kgdrywt	1	20	74.	6.6	37.
Benzo(g,h,i)perylene	E	1400	ug/Kgdrywt	1	20	74.	7.4	37.
2-Methylnaphthalene-D10		72.2	%					
Fluorene-D10	*	83.3	%					
Pyrene-D10		112.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7042-2DL
Client ID: 2W-SD-SD167-0001
Project: CTO-WE55 New London, CT
SDG: SE7042

Sample Date: 08-SEP-11
Received Date: 09-SEP-11
Extract Date: 27-OCT-11
Extracted By: EC
Extraction Method: SW846 3540
Lab Prep Batch: WG99906

Analysis Date: 01-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 27.
Report Date: 28-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	370	ug/Kgdrywt	10	20	740	96.	370
2-Methylnaphthalene	U	370	ug/Kgdrywt	10	20	740	81.	370
1-Methylnaphthalene	U	370	ug/Kgdrywt	10	20	740	62.	370
Acenaphthylene	U	370	ug/Kgdrywt	10	20	740	44.	370
Acenaphthene	U	370	ug/Kgdrywt	10	20	740	55.	370
Fluorene	U	370	ug/Kgdrywt	10	20	740	120	370
Phenanthrene		840	ug/Kgdrywt	10	20	740	66.	370
Anthracene	J	89.	ug/Kgdrywt	10	20	740	44.	370
Fluoranthene		3500	ug/Kgdrywt	10	20	740	66.	370
Pyrene		4000	ug/Kgdrywt	10	20	740	77.	370
Benzo (a) anthracene		1800	ug/Kgdrywt	10	20	740	70.	370
Chrysene		1900	ug/Kgdrywt	10	20	740	62.	370
Benzo (b) Fluoranthene		3600	ug/Kgdrywt	10	20	740	88.	370
Benzo(k)fluoranthene		2200	ug/Kgdrywt	10	20	740	110	370
Benzo(a)pyrene		2200	ug/Kgdrywt	10	20	740	120	370
Indeno (1,2,3-cd) pyrene		1500	ug/Kgdrywt	10	20	740	70.	370
Dibenzo (a,h) anthracene	J	520	ug/Kgdrywt	10	20	740	66.	370
Benzo(g,h,i)perylene		1500	ug/Kgdrywt	10	20	740	74.	370
2-Methylnaphthalene-D10		69.0	%					
Fluorene-D10	*	88.2	%					
Pyrene-D10		98.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7042-3
Client ID: 2W-SD-SD168-0001
Project: CTO-WE55 New London, CT
SDG: SE7042

Sample Date: 08-SEP-11
Received Date: 09-SEP-11
Extract Date: 27-OCT-11
Extracted By: EC
Extraction Method: SW846 3540
Lab Prep Batch: WG99906

Analysis Date: 01-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 24.
Report Date: 28-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	41.	ug/Kgdrywt	1	20	81.	10.	41.
2-Methylnaphthalene	U	41.	ug/Kgdrywt	1	20	81.	9.0	41.
1-Methylnaphthalene	U	41.	ug/Kgdrywt	1	20	81.	6.9	41.
Acenaphthylene	J	37.	ug/Kgdrywt	1	20	81.	4.9	41.
Acenaphthene	J	9.3	ug/Kgdrywt	1	20	81.	6.1	41.
Fluorene	J	19.	ug/Kgdrywt	1	20	81.	13.	41.
Phenanthrene		300	ug/Kgdrywt	1	20	81.	7.3	41.
Anthracene	J	33.	ug/Kgdrywt	1	20	81.	4.9	41.
Fluoranthene		510	ug/Kgdrywt	1	20	81.	7.3	41.
Pyrene		690	ug/Kgdrywt	1	20	81.	8.6	41.
Benzo (a) anthracene		280	ug/Kgdrywt	1	20	81.	7.7	41.
Chrysene		300	ug/Kgdrywt	1	20	81.	6.9	41.
Benzo (b) Fluoranthene		440	ug/Kgdrywt	1	20	81.	9.8	41.
Benzo(k)fluoranthene		280	ug/Kgdrywt	1	20	81.	13.	41.
Benzo(a)pyrene		320	ug/Kgdrywt	1	20	81.	13.	41.
Indeno (1,2,3-cd) pyrene		240	ug/Kgdrywt	1	20	81.	7.7	41.
Dibenzo (a,h) anthracene	J	76.	ug/Kgdrywt	1	20	81.	7.3	41.
Benzo(g,h,i)perylene		220	ug/Kgdrywt	1	20	81.	8.1	41.
2-Methylnaphthalene-D10		73.5	%					
Fluorene-D10	*	92.6	%					
Pyrene-D10		107.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7042-4
Client ID: 2W-SD-SD169-0001
Project: CTO-WE55 New London, CT
SDG: SE7042

Sample Date: 08-SEP-11
Received Date: 09-SEP-11
Extract Date: 27-OCT-11
Extracted By: EC
Extraction Method: SW846 3540
Lab Prep Batch: WG99906

Analysis Date: 31-OCT-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 38.
Report Date: 28-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	6.8	ug/Kgdrywt	1	20	51.	6.7	26.
2-Methylnaphthalene	U	26.	ug/Kgdrywt	1	20	51.	5.7	26.
1-Methylnaphthalene	J	5.6	ug/Kgdrywt	1	20	51.	4.4	26.
Acenaphthylene	J	35.	ug/Kgdrywt	1	20	51.	3.1	26.
Acenaphthene	J	12.	ug/Kgdrywt	1	20	51.	3.8	26.
Fluorene	J	20.	ug/Kgdrywt	1	20	51.	8.2	26.
Phenanthrene		460	ug/Kgdrywt	1	20	51.	4.6	26.
Anthracene	J	44.	ug/Kgdrywt	1	20	51.	3.1	26.
Fluoranthene	E	890	ug/Kgdrywt	1	20	51.	4.6	26.
Pyrene	E	1200	ug/Kgdrywt	1	20	51.	5.4	26.
Benzo (a) anthracene		480	ug/Kgdrywt	1	20	51.	4.9	26.
Chrysene		530	ug/Kgdrywt	1	20	51.	4.4	26.
Benzo (b) Fluoranthene	E	700	ug/Kgdrywt	1	20	51.	6.2	26.
Benzo(k)fluoranthene		580	ug/Kgdrywt	1	20	51.	8.0	26.
Benzo(a)pyrene		580	ug/Kgdrywt	1	20	51.	8.5	26.
Indeno (1,2,3-cd) pyrene		340	ug/Kgdrywt	1	20	51.	4.9	26.
Dibenzo (a,h) anthracene		92.	ug/Kgdrywt	1	20	51.	4.6	26.
Benzo(g,h,i)perylene		300	ug/Kgdrywt	1	20	51.	5.1	26.
2-Methylnaphthalene-D10		72.7	%					
Fluorene-D10	*	87.8	%					
Pyrene-D10		100.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7042-4DL
Client ID: 2W-SD-SD169-0001
Project: CTO-WE55 New London, CT
SDG: SE7042

Sample Date: 08-SEP-11
Received Date: 09-SEP-11
Extract Date: 27-OCT-11
Extracted By: EC
Extraction Method: SW846 3540
Lab Prep Batch: WG99906

Analysis Date: 01-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 38.
Report Date: 28-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	77.	ug/Kgdrywt	3	20	150	20.	77.
2-Methylnaphthalene	U	77.	ug/Kgdrywt	3	20	150	17.	77.
1-Methylnaphthalene	U	77.	ug/Kgdrywt	3	20	150	13.	77.
Acenaphthylene	J	35.	ug/Kgdrywt	3	20	150	9.3	77.
Acenaphthene	U	77.	ug/Kgdrywt	3	20	150	12.	77.
Fluorene	U	77.	ug/Kgdrywt	3	20	150	25.	77.
Phenanthrene		420	ug/Kgdrywt	3	20	150	14.	77.
Anthracene	J	44.	ug/Kgdrywt	3	20	150	9.3	77.
Fluoranthene		920	ug/Kgdrywt	3	20	150	14.	77.
Pyrene		1100	ug/Kgdrywt	3	20	150	16.	77.
Benzo (a) anthracene		450	ug/Kgdrywt	3	20	150	15.	77.
Chrysene		510	ug/Kgdrywt	3	20	150	13.	77.
Benzo (b) Fluoranthene		890	ug/Kgdrywt	3	20	150	18.	77.
Benzo(k)fluoranthene		520	ug/Kgdrywt	3	20	150	24.	77.
Benzo(a)pyrene		550	ug/Kgdrywt	3	20	150	25.	77.
Indeno (1,2,3-cd) pyrene		430	ug/Kgdrywt	3	20	150	15.	77.
Dibenzo (a,h) anthracene	J	140	ug/Kgdrywt	3	20	150	14.	77.
Benzo(g,h,i)perylene		400	ug/Kgdrywt	3	20	150	15.	77.
2-Methylnaphthalene-D10		66.3	%					
Fluorene-D10	*	85.5	%					
Pyrene-D10		103.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7042-5
Client ID: 2W-SD-SD170-0001
Project: CTO-WE55 New London, CT
SDG: SE7042

Sample Date: 08-SEP-11
Received Date: 09-SEP-11
Extract Date: 27-OCT-11
Extracted By: EC
Extraction Method: SW846 3540
Lab Prep Batch: WG99906

Analysis Date: 31-OCT-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 25.
Report Date: 28-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	39.	ug/Kgdrywt	1	20	77.	10.	39.
2-Methylnaphthalene	U	39.	ug/Kgdrywt	1	20	77.	8.5	39.
1-Methylnaphthalene	U	39.	ug/Kgdrywt	1	20	77.	6.6	39.
Acenaphthylene	J	28.	ug/Kgdrywt	1	20	77.	4.6	39.
Acenaphthene	J	30.	ug/Kgdrywt	1	20	77.	5.8	39.
Fluorene	J	34.	ug/Kgdrywt	1	20	77.	12.	39.
Phenanthrene	E	1200	ug/Kgdrywt	1	20	77.	7.0	39.
Anthracene		99.	ug/Kgdrywt	1	20	77.	4.6	39.
Fluoranthene	E	4500	ug/Kgdrywt	1	20	77.	7.0	39.
Pyrene	E	6300	ug/Kgdrywt	1	20	77.	8.1	39.
Benzo (a) anthracene	E	2600	ug/Kgdrywt	1	20	77.	7.4	39.
Chrysene	E	2300	ug/Kgdrywt	1	20	77.	6.6	39.
Benzo (b) Fluoranthene	U	39.	ug/Kgdrywt	1	20	77.	9.3	39.
Benzo(k)fluoranthene	E	2300	ug/Kgdrywt	1	20	77.	12.	39.
Benzo(a)pyrene	E	3000	ug/Kgdrywt	1	20	77.	13.	39.
Indeno (1,2,3-cd) pyrene	E	1700	ug/Kgdrywt	1	20	77.	7.4	39.
Dibenzo (a,h) anthracene		340	ug/Kgdrywt	1	20	77.	7.0	39.
Benzo(g,h,i)perylene	E	1400	ug/Kgdrywt	1	20	77.	7.7	39.
2-Methylnaphthalene-D10		60.8	%					
Fluorene-D10		76.0	%					
Pyrene-D10		101.	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7042-5DL
Client ID: 2W-SD-SD170-0001
Project: CTO-WE55 New London, CT
SDG: SE7042

Sample Date: 08-SEP-11
Received Date: 09-SEP-11
Extract Date: 27-OCT-11
Extracted By: EC
Extraction Method: SW846 3540
Lab Prep Batch: WG99906

Analysis Date: 01-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 25.
Report Date: 28-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	460	ug/Kgdrywt	12	20	930	120	460
2-Methylnaphthalene	U	460	ug/Kgdrywt	12	20	930	100	460
1-Methylnaphthalene	U	460	ug/Kgdrywt	12	20	930	79.	460
Acenaphthylene	U	460	ug/Kgdrywt	12	20	930	56.	460
Acenaphthene	U	460	ug/Kgdrywt	12	20	930	70.	460
Fluorene	U	460	ug/Kgdrywt	12	20	930	150	460
Phenanthrene		1100	ug/Kgdrywt	12	20	930	84.	460
Anthracene	J	120	ug/Kgdrywt	12	20	930	56.	460
Fluoranthene		4500	ug/Kgdrywt	12	20	930	84.	460
Pyrene		5200	ug/Kgdrywt	12	20	930	97.	460
Benzo (a) anthracene		2400	ug/Kgdrywt	12	20	930	88.	460
Chrysene		2500	ug/Kgdrywt	12	20	930	79.	460
Benzo (b) Fluoranthene		4200	ug/Kgdrywt	12	20	930	110	460
Benzo(k)fluoranthene		2800	ug/Kgdrywt	12	20	930	140	460
Benzo(a)pyrene		3000	ug/Kgdrywt	12	20	930	150	460
Indeno (1,2,3-cd) pyrene		1800	ug/Kgdrywt	12	20	930	88.	460
Dibenzo (a,h) anthracene	J	640	ug/Kgdrywt	12	20	930	84.	460
Benzo(g,h,i)perylene		1700	ug/Kgdrywt	12	20	930	93.	460
2-Methylnaphthalene-D10		57.4	%					
Fluorene-D10		72.5	%					
Pyrene-D10		90.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7042-6
Client ID: 2W-SD-SD171-0001
Project: CTO-WE55 New London, CT
SDG: SE7042

Sample Date: 08-SEP-11
Received Date: 09-SEP-11
Extract Date: 27-OCT-11
Extracted By: EC
Extraction Method: SW846 3540
Lab Prep Batch: WG99906

Analysis Date: 01-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 20.
Report Date: 28-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	49.	ug/Kgdrywt	1	20	99.	13.	49.
2-Methylnaphthalene	U	49.	ug/Kgdrywt	1	20	99.	11.	49.
1-Methylnaphthalene	U	49.	ug/Kgdrywt	1	20	99.	8.4	49.
Acenaphthylene	J	12.	ug/Kgdrywt	1	20	99.	5.9	49.
Acenaphthene	U	49.	ug/Kgdrywt	1	20	99.	7.4	49.
Fluorene	U	49.	ug/Kgdrywt	1	20	99.	16.	49.
Phenanthrene		260	ug/Kgdrywt	1	20	99.	8.9	49.
Anthracene	J	22.	ug/Kgdrywt	1	20	99.	5.9	49.
Fluoranthene		790	ug/Kgdrywt	1	20	99.	8.9	49.
Pyrene		990	ug/Kgdrywt	1	20	99.	10.	49.
Benzo (a) anthracene		380	ug/Kgdrywt	1	20	99.	9.4	49.
Chrysene		380	ug/Kgdrywt	1	20	99.	8.4	49.
Benzo (b) Fluoranthene		760	ug/Kgdrywt	1	20	99.	12.	49.
Benzo(k)fluoranthene		420	ug/Kgdrywt	1	20	99.	15.	49.
Benzo(a)pyrene		490	ug/Kgdrywt	1	20	99.	16.	49.
Indeno (1,2,3-cd) pyrene		410	ug/Kgdrywt	1	20	99.	9.4	49.
Dibenzo (a,h) anthracene		110	ug/Kgdrywt	1	20	99.	8.9	49.
Benzo(g,h,i)perylene		370	ug/Kgdrywt	1	20	99.	9.9	49.
2-Methylnaphthalene-D10		66.3	%					
Fluorene-D10	*	81.4	%					
Pyrene-D10		104.	%					

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APPENDIX C

REGIONAL WORKSHEETS

EPA-NE
Data Validation Worksheet Cover Page - Page 1

Site Name New London
Reference No. _____

REGION I ORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name Katahdin
Case/Project No. _____
SDG No. SE7042
No. of Samples/Matrix 6 sediment

SOW/Method No. _____
Sampling Date(s) _____
Shipping Date(s) _____
Date Rec'd by lab _____

Traffic Report Sample Nos. See DV letter

Trip Blank No. _____
Equipment Blank No. _____
Bottle Blank No. _____
Field Duplicate Nos. _____

PES Nos. _____

The Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision _____ was used to evaluate the data and/or approved modifications to the EPA-NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attach modified criteria from EPA approved QAPjP or amendment to QAPjP).

A Tier II or Tier III evaluation was used to validate the data (circle one). If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc. that received partial Tier III validation

_____

The data were evaluated based upon the following parameters:

- Overall Evaluation of Data
- Data Completeness (CSF Audit - Tier I)
- Preservation & Technical Holding Times
- GC/MS & GC/ECD Instrument Performance Check
- Initial & Continuing Calibrations
- Blanks
- Surrogate Compounds
- Internal Standards
- Matrix Spike/Matrix Spike Duplicate
- Field Duplicates
- Sensitivity Check
- PE Samples/Accuracy Check
- Target Compound Identification
- Compound Quantitation and Reported Quantitation Limits
- TICs
- Semivolatile and Pesticide/PCB Cleanup
- System Performance

Region I Definitions and Qualifiers:

A - Acceptable Data
J - Numerical value associated with compound is an estimated quantity.
R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.
U - Compound not detected at that numerical sample quantitation limit.
UJ - The sample quantitation limit is an estimated quantity.
TB, BB, EB - Compound detected in aqueous trip blank, aqueous bottle blank, or aqueous equipment blank associated with soil/sediment samples.

Validator's Name Leanne Ganser Company Name Tetra Tech Phone Number _____

Date Validation Started 12-16-11 Date Validation Completed 12-16-11

EPA-NE
Data Validation Worksheet Cover Page - Page 2

See DV letter

Check if all criteria are met and no hard copy worksheet provided. Indicate NA if worksheet is not applicable to analytical method. Note: there is no standard worksheet for System Performance, however, the validator must document all system performance issues in the Data Validation Memorandum.

VOA/SV worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	_____
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	_____
VOA/SV-II	GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)	_____
VOA/SV-III	INITIAL CALIBRATION	_____
VOA/SV-IV	CONTINUING CALIBRATION	_____
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	_____
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	_____
VOA-VI	VOA SURROGATE SPIKE RECOVERIES	_____
SV-VI	SV SURROGATE SPIKE RECOVERIES	_____
VOA/SV-VII	INTERNAL STANDARD PERFORMANCE	_____
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	_____
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	_____
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	_____
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	_____
VOA/SV-Pest/PCB-XII	TARGET COMPOUND IDENTIFICATION	_____
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	_____
VOA/SV-XIV	TENTATIVELY IDENTIFIED COMPOUNDS	_____
VOA/SV-XV	SEMIVOLATILE CLEANUP	_____
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	_____

Pest/PCB worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	_____
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	_____
Pest/PCB-IIA	GC/ECD INSTRUMENT PERFORMANCE CHECK-RESOLUTION	_____
Pest/PCB-IIB	GC/ECD INSTRUMENT PERFORMANCE CHECK-RETENTION TIMES	_____
Pest/PCB-IIC	GC/ECD INSTRUMENT PERFORMANCE CHECK-ACCURACY CHECK OF INITIAL CALIBRATION	_____
Pest/PCB-IID	GC/ECD INSTRUMENT PERFORMANCE CHECK-PESTICIDE DEGRADATION	_____
Pest/PCB-III	INITIAL CALIBRATION	_____
Pest/PCB-IV	CONTINUING CALIBRATION	_____
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	_____
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	_____
Pest/PCB-VI	SURROGATE COMPOUNDS: SPIKE RECOVERIES AND RETENTION TIME SHIFT	_____
Pest/PCB-VII	PESTICIDE CLEANUP	_____
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	_____
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	_____
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	_____
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	_____
Pest/PCB-XII	COMPOUND IDENTIFICATION	_____
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	_____
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	_____

I certify that all criteria were met for the worksheets checked above.

Signature: _____ Name: Leanne Ganser

Date: 12-16-11

The data validator generates a Data Validation Report, applicable to Data Validation Tiers II and III, that consists of the following components in the order specified below: (Refer to Section 11 for a description of each of the Data Validation Report components).

1. Organic Regional Data Assessment/Inorganic Regional Data Assessment (ORDA/IRDA) Form
2. Data Validation Memorandum
   a. Narrative
   b. Table I-Qualifier Recommendation Summary Table
   c. Table II-Overall Evaluation of Data
   d. Table III-Tentatively Identified Compounds
   e. Data Summary Tables
3. Standard Data Validation Worksheets
   a. Manual
   b. Automated Data Review Reports (i.e., CADRE)
4. Support Documentation
   a. Copy of non-CLP analytical method, e.g., DAS methods, modified EPA methods
   b. Copies of PES Score Reports/Vendor PES QC Acceptance Limits
   c. Copies of Telephone Logs/Communication Forms for:
      - RSCC communications
      - Requests for laboratory data resubmissions/clarifications
      - Communications with samplers resolving sampling problems
      - Communications with TPO/Lead Chemist to report contractually-deficient data for rejection/reduced payment
      - Communications with EPA Site Manager concerning possible data rejection
      - EPA Site Manager authorization for alternate DV tier
   d. Copies of data supporting recommendations for reduced payment resulting from CSF Audit and/or PE sample result evaluation
   e. Original data to support recommendations for data rejection/non-payment identified from Tier II or Tier III data validation
   f. Copies of field sampling notes and/or field report supplied by field sampler
   g. Copies of EPA-approved amendments to QAPjP and/or SAP describing modified criteria to be used for validating site data
5. CSF Completeness Evidence Audit
6. DQO Summary Form

The data validator is responsible for implementing all corrective actions required by the contractor Lead Chemist in response to EPA-NE data validation oversight findings.

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

N/A

VOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: _____ Date: 12-16-11

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

See DV letter

SEMIVOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: _____

Date: 12-16-11

COMPLETE SDG FILE (CSF) AUDIT

Organic Fractions: _____

Missing Information	Date Lab Contacted	Date Received
	See DV letter	

Validator: _____ Date: 12-16-11

EPA-NE - Data Validation
VOA/SV - Pest/PCB-I

Sampler:_____ Company:_____ Contacted: Yes No Date:_____

I. PRESERVATION AND HOLDING TIMES - Circle sample numbers with exceeded technical holding times or omitted preservation.
List all required preservation codes and circle omitted preservation codes.
Circle all exceeded technical holding times.
Identify extraction technique after "# of Days"/(*Extraction Code).

See DV letter

Sample No. (TR No.)	Matrix	Pres. Code	Date Sampled	VOA			BNA					PEST/PCB				
				Date Analyzed	# of Days from Samp. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action

Preservation Code:
1. Cool @ 4°C (± 2°)
2. Preserve with HCl to at least pH 2
3. Protect from light
4. Freeze
5. Room Temperature (Avoid excessive heat)

(*Extraction Code:)
L/L - Liquid/Liquid
SON - Sonication
SEP - Separatory Funnel
SOX - Soxhlet
SPE - Solid Phase Extraction

Action Code:
J - Estimate (J) Detected Values
UJ - Estimate (UJ) Non-Detected Values
R - Reject (R) Non-Detected Values

Validator: _____ Date: 12-11-11

II. GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING) See DV letter

List all Instrument Performance Checks that are outside method QC tuning acceptance criteria.

Volatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action
Comments:							

Semivolatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action
Comments:							

If tuning compounds and criteria are different from those specified in CLP SOW OLM03.1, then the validator should include a copy of the method-specific tuning criteria with this worksheet.

Validator: _____ Date: 12-16-11

EPA-NE - Data Validation Worksheet
VOA/SV-III

See DV letter

III. INITIAL CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Instrument	Parameter	Matrix	Compound	% RSD	$\overline{RRF}$	Samples Affected	Action

Comments:

Validator: [signature]

Date: 10-16-11

EPA-NE - Data Validation Worksheet

VOA/SV-IV

See DV letter

IV. CONTINUING CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Date of CCAL	Instrument	Parameter	Matrix	Compound	%D	RRF	Samples Affected	Action

Comments:

Validator: [signature]

Date: 12-16-11

EPA-NE - Data Validation Worksheet

VOA/SV - Pest/PCB-V-A

See DV letter

V. BLANK ANALYSIS

Concentration Level:____

List the blank contamination below.

Contacted: Yes No Date:____

Sampler: _____ Company: _____

1. Laboratory: Method, Storage and Instrument Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

2. Field: Equipment (Rinsate), Trip and Bottle Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

Validator: _____ Date: 12-16-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-V-B

See DV letter

3. Blank Actions - List the maximum concentrations of blank compounds.

Compound	Type of Blank	Date Blank Sampled/Originated	Max. Conc. (units)	Action Level (units)	Sample QL	Samples Affected	Action

Comments: _____

Validator: _____ Date: 12-16-11

12/96

EPA-NE - Data Validation Worksheet
VOA-VI

N/A

VI. VOA SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Volatile Method QC Acceptance Criteria				
	Toluene-d_8	BFB	DCE-d_4	Other:	
OLM03.2	Water 88-110 Soil 84-138	Water 86-115 Soil 59-113	Water 76-114 Soil 70-121		
OLC02.1	NA	80-120	NA		
Other:					
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

Validator: _____

Date: 12-16-1

EPA-NE - Data Validation Worksheet See DV letter
SV-VI

VI. SV SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Base/Neutral Method QC Acceptance Criteria					
	NBZ-d_5	2-FBP	TPH-d_{14}	1,2-DCB-d_4*	Other:	
OLM03.2	Water Soil 35-114 23-120	Water Soil 43-116 30-115	Water Soil 33-141 18-137	Water Soil 16-110 20-130		
OLC02.1	40-110	30-110	20-140	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

Method	Acid Method QC Acceptance Criteria					
	Phenol-d_5	2-FP	2,4,6-TBP	2-CP-d_4*	Other:	
OLM03.2	Water Soil 10-110 24-113	Water Soil 21-110 25-121	Water Soil 10-123 19-122	Water Soil 33-110 20-130		
OLC02.1	15-115	15-110	15-130	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

* Advisory Surrogates - OLM03.2

Validator: L Sommer Date: 12-16-11

EPA-NE - Data Validation Worksheet
VOA/SV-VII

See DV letter

VII. INTERNAL STANDARD PERFORMANCE

List the internal standards that are outside the area count and retention time method QC acceptance criteria.
IS Area Count method QC acceptance criteria: _____
IS Retention Time method QC acceptance criteria: _____

Sample Number (TR#)	Date and Time Analyzed	Instrument	Parameter	IS Outside Area Count and/or RT Criteria	__IS Area	RT Shift	Acceptable Range (IS area or RT shift)	Action

Validator: _____

Date: 12-16-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-VIII

~~See DV letter~~ N/A

VIII. MATRIX SPIKE/MATRIX SPIKE DUPLICATE - List all MS/MSD analytes that are outside method QC acceptance criteria.

Use a separate worksheet for each MS/MSD pair.

Sample # _____ Matrix _____ Concentration Level _____

Parameter	Compound	MS %Rec	MSD %Rec	RPD	Method QC Limits		Concentration			% RSD	Action
					% Rec	RPD	Unspiked Sample	MS	MSD		

Date: 12-16-11

Validator: _____

N/A

IX. FIELD DUPLICATE PRECISION - List all field duplicate analytes that are outside criteria.

Use a separate worksheet for each field duplicate pair.

Sample Number _____ Duplicate Sample Number _____ Matrix _____

Parameter	Compound	Sample Conc.	Sample QL		Duplicate Conc.	Duplicate QL		RPD	QC Acceptance Criteria RPD or NA*	Action
			SQL	2xSQL		SQL	2xSQL			

* For instances where one duplicate result is ND (or reported less than the sample QL).

Does the MS/MSD data indicate acceptable laboratory precision? Y N

Comments: _____

_____

Sampler Name: _____ Contractor Name: _____ Date Contacted: _____

Reason for Contact and resolution obtained: _____

Validator: _____ Date: 12-16-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-X

See DV letter

X. SENSITIVITY CHECK (Method Detection Limit Study)

List all compounds, surrogates, and internal standards that are outside the MDL criteria.

- Has an appropriate MDL study been submitted with seven replicates for each compound and matrix of interest? **Y N**
- Date of Preparation/Analysis: _____ Within 1 year? **Y N**
- Instrument I.D.: _____ Same as samples? **Y N**
- Column I.D.: _____ Same as samples? **Y N**

Matrix	Compound	MDL > QL	Method QC Limits < 80% or > 120%	IS Outside Area Count and/or RT Criteria	RSD > 20%	Samples Affected	Action

If an MDL study has not been submitted, use only the LFB results to evaluate data.

(Laboratory Fortified Blank) - List all LFB compounds, surrogates and internal standards that are outside criteria.

- Has an appropriate and complete LFB been submitted at the proper frequency? **Y N**
- Does it contain all target compounds at the method-required QLs? **Y N**
- Was the LFB spiked with a standard from a source (vendor) independent of the calibration standard? **Y N**

Matrix	Compound	Method QC Limits < 60% or > 140% Other:	IS Outside Area Count and/or RT Criteria	Samples Affected	Action

Validator: _____

Date: 12-16-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XI See DV letter

XI. ACCURACY CHECK (Performance Evaluation Results) - List all analytes that are outside criteria.

SDG No: _____ CASE: _____

Are more than one-half of the PES analytes within criteria for each parameter. **Y N**

PE Sample Number	Ampule Number	Parameter	Type of PES	Matrix	Analyte	Conc.	Region I EPA PES Scores*	Non-EPA PES Scores**	Samples Affected	Action

* For Region I PESs indicate the Region I PES Score Report Result: Action High; Action Low; TCL MISS; TCL CONTAMINANT; TIC HIT; TIC MISS; TIC CONTAMINANT

** For Non-EPA PESs indicate the Non-EPA PES Score: PES COMPOUND MISS; PES COMPOUND CONTAMINANT; PES COMPOUND HIT (% Recovery Limits)

Validator: _____ Date: 12-16-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XII See DV letter

XII. TARGET COMPOUND IDENTIFICATION - List the analytes that are outside the acceptance criteria.

Sample Number	Compound	___MS Ions	____RRT	Action

Validator: [signature]

Date: 12-16-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XIII

See DV report

XIII. SAMPLE QUANTITATION

Recalculate, from the raw data, the concentrations for one positive detect and one reported sample quantitation limit for a non-detect in a diluted sample or soil sample per fraction. (Note: Although Section XIII, C.1.a, requires that one calculation for each fraction in each sample be performed, the validator is only required to reproduce an example, for each fraction, of one positive detect and one sample quantitation limit calculation on this worksheet.)

Do all soil/sediment samples have % solids greater than 30%? Y N
If no, list sample numbers_____

Fraction		Calculation
VOA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
BNA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
Pesticide/PCB		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		

Validator: _____ Date: 12-16-11

N/A

XIV. TENTATIVELY IDENTIFIED COMPOUNDS (TICs)

List the 5 TICs having the highest concentration for each sample parameter.

Sample Number	Parameter	Compound	____RRT	__Est. Conc.	Action

Validator: _____

Date: 12-16-11

EPA-NE - Data Validation Worksheet
VOA/SV-XV

See DV letter

XV. SEMIVOLATILE CLEANUP - List all analytes that are outside method cleanup QC criteria.

Cleanup Procedure	Instrument # or Lot #	Date/Time GPC Calibrated or Check Solution Analyzed	Compound	% Rec	QC Limits	Samples Affected	Action

Did the GPC column meet; resolution requirements? Y or N
peak shape requirements? Y or N
retention time shift requirements? Y or N

Was the GPC calibration, Silica Gel cleanup checked at the method required frequency with correct compounds and concentrations? Y or N

Were all compounds less than QL for the GPC/Silica Gel/Acid-Partition blank? Y or N

Did the blank surrogate recoveries and IS area counts and RTs (if added) meet method QC acceptance criteria? Y or N

Comments: _____

Validator: _____

Date: 12/16/11

APPENDIX D

SUPPORT DOCUMENTATION

HOLDTIME

PROJ_NO 02625

SDG	SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SE7042	TS	%	2W-SD-SD171-0001	SE7042-6	NM	09/08/2011	10/27/2011	10/28/2011	49	1	50
SE7042	TS	%	2W-SD-SD167-0001	SE7042-2	NM	09/08/2011	10/27/2011	10/28/2011	49	1	50
SE7042	TS	%	2W-SD-SD168-0001	SE7042-3	NM	09/08/2011	10/27/2011	10/28/2011	49	1	50
SE7042	TS	%	2W-SD-SD169-0001	SE7042-4	NM	09/08/2011	10/27/2011	10/28/2011	49	1	50
SE7042	TS	%	2W-SD-SD170-0001	SE7042-5	NM	09/08/2011	10/27/2011	10/28/2011	49	1	50
SE7042	TS	%	2W-SD-SD166-0001	SE7042-1	NM	09/08/2011	10/27/2011	10/28/2011	49	1	50
SE7042	SIM	%	2W-SD-SD166-0001	SE7042-1	NM	09/08/2011	10/27/2011	10/31/2011	49	4	53
SE7042	SIM	%	2W-SD-SD167-0001	SE7042-2	NM	09/08/2011	10/27/2011	10/31/2011	49	4	53
SE7042	SIM	%	2W-SD-SD168-0001	SE7042-3	NM	09/08/2011	10/27/2011	11/01/2011	49	5	54
SE7042	SIM	%	2W-SD-SD169-0001	SE7042-4	NM	09/08/2011	10/27/2011	10/31/2011	49	4	53
SE7042	SIM	%	2W-SD-SD171-0001	SE7042-6	NM	09/08/2011	10/27/2011	11/01/2011	49	5	54
SE7042	SIM	%	2W-SD-SD170-0001	SE7042-5	NM	09/08/2011	10/27/2011	10/31/2011	49	4	53
SE7042	SIM	UG/KG	2W-SD-SD171-0001	SE7042-6	NM	09/08/2011	10/27/2011	11/01/2011	49	5	54
SE7042	SIM	UG/KG	2W-SD-SD166-0001	SE7042-1	NM	09/08/2011	10/27/2011	10/31/2011	49	4	53
SE7042	SIM	UG/KG	2W-SD-SD166-0001DL	SE7042-1DL	NM	09/08/2011	10/27/2011	11/01/2011	49	5	54
SE7042	SIM	UG/KG	2W-SD-SD167-0001	SE7042-2	NM	09/08/2011	10/27/2011	10/31/2011	49	4	53

SDG	SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SE7042	SIM	UG/KG	2W-SD-SD167-0001	SE7042-2DL	NM	09/08/2011	10/27/2011	11/01/2011	49	5	54
SE7042	SIM	UG/KG	2W-SD-SD168-0001	SE7042-3	NM	09/08/2011	10/27/2011	11/01/2011	49	5	54
SE7042	SIM	UG/KG	2W-SD-SD169-0001	SE7042-4	NM	09/08/2011	10/27/2011	10/31/2011	49	4	53
SE7042	SIM	UG/KG	2W-SD-SD169-0001	SE7042-4DL	NM	09/08/2011	10/27/2011	11/01/2011	49	5	54
SE7042	SIM	UG/KG	2W-SD-SD170-0001	SE7042-5	NM	09/08/2011	10/27/2011	10/31/2011	49	4	53
SE7042	SIM	UG/KG	2W-SD-SD170-0001DL	SE7042-5DL	NM	09/08/2011	10/27/2011	11/01/2011	49	5	54

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO-WE55 NEW LONDON, CT
SE7042

Sample Receipt

The following samples were received on September 9, 2011 and were logged in under Katahdin Analytical Services work order number SE7042 for a hardcopy due date of November 11, 2011.

KATAHDIN Sample No.	TTNUS Sample Identification
SE7042-1	2W-SD-SD166-0001
SE7042-2	2W-SD-SD167-0001
SE7042-3	2W-SD-SD168-0001
SE7042-4	2W-SD-SD169-0001
SE7042-5	2W-SD-SD170-0001
SE7042-6	2W-SD-SD171-0001

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

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

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

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

Organics Analysis

The samples of Work Order SE7042 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis.

8270 SIM Analysis

Surrogate recoveries for all samples and QC, as well as spike recoveries for the laboratory control sample and laboratory control sample duplicate (LCS/LCSD) were evaluated using laboratory established acceptance limits.

Samples SE7042-1, 1DL, 2, 2DL, 3, 4, 4DL, 5, 5DL,and 6 were manually integrated for the analytes benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, and/or indeno(1,2,3-cd)pyrene. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Sample SE7042-5 had a concentration above the LOQ for the analyte benzo(b)fluoranthene in the diluted analysis but is not reported above the MDL in the undiluted analysis. The analyte is actually detected in the undiluted analysis. Because the calibration model used for this analyte was quadratic and the response was outside of the calibration range, the calculated value generated from the data processing software is 0.00. Consequently, the analyte is reported as undetected on the ROA.

Samples SE7042-1, 1DL, 2, 2DL, 3, 4, 4DL, and 6 had recoveries for one or two surrogates that were high and outside the laboratory established acceptance limits. Samples SE7042-1, 2, 4, and 5 had low responses for one or two internal standards, which were outside the DoD QSM acceptance limit of -50% to +100% of the responses of the internal standards of the ICAL midpoint standard. Some of the samples were reanalyzed at a dilution. Therefore, no further action was taken.

The initial calibration analyzed on the G instrument on 10/31/1 had %RSD values for three analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The target analyte 2-methylnaphthalene failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. This compound was calibrated using the average model. The corresponding independent check standard (file G3653) had a low concentration for the target analyte benzo(k)fluoranthene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL.

The CV (file G3664) had a high response for the target analyte benzo(b)fluoranthene which resulted in a %D that was greater than the acceptance limit of 20% from DoD QSM Version 4.1.

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

Wet Chemistry Analysis

The samples of Work Order SE7042 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Annual Book of ASTM Standards", Method D2216-98 "Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass".

All analyses were performed within analytical holding times. All quality control criteria were met.

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

Leslie Dimond
12.07.11

Leslie Dimond
Quality Assurance Officer

Jennifer Obrin

From: Bernhardt, Aaron [Aaron.Bernhardt@tetratech.com]
Sent: Monday, October 24, 2011 9:19 AM
To: Kelly Perkins (kperkins@katahdinlab.com)
Cc: Sedlmyer, Tobrena; Ganser, Leanne
Subject: New London

SE 7042 - new work order

Kelly,

You still have some samples from our project in September 2011 that are being held in a freezer.

I would like you to please analyze samples 2WSD166-0001 through 2WSD171-0001. They should only be analyzed for PAHs.

Thanks,

SE5099 -old work order

Aaron

Aaron Bernhardt | Project Manager/Ecological Risk Assessor
Direct: 412.921.8433 | Main: 412.921.7090 | Cell: 412-523-0634
aaron.bernhardt@tetratech.com

Tetra Tech | Risk Assessment Group
661 Andersen Drive Foster Plaza 7 | Pittsburgh, PA 15220 | www.tetratech.com

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000086

New London
WE55

TABLE 2

ANALYTICAL SAMPLING SUMMARY FOR PHASE III AND IV SAMPLES
AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Site Sample Summary

Excavation Area	Phase of Analysis	Sample Location ID	Number of Samples	Analytical Group
1	III	2WSD163, 2WSD164, 2WSD165	3	PAHs
	IV	2WSD166, 2WSD167, 2WSD168, 2WSD169, 2WSD170, 2WSD171	6	
3	III	2WSD172, 2WSD173, 2WSD174, 2WSD175	4	Pesticides
	IV	2WSD176, 2WSD177, 2WSD178, 2WSD179	4	PAHs, PCBs, Pesticides, and Metals
5	III	2WSD180, 2WSD181	2	PAHs, PCBs, Pesticides, and Metals
	IV	2WSD182	1	

Field Quality Control Sample Summary

Matrix	Analytical Group	Number of Sampling Locations (Phase III/ Phase IV)[1]	Number of Field Duplicate Pairs	Number of MS/MSDs	Laboratory Method
Sediment	PAHs	5/11	1	1	SW-846 8270D SIM
Sediment	Pesticides	6/5	1	1	SW-846 8081B
Sediment	PCBs	2/5	1	1	SW-846 8082A
Sediment	Metals	2/5	1	1	SW-846 6010C

1- Duplicate samples will not be collected for the Phase IV samples, because it is not know which of the samples, if any, will be selected for analysis

Abbreviations:
MS/MSD - Matrix spike/matrix spike duplicate
PAH - Polycyclic aromatic hydrocarbon
PCB - Polychlorinated biphenyl
SIM - Selected ion monitoring

PAHs: 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, and Pyrene
PCBs: Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260
Pesticides: 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT

000087

TABLE 2

ANALYTICAL SAMPLING SUMMARY FOR PHASE III AND IV SAMPLES
AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Metals: Arsenic, Cadmium, Chromium, Copper, Lead, Nickel, and Zinc

000088

Katahdin Analytical Services, Inc. — Sample Receipt Condition Report

Client: Tetra Tech	KAS PM: KAP	Sampled By: Client
Project:	KIMS Entry By: GW	Delivered By: FedEx
KAS Work Order#: SE5699 / SE7042	KIMS Review By: DM	Received By: GW
SDG #:	Cooler: 1 of 1	Date/Time Rec.: 9-9-11 / 10:15

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 4.4
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2*				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 27441 | PAGE 1 OF 1

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433(w)	LABORATORY NAME AND CONTACT: KATAHDIN / KELLY PERKINS
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER A. Bernhardt	PHONE NUMBER 412-523-0634 (c)	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FEDEX AB# 8676441113228		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

SE5699/
SE7042

DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT) inch	BOTTOM DEPTH (FT) inch	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS PAHs	COMMENTS
9/8	935	2W-SD-SD163-0001		0	4	SD	G	1	P		X	
	925	2W-SD-SD164-0001						1			X	
	910	2W-SD-SD165-0001						1			X	
	1012	2W-SD-SD166-0001						1			X*	Hold for Analysis
	1005	2W-SD-SD167-0001						1			X*	
	941	2W-SD-SD168-0001						1			X*	
	1030	2W-SD-SD169-0001						1			X*	
	1025	2W-SD-SD170-0001						1			X*	
	1020	2W-SD-SD171-0001						1			X*	
	1200	2W-SD-DUP03						1			X	

1. RELINQUISHED BY	DATE 9-8-11	TIME 1500	1. RECEIVED BY FED EX	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 9-9-11	TIME 10:15
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS
** REFRIGERATE CONTAINER to 4°C & HOLD " " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

000010

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1 %.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE7042

Lab File ID: GD908 DFTPP Injection Date: 10/31/11

Instrument ID: GCMS-G DFTPP Injection Time: 1051

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	38.9
68	Less than 2.0% of mass 69	0.5 (1.1)1
69	Less than 100.0% of mass 198	42.9
70	Less than 2.0% of mass 69	0.2 (0.6)1
127	40.0 - 60.0% of mass 198	57.2
197	Less than 1.0% of mass 198	0.1
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	24.1
365	1.0 - 100.0% of mass 198	3.8
441	0.0 - 100.0% of mass 443	12.9 (77.5)2
442	40.0 - 100.0% of mass 198	87.2
443	17.0 - 23.0% of mass 442	16.6 (19.1)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00G1031	G3647	10/31/11	1112
02		SSTD8.00G1031	G3648	10/31/11	1201
03		SSTD5.00G1032	G3649	10/31/11	1245
04		SSTD2.00G1033	G3650	10/31/11	1329
05		SSTD0.50G1034	G3651	10/31/11	1413
06		SSTD0.20G1035	G3652	10/31/11	1458
07		SIM IND CHECK	G3653	10/31/11	1542
08	WG99906-BLANK	WG99906-1	G3654	10/31/11	1626
09	WG99906-LCS	WG99906-2	G3655	10/31/11	1711
10	WG99906-LCSD	WG99906-3	G3656	10/31/11	1755
11	2W-SD-SD166-0001	SE7042-1	G3657	10/31/11	1839
12	2W-SD-SD167-0001	SE7042-2	G3658	10/31/11	1923
13	2W-SD-SD169-0001	SE7042-4	G3660	10/31/11	2051
14	2W-SD-SD170-0001	SE7042-5	G3661	10/31/11	2134
15					
16					
17					
18					
19					
20					

FORM V SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE7042

Lab File ID: GD909 DFTPP Injection Date: 11/01/11

Instrument ID: GCMS-G DFTPP Injection Time: 0630

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	37.9
68	Less than 2.0% of mass 69	0.6 (1.4)1
69	Less than 100.0% of mass 198	40.8
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	40.0 - 60.0% of mass 198	56.7
197	Less than 1.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	24.6
365	1.0 - 100.0% of mass 198	4.0
441	0.0 - 100.0% of mass 443	13.7 (75.2)2
442	40.0 - 100.0% of mass 198	95.9
443	17.0 - 23.0% of mass 442	18.2 (19.0)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00G1101	G3664	11/01/11	0648
02	2W-SD-SD166-0001	SE7042-1DL	G3669	11/01/11	1032
03	2W-SD-SD167-0001	SE7042-2DL	G3670	11/01/11	1116
04	2W-SD-SD168-0001	SE7042-3	G3671	11/01/11	1201
05	2W-SD-SD169-0001	SE7042-4DL	G3672	11/01/11	1245
06	2W-SD-SD170-0001	SE7042-5DL	G3673	11/01/11	1330
07	2W-SD-SD171-0001	SE7042-6	G3674	11/01/11	1415
08					
09					
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20					

FORM V SV

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG99906-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE7042

Lab File ID: G3654 Lab Sample ID: WG99906-1

Instrument ID: GCMS-G Date Extracted: 10/27/11

Matrix: (soil/water) SOIL Date Analyzed: 10/31/11

Level:(low/med) LOW Time Analyzed: 1626

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG99906-LCS	WG99906-2	G3655	10/31/11	1711
02	WG99906-LCSD	WG99906-3	G3656	10/31/11	1755
03	2W-SD-SD166-0001	SE7042-1	G3657	10/31/11	1839
04	2W-SD-SD167-0001	SE7042-2	G3658	10/31/11	1923
05	2W-SD-SD169-0001	SE7042-4	G3660	10/31/11	2051
06	2W-SD-SD170-0001	SE7042-5	G3661	10/31/11	2134
07	2W-SD-SD166-0001	SE7042-1DL	G3669	11/01/11	1032
08	2W-SD-SD167-0001	SE7042-2DL	G3670	11/01/11	1116
09	2W-SD-SD168-0001	SE7042-3	G3671	11/01/11	1201
10	2W-SD-SD169-0001	SE7042-4DL	G3672	11/01/11	1245
11	2W-SD-SD170-0001	SE7042-5DL	G3673	11/01/11	1330
12	2W-SD-SD171-0001	SE7042-6	G3674	11/01/11	1415
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30					

COMMENTS:

FORM IVSV

Katahdin Analytical Services A000001

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG99906-1
Client ID: Method Blank Sample
Project:
SDG: SE7042

Sample Date:
Received Date: 27-OCT-11
Extract Date: 27-OCT-11
Extracted By: EC
Extraction Method: SW846 3540
Lab Prep Batch: WG99906

Analysis Date: 31-OCT-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: NA
Report Date: 02-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.6	10.
2-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.2	10.
1-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Acenaphthylene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10.	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10.	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	U	10.	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo (a) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo (b) Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	U	10.	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno (1,2,3-cd) pyrene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo (a,h) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	U	10.	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene-D10		73.7	%					
Fluorene-D10		73.8	%					
Pyrene-D10		80.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: SE7042

Instrument ID: GCMS-G Calibration Date(s): 10/31/11 10/31/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 1112 1458

LAB FILE ID: RF0.2: G3652 RF0.5: G3651 RF1: G3647
RF2: G3650 RF5: G3649 RF8: G3648

								COEFFICENTS			%RSD	MAX %RSD
COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	A0	A1	A2	OR R^2	OR R^2
1-Methylnaphthalene	0.726	0.667	0.617	0.590	0.492	0.521	AVRG		0.60217367		14.560	15.000
Naphthalene	0.905	0.954	0.996	0.989	0.840	0.883	AVRG		0.92805806		6.687	15.000
2-Methylnaphthalene	1.296	1.307	1.194	1.009	0.719	0.769	AVRG		1.04895737		24.762	15.000
Acenaphthylene	1.550	1.604	1.704	1.750	1.552	1.755	AVRG		1.65252805		5.794	15.000
Acenaphthene	1.013	1.019	1.070	1.071	0.961	1.065	AVRG		1.03307473		4.254	15.000
Fluorene	1.207	1.203	1.210	1.191	1.110	1.242	AVRG		1.19365105		3.728	15.000
Phenanthrene	0.824	0.830	0.895	0.938	0.938	1.052	AVRG		0.91281658		9.280	15.000
Anthracene	1.039	1.105	1.150	1.156	1.085	1.186	AVRG		1.12008095		4.798	15.000
Fluoranthene	0.911	0.901	0.930	0.958	0.943	1.086	AVRG		0.95492014		7.042	15.000
Pyrene	1.517	1.643	1.612	1.694	1.432	1.705	AVRG		1.60051455		6.680	15.000
Benzo(a)anthracene	0.794	0.817	0.944	0.975	0.888	1.080	AVRG		0.91626923		11.591	15.000
Chrysene	1.520	1.436	1.261	1.308	1.050	1.146	AVRG		1.28670331		13.627	15.000
Benzo(b)fluoranthene	10554	20540	48112	117390	319370	644210	2ORDR	1.319e-002	1.37948955	-4.24e-002	0.99896	0.99000
Benzo(k)fluoranthene	1.771	1.780	1.744	1.626	1.418	1.498	AVRG		1.63958578		9.338	15.000
Benzo(a)pyrene	1.023	0.965	0.999	1.034	0.932	1.066	AVRG		1.00333471		4.836	15.000
Indeno(1,2,3-cd)pyrene	0.650	0.709	0.725	0.881	0.756	0.902	AVRG		0.77062504		13.013	15.000
Dibenzo(a,h)anthracene	6723	17694	37734	92381	220050	416660	LINR	0.20271830	1.44058623		0.99012	0.99000
Benzo(g,h,i)perylene	0.700	0.705	0.676	0.808	0.657	0.771	AVRG		0.71948651		8.071	15.000
2-Methylnaphthalene-D10	0.943	0.929	0.989	1.029	0.878	0.971	AVRG		0.95661042		5.464	15.000
Fluorene-D10	0.708	0.734	0.843	0.898	0.825	0.953	AVRG		0.82683421		11.335	15.000
Pyrene-D10	0.903	0.981	0.961	1.016	0.870	1.025	AVRG		0.95936644		6.448	15.000

FORM VI SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE7042

Instrument ID: GCMS-G Calibration Date: 10/31/11 Time: 1112

Lab File ID: G3647 Init. Calib. Date(s): 10/31/11 10/31/11

Init. Calib. Times: 1112 1458

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1-Methylnaphthalene	0.6020000	0.6172100	0.6172100	0.01	2.53	20.00	AVRG
Naphthalene	0.9280000	0.9960300	0.9960300	0.01	7.33	20.00	AVRG
2-Methylnaphthalene	1.0490000	1.1940000	1.1940000	0.01	13.82	20.00	AVRG
Acenaphthylene	1.6520000	1.7044000	1.7044000	0.01	3.17	20.00	AVRG
Acenaphthene	1.0330000	1.0701000	1.0701000	0.01	3.59	20.01	AVRG
Fluorene	1.1940000	1.2095000	1.2095000	0.01	1.30	20.00	AVRG
Phenanthrene	0.9130000	0.8948000	0.8948000	0.01	-1.99	20.00	AVRG
Anthracene	1.1200000	1.1500000	1.1500000	0.01	2.68	20.00	AVRG
Fluoranthene	0.9550000	0.9305400	0.9305400	0.01	-2.56	20.01	AVRG
Pyrene	1.6000000	1.6120000	1.6120000	0.01	0.75	20.00	AVRG
Benzo(a)anthracene	0.9160000	0.9435900	0.9435900	0.01	3.01	20.00	AVRG
Chrysene	1.2870000	1.2606000	1.2606000	0.01	-2.05	20.00	AVRG
Benzo(b)fluoranthene	0.9517000	1.0000000	0.7011500	0.01	-4.83	20.00	2RDR
Benzo(k)fluoranthene	1.6400000	1.7444000	1.7444000	0.01	6.36	20.00	AVRG
Benzo(a)pyrene	1.0030000	0.9994900	0.9994900	0.01	-0.35	20.01	AVRG
Indeno(1,2,3-cd)pyrene	0.7700000	0.7249500	0.7249500	0.01	-5.85	20.00	AVRG
Dibenzo(a,h)anthracene	0.9543600	1.0000000	0.5499100	0.01	-4.56	20.00	LINR
Benzo(g,h,i)perylene	0.7200000	0.6764200	0.6764200	0.01	-6.05	20.00	AVRG
2-Methylnaphthalene-D10	0.9560000	0.9890300	0.9890300	0.01	3.46	20.00	AVRG
Fluorene-D10	0.8270000	0.8430300	0.8430300	0.01	1.94	20.00	AVRG
Pyrene-D10	0.9590000	0.9609700	0.9609700	0.01	0.20	20.00	AVRG

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE7042

Instrument ID: GCMS-G Calibration Date: 11/01/11 Time: 0648

Lab File ID: G3664 Init. Calib. Date(s): 10/31/11 10/31/11

Init. Calib. Times: 1112 1458

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
1-Methylnaphthalene	0.6020000	0.5826200	0.5826200	0.01	-3.22	20.00	AVRG	
Naphthalene	0.9280000	0.9359900	0.9359900	0.01	0.86	20.00	AVRG	
2-Methylnaphthalene	1.0490000	1.1946000	1.1946000	0.01	13.88	20.00	AVRG	
Acenaphthylene	1.6520000	1.6502000	1.6502000	0.01	-0.11	20.00	AVRG	
Acenaphthene	1.0330000	1.0089000	1.0089000	0.01	-2.33	20.01	AVRG	
Fluorene	1.1940000	1.1743000	1.1743000	0.01	-1.65	20.00	AVRG	
Phenanthrene	0.9130000	0.9021000	0.9021000	0.01	-1.19	20.00	AVRG	
Anthracene	1.1200000	1.0786000	1.0786000	0.01	-3.70	20.00	AVRG	
Fluoranthene	0.9550000	0.8881400	0.8881400	0.01	-7.00	20.01	AVRG	
Pyrene	1.6000000	1.7348000	1.7348000	0.01	8.42	20.00	AVRG	
Benzo(a)anthracene	0.9160000	0.9492600	0.9492600	0.01	3.63	20.00	AVRG	
Chrysene	1.2870000	1.1823000	1.1823000	0.01	-8.14	20.00	AVRG	
Benzo(b)fluoranthene	1.2812000	1.0000000	0.9562400	0.01	28.12	20.00	2RDR	<-
Benzo(k)fluoranthene	1.6400000	1.5021000	1.5021000	0.01	-8.41	20.00	AVRG	
Benzo(a)pyrene	1.0030000	0.9846800	0.9846800	0.01	-1.83	20.01	AVRG	
Indeno(1,2,3-cd)pyrene	0.7700000	0.7595500	0.7595500	0.01	-1.36	20.00	AVRG	
Dibenzo(a,h)anthracene	0.9920400	1.0000000	0.5760600	0.01	-0.80	20.00	LINR	
Benzo(g,h,i)perylene	0.7200000	0.6929000	0.6929000	0.01	-3.76	20.00	AVRG	
2-Methylnaphthalene-D10	0.9560000	0.9612800	0.9612800	0.01	0.55	20.00	AVRG	
Fluorene-D10	0.8270000	0.8851500	0.8851500	0.01	7.03	20.00	AVRG	
Pyrene-D10	0.9590000	1.0325000	1.0325000	0.01	7.66	20.00	AVRG	

FORM VII PEST

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** CTO-WE55 New London, CT **Matrix:** SL
Lab Code: KAS **SDG:** SE7042

Client Sample ID	Lab Sample ID	2MN	#	FLO	#	PYR	#	Total Out
2W-SD-SD166-0001	SE7042-1	74.3		90.8	*	161.	*	2
2W-SD-SD166-0001	SE7042-1DL	72.3		104.	*	114.		1
2W-SD-SD167-0001	SE7042-2	72.2		83.3	*	112.		1
2W-SD-SD167-0001	SE7042-2DL	69.0	D	88.2	D*	98.0	D	1
2W-SD-SD168-0001	SE7042-3	73.5		92.6	*	107.		1
2W-SD-SD169-0001	SE7042-4	72.7		87.8	*	100.		1
2W-SD-SD169-0001	SE7042-4DL	66.3		85.5	*	103.		1
2W-SD-SD170-0001	SE7042-5	60.8		76.0		101.		0
2W-SD-SD170-0001	SE7042-5DL	57.4	D	72.5	D	90.3	D	0
2W-SD-SD171-0001	SE7042-6	66.3		81.4	*	104.		1
Method Blank Sample	WG99906-1	73.7		73.8		80.1		0
Laboratory Control S	WG99906-2	65.3		67.4		75.2		0
Laboratory Control S	WG99906-3	53.9		62.4		68.3		0

		QC Limits
2MN	2-METHYLNAPHTHALENE-D10	14-131
FLO	FLUORENE-D10	18-77
PYR	PYRENE-D10	34-131

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
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sales@katahdinlab.com

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE7042

Lab File ID (Standard): G3647 Date Analyzed: 10/31/11

Instrument ID: GCMS-G Time Analyzed: 1112

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD		51871	8.98	167195	11.94	81378	16.25
UPPER LIMIT		103742	9.52	334390	12.48	162756	16.79
LOWER LIMIT		25936	8.44	83598	11.40	40689	15.71
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01	WG99906-BLANK	WG99906-1	46118	8.99	165494	11.94	81970	16.25
02	WG99906-LCS	WG99906-2	51196	8.99	166673	11.93	76148	16.23
03	WG99906-LCSD	WG99906-3	47332	8.99	171838	11.93	87033	16.23
04	2W-SD-SD166-0001	SE7042-1	46979	9.00	168155	11.94	89479	16.25
05	2W-SD-SD167-0001	SE7042-2	44178	9.00	162802	11.93	83339	16.24
06	2W-SD-SD169-0001	SE7042-4	48643	8.99	173714	11.93	91663	16.24
07	2W-SD-SD170-0001	SE7042-5	48301	9.00	176547	11.93	94667	16.23
08		SSTD1.00G1101	43857	8.95	157950	11.91	78916	16.22
09	2W-SD-SD166-0001	SE7042-1DL	33471	8.96	116846	11.93	62538	16.23
10	2W-SD-SD167-0001	SE7042-2DL	37363	8.96	131952	11.93	71005	16.22
11	2W-SD-SD168-0001	SE7042-3	42348	8.96	149136	11.91	79784	16.22
12	2W-SD-SD169-0001	SE7042-4DL	38152	8.96	132249	11.92	73032	16.22
13	2W-SD-SD170-0001	SE7042-5DL	32416	8.96	116383	11.93	64446	16.23
14	2W-SD-SD171-0001	SE7042-6	42619	8.98	152173	11.92	81539	16.22
15								
16								
17								
18								
19								
20								

IS1 (DCB) = 1,4-Dichlorobenzene-D4
IS2 (NPT) = Naphthalene-D8
IS3 (ANT) = Acenaphthene-D10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: SE7042

Lab File ID (Standard): G3647 Date Analyzed: 10/31/11

Instrument ID: GCMS-G Time Analyzed: 1112

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD		117814	19.87	72005	26.49	54895	29.81
UPPER LIMIT		235628	20.41	144010	27.03	109790	30.35
LOWER LIMIT		58907	19.33	36003	25.95	27448	29.27
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01	WG99906-BLANK	WG99906-1	120790	19.88	77610	26.50	60192	29.81
02	WG99906-LCS	WG99906-2	100511	19.87	68833	26.47	57052	29.80
03	WG99906-LCSD	WG99906-3	132340	19.87	92628	26.47	72786	29.80
04	2W-SD-SD166-0001	SE7042-1	123422	19.85	31576*	26.47	16327*	29.79
05	2W-SD-SD167-0001	SE7042-2	114239	19.85	40091	26.47	23685*	29.79
06	2W-SD-SD169-0001	SE7042-4	129329	19.87	53770	26.47	26926*	29.79
07	2W-SD-SD170-0001	SE7042-5	132112	19.85	47769	26.47	24897*	29.79
08		SSTD1.00G1101	122933	19.84	65611	26.44	40129	29.78
09	2W-SD-SD166-0001	SE7042-1DL	100592	19.84	45891	26.44	27403*	29.76
10	2W-SD-SD167-0001	SE7042-2DL	112467	19.84	53671	26.44	28836	29.76
11	2W-SD-SD168-0001	SE7042-3	126305	19.84	54961	26.44	34026	29.76
12	2W-SD-SD169-0001	SE7042-4DL	114165	19.84	50421	26.44	26156*	29.76
13	2W-SD-SD170-0001	SE7042-5DL	105515	19.85	49816	26.44	30449	29.76
14	2W-SD-SD171-0001	SE7042-6	119965	19.84	51813	26.44	28862	29.76
15								
16								
17								
18								
19								
20								

IS4 (PHN) = Phenanthrene-D10
IS5 (CRY) = Chrysene-D12
IS6 (PRY) = Perylene-D12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG99906-2
LCSD ID: WG99906-3
Project:
SDG: SE7042
Report Date: 02-NOV-11

Received Date: 27-OCT-11
Extract Date: 27-OCT-11
Extracted By: EC
Extraction Method: SW846 3540
Lab Prep Batch: WG99906

Analysis Date: 31-OCT-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Naphthalene	66.7	51.9	77.8	42.9	64.3	ug/Kgdrywt	19	50	10-129
2-Methylnaphthalene	66.7	49.8	74.7	44.1	66.1	ug/Kgdrywt	12	50	10-152
1-Methylnaphthalene	66.7	29.3	43.9	25.6	38.4	ug/Kgdrywt	13	50	17-113
Acenaphthylene	66.7	50.0	75.0	41.8	62.7	ug/Kgdrywt	18	50	25-94
Acenaphthene	66.7	50.1	75.1	41.9	62.8	ug/Kgdrywt	18	50	33-98
Fluorene	66.7	49.5	74.2	44.0	66.0	ug/Kgdrywt	12	50	40-92
Phenanthrene	66.7	60.8	91.2	49.9	74.8	ug/Kgdrywt	20	50	46-96
Anthracene	66.7	57.6	86.4	47.3	70.9	ug/Kgdrywt	20	50	34-96
Fluoranthene	66.7	59.9	89.8	50.6	75.9	ug/Kgdrywt	17	50	38-116
Pyrene	66.7	56.7	85.0	46.3	69.4	ug/Kgdrywt	20	50	35-111
Benzo (a) anthracene	66.7	54.8	82.2	47.3	70.9	ug/Kgdrywt	15	50	48-100
Chrysene	66.7	54.9	82.3	46.4	69.6	ug/Kgdrywt	17	50	46-101
Benzo (b) Fluoranthene	66.7	56.9	85.3	61.6	92.4	ug/Kgdrywt	8	50	53-100
Benzo(k)fluoranthene	66.7	54.2	81.2	43.0	64.5	ug/Kgdrywt	23	50	49-96
Benzo(a)pyrene	66.7	57.4	86.0	49.4	74.1	ug/Kgdrywt	15	50	61-101
Indeno (1,2,3-cd) pyrene	66.7	61.3	91.9	46.3	69.4	ug/Kgdrywt	28	50	50-105
Dibenzo (a,h) anthracene	66.7	58.4	87.6	45.3	67.9	ug/Kgdrywt	25	50	55-105
Benzo(g,h,i)perylene	66.7	61.5	92.2	45.2	67.8	ug/Kgdrywt	30	50	53-103
2-Methylnaphthalene-D10			65.3		53.9				14-131
Fluorene-D10			67.4		62.4				18-77
Pyrene-D10			75.2		68.3				34-131

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http://www.katahdinlab.com

Data File: \\target_server\GG\chem\gcms-g.i\G103111.b\G3657.D
Report Date: 28-Nov-2011 08:08

Sample Calc

Katahdin Analytical Services

Data file : \\target_server\GG\chem\gcms-g.i\G103111.b\G3657.D
Lab Smp Id: SE7042-1 Client Smp ID: 2W-SD-SD166-0001
Inj Date : 31-OCT-2011 18:39 MS Autotune Date: 15-JUN-2004 09:29
Operator : WAS Inst ID: gcms-g.i
Smp Info : SE7042-1
Misc Info : WG100283,WG99906,G3647
Comment :
Method : \\target_server\GG\chem\gcms-g.i\G103111.b\gspsim21.m
Meth Date : 01-Nov-2011 06:18 gcms-g.i Quant Type: ISTD
Cal Date : 31-OCT-2011 14:58 Cal File: G3652.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sw8270sim+1mn.sub
Target Version: 4.12

Benzo(a)anthracene
reported result: 780 µg/kg

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03030	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	68.013	% Moisture
Cpnd Variable		Local Compound Variable

$\frac{275289 \times 0.80}{31576 \times 0.916} = 7.61 \times \frac{0.001}{0.0303} \times \frac{100}{100-68.013} \times 1000 = 785\ \mu g/kg$

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW
* 7 1,4-Dichlorobenzene-D4	152	8.995	8.994	(1.000)	46979	0.80000		
* 20 Naphthalene-D8	136	11.943	11.954	(1.000)	168155	0.80000		
$ 25 2-Methylnaphthalene-D10	152	13.590	13.631	(0.836)	158281	1.47932	153	
28 1-Methylnaphthalene	142	13.915	13.942	(1.165)	7339	0.05798	5.98(aQ)	
37 Acenaphthylene	152	15.858	15.873	(0.976)	48857	0.26433	27.3(a)	
* 39 Acenaphthene-D10	164	16.248	16.248	(1.000)	89479	0.80000		
40 Acenaphthene	153	16.320	16.335	(1.004)	18855	0.16318	16.8(a)	
$ 47 Fluorene-D10	176	17.509	17.526	(1.078)	167742	1.81381	187	
48 Fluorene	166	17.575	17.592	(1.082)	34164	0.25589	26.4(a)	
* 58 Phenanthrene-D10	188	19.854	19.894	(1.000)	123422	0.80000		
59 Phenanthrene	178	19.908	19.949	(1.003)	949953	6.74553	696	
60 Anthracene	178	20.031	20.072	(1.009)	99636	0.57659	59.5(a)	
63 Fluoranthene	202	22.877	22.931	(1.152)	2077465	14.1015	1450(A)	
$ 64 Pyrene-D10	212	23.370	23.403	(0.883)	121659	3.21287	331(R)	
65 Pyrene	202	23.412	23.445	(0.884)	1792001	28.3669	2930(A)	
67 Benzo(a)anthracene	228	26.431	26.471	(0.998)	275289	7.61200	785	
* 68 Chrysene-D12	240	26.472	26.498	(1.000)	31576	0.80000		
69 Chrysene	228	26.526	26.566	(1.002)	426228	8.39260	866(A)	
73 Benzo(b)fluoranthene	252	28.979	29.015	(0.973)	237102	8.87580	916(AM)	M3
74 Benzo(k)fluoranthene	252	29.004	29.065	(0.974)	285184	8.52265	879(AM)	M6
75 Benzo(a)pyrene	252	29.651	29.700	(0.995)	180535	8.81656	910(A)	

WES 11-29-11

RRF = 0.916

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **A. BERNHARDT** **DATE:** **DECEMBER 23, 2011**

FROM: **LEANNE GANSER** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – PAH**
CTO WE55, NSB NEW LONDON
SDG WE55-6

SAMPLES: 9/Sediment/PAH

2W-SD-SD183-0001	2W-SD-SD184-0001	2W-SD-SD185-0001
2W-SD-SD186-0001	2W-SD-SD187-0001	2W-SD-SD188-0001
2W-SD-SD189-0001	2W-SD-SD190-0001	2W-SD-SD191-0001

Overview

The sample set for NSB New London, CTO WE55, SDG WE55-6 consisted of nine (9) sediment environmental samples. The samples were analyzed for polycyclic aromatic hydrocarbons (PAHs). One field duplicate pair was included in this sample delivery group (SDG): 2W-SD-DUP01/2W-SD-SD190-0001. Sample 2W-SD-DUP01 was included in SDG WE55-7.

The samples were collected by Tetra Tech on November 2-3, 2011 and analyzed by Katahdin Analytical Services. All analyses were conducted in accordance with SW-846 Method 8270D SIM analytical and reporting protocols. The data was evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • GC/MS Instrument Tuning and System Performance
• Laboratory Method Blank Results
• Initial and Continuing Calibration
* • Surrogate Spike Recoveries
• Internal Standard Areas
* • Laboratory Control Sample/Laboratory Control Sample Duplicate Results
* • Detection Limits
* • Field Duplicate Results
* • Compound Identification and Quantification

The asterisk (*) indicates that all quality control criteria were met for this parameter. Qualified (if applicable) analytical results are summarized in Appendix A. Results as reported by the laboratory are presented in Appendix B. Appendix C contains Region I worksheets, and Appendix D contains the documentation to support the findings as discussed in this data validation report. . An EPA Region 1 tier III validation was performed on the data in this SDG. The text of this report has been formulated to address only those areas affecting data quality.

LABORATORY METHOD BLANKS

The following contaminants were detected in the laboratory method blanks at the following maximum concentration:

Analyte	Maximum Concentration	Action Level
Indeno(1,2,3-cd)pyrene	2.4 ug/kg	12 ug/kg
Benzo(g,h,i)perylene	2.4 ug/kg	12 ug/kg

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. The result for indeno(1,2,3-cd)pyrene in sample 2W-SD-SD187-0001 was qualified as nondetected, "U".

INITIAL AND CONTINUING CALIBRATION

The continuing calibration performed on instrument GCMS-G on 11/16/11 at 07:13 had a Percent Drift (%Drift) greater than 20% for pyrene affecting all samples. The positive results reported for pyrene were qualified as estimated, (J).

INTERNAL STANDARD RESULTS

The internal standard area for perylene-d12 was below the lower quality control limit in samples 2W-SD-SD188-0001 and 2W-SD-SD189-0001 (diluted) affecting results for benzo(b)fluoranthene, benzo(a)pyrene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene. The positive results reported for benzo(b)fluoranthene, benzo(a)pyrene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene were qualified as estimated, (J), in sample 2W-SD-SD188-0001. Only the positive result reported for benzo(b)fluoranthene was qualified as estimated, (J), in sample 2W-SD-SD189-0001 because all other results were reported from the undiluted sample.

NOTES

Percent solids were less than 30 percent in samples 2W-SD-SD184-0001, 2W-SD-SD186-0001, 2W-SD-SD187-0001, 2W-SD-SD188-0001, 2W-SD-SD189-0001, 2W-SD-SD190-0001, and 2W-SD-SD191-0001. Positive and nondetected results in these samples were qualified as estimated, (J) and (UJ), respectively.

The continuing calibration performed on instrument GCMS-G on 11/17/11 at 07:33 had %Drifts greater than 20% for indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene affecting sample 2W-SD-SD189-0001 analyzed at dilution. No action was necessary as results for these compounds were reported from the undiluted analysis.

The following samples were reanalyzed at dilution because results for some compounds exceeded the instrument's linear calibration range:

Sample	Dilution
2W-SD-SD186-0001	3X
2W-SD-SD189-0001	2X

Positive results reported below the LOQ but above the Method Detection Limit (MDL) were qualified as estimated, (J). Non-detected results are reported to the Limit of Detection (LOD).

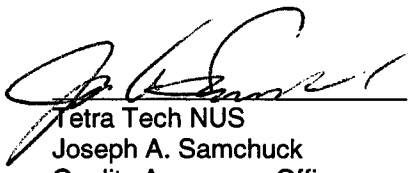
EXECUTIVE SUMMARY

Laboratory Performance: Continuing calibration %Drifts were noncompliant for some PAHs. Internal standard areas were noncompliant in the some samples. Some PAHs were detected in the blanks.

Other Factors Affecting Data Quality: Some samples required dilutions. Percent solids were less than 30% in most samples. Positive results reported below the LOQ but above the MDL were qualified as estimated, (J). Non-detected results were reported to the LOD.

The data for these analyses were reviewed with reference to the criteria for SW-846 Method 8270D SIM listed in the project specific SAP, the "USEPA Region 1 Laboratory Data Validation Functional Guidelines – Part II" (12/96), and the Department of Defense (DOD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

Tetra Tech NUS
Leanne Ganser
Environmental Scientist



Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C – Regional Worksheets
4. Appendix D - Support Documentation

APPENDIX A

QUALIFIED LABORATORY RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS-GFAA MSA's r < 0.995 / ICP PDS Recovery Noncompliance
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 02625	NSAMPLE	2W-SD-SD183-0001			2W-SD-SD184-0001			2W-SD-SD185-0001			2W-SD-SD186-0001		
SDG: WE55-6	LAB_ID	SE7369-1			SE7369-5			SE7369-2			SE7369-3		
FRACTION: PAH	SAMP_DATE	11/2/2011			11/3/2011			11/2/2011			11/2/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	47.0			25.8			46.2			16.4		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		5.2	J	P	38	UJ	Y	4.9	J	P	10	J	PY
2-METHYLNAPHTHALENE		6.4	J	P	38	UJ	Y	9.2	J	P	15	J	PY
ACENAPHTHENE		5.8	J	P	6.7	J	PY	9.3	J	P	24	J	PY
ACENAPHTHYLENE		23	J	P	30	J	PY	32	J	P	31	J	PY
ANTHRACENE		20	J	P	23	J	PY	26	J	P	66	J	PY
BENZO(A)ANTHRACENE		130			170	J	Y	160			880	J	Y
BENZO(A)PYRENE		160			220	J	Y	190			1300	J	Y
BENZO(B)FLUORANTHENE		200			380	J	Y	230					
BENZO(G,H,I)PERYLENE		130			180	J	Y	150			1100	J	Y
BENZO(K)FLUORANTHENE		170			230	J	Y	190			1200	J	Y
CHRYSENE		190			290	J	Y	230			1500	J	Y
DIBENZO(A,H)ANTHRACENE		36	J	P	55	J	PY	48			230	J	Y
FLUORANTHENE		250			420	J	Y	290					
FLUORENE		12	J	P	14	J	PY	15	J	P	32	J	PY
INDENO(1,2,3-CD)PYRENE		120			180	J	Y	140			1100	J	Y
NAPHTHALENE		7.6	J	P	38	UJ	Y	11	J	P	57	UJ	Y
PHENANTHRENE		150			200	J	Y	170			710	J	Y
PYRENE		330	J	C	440	J	CY	360	J	C			

PROJ_NO: 02625	NSAMPLE	2W-SD-SD186-0001DL			2W-SD-SD187-0001			2W-SD-SD188-0001			2W-SD-SD189-0001		
SDG: WE55-6	LAB_ID	SE7369-3DL			SE7369-4			SE7369-6			SE7369-7		
FRACTION: PAH	SAMP_DATE	11/2/2011			11/2/2011			11/3/2011			11/3/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	16.4			11.3			12.7			14.7		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE					85	UJ	Y	76	UJ	Y	67	UJ	Y
2-METHYLNAPHTHALENE					85	UJ	Y	76	UJ	Y	33	J	PY
ACENAPHTHENE					85	UJ	Y	15	J	PY	60	J	PY
ACENAPHTHYLENE					85	UJ	Y	19	J	PY	66	J	PY
ANTHRACENE					85	UJ	Y	38	J	PY	93	J	PY
BENZO(A)ANTHRACENE					72	J	PY	520	J	Y	620	J	Y
BENZO(A)PYRENE					97	J	PY	700	J	NY	890	J	Y
BENZO(B)FLUORANTHENE		2400	J	Y	160	J	PY	1100	J	NY			
BENZO(G,H,I)PERYLENE					120	J	PY	610	J	NY	870	J	Y
BENZO(K)FLUORANTHENE					120	J	PY	750	J	NY	860	J	Y
CHRYSENE					120	J	PY	750	J	Y	1100	J	Y
DIBENZO(A,H)ANTHRACENE					37	J	PY	150	J	PNY	280	J	Y
FLUORANTHENE		2200	J	Y	210	J	Y	1200	J	Y	1500	J	Y
FLUORENE					85	UJ	Y	76	UJ	Y	68	J	PY
INDENO(1,2,3-CD)PYRENE					100	U	A	580	J	NY	850	J	Y
NAPHTHALENE					85	UJ	Y	76	UJ	Y	29	J	PY
PHENANTHRENE					83	J	PY	350	J	Y	500	J	Y
PYRENE		2300	J	CY	220	J	CY	1400	J	CY	1500	J	CY

PROJ_NO: 02625	NSAMPLE	2W-SD-SD189-0001DL			2W-SD-SD190-0001			2W-SD-SD191-0001		
SDG: WE55-6	LAB_ID	SE7369-7DL			SE7369-8			SE7369-9		
FRACTION: PAH	SAMP_DATE	11/3/2011			11/3/2011			11/3/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	14.7			13.8			13.5		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE					70	UJ	Y	51	UJ	Y
2-METHYLNAPHTHALENE					70	UJ	Y	51	UJ	Y
ACENAPHTHENE					28	J	PY	51	UJ	Y
ACENAPHTHYLENE					36	J	PY	51	UJ	Y
ANTHRACENE					55	J	PY	13	J	PY
BENZO(A)ANTHRACENE					640	J	Y	96	J	PY
BENZO(A)PYRENE					880	J	Y	130	J	Y
BENZO(B)FLUORANTHENE		1800	J	NY	1500	J	Y	220	J	Y
BENZO(G,H,I)PERYLENE					780	J	Y	100	J	PY
BENZO(K)FLUORANTHENE					880	J	Y	120	J	Y
CHRYSENE					840	J	Y	150	J	Y
DIBENZO(A,H)ANTHRACENE					210	J	Y	29	J	PY
FLUORANTHENE					1400	J	Y	240	J	Y
FLUORENE					37	J	PY	51	UJ	Y
INDENO(1,2,3-CD)PYRENE					740	J	Y	99	J	PY
NAPHTHALENE					70	UJ	Y	51	UJ	Y
PHENANTHRENE					340	J	Y	100	J	PY
PYRENE					1700	J	CY	270	J	CY

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

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ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7369-1
Client ID: 2W-SD-SD183-0001
Project: CTO-WE55 New London, CT
SDG: WE55-6

Sample Date: 02-NOV-11
Received Date: 04-NOV-11
Extract Date: 08-NOV-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG100656

Analysis Date: 16-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 47.
Report Date: 17-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	7.6	ug/Kgdrywt	1	20	36.	4.6	18.
2-Methylnaphthalene	J	6.4	ug/Kgdrywt	1	20	36.	3.9	18.
1-Methylnaphthalene	J	5.2	ug/Kgdrywt	1	20	36.	3.0	18.
Acenaphthylene	J	23.	ug/Kgdrywt	1	20	36.	2.1	18.
Acenaphthene	J	5.8	ug/Kgdrywt	1	20	36.	2.7	18.
Fluorene	J	12.	ug/Kgdrywt	1	20	36.	5.7	18.
Phenanthrene		150	ug/Kgdrywt	1	20	36.	3.2	18.
Anthracene	J	20.	ug/Kgdrywt	1	20	36.	2.1	18.
Fluoranthene		250	ug/Kgdrywt	1	20	36.	3.2	18.
Pyrene		330	ug/Kgdrywt	1	20	36.	3.8	18.
Benzo (a) anthracene		130	ug/Kgdrywt	1	20	36.	3.4	18.
Chrysene		190	ug/Kgdrywt	1	20	36.	3.0	18.
Benzo (b) Fluoranthene		200	ug/Kgdrywt	1	20	36.	4.3	18.
Benzo(k)fluoranthene		170	ug/Kgdrywt	1	20	36.	5.5	18.
Benzo(a)pyrene		160	ug/Kgdrywt	1	20	36.	5.9	18.
Indeno (1,2,3-cd) pyrene		120	ug/Kgdrywt	1	20	36.	3.4	18.
Dibenzo (a,h) anthracene	J	36.	ug/Kgdrywt	1	20	36.	3.2	18.
Benzo(g,h,i)perylene		130	ug/Kgdrywt	1	20	36.	3.6	18.
2-Methylnaphthalene-D10		54.3	%					
Fluorene-D10		59.4	%					
Pyrene-D10		72.4	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7369-5
Client ID: 2W-SD-SD184-0001
Project: CTO-WE55 New London, CT
SDG: WE55-6

Sample Date: 03-NOV-11
Received Date: 04-NOV-11
Extract Date: 08-NOV-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG100656

Analysis Date: 16-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 26.
Report Date: 22-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	38.	ug/Kgdrywt	1	20	76.	9.9	38.
2-Methylnaphthalene	U	38.	ug/Kgdrywt	1	20	76.	8.4	38.
1-Methylnaphthalene	U	38.	ug/Kgdrywt	1	20	76.	6.4	38.
Acenaphthylene	J	30.	ug/Kgdrywt	1	20	76.	4.6	38.
Acenaphthene	J	6.7	ug/Kgdrywt	1	20	76.	5.7	38.
Fluorene	J	14.	ug/Kgdrywt	1	20	76.	12.	38.
Phenanthrene		200	ug/Kgdrywt	1	20	76.	6.8	38.
Anthracene	J	23.	ug/Kgdrywt	1	20	76.	4.6	38.
Fluoranthene		420	ug/Kgdrywt	1	20	76.	6.8	38.
Pyrene		440	ug/Kgdrywt	1	20	76.	8.0	38.
Benzo (a) anthracene		170	ug/Kgdrywt	1	20	76.	7.2	38.
Chrysene		290	ug/Kgdrywt	1	20	76.	6.4	38.
Benzo (b) Fluoranthene		380	ug/Kgdrywt	1	20	76.	9.1	38.
Benzo(k)fluoranthene		230	ug/Kgdrywt	1	20	76.	12.	38.
Benzo(a)pyrene		220	ug/Kgdrywt	1	20	76.	12.	38.
Indeno (1,2,3-cd) pyrene		180	ug/Kgdrywt	1	20	76.	7.2	38.
Dibenzo (a,h) anthracene	J	55.	ug/Kgdrywt	1	20	76.	6.8	38.
Benzo(g,h,i)perylene		180	ug/Kgdrywt	1	20	76.	7.6	38.
2-Methylnaphthalene-D10		50.2	%					
Fluorene-D10		58.9	%					
Pyrene-D10		68.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7369-2
Client ID: 2W-SD-SD185-0001
Project: CTO-WE55 New London, CT
SDG: WE55-6

Sample Date: 02-NOV-11
Received Date: 04-NOV-11
Extract Date: 08-NOV-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG100656

Analysis Date: 16-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 46.
Report Date: 22-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	11.	ug/Kgdrywt	1	20	43.	5.6	21.
2-Methylnaphthalene	J	9.2	ug/Kgdrywt	1	20	43.	4.7	21.
1-Methylnaphthalene	J	4.9	ug/Kgdrywt	1	20	43.	3.6	21.
Acenaphthylene	J	32.	ug/Kgdrywt	1	20	43.	2.6	21.
Acenaphthene	J	9.3	ug/Kgdrywt	1	20	43.	3.2	21.
Fluorene	J	15.	ug/Kgdrywt	1	20	43.	6.8	21.
Phenanthrene		170	ug/Kgdrywt	1	20	43.	3.8	21.
Anthracene	J	26.	ug/Kgdrywt	1	20	43.	2.6	21.
Fluoranthene		290	ug/Kgdrywt	1	20	43.	3.8	21.
Pyrene		360	ug/Kgdrywt	1	20	43.	4.5	21.
Benzo (a) anthracene		160	ug/Kgdrywt	1	20	43.	4.1	21.
Chrysene		230	ug/Kgdrywt	1	20	43.	3.6	21.
Benzo (b) Fluoranthene		230	ug/Kgdrywt	1	20	43.	5.1	21.
Benzo(k)fluoranthene		190	ug/Kgdrywt	1	20	43.	6.6	21.
Benzo(a)pyrene		190	ug/Kgdrywt	1	20	43.	7.1	21.
Indeno (1,2,3-cd) pyrene		140	ug/Kgdrywt	1	20	43.	4.1	21.
Dibenzo (a,h) anthracene		48.	ug/Kgdrywt	1	20	43.	3.8	21.
Benzo(g,h,i)perylene		150	ug/Kgdrywt	1	20	43.	4.3	21.
2-Methylnaphthalene-D10		62.6	%					
Fluorene-D10		67.7	%					
Pyrene-D10		82.5	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7369-3
Client ID: 2W-SD-SD186-0001
Project: CTO-WE55 New London, CT
SDG: WE55-6

Sample Date: 02-NOV-11
Received Date: 04-NOV-11
Extract Date: 08-NOV-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG100656

Analysis Date: 16-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 16.
Report Date: 22-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	57.	ug/Kgdrywt	1	20	110	15.	57.
2-Methylnaphthalene	J	15.	ug/Kgdrywt	1	20	110	13.	57.
1-Methylnaphthalene	J	10.	ug/Kgdrywt	1	20	110	9.7	57.
Acenaphthylene	J	31.	ug/Kgdrywt	1	20	110	6.9	57.
Acenaphthene	J	24.	ug/Kgdrywt	1	20	110	8.6	57.
Fluorene	J	32.	ug/Kgdrywt	1	20	110	18.	57.
Phenanthrene		710	ug/Kgdrywt	1	20	110	10.	57.
Anthracene	J	66.	ug/Kgdrywt	1	20	110	6.9	57.
Fluoranthene	E	2400	ug/Kgdrywt	1	20	110	10.	57.
Pyrene	E	2500	ug/Kgdrywt	1	20	110	12.	57.
Benzo (a) anthracene		880	ug/Kgdrywt	1	20	110	11.	57.
Chrysene		1500	ug/Kgdrywt	1	20	110	9.7	57.
Benzo (b) Fluoranthene	E	2100	ug/Kgdrywt	1	20	110	14.	57.
Benzo(k)fluoranthene		1200	ug/Kgdrywt	1	20	110	18.	57.
Benzo(a)pyrene		1300	ug/Kgdrywt	1	20	110	19.	57.
Indeno (1,2,3-cd) pyrene		1100	ug/Kgdrywt	1	20	110	11.	57.
Dibenzo (a,h) anthracene		230	ug/Kgdrywt	1	20	110	10.	57.
Benzo(g,h,i)perylene		1100	ug/Kgdrywt	1	20	110	11.	57.
2-Methylnaphthalene-D10		56.0	%					
Fluorene-D10		67.5	%					
Pyrene-D10		84.8	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7369-3DL
Client ID: 2W-SD-SD186-0001
Project: CTO-WE55 New London, CT
SDG: WE55-6

Sample Date: 02-NOV-11
Received Date: 04-NOV-11
Extract Date: 08-NOV-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG100656

Analysis Date: 16-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 16.
Report Date: 22-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	170	ug/Kgdrywt	3	20	340	45.	170
2-Methylnaphthalene	U	170	ug/Kgdrywt	3	20	340	38.	170
1-Methylnaphthalene	U	170	ug/Kgdrywt	3	20	340	29.	170
Acenaphthylene	J	40.	ug/Kgdrywt	3	20	340	21.	170
Acenaphthene	J	27.	ug/Kgdrywt	3	20	340	26.	170
Fluorene	U	170	ug/Kgdrywt	3	20	340	55.	170
Phenanthrene		690	ug/Kgdrywt	3	20	340	31.	170
Anthracene	J	81.	ug/Kgdrywt	3	20	340	21.	170
Fluoranthene		2200	ug/Kgdrywt	3	20	340	31.	170
Pyrene		2300	ug/Kgdrywt	3	20	340	36.	170
Benzo (a) anthracene		850	ug/Kgdrywt	3	20	340	33.	170
Chrysene		1400	ug/Kgdrywt	3	20	340	29.	170
Benzo (b) Fluoranthene		2400	ug/Kgdrywt	3	20	340	41.	170
Benzo(k)fluoranthene		1200	ug/Kgdrywt	3	20	340	53.	170
Benzo(a)pyrene		1300	ug/Kgdrywt	3	20	340	57.	170
Indeno (1,2,3-cd) pyrene		1300	ug/Kgdrywt	3	20	340	33.	170
Dibenzo (a,h) anthracene	J	300	ug/Kgdrywt	3	20	340	31.	170
Benzo(g,h,i)perylene		1200	ug/Kgdrywt	3	20	340	34.	170
2-Methylnaphthalene-D10		57.1	%					
Fluorene-D10		70.9	%					
Pyrene-D10		81.2	%					

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ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7369-4
Client ID: 2W-SD-SD187-0001
Project: CTO-WE55 New London, CT
SDG: WE55-6

Sample Date: 02-NOV-11
Received Date: 04-NOV-11
Extract Date: 08-NOV-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG100656

Analysis Date: 16-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 11.
Report Date: 22-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	85.	ug/Kgdrywt	1	20	170	22.	85.
2-Methylnaphthalene	U	85.	ug/Kgdrywt	1	20	170	19.	85.
1-Methylnaphthalene	U	85.	ug/Kgdrywt	1	20	170	14.	85.
Acenaphthylene	U	85.	ug/Kgdrywt	1	20	170	10.	85.
Acenaphthene	U	85.	ug/Kgdrywt	1	20	170	13.	85.
Fluorene	U	85.	ug/Kgdrywt	1	20	170	27.	85.
Phenanthrene	J	83.	ug/Kgdrywt	1	20	170	15.	85.
Anthracene	U	85.	ug/Kgdrywt	1	20	170	10.	85.
Fluoranthene		210	ug/Kgdrywt	1	20	170	15.	85.
Pyrene		220	ug/Kgdrywt	1	20	170	18.	85.
Benzo (a) anthracene	J	72.	ug/Kgdrywt	1	20	170	16.	85.
Chrysene	J	120	ug/Kgdrywt	1	20	170	14.	85.
Benzo (b) Fluoranthene	J	160	ug/Kgdrywt	1	20	170	20.	85.
Benzo(k)fluoranthene	J	120	ug/Kgdrywt	1	20	170	26.	85.
Benzo(a)pyrene	J	97.	ug/Kgdrywt	1	20	170	28.	85.
Indeno (1,2,3-cd) pyrene	J	100	ug/Kgdrywt	1	20	170	16.	85.
Dibenzo (a,h) anthracene	J	37.	ug/Kgdrywt	1	20	170	15.	85.
Benzo(g,h,i)perylene	J	120	ug/Kgdrywt	1	20	170	17.	85.
2-Methylnaphthalene-D10		52.4	%					
Fluorene-D10		61.1	%					
Pyrene-D10		82.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7369-6
Client ID: 2W-SD-SD188-0001
Project: CTO-WE55 New London, CT
SDG: WE55-6

Sample Date: 03-NOV-11
Received Date: 04-NOV-11
Extract Date: 08-NOV-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG100656

Analysis Date: 16-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 13.
Report Date: 22-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	76.	ug/Kgdrywt	1	20	150	20.	76.
2-Methylnaphthalene	U	76.	ug/Kgdrywt	1	20	150	17.	76.
1-Methylnaphthalene	U	76.	ug/Kgdrywt	1	20	150	13.	76.
Acenaphthylene	J	19.	ug/Kgdrywt	1	20	150	9.1	76.
Acenaphthene	J	15.	ug/Kgdrywt	1	20	150	11.	76.
Fluorene	U	76.	ug/Kgdrywt	1	20	150	24.	76.
Phenanthrene		350	ug/Kgdrywt	1	20	150	14.	76.
Anthracene	J	38.	ug/Kgdrywt	1	20	150	9.1	76.
Fluoranthene		1200	ug/Kgdrywt	1	20	150	14.	76.
Pyrene		1400	ug/Kgdrywt	1	20	150	16.	76.
Benzo (a) anthracene		520	ug/Kgdrywt	1	20	150	14.	76.
Chrysene		750	ug/Kgdrywt	1	20	150	13.	76.
Benzo (b) Fluoranthene		1100	ug/Kgdrywt	1	20	150	18.	76.
Benzo(k)fluoranthene		750	ug/Kgdrywt	1	20	150	23.	76.
Benzo(a)pyrene		700	ug/Kgdrywt	1	20	150	25.	76.
Indeno (1,2,3-cd) pyrene		580	ug/Kgdrywt	1	20	150	14.	76.
Dibenzo (a,h) anthracene	J	150	ug/Kgdrywt	1	20	150	14.	76.
Benzo(g,h,i)perylene		610	ug/Kgdrywt	1	20	150	15.	76.
2-Methylnaphthalene-D10		54.4	%					
Fluorene-D10		66.9	%					
Pyrene-D10		85.3	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7369-7
Client ID: 2W-SD-SD189-0001
Project: CTO-WE55 New London, CT
SDG: WE55-6

Sample Date: 03-NOV-11
Received Date: 04-NOV-11
Extract Date: 08-NOV-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG100656

Analysis Date: 16-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 15.
Report Date: 22-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	29.	ug/Kgdrywt	1	20	130	17.	67.
2-Methylnaphthalene	J	33.	ug/Kgdrywt	1	20	130	15.	67.
1-Methylnaphthalene	U	67.	ug/Kgdrywt	1	20	130	11.	67.
Acenaphthylene	J	66.	ug/Kgdrywt	1	20	130	8.0	67.
Acenaphthene	J	60.	ug/Kgdrywt	1	20	130	10.	67.
Fluorene	J	68.	ug/Kgdrywt	1	20	130	21.	67.
Phenanthrene		500	ug/Kgdrywt	1	20	130	12.	67.
Anthracene	J	93.	ug/Kgdrywt	1	20	130	8.0	67.
Fluoranthene		1500	ug/Kgdrywt	1	20	130	12.	67.
Pyrene		1500	ug/Kgdrywt	1	20	130	14.	67.
Benzo (a) anthracene		620	ug/Kgdrywt	1	20	130	13.	67.
Chrysene		1100	ug/Kgdrywt	1	20	130	11.	67.
Benzo (b) Fluoranthene	E	1800	ug/Kgdrywt	1	20	130	16.	67.
Benzo(k)fluoranthene		860	ug/Kgdrywt	1	20	130	21.	67.
Benzo(a)pyrene		890	ug/Kgdrywt	1	20	130	22.	67.
Indeno (1,2,3-cd) pyrene		850	ug/Kgdrywt	1	20	130	13.	67.
Dibenzo (a,h) anthracene		280	ug/Kgdrywt	1	20	130	12.	67.
Benzo(g,h,i)perylene		870	ug/Kgdrywt	1	20	130	13.	67.
2-Methylnaphthalene-D10		35.4	%					
Fluorene-D10		48.6	%					
Pyrene-D10		57.6	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7369-7DL
Client ID: 2W-SD-SD189-0001
Project: CTO-WE55 New London, CT
SDG: WE55-6

Sample Date: 03-NOV-11
Received Date: 04-NOV-11
Extract Date: 08-NOV-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG100656

Analysis Date: 17-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 15.
Report Date: 22-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	130	ug/Kgdrywt	2	20	270	35.	130
2-Methylnaphthalene	J	34.	ug/Kgdrywt	2	20	270	29.	130
1-Methylnaphthalene	U	130	ug/Kgdrywt	2	20	270	23.	130
Acenaphthylene	J	62.	ug/Kgdrywt	2	20	270	16.	130
Acenaphthene	J	63.	ug/Kgdrywt	2	20	270	20.	130
Fluorene	J	67.	ug/Kgdrywt	2	20	270	43.	130
Phenanthrene		540	ug/Kgdrywt	2	20	270	24.	130
Anthracene	J	92.	ug/Kgdrywt	2	20	270	16.	130
Fluoranthene		1500	ug/Kgdrywt	2	20	270	24.	130
Pyrene		1900	ug/Kgdrywt	2	20	270	28.	130
Benzo (a) anthracene		650	ug/Kgdrywt	2	20	270	25.	130
Chrysene		1100	ug/Kgdrywt	2	20	270	23.	130
Benzo (b) Fluoranthene		1800	ug/Kgdrywt	2	20	270	32.	130
Benzo(k)fluoranthene		1100	ug/Kgdrywt	2	20	270	41.	130
Benzo(a)pyrene		880	ug/Kgdrywt	2	20	270	44.	130
Indeno (1,2,3-cd) pyrene		800	ug/Kgdrywt	2	20	270	25.	130
Dibenzo (a,h) anthracene	J	250	ug/Kgdrywt	2	20	270	24.	130
Benzo(g,h,i)perylene		860	ug/Kgdrywt	2	20	270	27.	130
2-Methylnaphthalene-D10		36.5	%					
Fluorene-D10		48.9	%					
Pyrene-D10		75.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7369-8
Client ID: 2W-SD-SD190-0001
Project: CTO-WE55 New London, CT
SDG: WE55-6

Sample Date: 03-NOV-11
Received Date: 04-NOV-11
Extract Date: 08-NOV-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG100656

Analysis Date: 16-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 14.
Report Date: 22-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	70.	ug/Kgdrywt	1	20	140	18.	70.
2-Methylnaphthalene	U	70.	ug/Kgdrywt	1	20	140	16.	70.
1-Methylnaphthalene	U	70.	ug/Kgdrywt	1	20	140	12.	70.
Acenaphthylene	J	36.	ug/Kgdrywt	1	20	140	8.5	70.
Acenaphthene	J	28.	ug/Kgdrywt	1	20	140	10.	70.
Fluorene	J	37.	ug/Kgdrywt	1	20	140	22.	70.
Phenanthrene		340	ug/Kgdrywt	1	20	140	13.	70.
Anthracene	J	55.	ug/Kgdrywt	1	20	140	8.5	70.
Fluoranthene		1400	ug/Kgdrywt	1	20	140	13.	70.
Pyrene		1700	ug/Kgdrywt	1	20	140	15.	70.
Benzo (a) anthracene		640	ug/Kgdrywt	1	20	140	13.	70.
Chrysene		840	ug/Kgdrywt	1	20	140	12.	70.
Benzo (b) Fluoranthene		1500	ug/Kgdrywt	1	20	140	17.	70.
Benzo(k)fluoranthene		880	ug/Kgdrywt	1	20	140	22.	70.
Benzo(a)pyrene		880	ug/Kgdrywt	1	20	140	23.	70.
Indeno (1,2,3-cd) pyrene		740	ug/Kgdrywt	1	20	140	13.	70.
Dibenzo (a,h) anthracene		210	ug/Kgdrywt	1	20	140	13.	70.
Benzo(g,h,i)perylene		780	ug/Kgdrywt	1	20	140	14.	70.
2-Methylnaphthalene-D10		38.3	%					
Fluorene-D10		53.6	%					
Pyrene-D10		73.0	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7369-9
Client ID: 2W-SD-SD191-0001
Project: CTO-WE55 New London, CT
SDG: WE55-6

Sample Date: 03-NOV-11
Received Date: 04-NOV-11
Extract Date: 08-NOV-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG100656

Analysis Date: 16-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 14.
Report Date: 22-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	51.	ug/Kgdrywt	1	20	100	13.	51.
2-Methylnaphthalene	U	51.	ug/Kgdrywt	1	20	100	11.	51.
1-Methylnaphthalene	U	51.	ug/Kgdrywt	1	20	100	8.6	51.
Acenaphthylene	U	51.	ug/Kgdrywt	1	20	100	6.1	51.
Acenaphthene	U	51.	ug/Kgdrywt	1	20	100	7.6	51.
Fluorene	U	51.	ug/Kgdrywt	1	20	100	16.	51.
Phenanthrene	J	100	ug/Kgdrywt	1	20	100	9.1	51.
Anthracene	J	13.	ug/Kgdrywt	1	20	100	6.1	51.
Fluoranthene		240	ug/Kgdrywt	1	20	100	9.1	51.
Pyrene		270	ug/Kgdrywt	1	20	100	11.	51.
Benzo (a) anthracene	J	96.	ug/Kgdrywt	1	20	100	9.6	51.
Chrysene		150	ug/Kgdrywt	1	20	100	8.6	51.
Benzo (b) Fluoranthene		220	ug/Kgdrywt	1	20	100	12.	51.
Benzo(k)fluoranthene		120	ug/Kgdrywt	1	20	100	16.	51.
Benzo(a)pyrene		130	ug/Kgdrywt	1	20	100	17.	51.
Indeno (1,2,3-cd) pyrene	J	99.	ug/Kgdrywt	1	20	100	9.6	51.
Dibenzo (a,h) anthracene	J	29.	ug/Kgdrywt	1	20	100	9.1	51.
Benzo(g,h,i)perylene	J	100	ug/Kgdrywt	1	20	100	10.	51.
2-Methylnaphthalene-D10		30.2	%					
Fluorene-D10		47.3	%					
Pyrene-D10		60.4	%					

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APPENDIX C

REGIONAL WORKSHEETS

EPA-NE
Data Validation Worksheet Cover Page - Page 1

Site Name New London
Reference No. _____

REGION I ORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name Katahdin
Case/Project No. _____
SDG No. WE55-6
No. of Samples/Matrix 9 sediment

SOW/Method No. _____
Sampling Date(s) _____
Shipping Date(s) _____
Date Rec'd by lab _____

Traffic Report Sample Nos. See DV letter

Trip Blank No. _____
Equipment Blank No. _____
Bottle Blank No. _____
Field Duplicate Nos. _____

PES Nos. _____

The Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision _____ was used to evaluate the data and/or approved modifications to the EPA-NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attach modified criteria from EPA approved QAPjP or amendment to QAPjP).

A Tier II or Tier III evaluation was used to validate the data (circle one). If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc. that received partial Tier III validation

_____

The data were evaluated based upon the following parameters:

- Overall Evaluation of Data
- Data Completeness (CSF Audit - Tier I)
- Preservation & Technical Holding Times
- GC/MS & GC/ECD Instrument Performance Check
- Initial & Continuing Calibrations
- Blanks
- Surrogate Compounds
- Internal Standards
- Matrix Spike/Matrix Spike Duplicate
- Field Duplicates
- Sensitivity Check
- PE Samples/Accuracy Check
- Target Compound Identification
- Compound Quantitation and Reported Quantitation Limits
- TICs
- Semivolatile and Pesticide/PCB Cleanup
- System Performance

Region I Definitions and Qualifiers:

A - Acceptable Data
J - Numerical value associated with compound is an estimated quantity.
R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.
U - Compound not detected at that numerical sample quantitation limit.
UJ - The sample quantitation limit is an estimated quantity.
TB, BB, EB - Compound detected in aqueous trip blank, aqueous bottle blank, or aqueous equipment blank associated with soil/sediment samples.

Validator's Name Leanne Ganser Company Name Tetra Tech Phone Number _____

Date Validation Started 12-19-11 Date Validation Completed 12-19-11

EPA-NE
Data Validation Worksheet Cover Page - Page 2

See DV letter

Check if all criteria are met and no hard copy worksheet provided. Indicate NA if worksheet is not applicable to analytical method. Note: there is no standard worksheet for System Performance, however, the validator must document all system performance issues in the Data Validation Memorandum.

VOA/SV worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	_____
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	_____
VOA/SV-II	GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)	_____
VOA/SV-III	INITIAL CALIBRATION	_____
VOA/SV-IV	CONTINUING CALIBRATION	_____
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	_____
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	_____
VOA-VI	VOA SURROGATE SPIKE RECOVERIES	_____
SV-VI	SV SURROGATE SPIKE RECOVERIES	_____
VOA/SV-VII	INTERNAL STANDARD PERFORMANCE	_____
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	_____
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	_____
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	_____
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	_____
VOA/SV-Pest/PCB-XII	TARGET COMPOUND IDENTIFICATION	_____
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	_____
VOA/SV-XIV	TENTATIVELY IDENTIFIED COMPOUNDS	_____
VOA/SV-XV	SEMIVOLATILE CLEANUP	_____
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	_____

Pest/PCB worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	_____
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	_____
Pest/PCB-IIA	GC/ECD INSTRUMENT PERFORMANCE CHECK-RESOLUTION	_____
Pest/PCB-IIB	GC/ECD INSTRUMENT PERFORMANCE CHECK-RETENTION TIMES	_____
Pest/PCB-IIC	GC/ECD INSTRUMENT PERFORMANCE CHECK-ACCURACY CHECK OF INITIAL CALIBRATION	_____
Pest/PCB-IID	GC/ECD INSTRUMENT PERFORMANCE CHECK-PESTICIDE DEGRADATION	_____
Pest/PCB-III	INITIAL CALIBRATION	_____
Pest/PCB-IV	CONTINUING CALIBRATION	_____
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	_____
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	_____
Pest/PCB-VI	SURROGATE COMPOUNDS: SPIKE RECOVERIES AND RETENTION TIME SHIFT	_____
Pest/PCB-VII	PESTICIDE CLEANUP	_____
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	_____
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	_____
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	_____
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	_____
Pest/PCB-XII	COMPOUND IDENTIFICATION	_____
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	_____
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	_____

I certify that all criteria were met for the worksheets checked above.

Signature: _____ Name: Leanne Ganser

Date: 12-19-11

The data validator generates a Data Validation Report, applicable to Data Validation Tiers II and III, that consists of the following components in the order specified below: (Refer to Section 11 for a description of each of the Data Validation Report components).

1. Organic Regional Data Assessment/Inorganic Regional Data Assessment (ORDA/IRDA) Form
2. Data Validation Memorandum
   a. Narrative
   b. Table I-Qualifier Recommendation Summary Table
   c. Table II-Overall Evaluation of Data
   d. Table III-Tentatively Identified Compounds
   e. Data Summary Tables
3. Standard Data Validation Worksheets
   a. Manual
   b. Automated Data Review Reports (i.e., CADRE)
4. Support Documentation
   a. Copy of non-CLP analytical method, e.g., DAS methods, modified EPA methods
   b. Copies of PES Score Reports/Vendor PES QC Acceptance Limits
   c. Copies of Telephone Logs/Communication Forms for:
      - RSCC communications
      - Requests for laboratory data resubmissions/clarifications
      - Communications with samplers resolving sampling problems
      - Communications with TPO/Lead Chemist to report contractually-deficient data for rejection/reduced payment
      - Communications with EPA Site Manager concerning possible data rejection
      - EPA Site Manager authorization for alternate DV tier
   d. Copies of data supporting recommendations for reduced payment resulting from CSF Audit and/or PE sample result evaluation
   e. Original data to support recommendations for data rejection/non-payment identified from Tier II or Tier III data validation
   f. Copies of field sampling notes and/or field report supplied by field sampler
   g. Copies of EPA-approved amendments to QAPjP and/or SAP describing modified criteria to be used for validating site data
5. CSF Completeness Evidence Audit
6. DQO Summary Form

The data validator is responsible for implementing all corrective actions required by the contractor Lead Chemist in response to EPA-NE data validation oversight findings.

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

N/A

VOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: _____

Date: 12-19-11

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

See DV letter

SEMIVOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: _____ Date: 12-19-11

COMPLETE SDG FILE (CSF) AUDIT

Organic Fractions: _____

Missing Information	Date Lab Contacted	Date Received
	See DV letter	

Validator: _____ Date: 12-19-11

EPA-NE - Data Validation
VOA/SV - Pest/PCB-I

Sampler:_____ Company:_____ Contacted: Yes No Date:_____

I. PRESERVATION AND HOLDING TIMES - Circle sample numbers with exceeded technical holding times or omitted preservation.
List all required preservation codes and circle omitted preservation codes.
Circle all exceeded technical holding times.
Identify extraction technique after "# of Days"/(*Extraction Code).

See DV letter

Sample No. (TR No.)	Matrix	Pres. Code	Date Sampled	VOA			BNA					PEST PCB				
				Date Analyzed	# of Days from Samp. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr. (*)	Date Analyzed	# of Days from Extr to Anal.	Action	Date Extracted	# of Days from Samp. to Extr. (*)	Date Analyzed	# of Days from Extr. to Anal.	Action

Preservation Code:
1. Cool (a. 4°C (± 2°)
2. Preserve with HCl to at least pH 2
3. Protect from light
4. Freeze
5. Room Temperature (Avoid excessive heat)

(*Extraction Code:)
L/L - Liquid/Liquid
SON - Sonication
SEP - Separatory Funnel
SOX - Soxhlet
SPE - Solid Phase Extraction

Action Code:
J - Estimate (J) Detected Values
UJ - Estimate (UJ) Non-Detected Values
R - Reject (R) Non-Detected Values

Validator: _____ Date: 12-19-11

II. GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)

See DV letter

List all Instrument Performance Checks that are outside method QC tuning acceptance criteria.

Volatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action

Comments:

Semivolatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action

Comments:

If tuning compounds and criteria are different from those specified in CLP SOW OLM03.1, then the validator should include a copy of the method-specific tuning criteria with this worksheet.

Validator: _____

Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV-III

See DV letter

III. INITIAL CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Instrument	Parameter	Matrix	Compound	% RSD	$\overline{RRF}$	Samples Affected	Action

Comments:

Validator: L Dunn

Date: 12-19-11

EPA-NE - Data Validation Worksheet

VOA/SV-IV

See DV letter

IV. CONTINUING CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Date of CCAL	Instrument	Parameter	Matrix	Compound	%D	RRF	Samples Affected	Action

Comments:

Validator: [signature]

Date: 12-19-11

EPA-NE - Data Validation Worksheet

VOA/SV - Pest/PCB-V-A

See DV letter

V. BLANK ANALYSIS

List the blank contamination below.

Concentration Level:____

Contacted: Yes No Date:____

Sampler: _____ Company: _____

1. Laboratory: Method, Storage and Instrument Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

2. Field: Equipment (Rinsate), Trip and Bottle Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

Validator: L Jones

Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-V-B

See DV letter

3. **Blank Actions** - List the maximum concentrations of blank compounds.

Compound	Type of Blank	Date Blank Sampled/Originated	Max. Conc. (units)	Action Level (units)	Sample QL	Samples Affected	Action

Comments: _____

Date: 12-19-11

Validator: _____

12/96

N/A

EPA-NE - Data Validation Worksheet
VOA-VI

VI. VOA SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Volatile Method QC Acceptance Criteria				
	Toluene-d_8	BFB	DCE-d_4	Other:	
OLM03.2	Water 88-110 Soil 84-138	Water 86-115 Soil 59-113	Water 76-114 Soil 70-121		
OLC02.1	NA	80-120	NA		
Other:					
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

Date: 12-19-11

Validator: [signature]

EPA-NE - Data Validation Worksheet
SV-VI

See DV letter

VI. SV SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Base/Neutral Method QC Acceptance Criteria					
	NBZ-d_5	2-FBP	TPH-d_{14}	1,2-DCB-d_4*	Other:	
OLM03.2	Water Soil 35-114 23-120	Water Soil 43-116 30-115	Water Soil 33-141 18-137	Water Soil 16-110 20-130		
OLC02.1	40-110	30-110	20-140	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

Method	Acid Method QC Acceptance Criteria					
	Phenol-d_5	2-FP	2,4,6-TBP	2-CP-d_4*	Other:	
OLM03.2	Water Soil 10-110 24-113	Water Soil 21-110 25-121	Water Soil 10-123 19-122	Water Soil 33-110 20-130		
OLC02.1	15-115	15-110	15-130	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

* Advisory Surrogates - OLM03.2

Validator: _____ Date: 12/9/11

EPA-NE - Data Validation Worksheet
VOA/SV-VII

See DV letter

VII. INTERNAL STANDARD PERFORMANCE

List the internal standards that are outside the area count and retention time method QC acceptance criteria.
IS Area Count method QC acceptance criteria: _____
IS Retention Time method QC acceptance criteria: _____

Sample Number (TR#)	Date and Time Analyzed	Instrument	Parameter	IS Outside Area Count and/or RT Criteria	__IS Area	RT Shift	Acceptable Range (IS area or RT shift)	Action

Date: 12-19-11

Validator: L Ma

N/A

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-VIII

VIII. MATRIX SPIKE/MATRIX SPIKE DUPLICATE - List all MS/MSD analytes that are outside method QC acceptance criteria.

Use a separate worksheet for each MS/MSD pair.

Sample # _____ Matrix _____ Concentration Level _____

Parameter	Compound	MS %Rec	MSD %Rec	RPD	Method QC Limits		Concentration			% RSD	Action
					% Rec	RPD	Unspiked Sample	MS	MSD		

Validator: _____ Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-IX

See DV letter

IX. FIELD DUPLICATE PRECISION - List all field duplicate analytes that are outside criteria.

Use a separate worksheet for each field duplicate pair.

Sample Number _____ Duplicate Sample Number _____ Matrix _____

Parameter	Compound	Sample Conc.	Sample QL		Duplicate Conc.	Duplicate QL		RPD	QC Acceptance Criteria RPD or NA*	Action
			SQL	2xSQL		SQL	2xSQL			

* For instances where one duplicate result is ND (or reported less than the sample QL).

Does the MS/MSD data indicate acceptable laboratory precision? Y N

Comments: _____

_____

Sampler Name: _____ Contractor Name: _____ Date Contacted: _____

Reason for Contact and resolution obtained: _____

Validator: Jean Jason Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-X

See DV letter

X. SENSITIVITY CHECK (Method Detection Limit Study)

List all compounds, surrogates, and internal standards that are outside the MDL criteria.

- Has an appropriate MDL study been submitted with seven replicates for each compound and matrix of interest? Y N
- Date of Preparation/Analysis: _____ Within 1 year? Y N
- Instrument I.D.: _____ Same as samples? Y N
- Column I.D.: _____ Same as samples? Y N

Matrix	Compound	MDL > QL	Method QC Limits < 80% or > 120%	IS Outside Area Count and/or RT Criteria	RSD > 20%	Samples Affected	Action

If an MDL study has not been submitted, use only the LFB results to evaluate data.

(Laboratory Fortified Blank) - List all LFB compounds, surrogates and internal standards that are outside criteria.

- Has an appropriate and complete LFB been submitted at the proper frequency? Y N
- Does it contain all target compounds at the method-required QLs? Y N
- Was the LFB spiked with a standard from a source (vendor) independent of the calibration standard? Y N

Matrix	Compound	Method QC Limits < 60% or > 140% Other:	IS Outside Area Count and/or RT Criteria	Samples Affected	Action

Validator: _____ Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XI

See DV letter

XI. ACCURACY CHECK (Performance Evaluation Results) - List all analytes that are outside criteria.

SDG No: _____ CASE: _____

Y N

Are more than one-half of the PES analytes within criteria for each parameter.

PE Sample Number	Ampule Number	Parameter	Type of PES	Matrix	Analyte	Conc.	Region I EPA PES Scores*	Non-EPA PES Scores**	Samples Affected	Action

* For Region I PESs indicate the Region I PES Score Report Result: Action High; Action Low; TCL MISS; TCL CONTAMINANT; TIC HIT; TIC MISS; TIC CONTAMINANT

** For Non-EPA PESs indicate the Non-EPA PES Score: PES COMPOUND MISS; PES COMPOUND CONTAMINANT; PES COMPOUND HIT (% Recovery Limits)

Validator: _____ Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XII

See DV letter

XII. TARGET COMPOUND IDENTIFICATION - List the analytes that are outside the acceptance criteria.

Sample Number	Compound	__MS Ions	____RRT	Action

Date: 12-19-11

Validator: [signature]

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XIII

See DV report

XIII. SAMPLE QUANTITATION

Recalculate, from the raw data, the concentrations for one positive detect and one reported sample quantitation limit for a non-detect in a diluted sample or soil sample per fraction. (Note: Although Section XIII, C.1.a, requires that one calculation for each fraction in each sample be performed, the validator is only required to reproduce an example, for each fraction, of one positive detect and one sample quantitation limit calculation on this worksheet.)

Y N

Do all soil/sediment samples have % solids greater than 30%? _____

If no, list sample numbers _____

Fraction		Calculation
VOA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
BNA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
Pesticide/PCB		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		

Validator: _____

Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV-XIV

N/A

XIV. TENTATIVELY IDENTIFIED COMPOUNDS (TICs)

List the 5 TICs having the highest concentration for each sample parameter.

Sample Number	Parameter	Compound	RRT	Est. Conc.	Action

Validator _____

Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV-XV

see DV report

XV. SEMIVOLATILE CLEANUP - List all analytes that are outside method cleanup QC criteria.

Cleanup Procedure	Instrument # or Lot #	Date/Time GPC Calibrated or Check Solution Analyzed	Compound	% Rec	QC Limits	Samples Affected	Action

Did the GPC column meet; resolution requirements? Y or N
peak shape requirements? Y or N
retention time shift requirements? Y or N

Was the GPC calibration, Silica Gel cleanup checked at the method required frequency with correct compounds and concentrations? Y or N

Were all compounds less than QL for the GPC/Silica Gel/Acid-Partition blank? Y or N

Did the blank surrogate recoveries and IS area counts and RTs (if added) meet method QC acceptance criteria? Y or N

Comments: _____

Validator: _____ Date: 12-19-11

APPENDIX D

SUPPORT DOCUMENTATION

HOLDTIME

PROJ_NO 02625

SDG	SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
WE55-6	TS	%	2W-SD-SD190-0001	SE7369-8	NM	11/03/2011	11/08/2011	11/09/2011	5	1	6
WE55-6	TS	%	2W-SD-SD184-0001	SE7369-5	NM	11/03/2011	11/08/2011	11/09/2011	5	1	6
WE55-6	TS	%	2W-SD-SD185-0001	SE7369-2	NM	11/02/2011	11/08/2011	11/09/2011	6	1	7
WE55-6	TS	%	2W-SD-SD186-0001	SE7369-3	NM	11/02/2011	11/08/2011	11/09/2011	6	1	7
WE55-6	TS	%	2W-SD-SD187-0001	SE7369-4	NM	11/02/2011	11/08/2011	11/09/2011	6	1	7
WE55-6	TS	%	2W-SD-SD188-0001	SE7369-6	NM	11/03/2011	11/08/2011	11/09/2011	5	1	6
WE55-6	TS	%	2W-SD-SD191-0001	SE7369-9	NM	11/03/2011	11/08/2011	11/09/2011	5	1	6
WE55-6	TS	%	2W-SD-SD189-0001	SE7369-7	NM	11/03/2011	11/08/2011	11/09/2011	5	1	6
WE55-6	TS	%	2W-SD-SD183-0001	SE7369-1	NM	11/02/2011	11/08/2011	11/09/2011	6	1	7
WE55-6	SIM	%	2W-SD-SD183-0001	SE7369-1	NM	11/02/2011	11/08/2011	11/16/2011	6	8	14
WE55-6	SIM	%	2W-SD-SD184-0001	SE7369-5	NM	11/03/2011	11/08/2011	11/16/2011	5	8	13
WE55-6	SIM	%	2W-SD-SD185-0001	SE7369-2	NM	11/02/2011	11/08/2011	11/16/2011	6	8	14
WE55-6	SIM	%	2W-SD-SD186-0001	SE7369-3	NM	11/02/2011	11/08/2011	11/16/2011	6	8	14
WE55-6	SIM	%	2W-SD-SD187-0001	SE7369-4	NM	11/02/2011	11/08/2011	11/16/2011	6	8	14
WE55-6	SIM	%	2W-SD-SD188-0001	SE7369-6	NM	11/03/2011	11/08/2011	11/16/2011	5	8	13
WE55-6	SIM	%	2W-SD-SD190-0001	SE7369-8	NM	11/03/2011	11/08/2011	11/16/2011	5	8	13

SDG	SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
WE55-6	SIM	%	2W-SD-SD191-0001	SE7369-9	NM	11/03/2011	11/08/2011	11/16/2011	5	8	13
WE55-6	SIM	%	2W-SD-SD189-0001	SE7369-7	NM	11/03/2011	11/08/2011	11/16/2011	5	8	13
WE55-6	SIM	UG/KG	2W-SD-SD191-0001	SE7369-9	NM	11/03/2011	11/08/2011	11/16/2011	5	8	13
WE55-6	SIM	UG/KG	2W-SD-SD183-0001	SE7369-1	NM	11/02/2011	11/08/2011	11/16/2011	6	8	14
WE55-6	SIM	UG/KG	2W-SD-SD184-0001	SE7369-5	NM	11/03/2011	11/08/2011	11/16/2011	5	8	13
WE55-6	SIM	UG/KG	2W-SD-SD185-0001	SE7369-2	NM	11/02/2011	11/08/2011	11/16/2011	6	8	14
WE55-6	SIM	UG/KG	2W-SD-SD186-0001	SE7369-3	NM	11/02/2011	11/08/2011	11/16/2011	6	8	14
WE55-6	SIM	UG/KG	2W-SD-SD186-0001	SE7369-3DL	NM	11/02/2011	11/08/2011	11/16/2011	6	8	14
WE55-6	SIM	UG/KG	2W-SD-SD187-0001	SE7369-4	NM	11/02/2011	11/08/2011	11/16/2011	6	8	14
WE55-6	SIM	UG/KG	2W-SD-SD188-0001	SE7369-6	NM	11/03/2011	11/08/2011	11/16/2011	5	8	13
WE55-6	SIM	UG/KG	2W-SD-SD189-0001	SE7369-7	NM	11/03/2011	11/08/2011	11/16/2011	5	8	13
WE55-6	SIM	UG/KG	2W-SD-SD189-0001	SE7369-7DL	NM	11/03/2011	11/08/2011	11/17/2011	5	9	14
WE55-6	SIM	UG/KG	2W-SD-SD190-0001	SE7369-8	NM	11/03/2011	11/08/2011	11/16/2011	5	8	13

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO-WE55 NEW LONDON, CT
SDG: WE55-6
SE7369

Sample Receipt

The following samples were received on November 4, 2011 and were logged in under Katahdin Analytical Services work order number SE7369 for a hardcopy due date of November16, 2011.

KATAHDIN Sample No.	TTNUS Sample Identification
SE7369-1	2W-SD-SD183-0001
SE7369-2	2W-SD-SD185-0001
SE7369-3	2W-SD-SD186-0001
SE7369-4	2W-SD-SD187-0001
SE7369-5	2W-SD-SD184-0001
SE7369-6	2W-SD-SD188-0001
SE7369-7	2W-SD-SD189-0001
SE7369-8	2W-SD-SD190-0001
SE7369-9	2W-SD-SD191-0001

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

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

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

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

Organics Analysis

The samples of SDG WE55-6 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, and III 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, for the specific methods listed below or on the Report of Analysis.

8270C SIM Analysis

Surrogate recoveries for all samples and QC were evaluated using laboratory established acceptance limits.

All soil samples and associated QC were subjected to the GPC sample clean-up process.

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

Samples SE7369-1, 2, 3, 3DL, 4, 5, 6, 7, 7DL, 8, and 9 were manually integrated for the analytes benzo(k)fluoranthene, benzo(b)fluoranthene, and/or dibenzo(a,h)anthracene. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Sample SE7369-6 and 7DL had low responses for the internal standard perylene-d12 that resulted in %D's which were outside the DoD QSM 4.1 acceptance limit of -50% to +100% of the responses of the internal standards of the midpoint initial calibration standard.

The target analytes indeno(1,2,3-cd) and benzo(g,h,i)perylene were detected below ½ the reporting limit in the method blank WG100656-1. According to the DoD QSM section D.1.1.1, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit and is greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). Since the blank was acceptable, no further action was taken.

The CV (file G3955) had a high response for the target analyte pyrene. The CV (file G3972) had a low response for the target analytes indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene. These responses resulted in %D's that were greater than the acceptance limit of 20% from DoD QSM Version 4.1.

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

Wet Chemistry Analysis

The samples of SDG WE55-6 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Annual Book of ASTM Standards", Method D2216-98 "Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass".

All analyses were performed within analytical holding times. All quality control criteria were met.

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

Leslie Dimond
12.07.11

Leslie Dimond
Quality Assurance Officer

Jennifer Obrin

From: Carper, Kelly [Kelly.Carper@tetratech.com]
Sent: Thursday, November 10, 2011 2:22 PM
To: Jennifer Obrin
Cc: Samchuck, Joseph
Subject: RE:

Ok, Go with what you have and narrate

From: Jennifer Obrin [mailto:jobrin@katahdinlab.com]
Sent: Thursday, November 10, 2011 12:48 PM
To: Carper, Kelly; Sedlmyer, Tobrena
Subject: FW:

Kelly,

Please read Pete's response below and let me know how you would like the lab to proceed. Thanks.

Jennifer Obrin
Project Manager
Katahdin Analytical Services
600 Technology Way
Scarborough, ME 04074
(207) 874-2400 Ext. 17

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From: Peter Lemay [mailto:plemay@katahdinlab.com]
Sent: Thursday, November 10, 2011 12:45 PM
To: 'Jennifer Obrin'
Cc: 'Deb Nadeau'; Charlie Gomez; Willie Stone
Subject: RE:

Does the note in the analysis instructions apply for this analysis? The note mentions TS for 8270D. This analysis is only for PAHs by 8270-SIM and the PQLs are already low for SIM analyses.

The option is to use addition sample volume. This is not practical because the samples were in 4oz jars and there is now less volume because of the initial extraction.

In the past, Lucy has said to first centrifuge samples. Based on many of the samples that contain some vegetation material, this does not improve the TS.

Since the TSs are very low and extracting with more sample volume and centrifuging samples does not improve the TS, the other option is to dry the samples overnight. The samples are in 4oz jars and some of the sample volume has been removed for the initial extraction. We were told to dry some samples from another work order for PCBs with 4oz jars. We were only able to get around 10g of dried sample. Because these were PCBs with a final volume of 10ml, we were able to lower the PQL by concentrating the extracts to a lower final volume. For SVOA samples, the final volume is already at 1ml. Therefore, for these reasons, I am not sure if the PQL can be improved.

Peter Lemay
Organics Department Manager
Katahdin Analytical Services
600 Technology Way
Scarborough, ME 04074
Phone (207) 874-2400
Fax (207) 775-4029
plemay@katahdinlab.com

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From: Jennifer Obrin [mailto:jobrin@katahdinlab.com]
Sent: Thursday, November 10, 2011 9:49 AM
To: 'Peter Lemay'
Subject: FW:

What are the options for the Tetra Tech work order?

Jen

From: Carper, Kelly [mailto:Kelly.Carper@tetratech.com]
Sent: Thursday, November 10, 2011 9:46 AM
To: Jennifer Obrin
Cc: Sedlmyer, Tobrena
Subject: RE:

Well what are the options?

From: Jennifer Obrin [mailto:jobrin@katahdinlab.com]
Sent: Thursday, November 10, 2011 9:44 AM
To: Sedlmyer, Tobrena; Carper, Kelly
Subject:

The lab has informed me that the extractions group extracted the samples for SE7369, project New London, CT, before the total solids had been performed. Therefore, the sample amounts were not adjusted to account for total solids. Please find attached the total solids results. This affects SVOA SIM. How would you like the lab to proceed?

Jennifer Obrin
Project Manager
Katahdin Analytical Services
600 Technology Way
Scarborough, ME 04074
(207) 874-2400 Ext. 17

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No virus found in this message.
Checked by AVG - www.avg.com
Version: 2012.0.1869 / Virus Database: 2092/4607 - Release Date: 11/09/11

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2012.0.1869 / Virus Database: 2092/4607 - Release Date: 11/09/11

Jennifer Obrin

From: Bernhardt, Aaron [Aaron.Bernhardt@tetratech.com]
Sent: Monday, November 07, 2011 9:01 AM
To: Jennifer Obrin
Subject: RE: COC for samples received 11/4-CTO WE55 New London-SE7369

Jennifer,

I got a message on Friday about the MS/MSD sample. Sorry about that, I was under the impression that the sample came out of the same jar.

Can you run the site sample first and if there are no problems where you would need to re-extract then run the MS/MSD? The MS/MSD could also be run on a different sample, if needed, as long as it is one of the first nine that we are analyzing.

Let me know if this is an ok approach.

Thanks,

Aaron

From: Jennifer Obrin [mailto:jobrin@katahdinlab.com]
Sent: Monday, November 07, 2011 9:02 AM
To: Sedlmyer, Tobrena; Carper, Kelly; Bernhardt, Aaron
Subject: COC for samples received 11/4-CTO WE55 New London-SE7369

Please find attached the COC for the samples received 11/4 for project CTO WE55 New London, CT under the work order SE7369. Please let me know if you have any questions. Have a great day.

Jennifer Obrin
Project Manager
Katahdin Analytical Services
600 Technology Way
Scarborough, ME 04074
(207) 874-2400 Ext. 17

000069

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No virus found in this message.
Checked by AVG - www.avg.com
Version: 2012.0.1869 / Virus Database: 2092/4600 - Release Date: 11/06/11

Katahdin Analytical Services, Inc. — Sample Receipt Condition Report

Client:	Tetra Tech	KAS PM:	JO	Sampled By:	Client
Project:		KIMS Entry By:	GN	Delivered By:	Fed-Ex
KAS Work Order#:	SE7369	KIMS Review By:	DM	Received By:	GN
SDG #:		Cooler: 1 of 1		Date/Time Rec.:	11-4-11 / 10:15

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 0.8
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

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

Client did not include extra jars for MS/MSD.

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 27442 | PAGE 1 OF 2

PROJECT NO: 112G02625	FACILITY: NSB NEW LONDON	PROJECT MANAGER A. BERNHARDT	PHONE NUMBER 412 921 8433	LABORATORY NAME AND CONTACT: KATAHDIN / ~~KELLY~~ PERKINS
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS Jennifer Odrin 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FEDEX AB# 8770 6393-5100		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☒ 7 day ☐ 14 day

DATE (YEAR 2011)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (~~FT~~ INCS)	BOTTOM DEPTH (~~FT~~ INCS)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS PAHs	COMMENTS
		SE7369							G	#1		
11-2	1620	2W-SD-SD183-0001		0	4	SD	G	1			X	
11-2	1610	2W-SD-SD185-0001									X	
11-2	1605	2W-SD-SD186-0001									X	
11-2	1550	2W-SD-SD187-0001									X	
11-2	1635	2W-SD-SD204-0001									X	* Hold
1025 11-3	~~1045~~	2W-SD-SD184-0001									X	
1045	~~1050~~	2W-SD-SD188-0001									X	
	1015	2W-SD-SD189-0001									X	MS/MSD
	1000	2W-SD-SD190-0001									X	
	950	2W-SD-SD191-0001									X	
	1035	2W-SD-SD192-0001									X	* Hold
	1055	2W-SD-SD193-0001									X	* Hold
	1105	2W-SD-SD194-0001									X	* Hold

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	11-3-11	1700	1. RECEIVED BY FED EX	11-4-11	10 15
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER to -20°C & HOLD FOR FURTHER INSTRUCTIONS
~~** REFRIGERATE CONTAINER to 4°C & HOLD~~ " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 27443 | PAGE 1 OF 1

PROJECT NO: 112602625	FACILITY: NSB New London	PROJECT MANAGER A. Bernhardt	PHONE NUMBER 412-921-8433	LABORATORY NAME AND CONTACT: Katahdin / Jennifer Obrin
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS 600 Technology Way
		CARRIER/WAYBILL NUMBER Fed Ex AB# 8770-6393-5100		CITY, STATE Scarborough, ME 04074

STANDARD TAT ☐
RUSH TAT ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☒ 7 day ☐ 14 day

SE7369

DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT) 1 cm	BOTTOM DEPTH (FT) 1 cm	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS PAHs	COMMENTS
									G			
11-3	1120	2w-SD-SD195-0001		0	4	SD	G				X	* Hold
	1130	2w-SD-SD196									X	
	1145	2w-SD-SD197									X	
	1155	2w-SD-SD198									X	
	1300	2w-SD-SD199									X	
	1250	2w-SD-SD200									X	
	1240	2w-SD-SD201									X	
	1220	2w-SD-SD202									X	
	1210	2w-SD-SD203									X	
		~~2w-SD-SD204~~										
11-3	1800	2w-SD-DUP01		0	4	SD	G				X	* Hold

1. RELINQUISHED BY	DATE 11-3-11	TIME 1700	1. RECEIVED BY Fed Ex	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 11-4-11	TIME 1015
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * Freeze to -20°C + Hold for Further Instruction

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

310000

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-6

Lab File ID: GD927 DFTPP Injection Date: 11/15/11

Instrument ID: GCMS-G DFTPP Injection Time: 0826

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	39.2
68	Less than 2.0% of mass 69	0.5 (1.3)1
69	Less than 100.0% of mass 198	39.1
70	Less than 2.0% of mass 69	0.2 (0.6)1
127	40.0 - 60.0% of mass 198	56.4
197	Less than 1.0% of mass 198	0.1
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	24.9
365	1.0 - 100.0% of mass 198	4.2
441	0.0 - 100.0% of mass 443	13.2 (74.8)2
442	40.0 - 100.0% of mass 198	93.7
443	17.0 - 23.0% of mass 442	17.6 (18.8)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00G1115	G3939	11/15/11	0845
02		SSTD8.00G1115	G3940	11/15/11	0929
03		SSTD5.00G1115	G3941	11/15/11	1014
04		SSTD2.00G1115	G3942	11/15/11	1100
05		SSTD0.50G1115	G3943	11/15/11	1145
06		SSTD0.20G1125	G3944	11/15/11	1230
07		SIM IND CHECK	G3945	11/15/11	1315
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Katahdin Analytical Services A0000019

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-6

Lab File ID: GD928 DFTPP Injection Date: 11/16/11

Instrument ID: GCMS-G DFTPP Injection Time: 0655

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	44.7
68	Less than 2.0% of mass 69	0.5 (1.1)1
69	Less than 100.0% of mass 198	42.0
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	40.0 - 60.0% of mass 198	60.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	23.9
365	1.0 - 100.0% of mass 198	3.8
441	0.0 - 100.0% of mass 443	11.5 (73.5)2
442	40.0 - 100.0% of mass 198	81.4
443	17.0 - 23.0% of mass 442	15.7 (19.2)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00G1116	G3955	11/16/11	0713
02	WG100656-BLANK	WG100656-1	G3956	11/16/11	0759
03	WG100656-LCS	WG100656-2	G3957	11/16/11	0844
04	WG100656-LCSD	WG100656-3	G3958	11/16/11	0930
05	2W-SD-SD183-0001	SE7369-1	G3959	11/16/11	1015
06	2W-SD-SD185-0001	SE7369-2	G3960	11/16/11	1100
07	2W-SD-SD186-0001	SE7369-3	G3961	11/16/11	1145
08	2W-SD-SD187-0001	SE7369-4	G3962	11/16/11	1230
09	2W-SD-SD184-0001	SE7369-5	G3963	11/16/11	1315
10	2W-SD-SD188-0001	SE7369-6	G3964	11/16/11	1400
11	2W-SD-SD189-0001	SE7369-7	G3965	11/16/11	1445
12	2W-SD-SD190-0001	SE7369-8	G3966	11/16/11	1530
13	2W-SD-SD191-0001	SE7369-9	G3967	11/16/11	1615
14	2W-SD-SD186-0001	SE7369-3DL	G3969	11/16/11	1745
15					
16					
17					
18					
19					
20					

FORM V SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-6

Lab File ID: GD929 DFTPP Injection Date: 11/17/11

Instrument ID: GCMS-G DFTPP Injection Time: 0713

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	43.0
68	Less than 2.0% of mass 69	0.5 (1.3)1
69	Less than 100.0% of mass 198	39.7
70	Less than 2.0% of mass 69	0.1 (0.2)1
127	40.0 - 60.0% of mass 198	59.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	26.1
365	1.0 - 100.0% of mass 198	4.2
441	0.0 - 100.0% of mass 443	13.2 (75.3)2
442	40.0 - 100.0% of mass 198	93.2
443	17.0 - 23.0% of mass 442	17.5 (18.8)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00G1117	G3972	11/17/11	0733
02	2W-SD-SD189-0001	SE7369-7DL	G3973	11/17/11	0817
03					
04					
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20					

Katahdin Analytical Services A0000021

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG100656-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-6

Lab File ID: G3956 Lab Sample ID: WG100656-1

Instrument ID: GCMS-G Date Extracted: 11/08/11

Matrix: (soil/water) SOIL Date Analyzed: 11/16/11

Level: (low/med) LOW Time Analyzed: 0759

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG100656-LCS	WG100656-2	G3957	11/16/11	0844
02	WG100656-LCSD	WG100656-3	G3958	11/16/11	0930
03	2W-SD-SD183-0001	SE7369-1	G3959	11/16/11	1015
04	2W-SD-SD185-0001	SE7369-2	G3960	11/16/11	1100
05	2W-SD-SD186-0001	SE7369-3	G3961	11/16/11	1145
06	2W-SD-SD187-0001	SE7369-4	G3962	11/16/11	1230
07	2W-SD-SD184-0001	SE7369-5	G3963	11/16/11	1315
08	2W-SD-SD188-0001	SE7369-6	G3964	11/16/11	1400
09	2W-SD-SD189-0001	SE7369-7	G3965	11/16/11	1445
10	2W-SD-SD190-0001	SE7369-8	G3966	11/16/11	1530
11	2W-SD-SD191-0001	SE7369-9	G3967	11/16/11	1615
12	2W-SD-SD186-0001	SE7369-3DL	G3969	11/16/11	1745
13	2W-SD-SD189-0001	SE7369-7DL	G3973	11/17/11	0817
14					
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COMMENTS:

FORM IVSV

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG100656-1
Client ID: Method Blank Sample
Project:
SDG: WE55-6

Sample Date:
Received Date: 08-NOV-11
Extract Date: 08-NOV-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG100656

Analysis Date: 16-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: NA
Report Date: 17-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.6	10.
2-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.2	10.
1-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Acenaphthylene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10.	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10.	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	U	10.	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo (a) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo (b) Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	U	10.	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno (1,2,3-cd) pyrene	J	2.4	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo (a,h) anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	J	2.4	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene-D10		56.6	%					
Fluorene-D10		59.0	%					
Pyrene-D10		90.8	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-6

Instrument ID: GCMS-G Calibration Date(s): 11/15/11 11/15/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 0845 1230

LAB FILE ID: RF0.2: G3944 RF0.5: G3943 RF1: G3939
RF2: G3942 RF5: G3941 RF8: G3940

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	COEFF. A1	%RSD OR R^2	MAX %RSD OR R^2
1-Methylnaphthalene	0.763	0.749	0.684	0.610	0.613	0.582	AVRG	0.66679799	11.532	15.000
Naphthalene	0.988	1.123	1.108	0.985	1.021	0.963	AVRG	1.03136580	6.583	15.000
2-Methylnaphthalene	0.260	0.305	0.300	0.267	0.272	0.258	AVRG	0.27714764	7.390	15.000
Acenaphthylene	1.812	2.012	1.934	1.796	1.955	1.968	AVRG	1.91288815	4.610	15.000
Acenaphthene	1.113	1.228	1.159	1.074	1.179	1.194	AVRG	1.15784727	4.841	15.000
Fluorene	1.391	1.535	1.436	1.295	1.411	1.434	AVRG	1.41701424	5.487	15.000
Phenanthrene	1.194	1.256	1.117	1.108	1.192	1.214	AVRG	1.18002908	4.859	15.000
Anthracene	1.212	1.390	1.255	1.176	1.308	1.297	AVRG	1.27301194	5.979	15.000
Fluoranthene	1.187	1.264	1.157	1.119	1.230	1.223	AVRG	1.19668684	4.448	15.000
Pyrene	1.958	1.866	1.684	1.590	1.784	1.852	AVRG	1.78892487	7.458	15.000
Benzo(a)anthracene	1.259	1.282	1.189	1.137	1.286	1.308	AVRG	1.24353846	5.333	15.000
Chrysene	1.476	1.495	1.281	1.161	1.279	1.295	AVRG	1.33101708	9.678	15.000
Benzo(b)fluoranthene	1.116	1.319	1.162	1.205	1.314	1.253	AVRG	1.22816117	6.692	15.000
Benzo(k)fluoranthene	1.946	1.659	1.739	1.529	1.774	1.926	AVRG	1.76228346	9.015	15.000
Benzo(a)pyrene	1.508	1.247	1.215	1.172	1.292	1.338	AVRG	1.29521840	9.192	15.000
Indeno(1,2,3-cd)pyrene	1.105	1.017	1.054	1.035	1.135	1.076	AVRG	1.07029111	4.136	15.000
Dibenzo(a,h)anthracene	0.844	0.787	0.821	0.811	0.891	0.852	AVRG	0.83443087	4.353	15.000
Benzo(g,h,i)perylene	1.023	0.924	0.924	0.910	0.958	0.893	AVRG	0.93869075	4.957	15.000
2-Methylnaphthalene-D10	0.923	1.101	1.030	0.963	1.043	1.054	AVRG	1.01913546	6.344	15.000
Fluorene-D10	0.738	0.967	0.928	0.888	0.967	0.967	AVRG	0.90897353	9.855	15.000
Pyrene-D10	0.961	1.035	0.948	0.886	1.008	1.065	AVRG	0.98380939	6.600	15.000

FORM VI SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-6

Instrument ID: GCMS-G Calibration Date: 11/16/11 Time: 0713

Lab File ID: G3955 Init. Calib. Date(s): 11/15/11 11/15/11

Init. Calib. Times: 0845 1230

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
1-Methylnaphthalene	0.6670000	0.6836900	0.01	2.50	20.00	AVRG	
Naphthalene	1.0310000	1.0834000	0.01	5.08	20.00	AVRG	
2-Methylnaphthalene	0.2770000	0.2895000	0.01	4.51	20.00	AVRG	
Acenaphthylene	1.9130000	1.8804000	0.01	-1.70	20.00	AVRG	
Acenaphthene	1.1580000	1.1426000	0.01	-1.33	20.01	AVRG	
Fluorene	1.4170000	1.3969000	0.01	-1.42	20.00	AVRG	
Phenanthrene	1.1800000	1.1016000	0.01	-6.64	20.00	AVRG	
Anthracene	1.2730000	1.2089000	0.01	-5.04	20.00	AVRG	
Fluoranthene	1.1970000	1.0808000	0.01	-9.71	20.01	AVRG	
Pyrene	1.7890000	2.1631000	0.01	20.91	20.00	AVRG	<-
Benzo(a)anthracene	1.2440000	1.1603000	0.01	-6.73	20.00	AVRG	
Chrysene	1.3310000	1.2753000	0.01	-4.18	20.00	AVRG	
Benzo(b)fluoranthene	1.2280000	1.3431000	0.01	9.37	20.00	AVRG	
Benzo(k)fluoranthene	1.7620000	1.7078000	0.01	-3.08	20.00	AVRG	
Benzo(a)pyrene	1.2950000	1.1651000	0.01	-10.03	20.01	AVRG	
Indeno(1,2,3-cd)pyrene	1.0700000	1.0326000	0.01	-3.50	20.00	AVRG	
Dibenzo(a,h)anthracene	0.8340000	0.8159500	0.01	-2.16	20.00	AVRG	
Benzo(g,h,i)perylene	0.9390000	0.9315600	0.01	-0.79	20.00	AVRG	
2-Methylnaphthalene-D10	1.0190000	1.0009000	0.01	-1.78	20.00	AVRG	
Fluorene-D10	0.9090000	0.8921200	0.01	-1.86	20.00	AVRG	
Pyrene-D10	0.9840000	1.1609000	0.01	17.98	20.00	AVRG	

FORM VII PEST

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-6

Instrument ID: GCMS-G Calibration Date: 11/17/11 Time: 0733

Lab File ID: G3972 Init. Calib. Date(s): 11/15/11 11/15/11

Init. Calib. Times: 0845 1230

GC Column: ZB5-MS ID: 0.25 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
1-Methylnaphthalene	0.6670000	0.6586300	0.01	-1.25	20.00	AVRG	
Naphthalene	1.0310000	1.0466000	0.01	1.51	20.00	AVRG	
2-Methylnaphthalene	0.2770000	0.2891800	0.01	4.40	20.00	AVRG	
Acenaphthylene	1.9130000	1.9235000	0.01	0.55	20.00	AVRG	
Acenaphthene	1.1580000	1.1617000	0.01	0.32	20.01	AVRG	
Fluorene	1.4170000	1.3815000	0.01	-2.50	20.00	AVRG	
Phenanthrene	1.1800000	1.1206000	0.01	-5.03	20.00	AVRG	
Anthracene	1.2730000	1.2067000	0.01	-5.21	20.00	AVRG	
Fluoranthene	1.1970000	1.0138000	0.01	-15.30	20.01	AVRG	
Pyrene	1.7890000	2.1404000	0.01	19.64	20.00	AVRG	
Benzo(a)anthracene	1.2440000	1.1683000	0.01	-6.08	20.00	AVRG	
Chrysene	1.3310000	1.2020000	0.01	-9.69	20.00	AVRG	
Benzo(b)fluoranthene	1.2280000	1.1231000	0.01	-8.54	20.00	AVRG	
Benzo(k)fluoranthene	1.7620000	1.6758000	0.01	-4.89	20.00	AVRG	
Benzo(a)pyrene	1.2950000	1.1376000	0.01	-12.15	20.01	AVRG	
Indeno(1,2,3-cd)pyrene	1.0700000	0.8297300	0.01	-22.46	20.00	AVRG	<-
Dibenzo(a,h)anthracene	0.8340000	0.6533300	0.01	-21.66	20.00	AVRG	<-
Benzo(g,h,i)perylene	0.9390000	0.7316500	0.01	-22.08	20.00	AVRG	<-
2-Methylnaphthalene-D10	1.0190000	1.0075000	0.01	-1.13	20.00	AVRG	
Fluorene-D10	0.9090000	0.8671700	0.01	-4.60	20.00	AVRG	
Pyrene-D10	0.9840000	1.1530000	0.01	17.18	20.00	AVRG	

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** CTO-WE55 New London, CT **Matrix:** SL
Lab Code: KAS **SDG:** WE55-6

Client Sample ID	Lab Sample ID	2MN #	FLO #	PYR #	Total Out
2W-SD-SD183-0001	SE7369-1	54.3	59.4	72.4	0
2W-SD-SD185-0001	SE7369-2	62.6	67.7	82.5	0
2W-SD-SD186-0001	SE7369-3	56.0	67.5	84.8	0
2W-SD-SD186-0001	SE7369-3DL	57.1	70.9	81.2	0
2W-SD-SD187-0001	SE7369-4	52.4	61.1	82.6	0
2W-SD-SD184-0001	SE7369-5	50.2	58.9	68.0	0
2W-SD-SD188-0001	SE7369-6	54.4	66.9	85.3	0
2W-SD-SD189-0001	SE7369-7	35.4	48.6	57.6	0
2W-SD-SD189-0001	SE7369-7DL	36.5	48.9	75.0	0
2W-SD-SD190-0001	SE7369-8	38.3	53.6	73.0	0
2W-SD-SD191-0001	SE7369-9	30.2	47.3	60.4	0
Method Blank Sample	WG100656-1	56.6	59.0	90.8	0
Laboratory Control S	WG100656-2	59.3	60.2	90.8	0
Laboratory Control S	WG100656-3	53.4	54.2	82.3	0

		QC Limits
2MN	2-METHYLNAPHTHALENE-D10	14-131
FLO	FLUORENE-D10	18-77
PYR	PYRENE-D10	34-131

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG100656-2
LCSD ID: WG100656-3
Project:
SDG: WE55-6
Report Date: 17-NOV-11

Received Date: 08-NOV-11
Extract Date: 08-NOV-11
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG100656

Analysis Date: 16-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Naphthalene	66.7	46.7	70.0	40.6	60.9	ug/Kgdrywt	14	50	10-129
2-Methylnaphthalene	66.7	45.4	68.1	40.2	60.3	ug/Kgdrywt	12	50	10-152
1-Methylnaphthalene	66.7	27.9	41.8	24.4	36.6	ug/Kgdrywt	13	50	17-113
Acenaphthylene	66.7	43.8	65.7	38.8	58.2	ug/Kgdrywt	12	50	25-94
Acenaphthene	66.7	43.9	65.8	38.7	58.0	ug/Kgdrywt	12	50	33-98
Fluorene	66.7	43.0	64.5	38.5	57.7	ug/Kgdrywt	11	50	40-92
Phenanthrene	66.7	49.1	73.6	42.1	63.1	ug/Kgdrywt	15	50	46-96
Anthracene	66.7	50.9	76.3	40.3	60.4	ug/Kgdrywt	23	50	34-96
Fluoranthene	66.7	51.6	77.4	41.5	62.2	ug/Kgdrywt	22	50	38-116
Pyrene	66.7	62.5	93.7	55.7	83.5	ug/Kgdrywt	12	50	35-111
Benzo (a) anthracene	66.7	49.6	74.4	40.2	60.3	ug/Kgdrywt	21	50	48-100
Chrysene	66.7	52.1	78.1	43.6	65.4	ug/Kgdrywt	18	50	46-101
Benzo (b) Fluoranthene	66.7	54.7	82.0	49.0	73.5	ug/Kgdrywt	11	50	53-100
Benzo(k)fluoranthene	66.7	51.6	77.4	41.3	61.9	ug/Kgdrywt	22	50	49-96
Benzo(a)pyrene	66.7	48.0	72.0	43.9	65.8	ug/Kgdrywt	9	50	61-101
Indeno (1,2,3-cd) pyrene	66.7	53.4	80.0	45.5	68.2	ug/Kgdrywt	16	50	50-105
Dibenzo (a,h) anthracene	66.7	56.3	84.4	48.1	72.1	ug/Kgdrywt	16	50	55-105
Benzo(g,h,i)perylene	66.7	55.1	82.6	46.9	70.3	ug/Kgdrywt	16	50	53-103
2-Methylnaphthalene-D10			59.3		53.4				14-131
Fluorene-D10			60.2		54.2				18-77
Pyrene-D10			90.8		82.3				34-131

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P.O. Box 540, Scarborough, ME 04070
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http://www.katahdinlab.com

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-6

Lab File ID (Standard): G3939 Date Analyzed: 11/15/11

Instrument ID: GCMS-G Time Analyzed: 0845

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD		54590	8.47	163072	11.41	86969	15.71
UPPER LIMIT		109180	9.01	326144	11.95	173938	16.25
LOWER LIMIT		27295	7.93	81536	10.87	43485	15.17
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01		SSTD1.00G1116	44875	8.43	154436	11.39	81674	15.68
02	WG100656-BLANK	WG100656-1	43056	8.43	152670	11.39	81357	15.68
03	WG100656-LCS	WG100656-2	48133	8.43	156575	11.38	78701	15.66
04	WG100656-LCSD	WG100656-3	51391	8.43	168075	11.39	84985	15.67
05	2W-SD-SD183-0001	SE7369-1	47539	8.43	157098	11.38	83071	15.66
06	2W-SD-SD185-0001	SE7369-2	47127	8.43	158921	11.39	81389	15.66
07	2W-SD-SD186-0001	SE7369-3	43429	8.43	154071	11.39	80327	15.66
08	2W-SD-SD187-0001	SE7369-4	48638	8.43	161411	11.39	82523	15.67
09	2W-SD-SD184-0001	SE7369-5	44635	8.43	160644	11.38	81877	15.66
10	2W-SD-SD188-0001	SE7369-6	42506	8.43	152759	11.39	78705	15.68
11	2W-SD-SD189-0001	SE7369-7	46490	8.43	149545	11.39	78204	15.66
12	2W-SD-SD190-0001	SE7369-8	44433	8.43	148972	11.39	79282	15.68
13	2W-SD-SD191-0001	SE7369-9	43096	8.43	144964	11.39	75450	15.68
14	2W-SD-SD186-0001	SE7369-3DL	44826	8.43	145268	11.39	74142	15.68
15		SSTD1.00G1117	56809	8.39	182940	11.34	93158	15.64
16	2W-SD-SD189-0001	SE7369-7DL	52667	8.40	174118	11.34	90183	15.64
17								
18								
19								
20								

IS1 (DCB) = 1,4-Dichlorobenzene-D4
IS2 (NPT) = Naphthalene-D8
IS3 (ANT) = Acenaphthene-D10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

Katahdin Analytical Services A0000025

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-6

Lab File ID (Standard): G3939 Date Analyzed: 11/15/11

Instrument ID: GCMS-G Time Analyzed: 0845

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
12 HOUR STD		127329		19.32		92483		25.90		69188		29.21	
UPPER LIMIT		254658		19.86		184966		26.44		138376		29.75	
LOWER LIMIT		63665		18.78		46242		25.36		34594		28.67	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01		SSTD1.00G1116		113873		19.26		61388		25.85		35555	29.15
02	WG100656-BLANK	WG100656-1		106901		19.28		58257		25.85		46253	29.15
03	WG100656-LCS	WG100656-2		104331		19.26		63082		25.85		45070	29.14
04	WG100656-LCSD	WG100656-3		110904		19.26		60474		25.85		40494	29.15
05	2W-SD-SD183-0001	SE7369-1		117721		19.26		62331		25.85		36434	29.16
06	2W-SD-SD185-0001	SE7369-2		101879		19.26		59661		25.85		41575	29.16
07	2W-SD-SD186-0001	SE7369-3		116801		19.26		61765		25.85		35500	29.15
08	2W-SD-SD187-0001	SE7369-4		118077		19.26		59566		25.85		36012	29.15
09	2W-SD-SD184-0001	SE7369-5		104575		19.26		62583		25.86		39350	29.16
10	2W-SD-SD188-0001	SE7369-6		116096		19.26		59369		25.85		33638*	29.15
11	2W-SD-SD189-0001	SE7369-7		114103		19.26		64936		25.85		41454	29.16
12	2W-SD-SD190-0001	SE7369-8		122355		19.26		60042		25.86		34733	29.16
13	2W-SD-SD191-0001	SE7369-9		110962		19.26		61195		25.86		38065	29.16
14	2W-SD-SD186-0001	SE7369-3DL		110530		19.28		60113		25.86		41087	29.16
15		SSTD1.00G1117		127439		19.22		64701		25.81		43134	29.10
16	2W-SD-SD189-0001	SE7369-7DL		114970		19.22		51208		25.81		28434*	29.10
17													
18													
19													
20													

IS4 (PHN) = Phenanthrene-D10
IS5 (CRY) = Chrysene-D12
IS6 (PRY) = Perylene-D12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.54 minutes of internal standard RT
RT LOWER LIMIT = - 0.54 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

S/S SON

KATAHDIN ANALYTICAL SERVICES, INC.

ORGANIC EXTRACTIONS LOG - SOIL SEMIVOLATILE

Extraction Method: (check one)	SW846 3550 (SONIC.) ✓	SW846 3540 (SOX)	SW846 3545 (ASE)
	SW846 3580 (OIL / WIPES)	OTHER	
Analytical Method: (check one)	SW846 8270 ✓	OTHER	
Standards	Surrogate ID (1): SV 2521	Spike ID (1): SV 2579 PREX 932500	Spike ID (3):
	Surrogate ID (2): SV 2520	Spike ID (2): SV 2515	
Solvents / Chemicals / Consumables	Solvent Lot # (MeCl2): DF153	Solvent Lot # (Acetone): DE911	Sodium Sulfate (granular) Lot # 27961003
	Filter Paper Lot # (SON) FC003090	Filter Paper Lot # (KD) FC001490	Sodium Sulfate (powder) Lot # 27971003
Misc.	Nitrogen Bath Temperature: 36°C	Sonicator Horns Tuned: CP20%	Balance ID: Mettler PJ400
Extraction Start Time: 9:30		Extraction End Time: 14:10	

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction ECB	Fraction ME	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc. SV Tray	Comments
11-8-11	JMS	LWG100652-1 LWG100656-1	29.96	1mL	NR	✓	✓	11-9-11	KD	5mL	11-9-11	JMS	1mL	A10	SV A178043 SIM IS A178044
		LWG100652-2	29.96		1mL									C1	
		-3	30.02											C2	
		LWG100656-2	29.97				✓							C3	
		-3	29.97											C4	
		-5													LCS Extracted
		SE6561-1 B	30.13		NR	✓	✓								
		-2 B	31.00											C5	
		LCD	29.97		1.0mL		✓	11-10-11	KD	5	11-15-11	JMS	1mL	C6	
		LCS	30.03		0.4mL									SV A178787	
		LOD	29.95		0.15									C8	
		LCD	30.02		0.30									C9	Appox 9 added
		LOQ	29.95		0.4mL									C10	

EX-008 – Revision 2 – 07/14/2011 QAEX205 0000173

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction ECB	Fraction ME	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc. SV Tray	Comments
11-8-11	JMS	SE7303-4C	30.89	1mL	NR	✓		11-10-11	KD	5	11-15-11	JMS	1mL	A2	muck (wet material)
		-5B	37.26											A3	L
		-6C	31.85											A4	
		-7B	31.68											A5	
		-8B	31.96											A6	
		-9C	30.48											A7	
		-10C	31.15											A8	
		-11B	33.69											A9	
		-12B	30.78											A10	
		-13C	30.16					11-11-11	KD	5				B1	
		-14C	30.30											B2	
		-15B	30.05											B3	
		SE7309-1A	35.69				✓							B4	muck/wet material
		-2A	30.28											B5	
		-3A	31.95											B6	
		-4A	31.34											B7	
		-5A	30.65											B8	
		-6A	31.09											B9	
		-7A	30.60											B10	
		-8A	30.80											C1	
		-9A	43.84											C2	

Reviewed By GPC Blank Date 11-15-11 JMS Init. CB

Katahdin Analytical Services
GPC Logbook

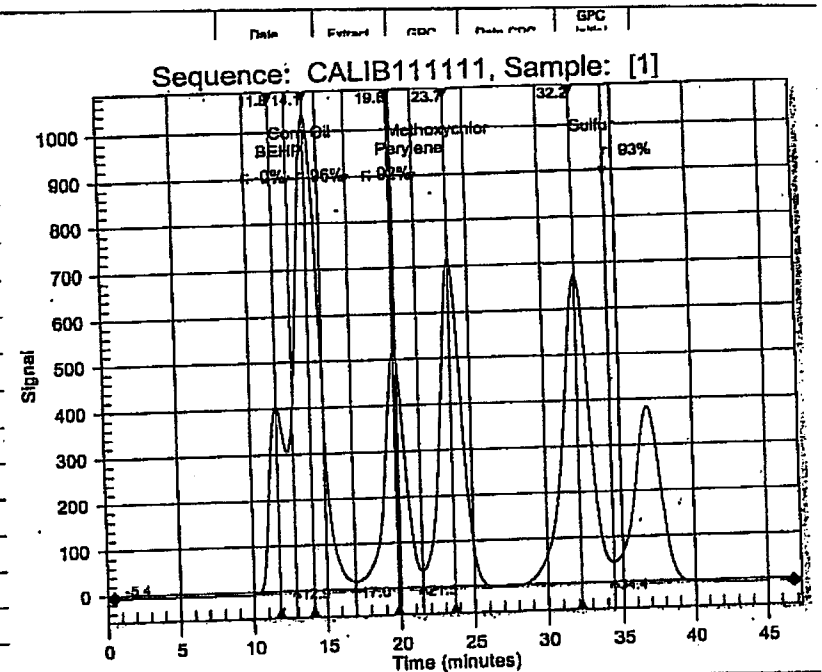
Analytical Method: (check one)	SW846 8081	SW846 8082		SW846 8270	
MeCl2 Lot #: DF153	Filter Lot #:	Room Temperature (beginning):		Room Temperature (ending):	
Flow Rate: 5.0mL/min	Flow Rate Set at: 4.7mL/min	GPC Dump Time:		GPC Collect Time:	

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analysis	Date GPC Started	GPC Initial Volume	Comments
1	Calib Soln	–	–	7MS	11-7-11	5mL	
2							
3	Calib STD 4076						
4	Restek Calib STD						
5	Lot # A080814						
6	Cat # 32041						
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

11-11-11

Katahdin Analytical Services
GPC Logbook

Tray Pos. No.	Date	Extract	GPC	Date GPC	GPC Initial
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					



P/P Dump: 21.5
Collect: 12.9

SVOA Dump: 17.0
Collect: 21.0

EX-006 – Revision 2 – 9/27/11 QAEX211 000

Katahdin Analytical Services 1000287

Katahdin Analytical Services
GPC Logbook

Analytical Method: (check one)	SW846 8081	SW846 8082		SW846 8270 ✓	
MeCl2 Lot #: DF153	Filter Lot #: 70408 (030)	Room Temperature (beginning):	25.7	Room Temperature (ending):	25.5°C
Flow Rate: 5.0 mL/min	Flow Rate Set at: 4.7	GPC Dump Time:	17.0	GPC Collect Time:	21.0

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
1	GPC Blank 11-14-11	—	—	KD	11-14-11	5	
2	~~LOD~~-SM	11-8-11	5	↓	↓	↓	
3	LOQ-SM	↓	↓	↓	↓	↓	
4	SE7303-6	↓	↓	↓	↓	↓	
5	↓ -8	↓	↓	↓	↓	↓	
6	↓ -11	↓	↓	↓	↓	↓	
7	LOQ-SV	↓	↓	↓	↓	↓	
8	SE7303-13	↓	↓	↓	↓	↓	
9	↓ -9	↓	↓	↓	↓	↓	
10	LODO.15-SV	↓	↓	↓	↓	↓	
11	LODO.30-SV	↓	↓	↓	↓	↓	
12	SE7303-7	↓	↓	↓	↓	↓	
13	↓ -14	↓	↓	↓	↓	↓	
14	SE7369-4	↓	↓	↓	↓	↓	
15	↓ -9	↓	↓	↓	↓	↓	
16	-8	↓	↓	↓	↓	↓	
17	-6	↓	↓	↓	↓	↓	
18	-5	↓	↓	↓	↓	↓	
19	-1	↓	↓	↓	↓	↓	
20	↓ -2	↓	↓	↓	↓	↓	
21	SE7303-12	↓	↓	↓	↓	↓	
22	↓ -15	↓	↓	↓	↓	↓	

Katahdin Analytical Services
GPC Logbook

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
23	SE7369-3	11-8-11	5	KD	11-14-11	5	
24	↓ -7	↓	↓	↓	↓	↓	
25	SE7303-4	↓	↓	↓	↓	↓	
26	~~Rinse~~ KD 11-9-11 | -10	↓	↓	↓	↓	↓	
27	↓ -5	↓	↓	↓	↓	↓	
28	Rinse	—	—	↓	↓	↓	
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							KD 11-14-11

Katahdin Analytical Services 1000288

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-G

DATE OF DFTPP INJECTION: 11/5/11

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
	50ng DFTPP	G0927	1	1	DFTPPSim	2.0	WAS	WG-101159
	SSTD 1.00 G1115	G3939		2	GspSim23			✓
	8.00	40		3				✓
	5.00	41		4				✓
	2.00	42		5				✓
	0.50	43		6				✓
	0.20	44		7				✓
	5ng IND check	45		8				✓
3550	SE6618-7	46		9				✓
	SE6619-7	47		10				✓
	SE6620-11	48		11				IBSC
7550	SE6617-3	49		12				IBS5,6
	-4	50		13				ASS2
	-5	51		14				ASS2
	-7	52		15				✓
	-8	53		16				✓
	-9	54		17				
								WAS 11-16-11

STANDARD	CODE
DFTPP	S2032
CAL. STD.	S2028 S2040
IS MIX	S2041

ICal WG-101158

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-G

DATE OF DFTPP INJECTION: 11611

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
	50ng DFTPP	GD928	1	1	DFTPPS.m	2.0	WB	dh WG101237
	SSTD 1.0D G1116	G3755		2	GcpS.mL3			dh
3510	WG100656-1	56		3				dh
	-2	57		4				dh
	-3	58		5				dh
	SE7369-1	59		6				dh
	-2	60		7				dh
	-3	61		8				dh DL 1:3
	-4	62		9				dh
	-5	63		10				dh
	-6	64		11				~~dh~~ DSG WAS 11-17-11
	-7	65		12				dh DL 1:2
	-8	66		13				dh
	-9	67		14				dh
	SE6616-6	68		15				dh
	SE7369-3DL	69	3	16				dh 5D/15D
	SE6617-10	70		17				#452
	GPC Blank 11-14-11	71		18				dh OCC
								WAS 11-17-11

STANDARD	CODE	
DFTPP	52032	
CAL. STD.	52028	52040
IS MIX		52041

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-G

DATE OF DFTPP INJECTION: 11-17-11

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
	50ng DFTPP	G0929	1	1	DFTPP5.m	2.0	WAS	ok WG-101263
	SSTD-00611-17	G3972	↓	2	G5ps.m23	↓	↓	ok
3550	SE7369-7AL	73	2	3	↓	↓	↓	↓DSG 100/200

STANDARD	CODE
DFTPP	S2032
CAL. STD.	S2028 S2040
IS MIX	S2041

REVIEWED AND APPROVED BY: _____

DATE: _____

Sample	Dilution	Percent Moisture	Percent Solids	Concentration in Blank (ug/kg)	Blank Action Level
2W-SD-SD183-0001	1	53	47	2.4	26
2W-SD-SD184-0001	1	74.2	25.8	2.4	47
2W-SD-SD185-0001	1	53.8	46.2	2.4	26
2W-SD-SD186-0001	1	83.6	16.4	2.4	73
2W-SD-SD186-0001DL	3	83.6	16.4	2.4	220
2W-SD-SD187-0001	1	88.7	11.3	2.4	106
2W-SD-SD188-0001	1	87.3	12.7	2.4	94
2W-SD-SD189-0001	1	85.3	14.7	2.4	82
2W-SD-SD189-0001DL	2	85.3	14.7	2.4	163
2W-SD-SD190-0001	1	86.2	13.8	2.4	87
2W-SD-SD191-0001	1	86.5	13.5	2.4	89

Data File: \\target_server\GG\chem\gcms-g.i\G111611.b\G3959.D
Report Date: 17-Nov-2011 07:25

Sample Calc

Katahdin Analytical Services

Data file : \\target_server\GG\chem\gcms-g.i\G111611.b\G3959.D
Lab Smp Id: SE7369-1 Client Smp ID: 2W-SD-SD183-0001
Inj Date : 16-NOV-2011 10:15 MS Autotune Date: 15-JUN-2004 08:29
Operator : WAS Inst ID: gcms-g.i
Smp Info : SE7369-1
Misc Info : WG101237,WG100656,WG101158-3
Comment :
Method : \\target_server\GG\chem\gcms-g.i\G111611.b\gspsim23.m
Meth Date : 17-Nov-2011 07:22 gcms-g.i Quant Type: ISTD
Cal Date : 15-NOV-2011 12:30 Cal File: G3944.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sw8270sim+1mn.sub
Target Version: 4.12

fluoranthene
reported result: 250 µg/kg

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03570	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	53.010	% Moisture
Cpnd Variable		Local Compound Variable

$\frac{740663}{117721} \otimes \frac{0.8}{1.197} = 4.205 \otimes \frac{0.001}{0.0357} \otimes \frac{100}{100-53.01} \otimes 1000 = 250.7\ \mu g/kg$

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kgdrywt)	REVIEW
* 7 1,4-Dichlorobenzene-D4	152	8.434	8.433	(1.000)	47539	0.80000		
* 20 Naphthalene-D8	136	11.376	11.388	(1.000)	157098	0.80000		
21 Naphthalene	128	11.424	11.425	(1.004)	25910	0.12793	7.63(a)	
$ 25 2-Methylnaphthalene-D10	152	13.032	13.030	(0.832)	114700	1.08386	64.6	
27 2-Methylnaphthalene	115	13.103	13.101	(1.152)	5864	0.10775	6.42(aQ)	
28 1-Methylnaphthalene	142	13.343	13.356	(1.173)	11500	0.08783	5.24(aQ)	
37 Acenaphthylene	152	15.275	15.275	(0.975)	78105	0.39321	23.4(a)	
* 39 Acenaphthene-D10	164	15.664	15.679	(1.000)	83071	0.80000		
40 Acenaphthene	153	15.736	15.737	(1.005)	11694	0.09726	5.80(a)	
$ 47 Fluorene-D10	176	16.925	16.926	(1.080)	112013	1.18675	70.7	
48 Fluorene	166	16.991	16.991	(1.085)	28577	0.19422	11.6(a)	
* 58 Phenanthrene-D10	188	19.264	19.264	(1.000)	117721	0.80000		
59 Phenanthrene	178	19.319	19.319	(1.003)	442675	2.54934	152	
60 Anthracene	178	19.428	19.428	(1.009)	62261	0.33237	19.8(a)	
63 Fluoranthene	202	22.282	22.272	(1.157)	740663	4.20607	251	
$ 64 Pyrene-D10	212	22.754	22.755	(0.880)	110755	1.44490	86.1	
65 Pyrene	202	22.796	22.786	(0.882)	769744	5.52256	329	
67 Benzo(a)anthracene	228	25.821	25.808	(0.999)	207390	2.14050	128	
* 68 Chrysene-D12	240	25.848	25.849	(1.000)	62331	0.80000	(Q)	
69 Chrysene	228	25.917	25.903	(1.003)	328232	3.16507	189	
73 Benzo(b)fluoranthene	252	28.355	28.341	(0.972)	186337	3.33140	198(M)	M3

was 1-17-12

RRF = 1.197

Field Duplicate Calculations

Parameter	2W-SD-DUP01		2W-SD-SD190-0001		RPD	
1-METHYLNAPHTHALENE	64	U	70	U	8.96	
2-METHYLNAPHTHALENE	64	U	70	U	8.96	
ACENAPHTHENE	14	J	28	J	66.67	ok
ACENAPHTHYLENE	64	U	36	J	56.00	ok
ANTHRACENE	35	J	55	J	44.44	
BENZO(A)ANTHRACENE	630		640		1.57	
BENZO(A)PYRENE	750		880		15.95	
BENZO(B)FLUORANTHENE	1200		1500		22.22	
BENZO(G,H,I)PERYLENE	750		780		3.92	
BENZO(K)FLUORANTHENE	800		880		9.52	
CHRYSENE	840		840		0.00	
DIBENZO(A,H)ANTHRACENE	200		210		4.88	
FLUORANTHENE	1400		1400		0.00	
FLUORENE	64	U	37	J	53.47	ok
INDENO(1,2,3-CD)PYRENE	670		740		9.93	
NAPHTHALENE	64	U	70	U	8.96	
PHENANTHRENE	310		340		9.23	
PYRENE	1200		1700		34.48	

ok: result < RL
D < 4 × RL

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **A. BERNHARDT** **DATE:** **DECEMBER 28, 2011**

FROM: **LEANNE GANSER** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – PAH**
CTO WE55, NSB NEW LONDON
SDG WE55-7

SAMPLES: 6/Sediment/PAH

2W-SD-SD193-0001	2W-SD-SD194-0001	2W-SD-SD195-0001
2W-SD-SD196-0001	2W-SD-SD197-0001	2W-SD-DUP01

Overview

The sample set for NSB New London, CTO WE55, SDG WE55-7 consisted of six (6) sediment environmental samples. The samples were analyzed for polycyclic aromatic hydrocarbons (PAHs). One field duplicate pair was included in this sample delivery group (SDG): 2W-SD-DUP01/2W-SD-SD190-0001. Sample 2W-SD-SD190-0001 was included in SDG WE55-6.

The samples were collected by Tetra Tech on November 3, 2011 and analyzed by Katahdin Analytical Services. All analyses were conducted in accordance with SW-846 Method 8270D SIM analytical and reporting protocols. The data was evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • GC/MS Instrument Tuning and System Performance
• Laboratory Method Blank Results
* • Initial and Continuing Calibration
* • Surrogate Spike Recoveries
* • Internal Standard Areas
• Matrix Spike/Matrix Spike Duplicate Recoveries
• Laboratory Control Sample/Laboratory Control Sample Duplicate Results
* • Field Duplicate Results
* • Detection Limits
* • Compound Identification and Quantification

The asterisk (*) indicates that all quality control criteria were met for this parameter. Qualified (if applicable) analytical results are summarized in Appendix A. Results as reported by the laboratory are presented in Appendix B. Appendix C contains Region I worksheets, and Appendix D contains the documentation to support the findings as discussed in this data validation report. An EPA Region 1 tier III validation was performed on the data in this SDG. The text of this report has been formulated to address only those areas affecting data quality.

LABORATORY METHOD BLANKS

The following contaminants were detected in the laboratory method blanks at the following maximum concentration:

Analyte	Maximum Concentration	Action Level
Fluoranthene	7 ug/kg	35 ug/kg
Pyrene	5.6 ug/kg	28 ug/kg
Benzo(a)anthracene	5.6 ug/kg	28 ug/kg
Benzo(b)fluoranthene	6.4 ug/kg	32 ug/kg
Benzo(a)pyrene	5.8 ug/kg	29 ug/kg
Indeno(1,2,3-cd)pyrene	4.8 ug/kg	24 ug/kg
Dibenzo(a,h)anthracene	1.9 ug/kg	9.5 ug/kg
Benzo(g,h,i)perylene	2.9 ug/kg	14.5 ug/kg

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. No action was taken as results were greater than or equal to the blank action level.

NOTES

Percent solids were less than 30 percent in all samples. Positive and nondetected results in these samples were qualified as estimated, (J) and (UJ), respectively.

The samples were held frozen until extraction 19 days after sample collection. The data were not qualified on this basis.

The laboratory control sample duplicate (LCSD) results and the relative percent difference (RPD) were outside quality control limits for acenaphthylene, acenaphthlene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, and chrysene. The RPD was outside quality control limits for 1-methylnaphthalene. The laboratory control sample (LCS) results were within quality control limits. Since the LCS was acceptable, no qualification was necessary.

The matrix spike recovery for benzo(b)fluoranthene was greater than quality control limits. No action was taken as the LCS recoveries were acceptable.

Positive results reported below the LOQ but above the Method Detection Limit (MDL) were qualified as estimated, (J). Non-detected results are reported to the Limit of Detection (LOD).

EXECUTIVE SUMMARY

Laboratory Performance: Some PAHs were detected in the blanks.

Other Factors Affecting Data Quality: Some samples required dilutions. Percent solids were less than 30% in all samples. Positive results reported below the LOQ but above the MDL were qualified as estimated, (J). Non-detected results were reported to the LOD.

The data for these analyses were reviewed with reference to the criteria for SW-846 Method 8270D SIM listed in the project specific SAP, the "USEPA Region 1 Laboratory Data Validation Functional Guidelines – Part II" (12/96), and the Department of Defense (DOD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

Tetra Tech NUS
Leanne Ganser
Environmental Scientist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C – Regional Worksheets
4. Appendix D - Support Documentation

APPENDIX A

QUALIFIED LABORATORY RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS-GFAA MSA's r < 0.995 / ICP PDS Recovery Noncompliance
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 02625	NSAMPLE	2W-SD-DUP01			2W-SD-SD193-0001			2W-SD-SD194-0001			2W-SD-SD195-0001		
SDG: WE55-7	LAB_ID	SE7795-6			SE7795-1			SE7795-2			SE7795-3		
FRACTION: PAH	SAMP_DATE	11/3/2011			11/3/2011			11/3/2011			11/3/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	15.3			19.9			18.6			17.1		
	DUP_OF	2W-SD-SD190-0001											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		64	UJ	Y	50	UJ	Y	51	UJ	Y	57	UJ	Y
2-METHYLNAPHTHALENE		64	UJ	Y	50	UJ	Y	51	UJ	Y	57	UJ	Y
ACENAPHTHENE		14	J	PY	9.4	J	PY	51	UJ	Y	10	J	PY
ACENAPHTHYLENE		64	UJ	Y	50	UJ	Y	51	UJ	Y	57	UJ	Y
ANTHRACENE		35	J	PY	29	J	PY	20	J	PY	26	J	PY
BENZO(A)ANTHRACENE		630	J	Y	240	J	Y	170	J	Y	240	J	Y
BENZO(A)PYRENE		750	J	Y	270	J	Y	200	J	Y	280	J	Y
BENZO(B)FLUORANTHENE		1200	J	Y	350	J	Y	300	J	Y	430	J	Y
BENZO(G,H,I)PERYLENE		750	J	Y	270	J	Y	190	J	Y	310	J	Y
BENZO(K)FLUORANTHENE		800	J	Y	320	J	Y	180	J	Y	330	J	Y
CHRYSENE		840	J	Y	400	J	Y	260	J	Y	400	J	Y
DIBENZO(A,H)ANTHRACENE		200	J	Y	61	J	PY	51	J	PY	76	J	PY
FLUORANTHENE		1400	J	Y	510	J	Y	420	J	Y	640	J	Y
FLUORENE		64	UJ	Y	50	UJ	Y	51	UJ	Y	57	UJ	Y
INDENO(1,2,3-CD)PYRENE		670	J	Y	240	J	Y	170	J	Y	280	J	Y
NAPHTHALENE		64	UJ	Y	50	UJ	Y	51	UJ	Y	57	UJ	Y
PHENANTHRENE		310	J	Y	240	J	Y	180	J	Y	250	J	Y
PYRENE		1200	J	Y	480	J	Y	370	J	Y	530	J	Y

PROJ_NO: 02625	NSAMPLE	2W-SD-SD196-0001			2W-SD-SD197-0001		
SDG: WE55-7	LAB_ID	SE7795-4			SE7795-5		
FRACTION: PAH	SAMP_DATE	11/3/2011			11/3/2011		
MEDIA: SEDIMENT	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	20.7			18.3		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYLNAPHTHALENE		46	UJ	Y	53	UJ	Y
2-METHYLNAPHTHALENE		31	J	PY	53	UJ	Y
ACENAPHTHENE		77	J	PY	11	J	PY
ACENAPHTHYLENE		67	J	PY	53	UJ	Y
ANTHRACENE		58	J	PY	27	J	PY
BENZO(A)ANTHRACENE		300	J	Y	230	J	Y
BENZO(A)PYRENE		310	J	Y	250	J	Y
BENZO(B)FLUORANTHENE		470	J	Y	350	J	Y
BENZO(G,H,I)PERYLENE		290	J	Y	230	J	Y
BENZO(K)FLUORANTHENE		310	J	Y	270	J	Y
CHRYSENE		410	J	Y	340	J	Y
DIBENZO(A,H)ANTHRACENE		77	J	PY	72	J	PY
FLUORANTHENE		770	J	Y	510	J	Y
FLUORENE		96	J	Y	17	UJ	Y
INDENO(1,2,3-CD)PYRENE		260	J	Y	210	J	Y
NAPHTHALENE		46	UJ	Y	53	UJ	Y
PHENANTHRENE		580	J	Y	230	J	Y
PYRENE		620	J	Y	440	J	Y

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7795-6
Client ID: 2W-SD-DUP01
Project: CTO-WE55 New London, CT
SDG: WE55-7
Lab File ID: G4176.D

Sample Date: 03-NOV-11
Received Date: 21-NOV-11
Extract Date: 22-NOV-11
Extracted By: EC
Extraction Method: SW846 3550
Lab Prep Batch: WG101469

Analysis Date: 29-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 15.
Report Date: 30-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	64.	ug/Kgdrywt	1	20	130	17.	64.
2-Methylnaphthalene	U	64.	ug/Kgdrywt	1	20	130	14.	64.
1-Methylnaphthalene	U	64.	ug/Kgdrywt	1	20	130	11.	64.
Acenaphthylene	U	64.	ug/Kgdrywt	1	20	130	7.7	64.
Acenaphthene	J	14.	ug/Kgdrywt	1	20	130	9.6	64.
Fluorene	U	64.	ug/Kgdrywt	1	20	130	20.	64.
Phenanthrene		310	ug/Kgdrywt	1	20	130	12.	64.
Anthracene	J	35.	ug/Kgdrywt	1	20	130	7.7	64.
Fluoranthene		1400	ug/Kgdrywt	1	20	130	12.	64.
Pyrene		1200	ug/Kgdrywt	1	20	130	13.	64.
Benzo (a) anthracene		630	ug/Kgdrywt	1	20	130	12.	64.
Chrysene		840	ug/Kgdrywt	1	20	130	11.	64.
Benzo (b) Fluoranthene		1200	ug/Kgdrywt	1	20	130	15.	64.
Benzo(k)fluoranthene		800	ug/Kgdrywt	1	20	130	20.	64.
Benzo(a)pyrene		750	ug/Kgdrywt	1	20	130	21.	64.
Indeno (1,2,3-cd) pyrene		670	ug/Kgdrywt	1	20	130	12.	64.
Dibenzo (a,h) anthracene		200	ug/Kgdrywt	1	20	130	12.	64.
Benzo(g,h,i)perylene		750	ug/Kgdrywt	1	20	130	13.	64.
2-Methylnaphthalene-D10		45.3	%					
Fluorene-D10		58.4	%					
Pyrene-D10		62.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7795-1
Client ID: 2W-SD-SD193-0001
Project: CTO-WE55 New London, CT
SDG: WE55-7
Lab File ID: G4169.D

Sample Date: 03-NOV-11
Received Date: 21-NOV-11
Extract Date: 22-NOV-11
Extracted By: EC
Extraction Method: SW846 3550
Lab Prep Batch: WG101469

Analysis Date: 29-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 20.
Report Date: 30-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	50.	ug/Kgdrywt	1	20	100	13.	50.
2-Methylnaphthalene	U	50.	ug/Kgdrywt	1	20	100	11.	50.
1-Methylnaphthalene	U	50.	ug/Kgdrywt	1	20	100	8.6	50.
Acenaphthylene	U	50.	ug/Kgdrywt	1	20	100	6.0	50.
Acenaphthene	J	9.4	ug/Kgdrywt	1	20	100	7.5	50.
Fluorene	U	50.	ug/Kgdrywt	1	20	100	16.	50.
Phenanthrene		240	ug/Kgdrywt	1	20	100	9.0	50.
Anthracene	J	29.	ug/Kgdrywt	1	20	100	6.0	50.
Fluoranthene		510	ug/Kgdrywt	1	20	100	9.0	50.
Pyrene		480	ug/Kgdrywt	1	20	100	10.	50.
Benzo (a) anthracene		240	ug/Kgdrywt	1	20	100	9.6	50.
Chrysene		400	ug/Kgdrywt	1	20	100	8.6	50.
Benzo (b) Fluoranthene		350	ug/Kgdrywt	1	20	100	12.	50.
Benzo(k)fluoranthene		320	ug/Kgdrywt	1	20	100	16.	50.
Benzo(a)pyrene		270	ug/Kgdrywt	1	20	100	17.	50.
Indeno (1,2,3-cd) pyrene		240	ug/Kgdrywt	1	20	100	9.6	50.
Dibenzo (a,h) anthracene	J	61.	ug/Kgdrywt	1	20	100	9.0	50.
Benzo(g,h,i)perylene		270	ug/Kgdrywt	1	20	100	10.	50.
2-Methylnaphthalene-D10		52.8	%					
Fluorene-D10		60.6	%					
Pyrene-D10		61.2	%					

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Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7795-2
Client ID: 2W-SD-SD194-0001
Project: CTO-WE55 New London, CT
SDG: WE55-7
Lab File ID: G4170.D

Sample Date: 03-NOV-11
Received Date: 21-NOV-11
Extract Date: 22-NOV-11
Extracted By: EC
Extraction Method: SW846 3550
Lab Prep Batch: WG101469

Analysis Date: 29-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 18.
Report Date: 30-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	51.	ug/Kgdrywt	1	20	100	13.	51.
2-Methylnaphthalene	U	51.	ug/Kgdrywt	1	20	100	11.	51.
1-Methylnaphthalene	U	51.	ug/Kgdrywt	1	20	100	8.7	51.
Acenaphthylene	U	51.	ug/Kgdrywt	1	20	100	6.2	51.
Acenaphthene	U	51.	ug/Kgdrywt	1	20	100	7.7	51.
Fluorene	U	51.	ug/Kgdrywt	1	20	100	16.	51.
Phenanthrene		180	ug/Kgdrywt	1	20	100	9.2	51.
Anthracene	J	20.	ug/Kgdrywt	1	20	100	6.2	51.
Fluoranthene		420	ug/Kgdrywt	1	20	100	9.2	51.
Pyrene		370	ug/Kgdrywt	1	20	100	11.	51.
Benzo (a) anthracene		170	ug/Kgdrywt	1	20	100	9.7	51.
Chrysene		260	ug/Kgdrywt	1	20	100	8.7	51.
Benzo (b) Fluoranthene		300	ug/Kgdrywt	1	20	100	12.	51.
Benzo(k)fluoranthene		180	ug/Kgdrywt	1	20	100	16.	51.
Benzo(a)pyrene		200	ug/Kgdrywt	1	20	100	17.	51.
Indeno (1,2,3-cd) pyrene		170	ug/Kgdrywt	1	20	100	9.7	51.
Dibenzo (a,h) anthracene	J	51.	ug/Kgdrywt	1	20	100	9.2	51.
Benzo(g,h,i)perylene		190	ug/Kgdrywt	1	20	100	10.	51.
2-Methylnaphthalene-D10		50.9	%					
Fluorene-D10		62.9	%					
Pyrene-D10		65.2	%					

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Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7795-3
Client ID: 2W-SD-SD195-0001
Project: CTO-WE55 New London, CT
SDG: WE55-7
Lab File ID: G4171.D

Sample Date: 03-NOV-11
Received Date: 21-NOV-11
Extract Date: 22-NOV-11
Extracted By: EC
Extraction Method: SW846 3550
Lab Prep Batch: WG101469

Analysis Date: 29-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 17.
Report Date: 30-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	57.	ug/Kgdrywt	1	20	110	15.	57.
2-Methylnaphthalene	U	57.	ug/Kgdrywt	1	20	110	12.	57.
1-Methylnaphthalene	U	57.	ug/Kgdrywt	1	20	110	9.7	57.
Acenaphthylene	U	57.	ug/Kgdrywt	1	20	110	6.8	57.
Acenaphthene	J	10.	ug/Kgdrywt	1	20	110	8.5	57.
Fluorene	U	57.	ug/Kgdrywt	1	20	110	18.	57.
Phenanthrene		250	ug/Kgdrywt	1	20	110	10.	57.
Anthracene	J	26.	ug/Kgdrywt	1	20	110	6.8	57.
Fluoranthene		640	ug/Kgdrywt	1	20	110	10.	57.
Pyrene		530	ug/Kgdrywt	1	20	110	12.	57.
Benzo (a) anthracene		240	ug/Kgdrywt	1	20	110	11.	57.
Chrysene		400	ug/Kgdrywt	1	20	110	9.7	57.
Benzo (b) Fluoranthene		430	ug/Kgdrywt	1	20	110	14.	57.
Benzo(k)fluoranthene		330	ug/Kgdrywt	1	20	110	18.	57.
Benzo(a)pyrene		280	ug/Kgdrywt	1	20	110	19.	57.
Indeno (1,2,3-cd) pyrene		280	ug/Kgdrywt	1	20	110	11.	57.
Dibenzo (a,h) anthracene	J	76.	ug/Kgdrywt	1	20	110	10.	57.
Benzo(g,h,i)perylene		310	ug/Kgdrywt	1	20	110	11.	57.
2-Methylnaphthalene-D10		51.6	%					
Fluorene-D10		66.0	%					
Pyrene-D10		66.0	%					

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Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7795-4
Client ID: 2W-SD-SD196-0001
Project: CTO-WE55 New London, CT
SDG: WE55-7
Lab File ID: G4174.D

Sample Date: 03-NOV-11
Received Date: 21-NOV-11
Extract Date: 22-NOV-11
Extracted By: EC
Extraction Method: SW846 3550
Lab Prep Batch: WG101469

Analysis Date: 29-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 21.
Report Date: 30-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	46.	ug/Kgdrywt	1	20	93.	12.	46.
2-Methylnaphthalene	J	31.	ug/Kgdrywt	1	20	93.	10.	46.
1-Methylnaphthalene	U	46.	ug/Kgdrywt	1	20	93.	7.9	46.
Acenaphthylene	J	67.	ug/Kgdrywt	1	20	93.	5.6	46.
Acenaphthene	J	77.	ug/Kgdrywt	1	20	93.	7.0	46.
Fluorene		96.	ug/Kgdrywt	1	20	93.	15.	46.
Phenanthrene		580	ug/Kgdrywt	1	20	93.	8.4	46.
Anthracene	J	58.	ug/Kgdrywt	1	20	93.	5.6	46.
Fluoranthene		770	ug/Kgdrywt	1	20	93.	8.4	46.
Pyrene		620	ug/Kgdrywt	1	20	93.	9.8	46.
Benzo (a) anthracene		300	ug/Kgdrywt	1	20	93.	8.8	46.
Chrysene		410	ug/Kgdrywt	1	20	93.	7.9	46.
Benzo (b) Fluoranthene		470	ug/Kgdrywt	1	20	93.	11.	46.
Benzo(k)fluoranthene		310	ug/Kgdrywt	1	20	93.	14.	46.
Benzo(a)pyrene		310	ug/Kgdrywt	1	20	93.	15.	46.
Indeno (1,2,3-cd) pyrene		260	ug/Kgdrywt	1	20	93.	8.8	46.
Dibenzo (a,h) anthracene	J	77.	ug/Kgdrywt	1	20	93.	8.4	46.
Benzo(g,h,i)perylene		290	ug/Kgdrywt	1	20	93.	9.3	46.
2-Methylnaphthalene-D10		54.5	%					
Fluorene-D10		63.9	%					
Pyrene-D10		63.9	%					

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ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Tetra Tech NUS, Inc.
Lab ID: SE7795-5
Client ID: 2W-SD-SD197-0001
Project: CTO-WE55 New London, CT
SDG: WE55-7
Lab File ID: G4175.D

Sample Date: 03-NOV-11
Received Date: 21-NOV-11
Extract Date: 22-NOV-11
Extracted By: EC
Extraction Method: SW846 3550
Lab Prep Batch: WG101469

Analysis Date: 29-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 18.
Report Date: 30-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	53.	ug/Kgdrywt	1	20	110	14.	53.
2-Methylnaphthalene	U	53.	ug/Kgdrywt	1	20	110	12.	53.
1-Methylnaphthalene	U	53.	ug/Kgdrywt	1	20	110	9.0	53.
Acenaphthylene	U	53.	ug/Kgdrywt	1	20	110	6.4	53.
Acenaphthene	J	11.	ug/Kgdrywt	1	20	110	8.0	53.
Fluorene	U	17.	ug/Kgdrywt	1	20	110	17.	53.
Phenanthrene		230	ug/Kgdrywt	1	20	110	9.6	53.
Anthracene	J	27.	ug/Kgdrywt	1	20	110	6.4	53.
Fluoranthene		510	ug/Kgdrywt	1	20	110	9.6	53.
Pyrene		440	ug/Kgdrywt	1	20	110	11.	53.
Benzo (a) anthracene		230	ug/Kgdrywt	1	20	110	10.	53.
Chrysene		340	ug/Kgdrywt	1	20	110	9.0	53.
Benzo (b) Fluoranthene		350	ug/Kgdrywt	1	20	110	13.	53.
Benzo(k)fluoranthene		270	ug/Kgdrywt	1	20	110	16.	53.
Benzo(a)pyrene		250	ug/Kgdrywt	1	20	110	18.	53.
Indeno (1,2,3-cd) pyrene		210	ug/Kgdrywt	1	20	110	10.	53.
Dibenzo (a,h) anthracene	J	72.	ug/Kgdrywt	1	20	110	9.6	53.
Benzo(g,h,i)perylene		230	ug/Kgdrywt	1	20	110	11.	53.
2-Methylnaphthalene-D10		42.1	%					
Fluorene-D10		53.1	%					
Pyrene-D10		51.1	%					

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APPENDIX C

REGIONAL WORKSHEETS

EPA-NE
Data Validation Worksheet Cover Page - Page 1

Site Name New London
Reference No. _____

REGION I ORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name Katahdin
Case/Project No. _____
SDG No. WE55-7
No. of Samples/Matrix 6 sediment

SOW/Method No. _____
Sampling Date(s) _____
Shipping Date(s) _____
Date Rec'd by lab _____

Traffic Report Sample Nos. See DV letter

Trip Blank No. _____
Equipment Blank No. _____
Bottle Blank No. _____
Field Duplicate Nos. _____

PES Nos. _____

The Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision _____ was used to evaluate the data and/or approved modifications to the EPA-NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attach modified criteria from EPA approved QAPjP or amendment to QAPjP).

A Tier II or Tier III evaluation was used to validate the data (circle one). If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc. that received partial Tier III validation

The data were evaluated based upon the following parameters:

- Overall Evaluation of Data
- Data Completeness (CSF Audit - Tier I)
- Preservation & Technical Holding Times
- GC/MS & GC/ECD Instrument Performance Check
- Initial & Continuing Calibrations
- Blanks
- Surrogate Compounds
- Internal Standards
- Matrix Spike/Matrix Spike Duplicate
- Field Duplicates
- Sensitivity Check
- PE Samples/Accuracy Check
- Target Compound Identification
- Compound Quantitation and Reported Quantitation Limits
- TICs
- Semivolatile and Pesticide/PCB Cleanup
- System Performance

Region I Definitions and Qualifiers:

A - Acceptable Data
J - Numerical value associated with compound is an estimated quantity.
R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.
U - Compound not detected at that numerical sample quantitation limit.
UJ - The sample quantitation limit is an estimated quantity.
TB, BB, EB - Compound detected in aqueous trip blank, aqueous bottle blank, or aqueous equipment blank associated with soil/sediment samples.

Validator's Name Leanne Ganser Company Name Tetra Tech Phone Number _____

Date Validation Started 12-19-11

Date Validation Completed 12-19-11

See DV letter

Check if all criteria are met and no hard copy worksheet provided. Indicate NA if worksheet is not applicable to analytical method. Note: there is no standard worksheet for System Performance, however, the validator must document all system performance issues in the Data Validation Memorandum.

VOA/SV worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	------
VOA/SV-II	GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)	------
VOA/SV-III	INITIAL CALIBRATION	------
VOA/SV-IV	CONTINUING CALIBRATION	------
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	------
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	------
VOA-VI	VOA SURROGATE SPIKE RECOVERIES	------
SV-VI	SV SURROGATE SPIKE RECOVERIES	------
VOA/SV-VII	INTERNAL STANDARD PERFORMANCE	------
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	------
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	------
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	------
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	------
VOA/SV-Pest/PCB-XII	TARGET COMPOUND IDENTIFICATION	------
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	------
VOA/SV-XIV	TENTATIVELY IDENTIFIED COMPOUNDS	------
VOA/SV-XV	SEMIVOLATILE CLEANUP	------
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	------

Pest/PCB worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	------
Pest/PCB-IIA	GC/ECD INSTRUMENT PERFORMANCE CHECK-RESOLUTION	------
Pest/PCB-IIB	GC/ECD INSTRUMENT PERFORMANCE CHECK-RETENTION TIMES	------
Pest/PCB-IIC	GC/ECD INSTRUMENT PERFORMANCE CHECK-ACCURACY CHECK OF INITIAL CALIBRATION	------
Pest/PCB-IID	GC/ECD INSTRUMENT PERFORMANCE CHECK-PESTICIDE DEGRADATION	------
Pest/PCB-III	INITIAL CALIBRATION	------
Pest/PCB-IV	CONTINUING CALIBRATION	------
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	------
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	------
Pest/PCB-VI	SURROGATE COMPOUNDS: SPIKE RECOVERIES AND RETENTION TIME SHIFT	------
Pest/PCB-VII	PESTICIDE CLEANUP	------
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	------
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	------
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	------
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	------
Pest/PCB-XII	COMPOUND IDENTIFICATION	------
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	------
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	------

I certify that all criteria were met for the worksheets checked above.

Signature: Leanne Gayser Name: Leanne Gayser

Date: 12-19-11

The data validator generates a Data Validation Report, applicable to Data Validation Tiers II and III, that consists of the following components in the order specified below: (Refer to Section 11 for a description of each of the Data Validation Report components).

1. Organic Regional Data Assessment/Inorganic Regional Data Assessment (ORDA/IRDA) Form
2. Data Validation Memorandum
   a. Narrative
   b. Table I-Qualifier Recommendation Summary Table
   c. Table II-Overall Evaluation of Data
   d. Table III-Tentatively Identified Compounds
   e. Data Summary Tables
3. Standard Data Validation Worksheets
   a. Manual
   b. Automated Data Review Reports (i.e., CADRE)
4. Support Documentation
   a. Copy of non-CLP analytical method, e.g., DAS methods, modified EPA methods
   b. Copies of PES Score Reports/Vendor PES QC Acceptance Limits
   c. Copies of Telephone Logs/Communication Forms for:
      - RSCC communications
      - Requests for laboratory data resubmissions/clarifications
      - Communications with samplers resolving sampling problems
      - Communications with TPO/Lead Chemist to report contractually-deficient data for rejection/reduced payment
      - Communications with EPA Site Manager concerning possible data rejection
      - EPA Site Manager authorization for alternate DV tier
   d. Copies of data supporting recommendations for reduced payment resulting from CSF Audit and/or PE sample result evaluation
   e. Original data to support recommendations for data rejection/non-payment identified from Tier II or Tier III data validation
   f. Copies of field sampling notes and/or field report supplied by field sampler
   g. Copies of EPA-approved amendments to QAPjP and/or SAP describing modified criteria to be used for validating site data
5. CSF Completeness Evidence Audit
6. DQO Summary Form

The data validator is responsible for implementing all corrective actions required by the contractor Lead Chemist in response to EPA-NE data validation oversight findings.

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

N/A

VOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: _____ Date: 12-19-11

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

See DV letter

SEMIVOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: _____

Date: 12-19-11

COMPLETE SDG FILE (CSF) AUDIT

Organic Fractions: _____

Missing Information	Date Lab Contacted	Date Received
	See DV letter	

Validator: _____ Date: 12-19-11

EPA-NE - Data Validation
VOA/SV - Pest/PCB-I

Sampler:_____ Company:_____ Contacted: Yes No Date:_____

I. PRESERVATION AND HOLDING TIMES - Circle sample numbers with exceeded technical holding times or omitted preservation.
List all required preservation codes and circle omitted preservation codes.
Circle all exceeded technical holding times.
Identify extraction technique after "# of Days"/(*Extraction Code).

See DV letter

Sample No. (FR No.)	Matrix	Pres. Code	Date Sampled	VOA			BNA					PEST PCB				
				Date Analyzed	# of Days from Samp. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr. (*)	Date Analyzed	# of Days from Extr. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr. (*)	Date Analyzed	# of Days from Extr. to Anal.	Action

Preservation Code:
1. Cool (a. 4°C (± 2°)
2. Preserve with HCl to at least pH 2
3. Protect from light
4. Freeze
5. Room Temperature (Avoid excessive heat)

(*Extraction Code:)
L/L - Liquid/Liquid
SON - Sonication
SEP - Separatory Funnel
SOX - Soxhlet
SPE - Solid Phase Extraction

Action Code:
J - Estimate (J) Detected Values
UJ - Estimate (UJ) Non-Detected Values
R - Reject (R) Non-Detected Values

Validator:_____ Date: 12-19-11

II. GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING) See DV letter

List all Instrument Performance Checks that are outside method QC tuning acceptance criteria.

Volatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action
Comments:							

Semivolatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action
Comments:							

If tuning compounds and criteria are different from those specified in CLP SOW OLM03.1, then the validator should include a copy of the method-specific tuning criteria with this worksheet.

Validator: L Sanders

Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV-III

See DV letter

III. INITIAL CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Instrument	Parameter	Matrix	Compound	% RSD	$\overline{RRF}$	Samples Affected	Action

Comments:

Validator: [signature]

Date: 12-19-11

EPA-NE - Data Validation Worksheet

VOA/SV-IV

See DV letter

IV. CONTINUING CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Date of CCAL	Instrument	Parameter	Matrix	Compound	%D	RRF	Samples Affected	Action

Comments:

Validator: Z Sam

Date: 12-19-11

EPA-NE - Data Validation Worksheet

VOA/SV - Pest/PCB-V-A

See DV letter

V. BLANK ANALYSIS

List the blank contamination below.

Concentration Level:____

Sampler: _____ Company: _____

Contacted: Yes No Date:____

1. Laboratory: Method, Storage and Instrument Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

2. Field: Equipment (Rinsate), Trip and Bottle Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

Validator: _____ Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-V-B

See DV letter

3. **Blank Actions** - List the maximum concentrations of blank compounds.

Compound	Type of Blank	Date Blank Sampled/Originated	Max. Conc. (units)	Action Level (units)	Sample QL	Samples Affected	Action

Comments: _____

Date: 12-19-11

Validator: _____

12/96

EPA-NE - Data Validation Worksheet
VOA-VI

N/A

VI. VOA SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Volatile Method QC Acceptance Criteria				
	Toluene-d_8	BFB	DCE-d_4	Other:	
OLM03.2	Water 88-110 Soil 84-138	Water 86-115 Soil 59-113	Water 76-114 Soil 70-121		
OLC02.1	NA	80-120	NA		
Other:					
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

Validator: [signature]

Date: 12-19-11

EPA-NE - Data Validation Worksheet
SV-VI

See DV letter

VI. SV SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Base/Neutral Method QC Acceptance Criteria					
	NBZ-d_5	2-FBP	TPH-d_{14}	1,2-DCB-d_4*	Other:	
OLM03.2	Water Soil 35-114 23-120	Water Soil 43-116 30-115	Water Soil 33-141 18-137	Water Soil 16-110 20-130		
OLC02.1	40-110	30-110	20-140	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

Method	Acid Method QC Acceptance Criteria					
	Phenol-d_5	2-FP	2,4,6-TBP	2-CP-d_4*	Other:	
OLM03.2	Water Soil 10-110 24-113	Water Soil 21-110 25-121	Water Soil 10-123 19-122	Water Soil 33-110 20-130		
OLC02.1	15-115	15-110	15-130	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

* Advisory Surrogates - OLM03.2

Validator: [signature]

Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV-VII

See DV letter

VII. INTERNAL STANDARD PERFORMANCE

List the internal standards that are outside the area count and retention time method QC acceptance criteria.
IS Area Count method QC acceptance criteria: _____
IS Retention Time method QC acceptance criteria: _____

Sample Number (TR#)	Date and Time Analyzed	Instrument	Parameter	IS Outside Area Count and/or RT Criteria	__IS Area	RT Shift	Acceptable Range (IS area or RT shift)	Action

Validator: L Sanson

Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-VIII

See DV letter

VIII. MATRIX SPIKE/MATRIX SPIKE DUPLICATE - List all MS/MSD analytes that are outside method QC acceptance criteria.

Use a separate worksheet for each MS/MSD pair.

Sample # _____ Matrix _____ Concentration Level _____

Parameter	Compound	MS %Rec	MSD %Rec	RPD	Method QC Limits		Concentration			% RSD	Action
					% Rec	RPD	Unspiked Sample	MS	MSD		

Validator: _____ Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-IX

See DV letter

IX. FIELD DUPLICATE PRECISION - List all field duplicate analytes that are outside criteria.

Use a separate worksheet for each field duplicate pair.

Sample Number _____ Duplicate Sample Number _____ Matrix _____

Parameter	Compound	Sample Conc.	Sample QL		Duplicate Conc.	Duplicate QL		RPD	QC Acceptance Criteria RPD or NA*	Action
			SQL	2xSQL		SQL	2xSQL			

* For instances where one duplicate result is ND (or reported less than the sample QL).

Does the MS/MSD data indicate acceptable laboratory precision? Y N

Comments: _____

_____

Sampler Name: _____ Contractor Name: _____ Date Contacted: _____

Reason for Contact and resolution obtained: _____

Validator: _____ Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-X

See DV letter

X. SENSITIVITY CHECK (Method Detection Limit Study)

List all compounds, surrogates, and internal standards that are outside the MDL criteria.

- Has an appropriate MDL study been submitted with seven replicates for each compound and matrix of interest? Y N
- Date of Preparation/Analysis: _____ Within 1 year? Y N
- Instrument I.D.: _____ Same as samples? Y N
- Column I.D.: _____ Same as samples? Y N

Matrix	Compound	MDL > QL	Method QC Limits < 80% or > 120%	IS Outside Area Count and/or RT Criteria	RSD > 20%	Samples Affected	Action

If an MDL study has not been submitted, use only the LFB results to evaluate data.

(Laboratory Fortified Blank) - List all LFB compounds, surrogates and internal standards that are outside criteria.

- Has an appropriate and complete LFB been submitted at the proper frequency? Y N
- Does it contain all target compounds at the method-required QLs? Y N
- Was the LFB spiked with a standard from a source (vendor) independent of the calibration standard? Y N

Matrix	Compound	Method QC Limits < 60% or > 140% Other:	IS Outside Area Count and/or RT Criteria	Samples Affected	Action

Validator: _____ Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XI

See DV letter

XI. ACCURACY CHECK (Performance Evaluation Results) - List all analytes that are outside criteria.

SDG No: _____ CASE: _____

Y N

Are more than one-half of the PES analytes within criteria for each parameter.

PE Sample Number	Ampule Number	Parameter	Type of PES	Matrix	Analyte	Conc.	Region I EPA PES Scores*	Non-EPA PES Scores**	Samples Affected	Action

* For Region I PESs indicate the Region I PES Score Report Result: Action High; Action Low; TCL MISS; TCL CONTAMINANT; TIC HIT; TIC MISS; TIC CONTAMINANT

** For Non-EPA PESs indicate the Non-EPA PES Score: PES COMPOUND MISS; PES COMPOUND CONTAMINANT; PES COMPOUND HIT (% Recovery Limits)

Validator: _____ Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XII

See DV letter

XII. TARGET COMPOUND IDENTIFICATION - List the analytes that are outside the acceptance criteria.

Sample Number	Compound	___MS Ions	____RRT	Action

Date: 12-19-11

Validator:

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XIII

See DV report

XIII. SAMPLE QUANTITATION

Recalculate, from the raw data, the concentrations for one positive detect and one reported sample quantitation limit for a non-detect in a diluted sample or soil sample per fraction. (Note: Although Section XIII, C.1.a, requires that one calculation for each fraction in each sample be performed, the validator is only required to reproduce an example, for each fraction, of one positive detect and one sample quantitation limit calculation on this worksheet.)

Y N

Do all soil/sediment samples have % solids greater than 30%?
If no, list sample numbers_____

Fraction		Calculation
VOA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
BNA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
Pesticide/PCB		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		

Validator: L James

Date: 12-19-11

XIV. TENTATIVELY IDENTIFIED COMPOUNDS (TICs) N/A

List the 5 TICs having the highest concentration for each sample parameter.

Sample Number	Parameter	Compound	____RRT	__Est. Conc.	Action

Validator: L Dam

Date: 12-19-11

EPA-NE - Data Validation Worksheet
VOA/SV-XV

See DV letter

XV. SEMIVOLATILE CLEANUP - List all analytes that are outside method cleanup QC criteria.

Cleanup Procedure	Instrument # or Lot #	Date/Time GPC Calibrated or Check Solution Analyzed	Compound	% Rec	QC Limits	Samples Affected	Action

Did the GPC column meet; resolution requirements? Y or N
peak shape requirements? Y or N
retention time shift requirements? Y or N

Was the GPC calibration, Silica Gel cleanup checked at the method required frequency with correct compounds and concentrations? Y or N

Were all compounds less than QL for the GPC/Silica Gel/Acid-Partition blank? Y or N

Did the blank surrogate recoveries and IS area counts and RTs (if added) meet method QC acceptance criteria? Y or N

Comments: _____

Validator: L Dam

Date: 12-19-11

APPENDIX D

SUPPORT DOCUMENTATION

HOLDTIME

PROJ_NO 02625

SDG	SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
WE55-7	TS	%	2W-SD-SD196-0001	SE7795-4	NM	11/03/2011	11/23/2011	11/28/2011	20	5	25
WE55-7	TS	%	2W-SD-SD193-0001	SE7795-1	NM	11/03/2011	11/23/2011	11/28/2011	20	5	25
WE55-7	TS	%	2W-SD-SD194-0001	SE7795-2	NM	11/03/2011	11/23/2011	11/28/2011	20	5	25
WE55-7	TS	%	2W-SD-SD195-0001	SE7795-3	NM	11/03/2011	11/23/2011	11/28/2011	20	5	25
WE55-7	TS	%	2W-SD-SD197-0001	SE7795-5	NM	11/03/2011	11/23/2011	11/28/2011	20	5	25
WE55-7	TS	%	2W-SD-DUP01	SE7795-6	NM	11/03/2011	11/23/2011	11/28/2011	20	5	25
WE55-7	SIM	%	2W-SD-DUP01	SE7795-6	NM	11/03/2011	11/22/2011	11/29/2011	19	7	26
WE55-7	SIM	%	2W-SD-SD193-0001	SE7795-1	NM	11/03/2011	11/22/2011	11/29/2011	19	7	26
WE55-7	SIM	%	2W-SD-SD194-0001	SE7795-2	NM	11/03/2011	11/22/2011	11/29/2011	19	7	26
WE55-7	SIM	%	2W-SD-SD196-0001	SE7795-4	NM	11/03/2011	11/22/2011	11/29/2011	19	7	26
WE55-7	SIM	%	2W-SD-SD197-0001	SE7795-5	NM	11/03/2011	11/22/2011	11/29/2011	19	7	26
WE55-7	SIM	%	2W-SD-SD195-0001	SE7795-3	NM	11/03/2011	11/22/2011	11/29/2011	19	7	26
WE55-7	SIM	UG/KG	2W-SD-SD197-0001	SE7795-5	NM	11/03/2011	11/22/2011	11/29/2011	19	7	26
WE55-7	SIM	UG/KG	2W-SD-DUP01	SE7795-6	NM	11/03/2011	11/22/2011	11/29/2011	19	7	26
WE55-7	SIM	UG/KG	2W-SD-SD193-0001	SE7795-1	NM	11/03/2011	11/22/2011	11/29/2011	19	7	26
WE55-7	SIM	UG/KG	2W-SD-SD194-0001	SE7795-2	NM	11/03/2011	11/22/2011	11/29/2011	19	7	26

SDG	SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
WE55-7	SIM	UG/KG	2W-SD-SD195-0001	SE7795-3	NM	11/03/2011	11/22/2011	11/29/2011	19	7	26
WE55-7	SIM	UG/KG	2W-SD-SD196-0001	SE7795-4	NM	11/03/2011	11/22/2011	11/29/2011	19	7	26

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO-WE55 NEW LONDON, CT
SDG: WE55-7
SE7795

Sample Receipt

The following samples were received on November 21, 2011 and were logged in under Katahdin Analytical Services work order number SE7795 for a hardcopy due date of December 9, 2011.

KATAHDIN Sample No.	TTNUS Sample Identification
SE7795-1	2W-SD-SD193-0001
SE7795-2	2W-SD-SD194-0001
SE7795-3	2W-SD-SD195-0001
SE7795-4	2W-SD-SD196-0001
SE7795-5	2W-SD-SD197-0001
SE7795-6	2W-SD-DUP01

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

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

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

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

Organics Analysis

The samples of SDG WE55-7 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, and III 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, for the specific methods listed below or on the Report of Analysis.

8270C SIM Analysis

Surrogate recoveries for all samples and QC were evaluated using laboratory established acceptance limits.

All soil samples and associated QC were subjected to the GPC sample clean-up process.

Samples SE7795-1, 2, 3, 4, 5, and 6 were manually integrated for the analytes benzo(k)fluoranthene, benzo(b)fluoranthene, and/or dibenzo(a,h)anthracene. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

The there were eight target analytes detected below ½ the reporting limit in the method blank WG101469-1. According to the DoD QSM section D.1.1.1, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit and is greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). Since the blank was acceptable, no further action was taken.

The independent check standard (file G4155), associated with the initial calibration on the G instrument on 11/28/2011, had low concentrations for benzo(a)anthracene and benzo(b)fluoranthene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

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

The LCSD WG100469-3 had recoveries for nine target analytes that were high and outside the laboratory established acceptance limits. The DoD QSM number of allowable exceedances for 18 target analytes is one. Since the LCS was acceptable, no further action was taken.

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

Wet Chemistry Analysis

The samples of SDG WE55-7 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Annual Book of ASTM Standards", Method D2216-98 "Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass".

All analyses were performed within analytical holding times. All quality control criteria were met.

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

Leslie Dimond
12.07.11

Leslie Dimond
Quality Assurance Officer

SE7795

Jennifer Obrin

From: Bernhardt, Aaron [Aaron.Bernhardt@tetratech.com]
Sent: Monday, November 21, 2011 7:47 AM
To: Jennifer Obrin (jobrin@katahdinlab.com)
Subject: RE: COC for samples received 11/4-CTO WE55 New London-SE7369

Jennifer,

Please analyze SD193-SD197 on 7-dat TAT. Also, see below about the duplicate. I will get back to you today on the MS/MSD question.

Thanks,

verbals: 12/5/11

Aaron

From: Bernhardt, Aaron
Sent: Friday, November 18, 2011 11:39 AM
To: 'Jennifer Obrin'
Subject: RE: COC for samples received 11/4-CTO WE55 New London-SE7369

I will let you know about the MS/MSD on Monday.

I did not see the duplicate result, though.

Also, we will want some additional samples analyzed on another 7-dat TAT. Probably SD193 through SD197, but I will let you know later today or Monday.

Thanks,

Aaron

From: Jennifer Obrin [mailto:jobrin@katahdinlab.com]
Sent: Thursday, November 17, 2011 2:09 PM
To: Bernhardt, Aaron
Subject: FW: COC for samples received 11/4-CTO WE55 New London-SE7369

Aaron,

Please find attached the results for WE55-6 with 2 dilutions that were needed. Are you absolutely going to need an MS/MSD? If so, they will now have to extract one from a sample that has enough volume left. Thanks.

Jennifer Obrin
Project Manager
Katahdin Analytical Services
600 Technology Way
Scarborough, ME 04074
(207) 874-2400 Ext. 17

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From: Jennifer Obrin [mailto:jobrin@katahdinlab.com]
Sent: Tuesday, November 15, 2011 1:46 PM
To: 'Bernhardt, Aaron'
Subject: FW: COC for samples received 11/4-CTO WE55 New London-SE7369

Hi Aaron ,

I apologize for all the emails. The samples are running tomorrow, dilutions if needed will be run Thursday. Based on previous emails below, a MS/MSD would then be extracted, which will delay the final report. We will still email you the prelims. Please let me know if this is going to cause any problems. Thanks.

Jen

From: Bernhardt, Aaron [mailto:Aaron.Bernhardt@tetratech.com]
Sent: Monday, November 07, 2011 9:01 AM
To: Jennifer Obrin
Subject: RE: COC for samples received 11/4-CTO WE55 New London-SE7369

Jennifer,

I got a message on Friday about the MS/MSD sample. Sorry about that, I was under the impression that the sample came out of the same jar.

Can you run the site sample first and if there are no problems where you would need to re-extract then run the MS/MSD? The MS/MSD could also be run on a different sample, if needed, as long as it is one of the first nine that we are analyzing.

Let me know if this is an ok approach.

Thanks,

Aaron

From: Jennifer Obrin [mailto:jobrin@katahdinlab.com]
Sent: Monday, November 07, 2011 9:02 AM
To: Sedlmyer, Tobrena; Carper, Kelly; Bernhardt, Aaron
Subject: COC for samples received 11/4-CTO WE55 New London-SE7369

Please find attached the COC for the samples received 11/4 for project CTO WE55 New London, CT under the work order SE7369. Please let me know if you have any questions. Have a great day.

Jennifer Obrin
Project Manager
Katahdin Analytical Services
600 Technology Way
Scarborough, ME 04074
(207) 874-2400 Ext. 17

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No virus found in this message.
Checked by AVG - www.avg.com
Version: 2012.0.1869 / Virus Database: 2092/4600 - Release Date: 11/06/11

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2012.0.1872 / Virus Database: 2101/4630 - Release Date: 11/21/11

Katahdin Analytical Services, Inc. Sample Receipt Condition Report

Client: Tetra Tech		KAS PM: JO	Sampled By: Client
Project:		KIMS Entry By: GN	Delivered By: Fed-Ex
KAS Work Order#: SE7369/SE7795		KIMS Review By: DJR	Received By: GN
SDG #:	Cooler: 1 of 1		Date/Time Rec.: 11-4-11/10:15

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 0.8
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol,				✓	
TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9 Cyanide – pH >12				✓	

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

Client did not include extra jars for MS/MSD.

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 27442 | PAGE 1 OF 2

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112602625	NSB NEW LONDON	A. BERNHARDT	412 921 8433	KATAHDIN / ~~KELLY PERKINS~~ Jennifer Obrin
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS 600 TECHNOLOGY WAY
		CARRIER/WAYBILL NUMBER FEDEX AB# 8770 6393-5100		CITY, STATE SCARBOROUGH, ME 04074

STANDARD TAT ☒
RUSH TAT ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☒ 7 day ☐ 14 day

SE7369/SE7795 QC 11.22.11

DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT) IN CM	BOTTOM DEPTH (FT) IN CM	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS PAHs	COMMENTS
									G	#1		
11-2	1620	2W-SD-SD183-0001		0	4	SD	G	1			X	
11-2	1610	2W-SD-SD185-0001									X	
11-2	1605	2W-SD-SD186-0001									X	
11-2	1550	2W-SD-SD187-0001									X	
11-2	1635	2W-SD-SD204-0001									X	* Hold
1025 11-3	~~1025~~	2W-SD-SD184-0001									X	
1045	~~1040~~	2W-SD-SD188-0001									X	
	1015	2W-SD-SD189-0001									X	MS/MSD
	1000	2W-SD-SD190-0001									X	
	950	2W-SD-SD191-0001									X	
	1035	2W-SD-SD192-0001									X	* Hold
	1055	2W-SD-SD193-0001									X	* Hold
	1105	2W-SD-SD194-0001									X	* Hold

1. RELINQUISHED BY	DATE 11-3-11	TIME 1700	1. RECEIVED BY FED EX	DATE 11-4-11	TIME 10 15
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS * FREEZE CONTAINER TO -20°C & HOLD FOR FURTHER INSTRUCTIONS
** ~~REFRIGERATE CONTAINER TO 4°C & HOLD~~ " "

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 27443 | PAGE 1 OF 1

PROJECT NO: 112602625	FACILITY: USB New London	PROJECT MANAGER A. Bernhardt	PHONE NUMBER 412-921-8433	LABORATORY NAME AND CONTACT: Katahdin & Jennifer Obrin
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS 600 Technology Way
		CARRIER/WAYBILL NUMBER Fed Ex AB# 8770-6393-5100		CITY, STATE Scarborough, ME 04074

STANDARD TAT ☐
RUSH TAT ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☒ 7 day ☐ 14 day

SE7369/SE7795 per 11.22.11

DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT) inch	BOTTOM DEPTH (FT) inch	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G): G	PRESERVATIVE USED	TYPE OF ANALYSIS: PAHs	COMMENTS
11-3	1120	2W-SD-SD195-0001		0	4	SD	G		X			* Hold
	1130	2W-SD-SD196							X			
	1145	2W-SD-SD197							X			
	1155	2W-SD-SD198							X			
	1300	2W-SD-SD199							X			
	1250	2W-SD-SD200							X			
	1240	2W-SD-SD201							X			
	1220	2W-SD-SD202							X			
	1210	2W-SD-SD203							X			
		~~Equip Blk~~										
11-3	1800	2W-SD-DUP01		0	4	SD	G		X			* Hold

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	11-3-11	1700	1. RECEIVED BY Fed Ex		
2. RELINQUISHED BY			2. RECEIVED BY	11-4-11	1015
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS * Freeze to -20°C + Hold for Further Instruction

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

00818

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-7

Lab File ID: GD939 DFTPP Injection Date: 11/28/11

Instrument ID: GCMS-G DFTPP Injection Time: 1154

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	36.1
68	Less than 2.0% of mass 69	0.4 (1.0)1
69	Less than 100.0% of mass 198	41.6
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	40.0 - 60.0% of mass 198	55.9
197	Less than 1.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	24.6
365	1.0 - 100.0% of mass 198	3.5
441	0.0 - 100.0% of mass 443	11.9 (71.0)2
442	40.0 - 100.0% of mass 198	84.5
443	17.0 - 23.0% of mass 442	16.8 (19.9)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00G1128	G4149	11/28/11	1215
02		SSTD8.00G1128	G4150	11/28/11	1306
03		SSTD5.00G1128	G4151	11/28/11	1350
04		SSTD0.50G1128	G4153	11/28/11	1519
05		SSTD0.20G1128	G4154	11/28/11	1603
06		SIM IND CHECK	G4155	11/28/11	1647
07					
08					
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Katahdin Analytical Services A0000015

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO-WE55 NEW LONDON, CT SDG No.: WE55-7

Lab File ID: GD940 DFTPP Injection Date: 11/29/11

Instrument ID: GCMS-G DFTPP Injection Time: 0626

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	40.0
68	Less than 2.0% of mass 69	0.7 (1.5)1
69	Less than 100.0% of mass 198	45.1
70	Less than 2.0% of mass 69	0.3 (0.6)1
127	40.0 - 60.0% of mass 198	59.5
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	23.1
365	1.0 - 100.0% of mass 198	3.3
441	0.0 - 100.0% of mass 443	10.8 (75.7)2
442	40.0 - 100.0% of mass 198	75.3
443	17.0 - 23.0% of mass 442	14.3 (19.0)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00G1129	G4165	11/29/11	0645
02	WG101469-BLANK	WG101469-1	G4166	11/29/11	0729
03	WG101469-LCS	WG101469-2	G4167	11/29/11	0814
04	WG101469-LCSD	WG101469-3	G4168	11/29/11	0858
05	2W-SD-SD193-0001	SE7795-1	G4169	11/29/11	0943
06	2W-SD-SD194-0001	SE7795-2	G4170	11/29/11	1027
07	2W-SD-SD195-0001	SE7795-3	G4171	11/29/11	1111
08	2W-SD-SD195-0001MS	WG101469-4	G4172	11/29/11	1155
09	2W-SD-SD195-0001MSD	WG101469-5	G4173	11/29/11	1239
10	2W-SD-SD196-0001	SE7795-4	G4174	11/29/11	1323
11	2W-SD-SD197-0001	SE7795-5	G4175	11/29/11	1408
12	2W-SD-DUP01	SE7795-6	G4176	11/29/11	1452
13					
14					
15					
16					
17					
18					
19					
20					

FORM V SV

Katahdin Analytical Services A0000016

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : CTO-WE55 New London, CT
Lab File ID : G4166.D
Instrument ID : GCMS-G
Matrix : SL

SDG : WE55-7
Lab Sample ID : WG101469-1
Date Extracted : 22-NOV-11
Date Analyzed : 29-NOV-11
Time Analyzed : 07:29

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG101469-2	G4167.D	11/29/11	08:14
Laboratory Control S	WG101469-3	G4168.D	11/29/11	08:58
2W-SD-SD193-0001	SE7795-1	G4169.D	11/29/11	09:43
2W-SD-SD194-0001	SE7795-2	G4170.D	11/29/11	10:27
2W-SD-SD195-0001	SE7795-3	G4171.D	11/29/11	11:11
Matrix Spike	WG101469-4	G4172.D	11/29/11	11:55
Matrix Spike Duplica	WG101469-5	G4173.D	11/29/11	12:39
2W-SD-SD196-0001	SE7795-4	G4174.D	11/29/11	13:23
2W-SD-SD197-0001	SE7795-5	G4175.D	11/29/11	14:08
2W-SD-DUP01	SE7795-6	G4176.D	11/29/11	14:52

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG101469-1
Client ID: Method Blank Sample
Project:
SDG: WE55-7
Lab File ID: G4166.D

Sample Date:
Received Date: 22-NOV-11
Extract Date: 22-NOV-11
Extracted By: EC
Extraction Method: SW846 3550
Lab Prep Batch: WG101469

Analysis Date: 29-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: NA
Report Date: 30-NOV-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.6	10.
2-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.2	10.
1-Methylnaphthalene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Acenaphthylene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10.	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10.	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	J	7.0	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	J	5.6	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo (a) anthracene	J	5.6	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo (b) Fluoranthene	J	6.4	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	J	5.8	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno (1,2,3-cd) pyrene	J	4.8	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo (a,h) anthracene	J	1.9	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	J	2.9	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene-D10		47.4	%					
Fluorene-D10		52.7	%					
Pyrene-D10		62.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO-WE55 NEW LONDON, CT SDG No.: WE55-7

Instrument ID: GCMS-G Calibration Date(s): 11/28/11 11/28/11

Column: ZB5-MS ID: 0.25 (mm) Calibration Time(s): 1215 1603

LAB FILE ID: RF0.2: G4154 RF0.5: G4153 RF1: G4149
RF2: G4152 RF5: G4151 RF8: G4150

								COEFFICENTS		%RSD	MAX %RSD
COMPOUND	RF0.2	RF0.5	RF1	RF2	RF5	RF8	CURVE	A0	A1	OR R^2	OR R^2
1-Methylnaphthalene	28746	65399	132690		563640	910030	LINR	-0.2397098	1.82425404	0.99540	0.99000
Naphthalene	1.104	1.089	1.177		0.997	0.900	AVRG		1.05350301	10.169	15.000
2-Methylnaphthalene	0.273	0.277	0.304		0.257	0.232	AVRG		0.26843540	9.900	15.000
Acenaphthylene	16022	28639	59942		265840	427200	LINR	-0.1706974	1.71304927	0.99830	0.99000
Acenaphthene	1.392	1.334	1.432		1.288	1.197	AVRG		1.32856182	6.890	15.000
Fluorene	1.565	1.514	1.628		1.424	1.324	AVRG		1.49121862	8.026	15.000
Phenanthrene	1.279	1.246	1.326		1.242	1.171	AVRG		1.25274718	4.528	15.000
Anthracene	1.344	1.306	1.562		1.320	1.225	AVRG		1.35134857	9.317	15.000
Fluoranthene	1.009	1.168	1.242		1.195	1.146	AVRG		1.15218021	7.604	15.000
Pyrene	2.657	2.147	2.495		2.085	1.847	AVRG		2.24624700	14.523	15.000
Benzo(a)anthracene	1.206	1.290	1.462		1.374	1.293	AVRG		1.32499129	7.305	15.000
Chrysene	19880	60154	104970		535340	904660	LINR	-0.1866424	0.77546740	0.99787	0.99000
Benzo(b)fluoranthene	1.505	1.356	1.393		1.480	1.404	AVRG		1.42747781	4.358	15.000
Benzo(k)fluoranthene	20302	56407	97472		467270	872200	LINR	-0.1863761	0.54864058	0.99556	0.99000
Benzo(a)pyrene	1.892	1.559	1.547		1.445	1.357	AVRG		1.56003073	13.017	15.000
Indeno(1,2,3-cd)pyrene	1.436	1.205	1.326		1.176	1.188	AVRG		1.26617550	8.857	15.000
Dibenzo(a,h)anthracene	1.164	0.905	1.051		0.907	0.923	AVRG		0.98999686	11.590	15.000
Benzo(g,h,i)perylene	9824	29021	54399		238580	493150	LINR	-0.1277100	0.99477332	0.99947	0.99000
2-Methylnaphthalene-D10	1.133	1.134	1.211		1.118	1.042	AVRG		1.12760377	5.332	15.000
Fluorene-D10	0.962	0.936	1.052		1.008	0.938	AVRG		0.97934035	5.115	15.000
Pyrene-D10	1.478	1.167	1.333		1.137	1.008	AVRG		1.22451390	14.954	15.000

Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : CTO-WE55 New London, CT
SDG: WE55-7
Lab ID : WG101744-1
Analytical Date: 11/29/11 06:45
Lab File ID : G4165.D
Instrument ID: GCMS-G
Initial Calibration Date(s): 11/28/11 12:15 11/28/11 16:03

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
21 Naphthalene	1.05350	1.15187	1.15187	0.010	9.33718	20.00000	Averaged
27 2-Methylnaphthalene	0.26844	0.29150	0.29150	0.010	8.59140	20.00000	Averaged
28 1-Methylnaphthalene	1.00000	1.17293	0.74809	0.010	17.29323	20.00000	Linear
37 Acenaphthylene	1.00000	1.06252	0.69997	0.010	6.25237	20.00000	Linear
40 Acenaphthene	1.32856	1.41856	1.41856	0.010	6.77388	20.01000	Averaged
48 Fluorene	1.49122	1.58344	1.58344	0.010	6.18415	20.00000	Averaged
59 Phenanthrene	1.25275	1.31567	1.31567	0.010	5.02300	20.00000	Averaged
60 Anthracene	1.35135	1.45276	1.45276	0.010	7.50445	20.00000	Averaged
63 Fluoranthene	1.15218	1.23641	1.23641	0.010	7.31088	20.01000	Averaged
65 Pyrene	2.24625	2.36472	2.36472	0.010	5.27432	20.00000	Averaged
67 Benzo(a)anthracene	1.32499	1.42943	1.42943	0.010	7.88221	20.00000	Averaged
69 Chrysene	1.00000	1.08374	1.59007	0.010	8.37372	20.00000	Linear
73 Benzo(b)fluoranthene	1.42748	1.32929	1.32929	0.010	-6.87837	20.00000	Averaged
74 Benzo(k)fluoranthene	1.00000	1.08250	2.24482	0.010	8.25003	20.00000	Linear
75 Benzo(a)pyrene	1.56003	1.49708	1.49708	0.010	-4.03495	20.01000	Averaged
77 Indeno(1,2,3-cd)pyrene	1.26618	1.26271	1.26271	0.010	-0.27345	20.00000	Averaged
78 Dibenzo(a,h)anthracene	0.99000	0.98516	0.98516	0.010	-0.48860	20.00000	Averaged
79 Benzo(g,h,i)perylene	1.00000	1.02992	1.13803	0.010	2.99156	20.00000	Linear
25 2-Methylnaphthalene-D10	1.12760	1.20788	1.20788	0.010	7.11949	20.00000	Averaged
47 Fluorene-D10	0.97934	1.04134	1.04134	0.010	6.33113	20.00000	Averaged
64 Pyrene-D10	1.22451	1.29995	1.29995	0.010	6.16010	20.00000	Averaged

*** = Compound out of QC criteria**

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** CTO-WE55 New London, CT **Matrix:** SL
Lab Code: KAS **SDG:** WE55-7

Client Sample ID	Lab Sample ID	2MN	#	FLO	#	PYR	#	Total Out
2W-SD-SD193-0001	SE7795-1	52.8		60.6		61.2		0
2W-SD-SD194-0001	SE7795-2	50.9		62.9		65.2		0
2W-SD-SD195-0001	SE7795-3	51.6		66.0		66.0		0
2W-SD-SD196-0001	SE7795-4	54.5		63.9		63.9		0
2W-SD-SD197-0001	SE7795-5	42.1		53.1		51.1		0
2W-SD-DUP01	SE7795-6	45.3		58.4		62.1		0
Method Blank Sample	WG101469-1	47.4		52.7		62.4		0
Laboratory Control S	WG101469-2	43.0		49.4		62.0		0
Laboratory Control S	WG101469-3	45.7		53.7		65.3		0
Matrix Spike	WG101469-4	60.4		67.1		70.4		0
Matrix Spike Duplica	WG101469-5	44.0		54.0		49.6		0

		QC Limits
2MN	2-METHYLNAPHTHALENE-D10	14-131
FLO	FLUORENE-D10	18-77
PYR	PYRENE-D10	34-131

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : CTO-WE55 New London, CT
Lab ID : WG101670-3
Lab File ID : G4149.D

SDG: WE55-7
Analytical Date: 11/28/11 12:15
Instrument ID: GCMS-G

		1,4-DICHLOROBENZENE-D4			NAPHTHALENE-D8			ACENAPHTHENE-D10		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	42499		8.16		143688		11.10		67591		15.38	
	Upper Limit	84998		8.66		287376		11.60		135182		15.88	
	Lower Limit	21249.5		7.66		71844		10.60		33795.5		14.88	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG101744-1					123791		11.07		58350		15.36	
Method Blank Sample	WG101469-1	35000		8.14		115457		11.08		57023		15.36	
Laboratory Control S	WG101469-2	35261		8.14		115671		11.07		56105		15.35	
Laboratory Control S	WG101469-3	36035		8.14		113224		11.07		55349		15.35	
2W-SD-SD193-0001	SE7795-1	42026		8.14		140333		11.07		67664		15.35	
2W-SD-SD194-0001	SE7795-2	34870		8.14		113134		11.07		56362		15.35	
2W-SD-SD195-0001	SE7795-3	40693		8.14		128402		11.07		64114		15.36	
Matrix Spike	WG101469-4	37536		8.14		128422		11.07		62566		15.36	
Matrix Spike Duplica	WG101469-5	39193		8.14		129599		11.07		65425		15.36	
2W-SD-SD196-0001	SE7795-4	35361		8.14		119702		11.07		58197		15.36	
2W-SD-SD197-0001	SE7795-5	38210		8.14		125364		11.08		61550		15.36	
2W-SD-DUP01	SE7795-6	37073		8.14		131365		11.08		64425		15.36	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : CTO-WE55 New London, CT
Lab ID : WG101670-3
Lab File ID : G4149.D

SDG: WE55-7
Analytical Date: 11/28/11 12:15
Instrument ID: GCMS-G

		PHENANTHRENE-D10		CHRYSENE-D12		PERYLENE-D12	
		Area #	RT #	Area #	RT #	Area #	RT #
	Std .	99082	18.96	51427	25.53	35086	28.84
	Upper Limit	198164	19.46	102854	26.03	70172	29.34
	Lower Limit	49541	18.46	25713.5	25.03	17543	28.34
Client Sample ID	Lab Sample ID						
Continuing Calibrati	WG101744-1	85493	18.95	47394	25.52	34366	28.82
Method Blank Sample	WG101469-1	82548	18.95	49448	25.52	36430	28.82
Laboratory Control S	WG101469-2	76665	18.95	43954	25.51	33391	28.82
Laboratory Control S	WG101469-3	78001	18.93	45806	25.51	35179	28.82
2W-SD-SD193-0001	SE7795-1	98779	18.93	54647	25.52	43961	28.83
2W-SD-SD194-0001	SE7795-2	82264	18.93	46715	25.51	36523	28.82
2W-SD-SD195-0001	SE7795-3	98665	18.93	55255	25.52	46578	28.81
Matrix Spike	WG101469-4	98061	18.95	48380	25.52	36505	28.83
Matrix Spike Duplica	WG101469-5	102230	18.95	60575	25.52	42928	28.83
2W-SD-SD196-0001	SE7795-4	84866	18.95	49159	25.52	36762	28.83
2W-SD-SD197-0001	SE7795-5	92191	18.95	53841	25.52	42920	28.83
2W-SD-DUP01	SE7795-6	96756	18.95	50812	25.52	38452	28.83

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG101469-2
LCSD ID: WG101469-3
Project:
SDG: WE55-7
Report Date: 30-NOV-11

Received Date: 22-NOV-11
Extract Date: 22-NOV-11
Extracted By: EC
Extraction Method: SW846 3550
Lab Prep Batch: WG101469

Analysis Date: 29-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Naphthalene	66.7	36.8	55.2	40.0	60.0	ug/Kgdrywt	8	50	10-129
2-Methylnaphthalene	66.7	36.2	54.3	55.4	83.0	ug/Kgdrywt	42	50	10-152
1-Methylnaphthalene	66.7	21.7	32.5	40.1	60.1	ug/Kgdrywt	60*	50	17-113
Acenaphthylene	66.7	35.9	53.8	181.	271.*	ug/Kgdrywt	134*	50	25-94
Acenaphthene	66.7	35.6	53.4	165.	247.*	ug/Kgdrywt	129*	50	33-98
Fluorene	66.7	36.2	54.3	168.	252.*	ug/Kgdrywt	129*	50	40-92
Phenanthrene	66.7	51.2	76.8	539.	808.*	ug/Kgdrywt	165*	50	46-96
Anthracene	66.7	44.4	66.6	85.8	129.*	ug/Kgdrywt	64*	50	34-96
Fluoranthene	66.7	54.3	81.4	326.	489.*	ug/Kgdrywt	143*	50	38-116
Pyrene	66.7	48.5	72.7	200.	300.*	ug/Kgdrywt	122*	50	35-111
Benzo (a) anthracene	66.7	42.3	63.4	81.6	122.*	ug/Kgdrywt	63*	50	48-100
Chrysene	66.7	45.5	68.2	82.8	124.*	ug/Kgdrywt	58*	50	46-101
Benzo (b) Fluoranthene	66.7	45.2	67.8	66.2	99.2	ug/Kgdrywt	38	50	53-100
Benzo(k)fluoranthene	66.7	37.9	56.8	50.7	76.0	ug/Kgdrywt	29	50	49-96
Benzo(a)pyrene	66.7	40.7	61.0	52.5	78.7	ug/Kgdrywt	25	50	61-101
Indeno (1,2,3-cd) pyrene	66.7	44.9	67.3	54.5	81.7	ug/Kgdrywt	19	50	50-105
Dibenzo (a,h) anthracene	66.7	46.0	69.0	55.4	83.0	ug/Kgdrywt	18	50	55-105
Benzo(g,h,i)perylene	66.7	48.4	72.6	55.5	83.2	ug/Kgdrywt	14	50	53-103
2-Methylnaphthalene-D10			43.0		45.7				14-131
Fluorene-D10			49.4		53.7				18-77
Pyrene-D10			62.0		65.3				34-131

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ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

MS/MSD Recovery Report

MS ID: WG101469-4
MSD ID: WG101469-5
Sample ID: SE7795-3
Client ID: 2W-SD-SD195-0001
Project:
SDG: WE55-7

Received Date: 21-NOV-11
Extract Date: 22-NOV-11
Extracted By: EC
Extraction Method: SW846 3550
Lab Prep Batch: WG101469
Report Date: 30-NOV-11

Analysis Date: 29-NOV-11
Analyst: WAS
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 17.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Naphthalene	389.	389.	ug/Kgdrywt	U57.	240	190	61.2	48.9	22	50	10-129
2-Methylnaphthalene	389.	389.	ug/Kgdrywt	U57.	260	220	66.3	57.6	14	50	10-152
1-Methylnaphthalene	389.	389.	ug/Kgdrywt	U57.	150	120	37.8	31.4	18	50	17-113
Acenaphthylene	389.	389.	ug/Kgdrywt	U57.	250	220	64.5	57.1	12	50	25-94
Acenaphthene	389.	389.	ug/Kgdrywt	J10.	250	220	61.4	55.0	10	50	33-98
Fluorene	389.	389.	ug/Kgdrywt	U57.	270	250	70.5	64.0	10	50	40-92
Phenanthrene	389.	389.	ug/Kgdrywt	250	570	510	82.3	67.9	10	50	46-96
Anthracene	389.	389.	ug/Kgdrywt	J26.	270	240	62.4	55.7	10	50	34-96
Fluoranthene	389.	389.	ug/Kgdrywt	640	1000	900	94.1	64.8	12	50	38-116
Pyrene	389.	389.	ug/Kgdrywt	530	950	700	108.	42.2	31	50	35-111
Benzo (a) anthracene	389.	389.	ug/Kgdrywt	240	550	450	81.0	55.3	20	50	48-100
Chrysene	389.	389.	ug/Kgdrywt	400	750	630	90.0	58.1	18	50	46-101
Benzo (b) Fluoranthene	389.	389.	ug/Kgdrywt	430	930	740	128.*	80.2	22	50	53-100
Benzo(k)fluoranthene	389.	389.	ug/Kgdrywt	330	570	570	60.4	60.9	0	50	49-96
Benzo(a)pyrene	389.	389.	ug/Kgdrywt	280	590	520	78.7	61.7	12	50	61-101
Indeno (1,2,3-cd) pyrene	389.	389.	ug/Kgdrywt	280	590	500	80.0	56.6	17	50	50-105
Dibenzo (a,h) anthracene	389.	389.	ug/Kgdrywt	J76.	400	360	83.8	71.7	12	50	55-105
Benzo(g,h,i)perylene	389.	389.	ug/Kgdrywt	310	640	550	85.6	63.3	14	50	53-103
2-Methylnaphthalene-D10							60.4	44.0			14-131
Fluorene-D10							67.1	54.0			18-77
Pyrene-D10							70.4	49.6			34-131

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KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-G

DATE OF DFTPP INJECTION: 11 28 11

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
	50ng DFTPP	GD939	1	1	DFTPP5M	2.0	JCh	VK
WG101670	55 ID 1.00 G1128	G4149		2	G5P5M26			✓
	8.00	50		3				✓
	5.00	51		4				✓
	2.00	52		5				✓ not used
	0.50	53		6				✓
	0.20	54		7				✓
	SIM IND CHK	55		8				nc
3550	WG99775-1	56		9				dl WG101687-1
	5ZL841-90L	57	2	10				dl 100/200
	-180L	58	2	11				dl ↓
	-13	59	1	12				dl
	-14	60		13				dl
	-15	61		14				dl
	-16	62		15				dl
	-17	63		16				dl
	-19	64		17				dl 2324

STANDARD	CODE
DFTPP	52053
CAL. STD.	52028 52049
IS MIX	52051

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-G

DATE OF DFTPP INJECTION: 1/29/11 6:26

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG-101744	50ng DFTPP	G0540	1	1	DFTPPsim	2.0	EMB	ok
	SSTD 1-ODG-1129	G4165		2	Gspsim26			ok
3560	WG101469-1	66		3				contamination
	-2	67		4				ok
	-3	68		5				trace, contaminated
	SE7795-1	69		6				ok
	-2	70		7				ok
	-3	71		8				ok
	WG101469-4	72		9				ok
	-5	73		10				ok
	SE7795-4	74		11				ok
	-5	75		12				ok
	-6	76		13				ok
3510	WG101046-1	77		14				No sim surr
	-2	78		15				ok
	-3	79		16				ok
3550	SE6620-30L	80	2	17				ok 1749

STANDARD	CODE
DFTPP	S2053
CAL. STD.	S2051 S2049
IS MIX	S2051

WS 1-29-11

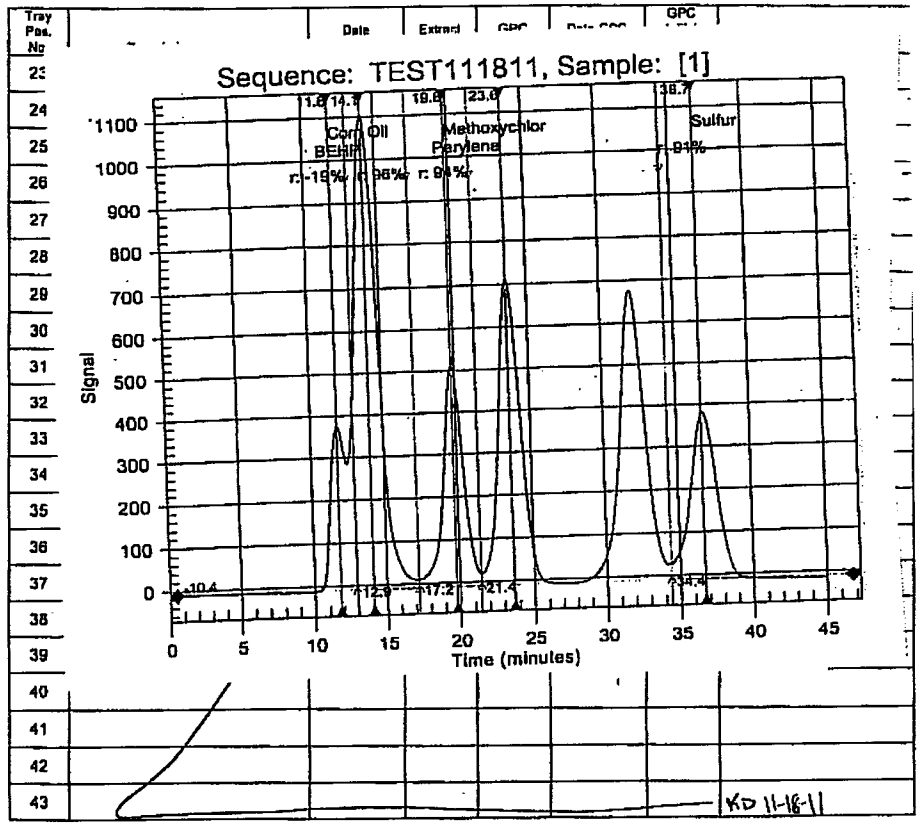
REVIEWED AND APPROVED BY: _____
DATE: _____

Katahdin Analytical Services
GPC Logbook

Analytical Method: (check one)	SW846 8081	SW846 8082		SW846 8270 ✓	
MeCl2 Lot #: DF 199	Filter Lot #: TO408110813	Room Temperature (beginning):	29.0°C 25.9	Room Temperature (ending):	28.1°C
Flow Rate: 5.0	Flow Rate Set at: 4.7	GPC Dump Time:	17.0	GPC Collect Time:	21.0

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
1	Calib Soln	—	—	KD	11-8-11	5mL	
2							
3	Calib STD 4077						
4	Restek Calib Std						
5	Lot# A0 80814						
6	Cat# 32041						
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							KD 11-8-11
22							

Katahdin Analytical Services
GPC Logbook



P/P Dump: 21.4
Collect: 13.0

Si Dump: 17.2
Collect: 21.0

Katahdin Analytical Services 1000224

SDN

KATAHDIN ANALYTICAL SERVICES, INC.

ORGANIC EXTRACTIONS LOG - SOIL SEMIVOLATILE

Extraction Method: (check one)	SW846 3550 (SONIC.) ✓	SW846 3540 (SOX)	SW846 3545 (ASE)
	SW846 3580 (OIL / WIPES)	OTHER	
Analytical Method: (check one)	SW846 8270 ✓	OTHER .	
Standards	Surrogate ID (1): SV: SV2521	Spike ID (1): SV1 SV2519	Spike ID (3):
	Surrogate ID (2): SIM: SV2520	Spike ID (2): SIM: SV2515	
Solvents / Chemicals / Consumables	Solvent Lot # (MeCl2): DF199	Solvent Lot # (Acetone): DE911	Sodium Sulfate (granular) Lot #
	Filter Paper Lot # (SON) FC003540	Filter Paper Lot # (KD)	Sodium Sulfate (powder) Lot # 27971004
Misc.	Nitrogen Bath Temperature:	Sonicator Horns Tuned: <20%	Balance ID: Mettler PJ400
Extraction Start Time: 0955		Extraction End Time: 1320	

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction ACID	Fraction BN	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc.	Comments
11-22-11	EC	WG 1014687-1 WG1014691-1	30.03	1mL ea	NR	✓	✓	11-23-11	WS	5mL	11-28-11	EC	1mL	SV12 A5	SV: R179769
		WG 1014687-2	30.02	1mL	1mL						11-29-11	EC	1mL	PP1025 B10	SIM: R179771
		-3	30.02											E7	
		-4	30.03											E8	MS: SE7702-1W
		-5	30.00											E9	MSD:
		WG 1014691-2	30.01				✓				11-28-11	EC	1mL	A10	
		-3	30.00											B1	
		-4	30.01											B2	MS: SE7795-3
		-5	30.04											B3	MSD:
		GPC BLANK									11-28-11	EC	1mL	D10	

EX-008 – Revision 2 – 07/14/2011 GPC BLANK QAEX205 11-29-11 EC 1mL PP1025 E10 0000189

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction ACID	Fraction BN	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc. PP1025	Comments
11-22-11	EC	SE7702-1W	30.04	1mL	NR	✓		11-23-11	WS	5mL	11-29-11	EC	1mL	~~B4~~ E1	
		-3 H	30.03											~~B5~~ E2	
		-5 H	30.01											~~B6~~ E3	
		SE7716-4 F	30.04											~~B7~~ E4	
		-5 F	30.19											~~B8~~ E5	
		SE7772-1 F	31.66											~~B9~~ E6	
		-2 F	30.14											~~B10~~ E7	
		-3 A	30.23											E8	
		-4 A	30.20											E9	
		-5 F	31.11											E10	
		-9 A	30.80											~~E11~~ F1	
		-10 A	30.12											F2	
		-11 A	30.51											F3	
		-12 A	30.73											F4	
		-13 A	30.24											F5	PP1026
		-14 A	30.03											F6	
		-16 F	30.38											F7	
		-18 F	30.05											F8	
		-19 F	30.10											F9	
		-20 F	30.03											F10	
		SE7795-1 A	30.00				✓				11-29-11			F11	
		-2 A	31.48				✓							F12	
		-3 A	30.70				✓							G1	
		-4 A	31.20				✓							G2	
		-5 A	30.79				✓							G3	
		-6 A	30.63				✓							G4	

Reviewed By: Date:

Katahdin Analytical Services
GPC Logbook

Analytical Method: (check one)	SW846 8081	SW846 8082		SW846 8270	
MeCl2 Lot #: DF199	Filter Lot #: T040811033	Room Temperature (beginning):	25.7	Room Temperature (ending):	
Flow Rate: 5.0	Flow Rate Set at: 4.7	GPC Dump Time:	17.2	GPC Collect Time:	21.0

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
1	GPC Blank	—	—	EC	11-23-11	5	
2	WG 101469-1 WG 10469-1	11-22-11	6				
3	WG101469-2	↓					
4	↓ -3						
5	WG 101533-1	11-23-11					
6	↓ -2	↓					
7	↓ -3	↓					
8	SE 7795-6	11-22-11					
9	↓ -1	↓					
10	-2						
11	-3						
12	-4						
13	↓ -5	↓					
14	WG 101469-4						
15	↓ -5	↓					
16	SE 7824-1	11-23-11	↓				
17	RINSE	—	—	↓	↓	↓	
18							
19							
20							
21							
22							EC 11-23-11

Katahdin Analytical Services
GPC Logbook

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							EC 11-23-11

Katahdin Analytical Services 1000226

Fluoranthene

Sample	Dilution	Percent Moisture	Percent Solids	Concentration in Blank (ug/kg)	Blank Action Level (ug/kg)
2W-SD-DUP01	1	84.7	15.3	7	229
2W-SD-SD193-0001	1	80.1	19.9	7	176
2W-SD-SD194-0001	1	81.4	18.6	7	188
2W-SD-SD195-0001	1	82.9	17.1	7	205
2W-SD-SD196-0001	1	79.3	20.7	7	169
2W-SD-SD197-0001	1	81.7	18.3	7	191

Pyrene/Benzo(a)anthracene

Sample	Dilution	Percent Moisture	Percent Solids	Concentration in Blank (ug/kg)	Blank Action Level (ug/kg)
2W-SD-DUP01	1	84.7	15.3	5.6	183
2W-SD-SD193-0001	1	80.1	19.9	5.6	141
2W-SD-SD194-0001	1	81.4	18.6	5.6	151
2W-SD-SD195-0001	1	82.9	17.1	5.6	164
2W-SD-SD196-0001	1	79.3	20.7	5.6	135
2W-SD-SD197-0001	1	81.7	18.3	5.6	153

Benzo(b)fluoranthene

Sample	Dilution	Percent Moisture	Percent Solids	Concentration in Blank (ug/kg)	Blank Action Level (ug/kg)
2W-SD-DUP01	1	84.7	15.3	6.4	209
2W-SD-SD193-0001	1	80.1	19.9	6.4	161
2W-SD-SD194-0001	1	81.4	18.6	6.4	172
2W-SD-SD195-0001	1	82.9	17.1	6.4	187
2W-SD-SD196-0001	1	79.3	20.7	6.4	155
2W-SD-SD197-0001	1	81.7	18.3	6.4	175

Benzo(a)pyrene

Sample	Dilution	Percent Moisture	Percent Solids	Concentration in Blank (ug/kg)	Blank Action Level (ug/kg)
2W-SD-DUP01	1	84.7	15.3	5.8	190
2W-SD-SD193-0001	1	80.1	19.9	5.8	146
2W-SD-SD194-0001	1	81.4	18.6	5.8	156
2W-SD-SD195-0001	1	82.9	17.1	5.8	170
2W-SD-SD196-0001	1	79.3	20.7	5.8	140
2W-SD-SD197-0001	1	81.7	18.3	5.8	158

Indeno(1,2,3-cd)pyrene

Sample	Dilution	Percent Moisture	Percent Solids	Concentration in Blank (ug/kg)	Blank Action Level (ug/kg)
2W-SD-DUP01	1	84.7	15.3	4.8	157
2W-SD-SD193-0001	1	80.1	19.9	4.8	121
2W-SD-SD194-0001	1	81.4	18.6	4.8	129
2W-SD-SD195-0001	1	82.9	17.1	4.8	140
2W-SD-SD196-0001	1	79.3	20.7	4.8	116
2W-SD-SD197-0001	1	81.7	18.3	4.8	131

Dibenzo(a,h)anthracene

Sample	Dilution	Percent Moisture	Percent Solids	Concentration in Blank (ug/kg)	Blank Action Level (ug/kg)
2W-SD-DUP01	1	84.7	15.3	1.9	62
2W-SD-SD193-0001	1	80.1	19.9	1.9	48
2W-SD-SD194-0001	1	81.4	18.6	1.9	51
2W-SD-SD195-0001	1	82.9	17.1	1.9	56
2W-SD-SD196-0001	1	79.3	20.7	1.9	46
2W-SD-SD197-0001	1	81.7	18.3	1.9	52

Benzo(g,h,i)perylene

Sample	Dilution	Percent Moisture	Percent Solids	Concentration in Blank (ug/kg)	Blank Action Level (ug/kg)
2W-SD-DUP01	1	84.7	15.3	2.9	95
2W-SD-SD193-0001	1	80.1	19.9	2.9	73
2W-SD-SD194-0001	1	81.4	18.6	2.9	78
2W-SD-SD195-0001	1	82.9	17.1	2.9	85
2W-SD-SD196-0001	1	79.3	20.7	2.9	70
2W-SD-SD197-0001	1	81.7	18.3	2.9	79

Field Duplicate Calculations

Parameter	2W-SD-DUP01		2W-SD-SD190-0001		RPD	
1-METHYLNAPHTHALENE	64	U	70	U	8.96	
2-METHYLNAPHTHALENE	64	U	70	U	8.96	
ACENAPHTHENE	14	J	28	J	66.67	ok
ACENAPHTHYLENE	64	U	36	J	56.00	ok
ANTHRACENE	35	J	55	J	44.44	
BENZO(A)ANTHRACENE	630		640		1.57	
BENZO(A)PYRENE	750		880		15.95	
BENZO(B)FLUORANTHENE	1200		1500		22.22	
BENZO(G,H,I)PERYLENE	750		780		3.92	
BENZO(K)FLUORANTHENE	800		880		9.52	
CHRYSENE	840		840		0.00	
DIBENZO(A,H)ANTHRACENE	200		210		4.88	
FLUORANTHENE	1400		1400		0.00	
FLUORENE	64	U	37	J	53.47	ok
INDENO(1,2,3-CD)PYRENE	670		740		9.93	
NAPHTHALENE	64	U	70	U	8.96	
PHENANTHRENE	310		340		9.23	
PYRENE	1200		1700		34.48	

ok: result < RL

D < 4 × RL

APPENDIX E

ANALYTICAL RESULTS

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WTB2	2WTB2	2WTB4	2WTB6	2WTB7	2WTB7	2WTB8	2WCSD4	2WCSD5	2WCSD6	2WCSD7	2WCSD8	2WCSD9	2WCSD10	2WCSD11	2WCSD12	2WCSD13	2WCSD14	2WCSD14
SAMPLE ID	090690-2WTB2(0-2)	090690-2WTB2(0-2)-D	090690-2WTB4(0-2)	090690-2WTB6(0-2)	090590-2WTB7(0-2)	090590-2WTB7(0-2)-D	083090-2WTB8(1-3)	2WCSD4	2WCSD5	2WCSD6	2WCSD7	2WCSD8	2WCSD9	2WCSD10	2WCSD11	2WCSD12	2WCSD13	2WCSD14	2WCSD14-D
SAMPLE DATE	9/6/1990	9/6/1990	9/6/1990	9/6/1990	9/5/1990	9/5/1990	8/30/1990	12/20/1993	12/20/1993	12/21/1993	12/20/1993	12/21/1993	12/21/1993	1/6/1994	12/20/1993	12/21/1993	12/21/1993	12/21/1993	12/21/1993
SAMPLE DEPTH (FEET)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	1 - 3	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
VOLATILES (UG/KG)																			
1,1,1-TRICHLOROETHANE	10 U	9 U	8 U	11 U	9 U	8 U	10 U	18 U	13 J	--	11 U	--	--	--	12 U	--	--	--	--
2-BUTANONE	20 U	18 U	16 U	87	19 U	5 J	310	18 U	19 U	--	11 U	--	--	--	12 U	--	--	--	--
ACETONE	20 U	18 U	16 U	540	19 U	37	850	18 UJ	19 UJ	--	11 U	--	--	--	12 UJ	--	--	--	--
CARBON DISULFIDE	10 U	9 U	8 U	6 J	9 U	8 U	8 J	18 U	19 U	--	11 U	--	--	--	12 U	--	--	--	--
METHYLENE CHLORIDE	10 U	9 U	8 U	11 U	9 U	8 U	4 J	22	10 J	--	11	--	--	--	12 J	--	--	--	--
TETRACHLOROETHENE	10 U	9 U	8 U	11 U	9 U	8 U	7 J	18 U	8 J	--	11 U	--	--	--	12 U	--	--	--	--
TOLUENE	10 U	9 U	8 U	11 U	9 U	8 U	10 U	18 U	4 J	--	11 U	--	--	--	12 U	--	--	--	--
TRICHLOROETHENE	10 U	9 U	4 J	11 U	9 U	8 U	10 U	18 U	22	--	11 U	--	--	--	12 U	--	--	--	--
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)																			
1-METHYLNAPHTHALENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	2600 U	590 U	530 U	720 U	620 U	530 U	670 U	31 J	630 U	700 U	350 U	530 U	430 U	510 U	410 U	560 U	600 U	660 U	600 U
ACENAPHTHENE	2600 U	590 U	530 U	720 U	620 U	530 U	670 U	38 J	630 U	700 U	43 J	530 U	430 U	510 U	410 U	560 U	600 U	70 J	60 J
ACENAPHTHYLENE	2600 U	590 U	77 J	720 U	620 U	530 U	120 J	90 J	630 U	700 U	350 U	530 U	430 U	510 U	410 U	560 U	600 U	74 J	65 J
ANTHRACENE	2600 U	590 U	52 J	720 U	620 U	530 U	79 J	160 J	630 U	65 J	190	530 U	430 U	510 U	410 UJ	560 U	600 U	290 J	290 J
BENZO(A)ANTHRACENE	400 J	590 U	220 J	200 J	620 U	530 U	370 J	2700 J	250 J	250 J	900	63 J	70 J	180 J	410 UJ	95 J	120 J	1800	1900
BENZO(A)PYRENE	2600 U	590 U	230 J	190 J	620 U	530 U	390 J	2400 J	210 J	700 U	800	78 J	73 J	140 J	410 UJ	110 J	130 J	2700	2500
BENZO(B)FLUORANTHENE	2600 U	590 U	220 J	210 J	620 U	530 U	550 J	2500 J	220 J	320 J	990	150 J	160 J	350 J	410 UJ	220 J	140 J	4800	4400
BENZO(G,H,I)PERYLENE	2600 U	590 U	530 U	720 U	620 U	530 U	670 U	760 J	54 J	240 J	260	47 J	47 J	510 U	410 UJ	59 J	100 J	1700	2400
BENZO(K)FLUORANTHENE	2600 U	590 U	310 J	250 J	620 U	530 U	390 J	2100 J	240 J	290 J	620	530 U	430 U	510 U	410 UJ	560 U	120 J	2100	1800
BENZOIC ACID	13000 U	2900 U	160 J	130 J	3000 U	220 J	3300 U	190 J	110 J	700 U	150 J	530 U	430 U	61 J	77 J	93 J	600 U	190 J	600 U
BIS(2-ETHYLHEXYL)PHTHALATE	2600 U	590 U	280 J	350 J	620 U	220 J	1300	710 U	630 U	700 U	350 U	530 U	430 U	530 U	1100 J	560 U	600 U	780 U	600 U
BUTYL BENZYL PHTHALATE	2600 U	590 U	530 U	720 U	620 U	530 U	670 U	600 UJ	630 U	700 U	350 U	530 U	430 U	510 U	410 UJ	560 U	600 U	52 J	600 U
CARBAZOLE	--	--	--	--	--	--	--	50 J	630 U	700 U	230	530 U	430 U	510 U	410 UJ	560 U	600 U	660	630
CHRYSENE	2600 U	590 U	320 J	250 J	620 U	530 U	600 J	3300 J	420 J	430 J	1100	110 J	130 J	660	410 UJ	190 J	160 J	3200	2900
DIBENZO(A,H)ANTHRACENE	2600 U	590 U	530 U	720 U	620 U	530 U	670 U	160 J	630 U	700 U	52	530 U	430 U	510 U	410 UJ	560 U	600 U	790	870
DIBENZOFURAN	2600 U	590 U	530 U	720 U	620 U	530 U	670 U	600 U	630 U	700 U	45	530 U	430 U	510 U	410 U	560 U	600 U	87 J	82 J
DI-N-BUTYL PHTHALATE	2600 U	590 U	530 U	720 U	620 U	530 U	670 U	600 U	630 U	700 U	350 U	530 U	430 U	510 U	180 J	560 U	600 U	660 U	600 U
DI-N-OCTYL PHTHALATE	2600 U	590 U	530 U	720 U	620 U	530 U	670 U	72 J	630 U	700 U	350 U	530 U	430 U	510 U	26 J	560 U	600 U	660 U	600 U
FLUORANTHENE	460 J	590 U	310 J	300 J	72 J	53 J	600 J	2800	470 J	330 J	1600	120 J	100 J	180 J	410 UJ	190 J	170 J	4600	5200
FLUORENE	2600 U	590 U	530 U	720 U	620 U	530 U	670 U	80 J	630 U	700 U	76	530 U	430 U	510 U	410 U	560 U	600 U	110 J	110 J
INDENO(1,2,3-CD)PYRENE	2600 U	590 U	530 U	720 U	620 U	530 U	270 J	1200 J	98 J	200 J	480	51 J	49 J	86 J	410 UJ	71 J	99 J	2200	2400
NAPHTHALENE	2600 U	590 U	530 U	720 U	620 U	530 U	670 U	87 J	160 J	700 U	36 J	530 U	430 U	510 U	410 U	560 U	600 U	660 U	600 U
PHENANTHRENE	2600 U	590 U	270 J	160 J	620 U	530 U	340 J	720	250 J	210 J	1300	77 J	430 U	110 J	230 J	120 J	600 U	2300	2300
PHENOL	2600 U	590 U	530 U	720 U	620 U	530 U	670 U	600 U	630 U	700 U	350 U	530 U	430 U	510 U	32 J	560 U	600 U	660 U	600 U
PYRENE	380 J	590 U	460 J	270 J	98 J	530 U	570 J	5200	610 J	530 J	2500	150 J	120 J	270 J	410 UJ	210 J	270 J	4600	4000
TOTAL PAHS	1240	0 U	2469	1830	170	53	4279	24326	2982	2865	10947	846	749	1976	230	1265	1309	31334	31195
PESTICIDES/PCBS (UG/KG)																			
4,4'-DDD	31 U	29 U	26 UJ	69 J	30 U	26 U	33 U	6.5 J	63 UJ	--	35 UJ	--	--	--	41 UJ	--	--	--	--
4,4'-DDE	31 U	29 U	32 UJ	35 UJ	30 U	26 U	33 U	60 UJ	63 UJ	--	35 UJ	--	--	--	41 UJ	--	--	--	--
4,4'-DDT	31 U	29 U	26 UJ	35 UR	30 U	26 U	33 U	60 J	10 J	--	35 UJ	--	--	--	41 UJ	--	--	--	--
ALPHA-CHLORDANE	160 U	140 U	130 UJ	170 UJ	150 U	130 U	160 U	31 UJ	6.4 J	--	18 UJ	--	--	--	21 UJ	--	--	--	--
AROCLOR-1260	370 J	290 UJ	260 UJ	350 UJ	300 U	260 U	330 U	600 UJ	630 UJ	--	350 UJ	--	--	--	410 UJ	--	--	--	--
ENDOSULFAN SULFATE	31 U	29 U	26 UJ	35 UJ	30 U	26 U	33 U	60 UJ	7.6 J	--	35 UJ	--	--	--	41 UJ	--	--	--	--
ENDRIN	31 U	29 U	26 UJ	35 UJ	30 U	26 U	33 U	15 J	18 J	--	35 UJ	--	--	--	10 J	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--	59 J	140 J	--	35 UJ	--	--	--	41 UJ	--	--	--	--
GAMMA-BHC (LINDANE)	16 U	14 U	13 UJ	17 UJ	15 U	13 U	16 U	31 UJ	33 UJ	--	18 UJ	--	--	--	21 UJ	--	--	--	--
GAMMA-CHLORDANE	160 U	140 U	130 UJ	170 UJ	150 U	130 U	160 U	31 UJ	7 J	--	18 UJ	--	--	--	21 UJ	--	--	--	--
METHOXYCHLOR	160 U	140 U	130 UJ	170 UJ	150 U	130 U	160 U	310 UJ	37 J	--	180 UJ	--	--	--	210 UJ	--	--	--	--
TOTAL AROCLOR	370	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	--	0 U	--	--	--	0 U	--	--	--	--
TOTAL CHLORDANE	0 U	0 U	0 U	0 U	0 U	0 U	0 U	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL DDT	0 U	0 U	0 U	69	0 U	0 U	0 U	66.5	10	--	0 U	--	--	--	0 U	--	--	--	--

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WTB2	2WTB2	2WTB4	2WTB6	2WTB7	2WTB7	2WTB8	2WCSD4	2WCSD5	2WCSD6	2WCSD7	2WCSD8	2WCSD9	2WCSD10	2WCSD11	2WCSD12	2WCSD13	2WCSD14	2WCSD14
SAMPLE ID	090690-2WTB2(0-2)	090690-2WTB2(0-2)-D	090690-2WTB4(0-2)	090690-2WTB6(0-2)	090590-2WTB7(0-2)	090590-2WTB7(0-2)-D	083090-2WTB8(1-3)	2WCSD4	2WCSD5	2WCSD6	2WCSD7	2WCSD8	2WCSD9	2WCSD10	2WCSD11	2WCSD12	2WCSD13	2WCSD14	2WCSD14-D
SAMPLE DATE	9/6/1990	9/6/1990	9/6/1990	9/6/1990	9/5/1990	9/5/1990	8/30/1990	12/20/1993	12/20/1993	12/21/1993	12/20/1993	12/21/1993	12/21/1993	1/6/1994	12/20/1993	12/21/1993	12/21/1993	12/21/1993	12/21/1993
SAMPLE DEPTH (FEET)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	1 - 3	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
METALS (MG/KG)																			
ALUMINUM	14100 J	14500 J	15300 J	16800 J	13900 J	15900 J	17900 J	15900	10600	16900	3510	12600	4550	12200	2560	13700	12200	26400	18500
ANTIMONY	2.8 U	2.7 U	2.4 U	3.2 U	3 U	3 U	3.4 U	5.9 U	5.1 U	6.4 U	3.2 U	4.9 U	3.9 U	7.8 J	3.7 U	9.4 U	14.6 U	17.4 U	18.4 U
ARSENIC	6.7 J	8.1 J	8.7	8.4	7.2 J	6.9 J	6.8 J	6.9	5.6	13.5	1.2	6.7	1.6	6.2 J	1.4	8.4	11.4	11.5	9
BARIUM	52.1	47.7	61.3	60.7	49.3	45.1	93.8	81.1	94.1	71.2	17	73.2	56.5	78.8 J	17.9	72.9	50	103	83.4
BERYLLIUM	1.8 J	1.7 J	0.3 U	0.73 J	1.5 J	1.8 J	1.8 J	1.5 U	1.5 U	1 U	0.55 U	1.2 U	0.63 U	0.53 J	0.57 U	1.2 U	1.3 U	2.3 U	1.7 U
BORON	1600 R	2200 R	672 R	563 R	170 R	1300 R	330 R	39.7	27.8 J	34.9 J	11 J	29.3 J	12.9 U	15.9 U	12.3 U	30.2 J	26.3 J	37.5 J	26.8 J
CADMIUM	6.9	7.2	0.29 U	1.9 J	4.5	6.7	6.7 J	1.1 J	29.5	0.85 U	0.43 U	0.63 U	0.51 U	0.64 U	0.49 U	0.73 U	0.74 U	0.8 U	0.72 U
CALCIUM	3300 J	3690 J	1250	1660	1590 J	1530 J	2360	2340 J	3290 J	1920 J	922 J	2150 J	1440 J	1660 J	680 J	1800 J	1230 J	3250 J	2900 J
CHROMIUM	41.2	39.9	89	101	72.7	41	102	66.3	27.8	97.5	5.7 U	45.4	8	41.4	11.4	50.5	53.1	36.1	27.6
COBALT	11.1	10.8	8.5	9.4	7.6	12.7	9.2	5.6	14.4	6.2	2.2	5.6	2.2	7.1 J	2.3	5.3	4.8	13.4	9.3
COPPER	20.2	17.1	47.6 J	64.1 J	35.4	39.1	55	39.4	57.2	52.8	4.6 U	23.6	6.1 U	16.8 J	5 U	23.4	29.5	37.7	28.7
CYANIDE	2.2 U	2.2 U	1.9 U	2.8 U	2.4 U	2.4 U	2.7 U	--	--	--	--	--	--	--	--	--	--	--	--
IRON	27200	27600	30800	27100	20200	23100	27900	32700	23700	31100	6940	31200	6920	23800	6430	24600	24600	40700	29000
LEAD	11.2 J	11.2	128 J	44 J	49.5 J	12.7 J	83.7	49.9	204	69.6	3.5	22.6	6.7	28	7.9	27.1	30.9	127	84.6
MAGNESIUM	7230	7630	6130	6540	6580	6950	7840	5540	4310	6140	1160	4860	2630	4720	1490	5080	5020	5310	4710
MANGANESE	306	376	188 J	202 J	189	265	233	220	2640	196	101	483	79.8	153	150	168	160	1480	954
MERCURY	0.18 U	0.17 U	0.69 J	0.23 U	0.38	0.21	0.67 J	0.38	0.18	0.6	0.11 U	0.18	0.14	0.27 J	0.12 U	0.29	0.42	0.2 U	0.18 U
NICKEL	25.9	26.8	16.7	20.2	16.8	26.2	26.9	18.5	31.5	21.5	3.3 J	13.8	4.7 J	13.1 J	5.6	15.5	14	25.8	18.7
POTASSIUM	3530	3800	4320	3680	2680	3520	4040 J	3580	2060	4020	870 U	2640	2150	2350 J	822 U	3090	4020	3170	3050
SELENIUM	0.71 U	0.7 U	1.2	1.5	0.79 U	0.78 U	0.93 J	1 U	0.75 U	0.98 U	0.43 UJ	0.66 U	0.51 UJ	0.67 J	0.49 UJ	0.73 UJ	0.96 U	1.2 U	0.97 U
SILVER	2.8 U	3.5	2.4 U	3.2 U	3 U	3 U	4.5	0.79 UJ	1.1 U	0.85 UJ	0.43 UJ	0.63 UJ	0.51 UJ	0.64 U	0.49 UJ	0.73 UJ	0.74 UJ	0.8 UJ	0.72 UJ
SODIUM	2040 J	1980 J	232 J	1570 J	1310 J	1430 J	3150	580	156 U	1120	36 U	163 U	69.3 U	356 J	28.4 U	209 U	273 U	169 U	162 U
THALLIUM	1.4 U	1.4 U	0.86 U	1.2 U	1.6 U	1.6 U	1.6 U	0.39 U	0.34 J	0.42 U	0.21 U	0.31 U	0.26 U	0.96 U	0.25 U	0.37 U	0.37 U	0.4 U	0.36 J
VANADIUM	57.9 J	56.7 J	50.5 J	52 J	56.9 J	60.6 J	75 J	44.5	56.7	54.9	12.8	33.4	17.5	47.1	8	41.5	37.2	62.2	45.3
ZINC	75.5 J	66.4 J	60.8 J	74.9 J	59.5 J	79.8 J	62.9 J	61.9	292	54.9	10.3 U	82.2	17.3	40.5 J	50.4	43.4	40.5	173	134
MISCELLANEOUS PARAMETERS																			
PERCENT COARSE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINES (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT GRAVEL (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT MEDIUM SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL SOLIDS (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL ORGANIC CARBON (MG/KG)	--	--	--	--	--	--	--	--	16000	--	--	--	--	--	510	--	--	--	--
PH (S.U.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
J = Estimated concentration
R = Rejected
U = Non-detect
UJ = Non-detect estimated
UR = Non-detect rejected
-- = Not analyzed

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WCSD15	2WMW2S	2WMW5S	2WMW5S	2WMW39DS	2WMW45DS	2WSD1	2WSD1	2WSD2	2WSD3	2WSD4	2WSD5	2WSD6
SAMPLE ID	2WCSD15	082390-2WMW2(0-2)	090490-2WMW5(0-2)	090490-2WMW5(0-2)-D	2W-SU-39DS-00-99	2W-SU-45DS-00-99	112690-2WSD1(0-0.5)	112690-2WSD1(0-0.5)-D	112690-2WSD2(0-0.5)	112690-2WSD3(0-0.5)	112690-2WSD4(0-0.5)	112690-2WSD5(0-0.5)	112690-2WSD6(0-0.5)
SAMPLE DATE	12/21/1993	8/23/1990	9/4/1990	9/4/1990	5/18/1999	5/16/1999	11/26/1990	11/26/1990	11/26/1990	11/26/1990	11/26/1990	11/26/1990	11/26/1990
SAMPLE DEPTH (FEET)	0 - 1	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5
VOLATILES (UG/KG)													
1,1,1-TRICHLOROETHANE	--	5 U	8 UJ	8 U	13 U	23 U	11 U	11 U	10 U	54 U	10 U	5 U	43 U
2-BUTANONE	--	11 U	17 UJ	17 U	13 U	23 U	140 J	42 J	100	110 U	20 U	11 U	86 U
ACETONE	--	11 U	17 UJ	17 U	25	160	210	300	130	230	20 U	11 U	240
CARBON DISULFIDE	--	5 U	8 UJ	8 U	13 U	23 U	11	17	16	18 J	10 U	5 U	9 J
METHYLENE CHLORIDE	--	5 U	8 UJ	8 U	3	6	11 U	11 U	10 U	54 U	10 J	3 J	10 J
TETRACHLOROETHENE	--	5 U	3 UJ	8 U	13 U	23 U	11 U	11 U	10 U	54 U	16 J	4 J	10 J
TOLUENE	--	5 U	8 UJ	4 U	13 U	23 U	11 U	11 U	10 U	54 U	10 U	5 U	43 U
TRICHLOROETHENE	--	5 U	8 UJ	8 U	13 U	23 U	11 U	11 U	10 U	54 U	11 J	3 J	43 U
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)													
1-METHYLNAPHTHALENE	--	--	--	--	43 U	61 U	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	690 U	350 U	550 U	560 U	43 U	61 U	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
ACENAPHTHENE	690 U	350 U	550 U	560 U	270	61 U	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
ACENAPHTHYLENE	690 U	350 U	550 U	59 J	88 U	120 U	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
ANTHRACENE	51 J	350 U	550 U	560 U	6.5 U	9.3 U	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
BENZO(A)ANTHRACENE	160 J	83 J	160 J	140 J	260	30	670 J	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
BENZO(A)PYRENE	690 U	81 J	550 U	560 U	310	52	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
BENZO(B)FLUORANTHENE	350 J	74 J	180 J	260 J	420	120	380 J	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
BENZO(G,H,I)PERYLENE	170 J	350 U	550 U	560 U	260	49	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
BENZO(K)FLUORANTHENE	690 U	71 J	120 J	180 J	180	9.3 U	480 J	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
BENZOIC ACID	690 U	1700 U	2700 U	2700 U	--	--	17000 U	18000 U	16000 U	17000 U	16000 U	8700 U	14000 U
BIS(2-ETHYLHEXYL)PHTHALATE	690 U	350 U	790	590	51.4 J	290 U	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
BUTYL BENZYL PHTHALATE	690 U	350 U	550 U	560 U	190 U	290 U	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
CARBAZOLE	690 U	--	--	--	190 U	290 U	--	--	--	--	--	--	--
CHRYSENE	250 J	110 J	230 J	330 J	290	9.3 U	630 J	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
DIBENZO(A,H)ANTHRACENE	690 U	350 U	550 U	560 U	32	15 U	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
DIBENZOFURAN	690 U	350 U	550 U	560 U	190 U	290 U	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
DI-N-BUTYL PHTHALATE	690 U	350 U	550 U	560 U	190 U	290 U	3500 U	3700 U	6100 U	3600 U	3400 U	1800 U	2800 U
DI-N-OCTYL PHTHALATE	690 U	350 U	550 U	560 U	190 U	290 U	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
FLUORANTHENE	270 J	160 J	180 J	240 J	890	83	970 J	3700 U	3400 U	390 J	410 J	1800 U	2800 U
FLUORENE	690 U	350 U	550 U	560 U	8.8 U	12 U	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
INDENO(1,2,3-CD)PYRENE	160 J	350 U	550 U	560 U	140	9.3 U	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
NAPHTHALENE	690 U	350 U	550 U	560 U	43 U	61 U	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
PHENANTHRENE	140 J	120 J	130 J	160 J	300	9.3 U	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
PHENOL	690 U	350 U	550 U	560 U	190 U	290 U	3500 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U
PYRENE	370 J	150 J	320 J	330 J	810	120	1300 J	3700 U	3400 U	670 J	460 J	1800 U	470 J
TOTAL PAHS	1921	849	1320	1699	4162	454	4430	0 U	0 U	1060	870	0 U	470
PESTICIDES/PCBS (UG/KG)													
4,4'-DDD	--	17 U	27 U	27 U	40	40	140 J	--	33 UJ	35 UJ	33 UJ	17 UJ	28 UJ
4,4'-DDE	--	17 U	27 U	27 U	5.2	10	36 J	--	40 J	35 UJ	33 UJ	17 UJ	28 UJ
4,4'-DDT	--	17 U	27 U	27 U	28	5.8 U	34 UJ	--	33 UJ	57 J	33 UJ	17 UJ	28 UJ
ALPHA-CHLORDANE	--	85 U	130 U	140 U	3	2.9 U	170 UJ	--	160 UJ	170 UJ	160 UJ	87 UJ	140 UJ
AROCLOR-1260	--	170 U	270 U	270 U	110	58 U	340 UJ	--	330 UJ	350 UJ	330 UJ	170 UJ	280 UJ
ENDOSULFAN SULFATE	--	17 U	27 U	27 U	3.8 U	5.8 U	34 UJ	--	33 UJ	35 UJ	33 UJ	17 UJ	28 UJ
ENDRIN	--	17 U	27 U	27 U	3.8 U	5.8 U	34 UJ	--	33 UJ	35 UJ	33 UJ	17 UJ	28 UJ
ENDRIN ALDEHYDE	--	--	--	--	3.8 U	5.8 U	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	8.5 U	13 U	14 U	1.9 U	2.9 U	17 UJ	--	16 UJ	17 UJ	16 UJ	8.7 UJ	14 UJ
GAMMA-CHLORDANE	--	85 U	130 U	140 U	2.2	2.9 U	170 UJ	--	160 UJ	170 UJ	160 UJ	87 UJ	140 UJ
METHOXYCHLOR	--	85 U	130 U	140 U	19 U	29 U	170 UJ	--	160 UJ	170 UJ	160 UJ	87 UJ	140 UJ
TOTAL AROCLOR	--	0 U	0 U	0 U	110	0 U	0 U	--	0 U	0 U	0 U	0 U	0 U
TOTAL CHLORDANE	--	0 U	0 U	0 U	5.2	0 U	--	--	--	--	--	--	--
TOTAL DDT	--	0 U	0 U	0 U	73.2	50	176	--	40	57	0 U	0 U	0 U

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WCSD15	2WMW2S	2WMW5S	2WMW5S	2WMW39DS	2WMW45DS	2WSD1	2WSD1	2WSD2	2WSD3	2WSD4	2WSD5	2WSD6
SAMPLE ID	2WCSD15	082390-2WMW2(0-2)	090490-2WMW5(0-2)	090490-2WMW5(0-2)-D	2W-SU-39DS-00-99	2W-SU-45DS-00-99	112690-2WSD1(0-0.5)	112690-2WSD1(0-0.5)-D	112690-2WSD2(0-0.5)	112690-2WSD3(0-0.5)	112690-2WSD4(0-0.5)	112690-2WSD5(0-0.5)	112690-2WSD6(0-0.5)
SAMPLE DATE	12/21/1993	8/23/1990	9/4/1990	9/4/1990	5/18/1999	5/16/1999	11/26/1990	11/26/1990	11/26/1990	11/26/1990	11/26/1990	11/26/1990	11/26/1990
SAMPLE DEPTH (FEET)	0 - 1	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5
METALS (MG/KG)													
ALUMINUM	16900	13000	11200 J	11500 J	4860	17400	18900	18400	22200	18800	16600	14200	19300
ANTIMONY	6.5 U	1.8 UJ	2.5 U	2.5 U	0.99 U	1.4 U	10.8 UR	11.3 UR	10.1 UR	9.8 UR	8.2 UR	8.2 UR	10.1 UR
ARSENIC	9.6	2.5	7 J	7.6 J	1.2 B	15.1	9.2 J	10.2 J	9.5 J	9.5 J	10 J	8.5 J	10.5 J
BARIUM	57.8	53.3	45.7	41.3	28.3 B	48.9 B	55.6	54.6	64.6	56.6	56	53.6	59.9
BERYLLIUM	1.7 U	0.55	1.2 J	1.3 J	0.28 B	0.89 B	0.91	0.83	1.1	0.88	0.44	0.39	0.81
BORON	25.8 J	71 R	530 R	290 R	--	--	4100 R	4500 R	4000 R	4400 R	1200 R	1300 R	730 R
CADMIUM	0.82 U	6.9	4.7	4.9	0.16 B	0.55 B	4.2	4.8	4.8	5.3	3.8	3.7	3.5
CALCIUM	1750 J	1170 J	1230 J	1310 J	1360	2070	4670	4660	4930	4220	1480	1090 J	2090
CHROMIUM	65.2	20.5 J	57.1	65.2	12.2	43.2	57.1	74.4	48.9	92.6	73.9	71.7	93.5
COBALT	4.3	8.5	7.3	12.3	4.8 B	11.1 B	10.8	10.6	11.9	11.1	7.3	6.8	8.4
COPPER	26	26.1 J	38.5	35.2	21.7	16.9	33 J	49.2 J	30.5 J	69.5 J	44.8 J	52.2 J	51.3 J
CYANIDE	--	1.4 U	1.9 U	2.1 U	--	--	2.7 U	2.8 U	2.6 U	2.4 U	2 U	2 U	2.5 U
IRON	14700	14200	21500	23100	8100	30400	28100	29200	31700	29700	26700	28300	22900
LEAD	35.1	16.3 J	38.5	26.8	22.4	11.8	51	60.6	21.3 J	46.1	56.8	48.1	69
MAGNESIUM	5380	4170	5520	5590	2170	6480	7630	7800	7870	7990	5950	5550	6700
MANGANESE	172	195 J	160 J	357 J	99.2	256	352	366	365	341	193	166	210
MERCURY	0.52	0.11 U	0.22	0.25	0.06 U	0.09 U	0.21 UJ	0.28 J	0.19 UJ	0.31 J	0.25 J	0.35 J	0.32 J
NICKEL	16.3	25.3 J	14.7	15.9	16.9	22.9	26	26.4	28.2	27	17.8	16.7	19.9
POTASSIUM	3920	2130 J	3180	2420	1000 B	4160	4390	4200	4920	4280	4560	4160	3980
SELENIUM	1.5 U	0.44 U	0.7	0.77	1.1 U	2.4	0.89	0.88	1.6	1.3	0.79	0.98	1.1
SILVER	0.82 UJ	1.8 U	2.5 U	2.5 U	0.2 U	0.28 U	3 UJ	3.2 UJ	2.8 UJ	2.7 UJ	2.3 UJ	2.3 UJ	2.8 UJ
SODIUM	334 U	118 J	957 J	930 J	224 B	954 B	3510	3690	3290	6090	383 J	291 J	1150 J
THALLIUM	0.41 U	0.88 U	1.2 U	1.3 U	0.84 U	1.2 U	0.86 U	0.9 U	0.81 U	0.78 U	0.66 U	0.65 U	0.81 U
VANADIUM	38.1	33.2	48.9 J	51.8 J	35.9	44.1	44.5	43.7	49.3	45.5	45.4	44.6	49.3
ZINC	42.6	125 J	54.6 J	61.3 J	49.7	58.9	90.6	110	126	127	63.2 J	58.1 J	57.6 J
MISCELLANEOUS PARAMETERS													
PERCENT COARSE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINES (%)	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT GRAVEL (%)	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT MEDIUM SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL SOLIDS (%)	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL ORGANIC CARBON (MG/KG)	--	--	--	--	--	--	--	--	--	--	--	--	--
PH (S.U.)	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
J = Estimated concentration
R = Rejected
U = Non-detect
UJ = Non-detect estimated
UR = Non-detect rejected
-- = Not analyzed

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD7	2WSD8	2WSD9	2WSD43	2WSD44	2WSD45	2WSD46	2WSD47	2WSD47	2WSD48	2WSD49	2WSD50	2WSD51	2WSD52
SAMPLE ID	112690-2WSD7(0-0.5)	112690-2WSD8(0-0.5)	112690-2WSD9(0-0.5)	2W-SD-SD43-0001	2W-SD-SD44-0001	2W-SD-SD45-0001	2W-SD-SD46-0001	2W-SD-SD47-0001	2W-SD-SD47-0001-D	2W-SD-SD48-0001	2W-SD-SD49-0001	2W-SD-SD50-0001	2W-SD-SD51-0001	2W-SD-SD52-0001
SAMPLE DATE	11/26/1990	11/26/1990	11/26/1990	10/19/2007	10/19/2007	10/18/2007	10/19/2007	10/19/2007	10/19/2007	10/19/2007	10/18/2007	10/18/2007	10/18/2007	10/18/2007
SAMPLE DEPTH (FEET)	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.5	0 - 0.5	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.5	0 - 0.5
VOLATILES (UG/KG)														
1,1,1-TRICHLOROETHANE	56 U	10 U	20 U	--	--	--	--	--	--	--	--	--	--	--
2-BUTANONE	110 U	20 U	40 U	--	--	--	--	--	--	--	--	--	--	--
ACETONE	720	190	40 U	--	--	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	56 U	15	20 U	--	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE	56 U	2 J	5 J	--	--	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	56 U	10 U	11 J	--	--	--	--	--	--	--	--	--	--	--
TOLUENE	56 U	10 U	20 U	--	--	--	--	--	--	--	--	--	--	--
TRICHLOROETHENE	56 U	10 U	6 J	--	--	--	--	--	--	--	--	--	--	--
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)														
1-METHYLNAPHTHALENE	--	--	--	91 UR	86 UR	120 UR	48 U	140 UR	130 UR	53 U	65 U	96 UR	140 UR	54 U
2-METHYLNAPHTHALENE	3700 U	3300 U	6600 U	20 J	86 UR	120 UR	7 J	140 UR	130 UR	12 J	65 U	96 UR	140 UR	54 U
ACENAPHTHENE	3700 U	3300 U	6600 U	26 J	16 J	120 UR	11 J	140 UR	130 UR	25 J	65 U	96 UR	140 UR	5.5 J
ACENAPHTHYLENE	3700 U	3300 U	6600 U	58 J	54 J	120 UR	57	87 J	110 J	59	7.3 J	28 J	140 UR	24 J
ANTHRACENE	3700 U	3300 U	2400 J	91 UR	62 J	120 UR	61	60 J	81 J	100	13 J	23 J	140 UR	22 J
BENZO(A)ANTHRACENE	3700 U	3300 U	27000	220 J	740 J	77 J	590	560 J	700 J	1100 J	120 J	200 J	45 J	160
BENZO(A)PYRENE	3700 U	3300 U	35000	240 J	680 J	95 J	510	560 J	710 J	930	150	240 J	63 J	200
BENZO(B)FLUORANTHENE	3700 U	420 J	55000	380 J	810 J	160 J	590	730 J	940 J	1100	230	300 J	99 J	240
BENZO(G,H,I)PERYLENE	3700 U	3300 U	23000	240 J	470 J	88 J	330	360 J	530 J	700	180	170 J	49 J	140
BENZO(K)FLUORANTHENE	3700 U	670 J	45000	160 J	490 J	79 J	360 J	420 J	480 J	650	100 J	160 J	49 J	150
BENZOIC ACID	780 J	16000 U	32000 J	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	3700 U	3300 U	6600 U	--	--	--	--	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	3700 U	3300 U	6600 U	--	--	--	--	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHRYSENE	3700 U	610 J	42000	230 J	710 J	98 J	580	600 J	740 J	1000	160	220 J	66 J	200
DIBENZO(A,H)ANTHRACENE	3700 U	3300 U	6600 U	120 J	260 J	120 UR	180 J	220 J	310 J	390 J	65 UJ	110 J	140 UR	79 J
DIBENZOFURAN	3700 U	3300 U	1000 J	--	--	--	--	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	3700 U	3300 U	7900 U	--	--	--	--	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	3700 U	3300 U	6600 U	--	--	--	--	--	--	--	--	--	--	--
FLUORANTHENE	470 J	1300 J	80000	490 J	1100 J	150 J	1100	950 J	1200 J	2000	220	330 J	140 J	320
FLUORENE	3700 U	3300 U	1000 J	41 J	21 J	120 UR	21 J	24 J	30 J	43 J	5.8 J	96 UR	140 UR	9.8 J
INDENO(1,2,3-CD)PYRENE	3700 U	3300 U	23000	270 J	660 J	100 J	460	500 J	720 J	870	180	230 J	64 J	190
NAPHTHALENE	3700 U	3300 U	6600 U	20 J	86 UR	120 UR	5.6 J	140 UR	130 UR	9.6 J	65 U	96 UR	140 UR	54 U
PHENANTHRENE	3700 U	440 J	36000	170 J	360 J	52 J	360	330 J	420 J	690	84	99 J	47 J	170
PHENOL	3700 U	3300 U	6600 U	--	--	--	--	--	--	--	--	--	--	--
PYRENE	610 J	1500 J	42000 J	430 J	1200 J	120 J	1000	1000 J	1200 J	1800 J	190	320 J	140 UR	320
TOTAL PAHS	1080	4940	411400	3115	7633	1019	6222.6	6401	8171	11478.6	1640.1	2430	622	2230.3
PESTICIDES/PCBS (UG/KG)														
4,4'-DDD	36 UJ	32 UJ	64 UJ	1300 J	93 J	39 J	160 J	580 J	900 J	210 J	62 J	79 J	110 J	340 J
4,4'-DDE	36 UJ	32 UJ	64 UJ	55 J	10 J	9.5 J	40	23 J	37 J	95	11 J	12 J	13 J	34 J
4,4'-DDT	36 UJ	32 UJ	64 UJ	150 UR	19 J	20 UR	65 J	32 J	52 J	210 J	14 J	27 J	16 J	420 J
ALPHA-CHLORDANE	180 UJ	160 UJ	320 UJ	52 J	7.3 UR	10 UR	4 U	12 UR	22 UR	4.5 U	16	11 J	12 UR	23 U
AROCLOR-1260	360 UJ	320 UJ	640 UJ	300 J	150 J	100 UR	340	380 J	430 J	580	56 U	370 J	120 UR	46 U
ENDOSULFAN SULFATE	36 UJ	32 UJ	64 UJ	150 UR	14 UR	20 UR	7.8 UJ	23 UR	44 UR	8.7 UJ	11 UJ	16 UR	24 UR	44 UJ
ENDRIN	36 UJ	32 UJ	64 UJ	150 UR	14 UR	20 UR	7.8 UJ	23 UR	44 UR	8.7 U	11 UJ	16 UR	24 UR	44 UJ
ENDRIN ALDEHYDE	--	--	--	150 UR	14 UR	20 UR	7.8 U	23 UR	44 UR	8.7 U	11 U	16 UR	24 UR	44 U
GAMMA-BHC (LINDANE)	18 UJ	16 UJ	32 UJ	78 UR	7.3 UR	10 UR	4 UJ	12 UR	22 UR	4.5 UJ	5.6 UJ	8.2 UR	12 UR	23 UJ
GAMMA-CHLORDANE	180 UJ	160 UJ	320 UJ	59 J	7.3 UR	10 UR	4 U	12 UR	22 UR	4.5 U	14 J	12 J	12 UR	23 U
METHOXYCHLOR	180 UJ	160 UJ	320 UJ	780 UR	73 UR	100 UR	40 UJ	120 UR	83 J	45 UJ	56 UJ	82 UR	120 UR	230 UJ
TOTAL AROCLOR	0 U	0 U	0 U	300	150	100	340	380	430	580	0 U	370	120	0 U
TOTAL CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL DDT	0 U	0 U	0 U	1355	122	48.5	265	635	989	515	87	118	139	794

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD7	2WSD8	2WSD9	2WSD43	2WSD44	2WSD45	2WSD46	2WSD47	2WSD47	2WSD48	2WSD49	2WSD50	2WSD51	2WSD52
SAMPLE ID	112690-2WSD7(0-0.5)	112690-2WSD8(0-0.5)	112690-2WSD9(0-0.5)	2W-SD-SD43-0001	2W-SD-SD44-0001	2W-SD-SD45-0001	2W-SD-SD46-0001	2W-SD-SD47-0001	2W-SD-SD47-0001-D	2W-SD-SD48-0001	2W-SD-SD49-0001	2W-SD-SD50-0001	2W-SD-SD51-0001	2W-SD-SD52-0001
SAMPLE DATE	11/26/1990	11/26/1990	11/26/1990	10/19/2007	10/19/2007	10/18/2007	10/19/2007	10/19/2007	10/19/2007	10/19/2007	10/18/2007	10/18/2007	10/18/2007	10/18/2007
SAMPLE DEPTH (FEET)	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.5	0 - 0.5	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.5	0 - 0.5
METALS (MG/KG)														
ALUMINUM	17800	18300	20800	28600 J	10400 J	3690 J	23800	18100 J	18400 J	15800	3840	8280 J	8520 J	26500
ANTIMONY	9.4 UR	10.1 UR	9.9 UR	0.41 UR	0.60 UR	2.3 U	0.31 UJ	0.33 UR	0.82 U	0.26 U	2 U	1.25 UR	0.86 U	0.27 U
ARSENIC	13.9 J	8.1 J	11.8 J	16.6 J	12.8 J	16.9 J	17.4	9.1 J	7.5 J	11.5	14.6 J	43.6 J	13.9 J	13.5
BARIUM	59.7	64	72.8	328 J	146 J	314 J	152	198 J	184 J	131	176	394 J	107 J	51.2
BERYLLIUM	0.51	0.84	0.85	2.9 J	0.58 J	0.63 J	0.91	1.3 J	1.2 J	0.49	0.31	0.61 J	1.6 J	1.3
BORON	450 R	3600 R	490 R	--	--	--	--	--	--	--	--	--	--	--
CADMIUM	3.5	5	6.1	1.8 J	1.1 J	0.15 UR	0.30	1.7 J	2.6 J	1.2	1.2 J	0.14 UR	1.2 J	1.1 J
CALCIUM	1830	6800	2160	4490 J	2020 J	4740 J	4230	5770 J	5590 J	4330	3580	5660 J	3370 J	2160
CHROMIUM	69.3	95.7	63.7	76.9 J	19.6 J	10.7 J	39.7	29.6 J	31.8 J	25.9	8.5 J	20.7 J	16.3 J	63.6
COBALT	7.6	10.2	8.6	6.1 J	3.4 J	0.40 UR	13.7	5.1 J	5.8 J	9.4	5.6 J	4 J	5.6 J	5.5 J
COPPER	34.6 J	71.5	39.6 J	161 J	82.3 J	25.4 J	97.2	100 J	120 J	59.9	92.3 J	64 J	36.1 J	96.7
CYANIDE	2.4 U	2.5 U	3.2	--	--	--	--	--	--	--	--	--	--	--
IRON	24100	25500	44000	70800 J	164000 J	300000 J	57700	45300 J	36000 J	40000	109000	315000 J	83600 J	46100
LEAD	37.8	69.2	241 J	127 J	45.2 J	14 J	78.5	79.1 J	94.8 J	49.7	39.2	54 J	24.6 J	119
MAGNESIUM	6060	7300	5880	6580 J	3360 J	887 J	10100 J	4500 J	4660 J	5410	1520 J	2210 J	682 J	4380 J
MANGANESE	193	278	357	262 J	265 J	636 J	579	352 J	298 J	812	389	1220 J	326 J	208
MERCURY	0.42 J	0.48 J	0.24 J	0.72 J	0.26 J	0.10 J	0.27	0.47 J	0.34 J	0.21	0.13	0.29 J	0.12 J	0.31
NICKEL	17.6	24.2	21.2	30.9 J	19.6 J	15.7 J	33.4	33.2 J	36 J	30.2	28.3 J	28.8 J	25.9 J	23.5
POTASSIUM	3790	4070	3310	2850 J	1740 J	625 J	3960	1790 J	1810 J	2150	916	987 J	525 J	2380
SELENIUM	1.6	1.2	1.3	0.71 UR	1.03 UR	9 U	1.4 U	0.57 UR	0.75 J	0.45 U	3.4 U	9.8 J	0.84 UR	0.61 U
SILVER	2.6 UJ	2.8 UJ	2.8 UJ	0.22 UR	0.32 UR	0.71 UR	0.16 UJ	0.18 UR	0.18 UR	0.14 U	0.22 UJ	0.66 UR	0.26 UR	0.11 UJ
SODIUM	464 J	6650	321 J	1010 J	318 J	653 J	571	1070 J	1020 J	292	208 J	769 J	847 J	431
THALLIUM	0.76 U	0.81 U	0.8 U	0.44 J	0.86 U	1.1 J	0.25 U	0.27 UR	0.28 UR	1	0.34 U	1.02 UR	0.40 UR	0.17 U
VANADIUM	44.8	41	55.9	289 J	51.3 J	30.6 J	69.1	83.7 J	85.4 J	96.1	24.1	114 J	38.9 J	52.9
ZINC	51.5 J	124	109	654 J	600 J	342 J	320	344 J	322 J	624	646	447 J	82.4 J	60.6
MISCELLANEOUS PARAMETERS														
PERCENT COARSE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINES (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT GRAVEL (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT MEDIUM SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL SOLIDS (%)	--	--	--	22	23	16	42	14	15	38	30	21	14	37
TOTAL ORGANIC CARBON (MG/KG)	--	--	--	180000 J	160000 J	270000 J	86000 J	400000 J	370000 J	120000	130000 J	200000 J	440000 J	250000 J
PH (S.U.)	--	--	--	5.5	5.7	5.9	6.4	5.8	5.9	6.5	6.2	6.2	5.3	5.6

Notes:
J = Estimated concentration
R = Rejected
U = Non-detect
UJ = Non-detect estimated
UR = Non-detect rejected
-- = Not analyzed

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD53	2WSD53	2WSD54	2WSD55	2WSD56	2WSD57	2WSD58	2WSD59	2WSD60	2WSD60	2WSD62	2WSD63	2WSD63	2WSD64
SAMPLE ID	2W-SD-SD53-0001	2W-SD-SD53-0001-D	2W-SD-SD54-0001	2W-SD-SD55-0001	2W-SD-SD56-0001	2W-SD-SD57-0001	2W-SD-SD58-0001	2W-SD-SD59-0001	2W-SD-SD60-0001	2W-SD-SD60-0001-D	2W-SD-SD62-0001	2W-SD-SD63-0001	2W-SD-SD63-0001-D	2W-SD-SD64-0001
SAMPLE DATE	10/18/2007	10/18/2007	10/18/2007	10/18/2007	10/18/2007	10/18/2007	10/18/2007	10/30/2008	10/30/2008	10/30/2008	10/29/2008	10/29/2008	10/29/2008	10/30/2008
SAMPLE DEPTH (FEET)	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
VOLATILES (UG/KG)														
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)														
1-METHYLNAPHTHALENE	58 U	59 U	140 UR	86 UR	33 U	32 U	--	230 UR	190 UR	--	4.4 J	--	--	--
2-METHYLNAPHTHALENE	58 U	59 U	140 UR	86 UR	33 U	32 U	--	230 UR	190 UR	--	5.3 J	--	--	--
ACENAPHTHENE	5.2 J	4.5 J	140 UR	86 UR	15 J	61	--	230 UR	190 UR	--	44	--	--	--
ACENAPHTHYLENE	20 J	19 J	140 UR	10 J	28 J	22 J	--	22 J	40 J	--	30	--	--	--
ANTHRACENE	28 J	24 J	140 UR	16 J	70	390	--	38 J	54 J	--	250	--	--	--
BENZO(A)ANTHRACENE	240	260	120 J	140 J	1200	4000	--	480 J	310 J	--	3600 J	--	--	--
BENZO(A)PYRENE	260 J	270	160 J	190 J	1500	3500	--	520 J	350 J	--	3000	--	--	--
BENZO(B)FLUORANTHENE	340 J	350	230 J	310 J	1800	4600	--	1100 J	430 J	--	4500 J	--	--	--
BENZO(G,H,I)PERYLENE	170 J	170	160 J	160 J	1200	2600	--	350 J	340 J	--	1800	--	--	--
BENZO(K)FLUORANTHENE	220 J	180	140 J	150 J	1100 J	2900 J	--	360 J	420 J	--	2000 J	--	--	--
BENZOIC ACID	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHRYSENE	280	300	190 J	180 J	1400	4100	--	550 J	430 J	--	3100	--	--	--
DIBENZO(A,H)ANTHRACENE	100 J	98 J	100 J	92 J	370 J	1400 J	--	180 J	120 J	--	370	--	--	--
DIBENZOFURAN	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORANTHENE	440	440	290 J	370 J	2800 J	8400	--	940 J	650 J	--	7300	--	--	--
FLUORENE	9 J	8.4 J	140 UR	7.6 J	24 J	130	--	230 UR	190 UR	--	110	--	--	--
INDENO(1,2,3-CD)PYRENE	250 J	250	220 J	220 J	1600	3500	--	440 J	300 J	--	2200	--	--	--
NAPHTHALENE	58 U	59 U	140 UR	86 UR	4 J	6 J	--	230 UR	190 UR	--	6 J	--	--	--
PHENANTHRENE	170	180	110 J	140 J	860	4300	--	400 J	330 J	--	3600	--	--	--
PHENOL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PYRENE	340	400	180 J	260 J	2200	8200	--	880 J	790 J	--	6300	--	--	--
TOTAL PAHS	2872.2	2953.9	1900	2245.6	16171	48109	--	6260	4564	--	38215.3	--	--	--
PESTICIDES/PCBS (UG/KG)														
4,4'-DDD	4.4 J	4.6 J	23 UR	14 UR	5.5 U	--	--	--	31 UR	--	8.5 J	--	--	--
4,4'-DDE	3 J	3.4 J	6.4 J	3.9 J	2.7 J	--	--	--	31 UR	--	4.9 UJ	--	--	--
4,4'-DDT	4.4 J	9.8 UJ	23 UR	14 UR	6 J	--	--	--	31 UR	--	4.9 UJ	--	--	--
ALPHA-CHLORDANE	5 UJ	5 UJ	12 UR	7.3 UR	2.8 UJ	--	--	--	16 UR	--	2.5 UJ	--	--	--
AROCLOR-1260	50 U	50 U	120 UR	73 UR	28 U	--	--	--	160 UR	--	25 U	37 UJ	39 UJ	--
ENDOSULFAN SULFATE	9.6 UJ	9.8 UJ	23 UR	14 UR	5.5 UJ	--	--	--	--	--	--	--	--	--
ENDRIN	9.6 UJ	9.8 UJ	23 UR	14 UR	5.5 UJ	--	--	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	9.6 UJ	9.8 UJ	23 UR	14 UR	5.5 UJ	--	--	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	5 UJ	5 UJ	12 UR	7.3 UR	8.2 J	--	--	--	--	--	--	--	--	--
GAMMA-CHLORDANE	5 UJ	5 UJ	12 UR	7.3 UR	2.8 UJ	--	--	--	16 UR	--	2.5 UJ	--	--	--
METHOXYCHLOR	50 UJ	50 UJ	120 UR	73 UR	28 UJ	--	--	--	--	--	--	--	--	--
TOTAL AROCLOR	0 U	0 U	120	73	0 U	--	--	--	160	--	0 U	0 U	0 U	--
TOTAL CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL DDT	11.8	8	6.4	3.9	8.7	--	--	--	31	--	8.5	--	--	--

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD53	2WSD53	2WSD54	2WSD55	2WSD56	2WSD57	2WSD58	2WSD59	2WSD60	2WSD60	2WSD62	2WSD63	2WSD63	2WSD64
SAMPLE ID	2W-SD-SD53-0001	2W-SD-SD53-0001-D	2W-SD-SD54-0001	2W-SD-SD55-0001	2W-SD-SD56-0001	2W-SD-SD57-0001	2W-SD-SD58-0001	2W-SD-SD59-0001	2W-SD-SD60-0001	2W-SD-SD60-0001-D	2W-SD-SD62-0001	2W-SD-SD63-0001	2W-SD-SD63-0001-D	2W-SD-SD64-0001
SAMPLE DATE	10/18/2007	10/18/2007	10/18/2007	10/18/2007	10/18/2007	10/18/2007	10/18/2007	10/30/2008	10/30/2008	10/30/2008	10/29/2008	10/29/2008	10/29/2008	10/30/2008
SAMPLE DEPTH (FEET)	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
METALS (MG/KG)														
ALUMINUM	17100	15200	10200 J	10700 J	11800	5470	--	--	16200 J	--	3720	--	--	--
ANTIMONY	0.86 UJ	0.66 UJ	1.2 U	1.3 U	0.17 UJ	0.16 UJ	--	--	3.1 J	--	0.27 J	--	--	--
ARSENIC	28.2 J	29.2 J	24.3 J	52.5 J	7.3	4.3 J	--	--	53.5 J	43.9 J	1.5	--	--	--
BARIUM	48.5	40	44.4 J	13.7 J	59.3	47.7	--	--	34.8 J	--	20.5	--	--	--
BERYLLIUM	1.1	1	1.1 J	1.4 J	0.31	0.27	--	--	1.7 J	--	0.18	--	--	--
BORON	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM	0.10 UJ	0.08 UJ	0.88 J	0.10 UR	0.02 U	1.1 J	0.03 U	--	0.88 J	--	0.34	--	--	0.42
CALCIUM	2660	2470	2730 J	1760 J	2040	1730	--	--	2140 J	--	1160	--	--	--
CHROMIUM	47.3	39.6	36.8 J	51.2 J	29.2	9.5	--	--	77.5 J	--	6.2	--	--	--
COBALT	2.7 J	2.4 J	1.1 J	0.27 UR	4.4	4.9 J	--	--	1.1 J	--	2.8 J	--	--	--
COPPER	57.3 J	57.2 J	55 J	41.2 J	20	19.2	--	--	59.4 J	--	8	--	--	--
CYANIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON	199000	198000	130000 J	249000 J	37300	37900	--	--	172000 J	--	12900	--	--	--
LEAD	65.8	61.4	48 J	33.4 J	58.4	159	--	--	54.7 J	--	46.7	--	--	68.0
MAGNESIUM	3340 J	2660 J	1180 J	726 J	3760 J	2240 J	--	--	2550 J	--	1500	--	--	--
MANGANESE	231	205	149 J	89.2 J	402	469	--	--	127 J	--	184	--	--	--
MERCURY	0.20	0.21	0.26 J	0.23 J	0.10	0.02	--	--	0.46 J	--	0.02 U	--	--	--
NICKEL	19.2 J	17.7 J	15.9 J	15.2 J	12.4	11.2 J	--	--	17.2 J	--	5.6	--	--	--
POTASSIUM	1810	1430	728 J	434 J	2070	1140	--	--	1540 J	--	729	--	--	--
SELENIUM	6.6 U	5.3 U	1 U	7.8 U	1.3 U	1.2 U	--	--	2.51 UR	--	0.22 UJ	--	--	--
SILVER	0.45 UJ	0.35 UJ	0.24 UR	0.47 UR	0.09 UJ	0.08 UJ	--	--	0.45 UR	--	0.04 UJ	--	--	--
SODIUM	344 J	323 J	739 J	967 J	202 J	149 J	--	--	1030 J	--	99.6	--	--	--
THALLIUM	0.70 U	0.54 U	0.37 UR	0.73 UR	0.14 U	0.13 U	--	--	0.43 UR	--	0.04 U	--	--	--
VANADIUM	57.3	51.2	63.6 J	60.6 J	34.7	22.9	--	--	98.8 J	--	13.9	--	--	--
ZINC	138	125	39.7 J	80.1 J	78.6	339	--	--	68.4 J	--	118	--	--	123
MISCELLANEOUS PARAMETERS														
PERCENT COARSE SAND (%)	--	--	--	--	--	--	--	--	25.5	--	7.4	--	--	--
PERCENT FINE SAND (%)	--	--	--	--	--	--	--	--	12.3	--	29	--	--	--
PERCENT FINES (%)	--	--	--	--	--	--	--	--	50.4	--	11.4	--	--	--
PERCENT GRAVEL (%)	--	--	--	--	--	--	--	--	8.6	--	1.5	--	--	--
PERCENT MEDIUM SAND (%)	--	--	--	--	--	--	--	--	3.1	--	50.7	--	--	--
TOTAL SOLIDS (%)	34	34	14	23	60	63	57	8.8	11	12	67	46	43	33
TOTAL ORGANIC CARBON (MG/KG)	200000 J	190000 J	370000 J	220000 J	38000 J	24000 J	--	--	410000 J	--	26000 J	--	--	--
PH (S.U.)	5.1	5.3	4.8	4.5	5.9	--	--	--	5.8	--	6.6	--	--	--

Notes:
J = Estimated concentration
R = Rejected
U = Non-detect
UJ = Non-detect estimated
UR = Non-detect rejected
-- = Not analyzed

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD65	2WSD66	2WSD67	2WSD68	2WSD69	2WSD70	2WSD71	2WSD72	2WSD73	2WSD74	2WSD75	2WSD75	2WSD76	2WSD77	2WSD78
SAMPLE ID	2W-SD-SD65-0001	2W-SD-SD66-0001	2W-SD-SD67-0001	2W-SD-SD68-0001	2W-SD-SD69-0001	2W-SD-SD70-0001	2W-SD-SD71-0001	2W-SD-SD72-0001	2W-SD-SD73-0001	2W-SD-SD74-0001	2W-SD-SD75-0001	2W-SD-SD75-0001-D	2W-SD-SD76-0001	2W-SD-SD77-0001	2W-SD-SD78-0001
SAMPLE DATE	10/30/2008	10/30/2008	10/29/2008	10/29/2008	10/29/2008	10/29/2008	10/30/2008	10/29/2008	10/29/2008	10/29/2008	10/29/2008	10/29/2008	10/29/2008	10/30/2008	10/29/2008
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
VOLATILES (UG/KG)															
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)															
1-METHYLNAPHTHALENE	--	170 UR	--	190 UR	45 U	120 UR	--	240 UR	130 UR	56	--	240	36 U	--	--
2-METHYLNAPHTHALENE	--	170 UR	--	190 UR	45 U	16 J	--	240 UR	130 UR	51 J	--	180 J	36 U	--	--
ACENAPHTHENE	--	170 UR	--	190 UR	7.3 J	20 J	--	240 UR	130 UR	120	--	400	14 J	--	--
ACENAPHTHYLENE	--	33 J	--	15 J	24 J	74 J	--	49 J	130 UR	210	--	480	31 J	--	--
ANTHRACENE	--	34 J	--	50 J	51	84 J	--	57 J	12 J	410	--	540	75	--	--
BENZO(A)ANTHRACENE	--	250 J	--	400 J	390	800 J	--	370 J	92 J	3600 J	--	5000 J	600	--	--
BENZO(A)PYRENE	--	290 J	--	480 J	350 J	880 J	--	430 J	120 J	2600	--	3300	650	--	--
BENZO(B)FLUORANTHENE	--	350 J	--	280 J	500 J	1200 J	--	510 J	160 J	180	--	4700 J	750	--	--
BENZO(G,H,I)PERYLENE	--	280 J	--	430 J	220 J	630 J	--	360 J	110 J	1300	--	1600 J	550	--	--
BENZO(K)FLUORANTHENE	--	310 J	--	780 J	250 J	860 J	--	460 J	150 J	1600 J	--	2100 J	620	--	--
BENZOIC ACID	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHRYSENE	--	320 J	--	580 J	420	820 J	--	480 J	140 J	3000	--	3800	690	--	--
DIBENZO(A,H)ANTHRACENE	--	65 J	--	150 J	190 J	200 J	--	130 J	32 J	320	--	450	110	--	--
DIBENZOFURAN	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORANTHENE	--	470 J	--	880 J	720	1200 J	--	750 J	220 J	5500	--	8600	1200	--	--
FLUORENE	--	170 UR	--	190 UR	14 J	28 J	--	240 UR	130 UR	260	--	850 J	21 J	--	--
INDENO(1,2,3-CD)PYRENE	--	250 J	--	390 J	310 J	620 J	--	340 J	94 J	1500	--	2100	490	--	--
NAPHTHALENE	--	170 UR	--	190 UR	45 U	120 UR	--	240 UR	130 UR	33 J	--	53	36 U	--	--
PHENANTHRENE	--	140 J	--	300 J	250	410 J	--	280 J	79 J	3400	--	7700	360	--	--
PHENOL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PYRENE	--	600 J	--	1000 J	860	1500 J	--	960 J	290 J	6200	--	9100	1400	--	--
TOTAL PAHS	--	3392	--	5735	4556.3	9342	--	5176	1499	30284	--	50953	7561	--	--
PESTICIDES/PCBS (UG/KG)															
4,4'-DDD	--	81 J	--	19 J	370 J	210 J	60 J	620 J	17 J	610	630	500	39 J	20	61 J
4,4'-DDE	--	18 J	--	9.7 J	150 J	42 J	18 J	21 J	2.4 UR	680	540	410	52	7.3 J	14 J
4,4'-DDT	--	38 J	--	11 J	120 J	19 UR	45 J	30 J	7.3 J	2100	2200	1800	420 J	11 J	28 J
ALPHA-CHLORDANE	--	14 UR	--	16 UR	3.8 UJ	36 J	11 UR	32 UR	17 UR	5.5 U	6.1 U	6 U	4.8 U	7.4 U	23 UR
AROCLOR-1260	--	480 J	--	160 UR	590 J	1100 J	--	480 J	110 UR	35 UJ	39 UJ	--	180 J	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	16 J	--	16 UR	3.8 UJ	31 J	1.9 UR	5.7 UR	3.1 UR	0.98 U	1.1 U	1.1 U	0.84 U	1.3 U	4 UR
METHOXYCHLOR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL AROCLOR	--	480	--	160	590	1100	--	480	110	0 U	0 U	--	180	--	--
TOTAL CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL DDT	--	137	--	39.7	640	252	123	671	24.3	3390	3370	2710	511	38.3	103

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD65	2WSD66	2WSD67	2WSD68	2WSD69	2WSD70	2WSD71	2WSD72	2WSD73	2WSD74	2WSD75	2WSD75	2WSD76	2WSD77	2WSD78
SAMPLE ID	2W-SD-SD65-0001	2W-SD-SD66-0001	2W-SD-SD67-0001	2W-SD-SD68-0001	2W-SD-SD69-0001	2W-SD-SD70-0001	2W-SD-SD71-0001	2W-SD-SD72-0001	2W-SD-SD73-0001	2W-SD-SD74-0001	2W-SD-SD75-0001	2W-SD-SD75-0001-D	2W-SD-SD76-0001	2W-SD-SD77-0001	2W-SD-SD78-0001
SAMPLE DATE	10/30/2008	10/30/2008	10/29/2008	10/29/2008	10/29/2008	10/29/2008	10/30/2008	10/29/2008	10/29/2008	10/29/2008	10/29/2008	10/29/2008	10/29/2008	10/30/2008	10/29/2008
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
METALS (MG/KG)															
ALUMINUM	--	8390 J	--	5990 J	10800	17900 J	--	13200 J	3130 J	13300	11300	--	11300	--	--
ANTIMONY	--	6 J	--	2.7 J	0.8 J	2.1 J	--	1.8 J	1.9 J	0.06 UJ	0.36 J	--	0.06 UJ	--	--
ARSENIC	52.1 J	38.3 J	--	4.7 J	7.6	17.8 J	--	8.3 J	7.9 J	12.9	9.1	--	5.2	--	--
BARIUM	--	456 J	--	112 J	102	228 J	--	197 J	102 J	69.2	93.5	--	72.8	--	--
BERYLLIUM	--	0.65 J	--	0.54 J	0.41	0.87 J	--	1.3 J	0.61 J	0.63	0.56	--	0.67	--	--
BORON	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM	--	2.7 J	--	0.92 J	0.62 J	2.8 J	--	1.5 J	0.97 J	0.33 J	1.1 J	--	0.16 J	--	--
CALCIUM	--	7100 J	--	2600 J	2920	5340 J	--	6390 J	2370 J	1880	3000	--	2680	--	--
CHROMIUM	--	19.1 J	--	11.6 J	21.8	34.1 J	--	21.6 J	8.1 J	20.5	20.5	--	16.1	--	--
COBALT	--	7.9 J	--	2 J	6.9 J	11.7 J	--	3.4 J	0.63 J	5.4	5.6	--	6.8	--	--
COPPER	--	77.3 J	95.8 J	48.5 J	70.4	233 J	--	81.8 J	75.0 J	33.6	76.1	--	54.4	--	--
CYANIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON	--	300000 J	--	204000 J	50100	88900 J	--	73800 J	150000 J	19200	28900	--	17800	--	--
LEAD	--	52.3 J	--	20.0 J	43.6	114 J	--	54.8 J	13.6 J	43.8	56.8	--	36.8	--	--
MAGNESIUM	--	2280 J	--	2370 J	4760	6310 J	--	3070 J	993 J	3190	3780	--	4830	--	--
MANGANESE	--	1350 J	--	383 J	298	608 J	--	324 J	206 J	243	249	--	900	--	--
MERCURY	--	0.27 J	--	0.11 UR	0.13	0.88 J	--	0.18 J	0.12 J	0.1	0.13	--	0.16	--	--
NICKEL	--	38.6 J	--	15.7 J	31.4	41.1 J	--	28.2 J	12.4 J	17.7	32.3	--	13.4	--	--
POTASSIUM	--	731 J	--	968 J	2120	2740 J	--	1060 J	447 J	1160	1150	--	2530	--	--
SELENIUM	--	6.44 UJ	--	2.96 UR	0.86 UJ	1.74 UR	--	1.69 UR	2.3 UR	0.59 J	0.62 U	--	0.39 U	--	--
SILVER	--	3.3 J	--	0.53 UR	0.29 J	2.5 J	--	0.48 J	0.41 UR	0.36 J	0.7	--	0.4	--	--
SODIUM	--	1220 J	--	151 U	450	1140 J	--	1450 J	346 J	331	591	--	203	--	--
THALLIUM	--	1.09 UR	--	0.5 UR	0.15 U	0.3 UR	--	0.29 UR	0.39 UR	0.07 U	0.1 U	--	0.07 U	--	--
VANADIUM	--	117 J	--	33.7 J	46.7	92.2 J	--	69.5 J	28.7 J	36	39.8	--	32.5	--	--
ZINC	--	698 J	1010 J	1060 J	247	733 J	--	264 J	538 J	139	242	--	323	--	--
MISCELLANEOUS PARAMETERS															
PERCENT COARSE SAND (%)	--	4.3	--	6.2	2.8	3	--	13	7.4	0.7	1.8	--	4.8	--	--
PERCENT FINE SAND (%)	--	27.6	--	21.8	28.1	10.2	--	11.3	18.9	31.3	30.9	--	28.1	--	--
PERCENT FINES (%)	--	49.7	--	58.8	40.3	74.7	--	43.7	42.8	61.6	57	--	46.5	--	--
PERCENT GRAVEL (%)	--	6.8	--	4.6	0.3	5.4	--	12.7	5.6	0.3	1.1	--	0.6	--	--
PERCENT MEDIUM SAND (%)	--	11.6	--	8.6	28.4	6.7	--	19.4	25.3	6.2	9.2	--	19.9	--	--
TOTAL SOLIDS (%)	11	12	16	10	44	17	25	8.3	15	48	44	44	56	36	12
TOTAL ORGANIC CARBON (MG/KG)	--	240000 J	--	220000 J	61000 J	200000 J	--	500000 J	260000 J	73000 J	94000 J	--	43000 J	--	--
PH (S.U.)	--	6.3	--	6.3	6.2	7	--	6.9	6	6	6.4	--	6.2	--	--

Notes:
J = Estimated concentration
R = Rejected
U = Non-detect
UJ = Non-detect estimated
UR = Non-detect rejected
-- = Not analyzed

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD79	2WSD80	2WSD81	2WSD81	2WSD82	2WSD83	2WSD83	2WSD84	2WSD85	2WSD86	2WSD87	2WSD88	2WSD89	2WSD90	2WSD91
SAMPLE ID	2W-SD-SD79-0001	2W-SD-SD80-0001	2W-SD-SD81-0001	2W-SD-SD81-0001-D	2W-SD-SD82-0001	2W-SD-SD83-0001	2W-SD-SD83-0001-D	2W-SD-SD84-0001	2W-SD-SD85-0001	2W-SD-SD86-0001	2W-SD-SD87-0001	2W-SD-SD88-0001	2W-SD-SD89-0001	2W-SD-SD90-0001	2W-SD-SD91-0001
SAMPLE DATE	10/29/2008	10/30/2008	10/30/2008	10/30/2008	10/30/2008	10/30/2008	10/30/2008	10/30/2008	4/7/2011	4/7/2011	4/7/2011	4/7/2011	4/7/2011	4/7/2011	4/7/2011
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
VOLATILES (UG/KG)															
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)															
1-METHYLNAPHTHALENE	6.6 J	9.8 J	6.2 J	--	9.2 J	17 J	10 J	8 J	40 UJ	28 U	19 UJ	24 UJ	25 UJ	28 UJ	45 UJ
2-METHYLNAPHTHALENE	8.1 J	15 J	67 UR	--	14 J	24 J	14 J	12 J	40 UJ	28 U	19 UJ	24 UJ	25 UJ	28 UJ	45 UJ
ACENAPHTHENE	62	9.2 J	6.1 J	--	8.7 J	17 J	10 J	6.7 J	40 UJ	6.4 J	5.7 J	18 J	22 J	15 J	37 J
ACENAPHTHYLENE	63	72	46 J	--	69	100 J	75 J	50 J	10 J	16 J	6.4 J	5.5 J	8.4 J	7.7 J	36 J
ANTHRACENE	260	51 J	41 J	--	48 J	94 J	47 J	35 J	12 J	23 J	17 J	68 J	78 J	50 J	130 J
BENZO(A)ANTHRACENE	6800 J	430	300 J	--	300 J	610 J	410 J	280	120 J	170	1000 J	900 J	1600 J	800 J	8500 J
BENZO(A)PYRENE	6200	410	280 J	--	320 J	540 J	360 J	290	120 J	240	1200 J	1400 J	2300 J	1200 J	11000 J
BENZO(B)FLUORANTHENE	8900 J	590	410 J	--	460 J	800 J	520 J	390	220 J	380	1700 J	2100 J	3400 J	2100 J	12000 J
BENZO(G,H,I)PERYLENE	3800	180	110 J	--	140 J	250 J	220 J	130	83 J	150	360 J	1100 J	1400 J	830 J	5700 J
BENZO(K)FLUORANTHENE	3900 J	240	180 J	--	190	340 J	210 J	180	68 J	120	360 J	900 J	1200 J	660 J	5300 J
BENZOIC ACID	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHRYSENE	4800	430	300 J	--	320 J	620 J	410 J	280	160 J	200	900 J	1400 J	1800 J	1000 J	6900 J
DIBENZO(A,H)ANTHRACENE	680	90	69 J	--	75	130 J	100 J	71	41 J	54 J	97 J	200 J	300 J	190 J	2200 J
DIBENZOFURAN	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORANTHENE	11000	580	400 J	--	480	950 J	650 J	410	250 J	370	1400 J	2200 J	3300 J	1800 J	12000 J
FLUORENE	90	22 J	18 J	--	22 J	37 J	28 J	18 J	40 UJ	11 J	6.5 J	24 J	24 J	18 J	31 J
INDENO(1,2,3-CD)PYRENE	4600	220	140 J	--	170	310 J	250 J	160	160 J	260	420 J	1300 J	1900 J	1100 J	45 UJ
NAPHTHALENE	10 J	13 J	67 UR	--	12 J	23 J	15 J	9.5 J	12 J	28 U	19 UJ	24 UJ	25 UJ	28 UJ	45 UJ
PHENANTHRENE	3000	370	250 J	--	310	620 J	410 J	270	130 J	190	160 J	860 J	800 J	510 J	1100 J
PHENOL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PYRENE	9700	650	380 J	--	440 J	980 J	710 J	440	380 J	500	2200 J	2900 J	3800 J	1900 J	17000 J
TOTAL PAHS	63873.1	4372.2	2930.1	--	3378.7	6445	4439	3032.2	1766	2690.4	9832.6	15375.5	21932.4	12180.7	81934
PESTICIDES/PCBS (UG/KG)															
4,4'-DDD	9.6 U	9.5 J	8.7 J	--	17	23 J	21 J	13 J	--	--	--	--	--	--	--
4,4'-DDE	9.6 UJ	3.1 J	4.7 J	--	6.5 J	9.1 J	9.2 J	8.6 J	--	--	--	--	--	--	--
4,4'-DDT	9.6 UJ	1.2 UJ	5.2 J	--	7.2 R	2.3 UR	1.8 UR	1.2 UJ	--	--	--	--	--	--	--
ALPHA-CHLORDANE	5 UJ	7.6 U	8.9 UR	--	7.1 U	14 UR	12 UR	7.6 U	--	--	--	--	--	--	--
AROCLOR-1260	50 U	49 UJ	57 UR	--	45 UJ	92 UR	74 UR	49 UJ	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-CHLORDANE	5 UJ	1.3 U	1.6 UR	--	1.2 U	2.5 UR	2 UR	1.3 U	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL AROCLOR	0 U	0 U	57	--	0 U	92	74	0 U	--	--	--	--	--	--	--
TOTAL CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL DDT	0 U	12.6	18.6	--	23.5	32.1	30.2	21.6	--	--	--	--	--	--	--

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD79	2WSD80	2WSD81	2WSD81	2WSD82	2WSD83	2WSD83	2WSD84	2WSD85	2WSD86	2WSD87	2WSD88	2WSD89	2WSD90	2WSD91
SAMPLE ID	**2W-SD-SD79-0001**	**2W-SD-SD80-0001**	**2W-SD-SD81-0001**	**2W-SD-SD81-0001-D**	**2W-SD-SD82-0001**	**2W-SD-SD83-0001**	**2W-SD-SD83-0001-D**	**2W-SD-SD84-0001**	**2W-SD-SD85-0001**	**2W-SD-SD86-0001**	**2W-SD-SD87-0001**	**2W-SD-SD88-0001**	**2W-SD-SD89-0001**	**2W-SD-SD90-0001**	**2W-SD-SD91-0001**
SAMPLE DATE	**10/29/2008**	**10/30/2008**	**10/30/2008**	**10/30/2008**	**10/30/2008**	**10/30/2008**	**10/30/2008**	**10/30/2008**	**4/7/2011**	**4/7/2011**	**4/7/2011**	**4/7/2011**	**4/7/2011**	**4/7/2011**	**4/7/2011**
SAMPLE DEPTH (FEET)	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**
METALS (MG/KG)															
ALUMINUM	17300	14600 J	13600 J	12100 J	17400 J	15100 J	13000 J	20500 J	--	--	--	--	--	--	--
ANTIMONY	0.13 UJ	0.65 J	1.6 J	0.96 J	0.55 J	0.51 J	0.62 J	1.0 J	--	--	--	--	--	--	--
ARSENIC	9.1	11.0	21.7 J	17.3 J	17.6	12.8 J	10.7 J	18.2	--	--	--	--	--	--	--
BARIUM	89.4	55.9	53.7 J	46.6 J	79.6	65.2 J	56.4 J	78.2	--	--	--	--	--	--	--
BERYLLIUM	1.1	0.4	0.49 J	0.43 J	0.57	0.75 J	0.64 J	0.63	--	--	--	--	--	--	--
BORON	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM	0.84 J	0.05 J	0.12 J	0.03 UR	0.03 J	0.45 J	0.39 J	0.17 J	--	--	--	--	--	--	--
CALCIUM	3220	1500	1940 J	1680 J	1440	2810 J	2380 J	4030	--	--	--	--	--	--	--
CHROMIUM	35.7	75.1	82.7 J	70.6 J	89.6	92 J	78.2 J	101	--	--	--	--	--	--	--
COBALT	9.4	4.8 J	3.8 J	3.6 J	5.2 J	5.8 J	4.8 J	7.1	--	--	--	--	--	--	--
COPPER	40.4	42.8	55.5 J	50.5 J	44.9	64.9 J	56.3 J	58.6	--	--	--	--	--	--	--
CYANIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON	36400	29300	106000 J	79900 J	38400	22500 J	18800 J	41500	--	--	--	--	--	--	--
LEAD	104	69.1	69.1 J	65.5 J	88	91.4 J	78.8 J	86.8	--	--	--	--	--	--	--
MAGNESIUM	4870	4920	4660 J	4310 J	5700	5140 J	4350 J	7080	--	--	--	--	--	--	--
MANGANESE	943	164	181 J	155 J	182	180 J	162 J	238 J	--	--	--	--	--	--	--
MERCURY	0.16	0.45	0.48 J	0.51 J	0.9 J	0.69 J	0.67 J	0.44	--	--	--	--	--	--	--
NICKEL	21.3	18.2	16.8 J	15.6 J	18.4	24.7 J	21.7 J	24.5	--	--	--	--	--	--	--
POTASSIUM	2700	2930 J	2350 J	2190 J	3010 J	2590 J	2240 J	4180 J	--	--	--	--	--	--	--
SELENIUM	0.89 U	1.0 J	1.77 UR	1.9 J	1.1 J	1.5 J	1.3 J	1.2 J	--	--	--	--	--	--	--
SILVER	0.52 J	0.24 J	0.32 UR	0.77 J	0.42 J	0.59 J	0.44 J	0.4 J	--	--	--	--	--	--	--
SODIUM	324	974	355 J	345 J	388	423 J	355 J	557	--	--	--	--	--	--	--
THALLIUM	0.15 U	0.08 U	0.3 UR	0.26 UR	0.15 U	0.13 UR	0.1 UR	0.36 U	--	--	--	--	--	--	--
VANADIUM	57.6	56.2	66.9 J	59.0 J	64.4	66.4 J	57.2 J	68.9	--	--	--	--	--	--	--
ZINC	206	44.5	44.3 J	40.5 J	47.4	60 J	50.1 J	78.6	--	--	--	--	--	--	--
MISCELLANEOUS PARAMETERS															
PERCENT COARSE SAND (%)	5.5	1.1	3.9	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINE SAND (%)	17.4	5.4	14.7	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINES (%)	71.3	90.8	66.5	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT GRAVEL (%)	3.4	1.3	1.2	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT MEDIUM SAND (%)	2.5	1.3	13.7	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL SOLIDS (%)	34	35	30	26	37	18	23	35	24	34	30	25	21	21	22
TOTAL ORGANIC CARBON (MG/KG)	140000 J	83000	130000	--	--	--	--	--	--	--	--	--	--	--	--
PH (S.U.)	6.1	4.2	4.9	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
J = Estimated concentration
R = Rejected
U = Non-detect
UJ = Non-detect estimated
UR = Non-detect rejected
-- = Not analyzed

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD92	2WSD93	2WSD94	2WSD95	2WSD96	2WSD96	2WSD97	2WSD98	2WSD99	2WSD100	2WSD101	2WSD102	2WSD103	2WSD104
SAMPLE ID	**2W-SD-SD92-0001**	**2W-SD-SD93-0001**	**2W-SD-SD94-0001**	**2W-SD-SD95-0001**	**2W-SD-SD96-0001**	**2W-SD-SD96-0001-D**	**2W-SD-SD97-0001**	**2W-SD-SD98-0001**	**2W-SD-SD99-0001**	**2W-SD-SD100-0001**	**2W-SD-SD101-0001**	**2W-SD-SD102-0001**	**2W-SD-SD103-0001**	**2W-SD-SD104-0001**
SAMPLE DATE	**4/7/2011**	**4/7/2011**	**4/7/2011**	**4/7/2011**	**4/7/2011**	**4/7/2011**	**4/7/2011**	**4/7/2011**	**4/7/2011**	**4/7/2011**	**4/6/2011**	**4/6/2011**	**4/6/2011**	**4/6/2011**
SAMPLE DEPTH (FEET)	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**
VOLATILES (UG/KG)														
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)														
1-METHYLNAPHTHALENE	11 J	15 J	4.4 J	4 J	4.7 J	4.1 J	3.4 J	17 U	7.3 J	13 U	40 UJ	75 UJ	6.3 J	100 UJ
2-METHYLNAPHTHALENE	13 J	25 J	25 U	17 U	21 U	18 U	19 U	17 U	18 U	13 U	40 UJ	75 UJ	28 UJ	100 UJ
ACENAPHTHENE	52 J	13 J	32 J	20 J	34 J	31 J	28 J	19 J	59	8.9 J	10 J	75 UJ	29 J	100 UJ
ACENAPHTHYLENE	40 J	40	11 J	10 J	13 J	9.3 J	6.6 J	12 J	23 J	6.5 J	10 J	17 J	17 J	63 J
ANTHRACENE	200 J	64	120	73	130	120	89	130	210	49	25 J	17 J	88 J	50 J
BENZO(A)ANTHRACENE	2600 J	690	1700	930	2300	1700	1300	1700	3200	610	220 J	160 J	1100 J	350 J
BENZO(A)PYRENE	4000 J	1100 J	2600	1300 J	3300	2800 J	2000 J	2200 J	5100	620	200 J	190 J	2200 J	390 J
BENZO(B)FLUORANTHENE	5900 J	1500	4500	2300 J	5700	4000 J	3700 J	3800 J	9000	1000	320 J	450 J	3800 J	910 J
BENZO(G,H,I)PERYLENE	2900 J	390	1600 J	680 J	2400 J	2300 J	1200 J	1100 J	3000	300 J	120 J	130 J	2000 J	280 J
BENZO(K)FLUORANTHENE	2100 J	330	1500	800 J	1800	1800 J	1300 J	1400 J	3400	360 J	98 J	130 J	1700 J	200 J
BENZOIC ACID	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHRYSENE	3300 J	900	2300	1200 J	2900	2600 J	1900 J	2100 J	5000	690	240 J	220 J	2300 J	500 J
DIBENZO(A,H)ANTHRACENE	540 J	120	360 J	200 J	480 J	380 J	260 J	280 J	720 J	88 J	54 J	38 J	400 J	74 J
DIBENZOFURAN	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORANTHENE	5400 J	1400	3800	1900	4800	4000	3200	3600	8600	1300	470 J	360 J	3500 J	780 J
FLUORENE	73 J	26 J	41 J	26 J	45	39	33 J	34 J	85	15 J	14 J	75 UJ	42 J	100 UJ
INDENO(1,2,3-CD)PYRENE	5300 J	1200	2200 J	960 J	3200 J	2800 J	1700 J	1600 J	4200	350 J	230 J	220 J	2400 J	440 J
NAPHTHALENE	30 J	39	25 U	5.4 J	6.8 J	5.7 J	19 U	17 U	10 J	13 U	11 J	75 UJ	8.3 J	100 UJ
PHENANTHRENE	1900 J	590	1400	750	1600	1400	1200	1200	3100	540	220 J	190 J	1300	420 J
PHENOL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PYRENE	7100 J	1800	4400	2300	5400	5200	3600	4200	8100	1400	640 J	400 J	4500	840 J
TOTAL PAHS	41448	10227	26564	13454.4	34108.8	29185	21516.6	23375	53807	7337.4	2882	2522	25384.3	5297
PESTICIDES/PCBS (UG/KG)														
4,4'-DDD	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1260	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL AROCLOR	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL DDT	--	--	--	--	--	--	--	--	--	--	--	--	--	--

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD92	2WSD93	2WSD94	2WSD95	2WSD96	2WSD96	2WSD97	2WSD98	2WSD99	2WSD100	2WSD101	2WSD102	2WSD103	2WSD104
SAMPLE ID	2W-SD-SD92-0001	2W-SD-SD93-0001	2W-SD-SD94-0001	2W-SD-SD95-0001	2W-SD-SD96-0001	2W-SD-SD96-0001-D	2W-SD-SD97-0001	2W-SD-SD98-0001	2W-SD-SD99-0001	2W-SD-SD100-0001	2W-SD-SD101-0001	2W-SD-SD102-0001	2W-SD-SD103-0001	2W-SD-SD104-0001
SAMPLE DATE	4/7/2011	4/7/2011	4/7/2011	4/7/2011	4/7/2011	4/7/2011	4/7/2011	4/7/2011	4/7/2011	4/7/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
METALS (MG/KG)														
ALUMINUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTIMONY	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARSENIC	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BARIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BORON	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CALCIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COBALT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COPPER	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CYANIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LEAD	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAGNESIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MANGANESE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MERCURY	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NICKEL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POTASSIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SILVER	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
THALLIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ZINC	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MISCELLANEOUS PARAMETERS														
PERCENT COARSE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINES (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT GRAVEL (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT MEDIUM SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL SOLIDS (%)	28	56	37	53	46	51	51	56	54	75	21	12	19	9.6
TOTAL ORGANIC CARBON (MG/KG)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PH (S.U.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
J = Estimated concentration
R = Rejected
U = Non-detect
UJ = Non-detect estimated
UR = Non-detect rejected
-- = Not analyzed

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD105	2WSD106	2WSD107	2WSD108	2WSD109	2WSD110	2WSD111	2WSD112	2WSD112	2WSD113	2WSD114	2WSD116	2WSD117	2WSD118
SAMPLE ID	2W-SD-SD105-0001	2W-SD-SD106-0001	2W-SD-SD107-0001	2W-SD-SD108-0001	2W-SD-SD109-0001	2W-SD-SD110-0001	2W-SD-SD111-0001	2W-SD-SD112-0001	2W-SD-SD112-0001-D	2W-SD-SD113-0001	2W-SD-SD114-0001	2W-SD-SD116-0001	2W-SD-SD117-0001	2W-SD-SD118-0001
SAMPLE DATE	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/5/2011
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
VOLATILES (UG/KG)														
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)														
1-METHYLNAPHTHALENE	44 UJ	18 J	40 UJ	21 J	15 J	2000	60 UJ	27 U	27 U	22 U	87 UJ	79 UJ	27 UJ	13 J
2-METHYLNAPHTHALENE	44 UJ	26 J	40 UJ	53 UJ	26 J	2300	60 UJ	27 U	27 U	22 U	87 UJ	79 UJ	27 UJ	16 J
ACENAPHTHENE	19 J	21 J	6.2 J	16 J	7.8 J	2300	60 UJ	11 J	28 J	5 J	87 UJ	79 UJ	27 UJ	20 UJ
ACENAPHTHYLENE	7.5 J	44 J	40 UJ	43 J	30 J	2200	60 UJ	6.1 J	8.2 J	5 J	44 J	79 UJ	3.4 J	13 J
ANTHRACENE	51 J	66 J	15 J	68 J	27 J	2800	10 J	30 J	71	19 J	46 J	79 UJ	7.6 J	21 J
BENZO(A)ANTHRACENE	850 J	590 J	250 J	580 J	230	2600	120 J	280	370	150	430 J	85 J	71 J	120 J
BENZO(A)PYRENE	1500 J	690 J	380 J	570 J	290	3100	170 J	330	370	200	500 J	160 J	85 J	130 J
BENZO(B)FLUORANTHENE	2600 J	1200 J	810 J	1200 J	520	3000	330 J	650 J	600	310	990 J	290 J	160 J	180 J
BENZO(G,H,I)PERYLENE	880 J	410 J	280 J	360 J	210	2400	140 J	200 J	240 J	150	360 J	180 J	71 J	120 J
BENZO(K)FLUORANTHENE	960 J	320 J	230 J	340 J	150	3000 J	99 J	210 J	230	85	300 J	83 J	60 J	46 J
BENZOIC ACID	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHRYSENE	1600 J	720 J	470 J	900 J	320	3100	180 J	430 J	470	190	570 J	99 J	94 J	120 J
DIBENZO(A,H)ANTHRACENE	210 J	140 J	65 J	99 J	74	2700	55 J	55 J	67 J	46	150 J	63 J	25 J	40 J
DIBENZOFURAN	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORANTHENE	2100 J	1200 J	480 J	620 J	480	2500	290 J	510	660	300	730 J	180 J	180 J	180 J
FLUORENE	25 J	40 J	40 UJ	35 J	20 J	2300	60 UJ	13 J	28 J	8.7 J	87 UJ	79 UJ	27 UJ	22 J
INDENO(1,2,3-CD)PYRENE	1100 J	650 J	380 J	460 J	340	2100 J	230 J	240 J	300 J	240	680 J	210 J	90 J	180 J
NAPHTHALENE	44 UJ	38 J	40 UJ	27 J	38 J	2200	60 UJ	27 U	27 U	5.9 J	87 UJ	79 UJ	27 UJ	30 J
PHENANTHRENE	850 J	590 J	250 J	500 J	250	2800	120 J	260	400	170	400 J	86 J	81 J	120 J
PHENOL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PYRENE	3000 J	1900 J	790 J	1100 J	680	3000	350 J	550	780	450	1300 J	200 J	190 J	210 J
TOTAL PAHS	15752.5	8645	4406.2	6918	3692.8	44400	2094	3775.1	4622.2	2334.6	6500	1636	1118	1548
PESTICIDES/PCBS (UG/KG)														
4,4'-DDD	--	--	--	--	--	--	--	--	--	--	110 J	170 J	11 J	3200 J
4,4'-DDE	--	--	--	--	--	--	--	--	--	--	18 J	24 J	7.9 J	320 J
4,4'-DDT	--	--	--	--	--	--	--	--	--	--	39 J	41 J	37 J	94 J
ALPHA-CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1260	--	--	--	--	--	--	--	--	--	--	66 UJ	16 UJ	5.3 UJ	5 UJ
ENDOSULFAN SULFATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL AROCLOR	--	--	--	--	--	--	--	--	--	--	0 U	0 U	0 U	0 U
TOTAL CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL DDT	--	--	--	--	--	--	--	--	--	--	167	235	55.9	3614

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD105	2WSD106	2WSD107	2WSD108	2WSD109	2WSD110	2WSD111	2WSD112	2WSD112	2WSD113	2WSD114	2WSD116	2WSD117	2WSD118
SAMPLE ID	2W-SD-SD105-0001	2W-SD-SD106-0001	2W-SD-SD107-0001	2W-SD-SD108-0001	2W-SD-SD109-0001	2W-SD-SD110-0001	2W-SD-SD111-0001	2W-SD-SD112-0001	2W-SD-SD112-0001-D	2W-SD-SD113-0001	2W-SD-SD114-0001	2W-SD-SD116-0001	2W-SD-SD117-0001	2W-SD-SD118-0001
SAMPLE DATE	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/5/2011
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
METALS (MG/KG)														
ALUMINUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTIMONY	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARSENIC	--	--	--	--	--	--	--	--	--	--	15.7 J	21.4 J	7.3 J	14.1 J
BARIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BORON	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM	--	--	--	--	--	--	--	--	--	--	1.6 UJ	1.6 UJ	1 UJ	1.2 J
CALCIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM	--	--	--	--	--	--	--	--	--	--	53.4 J	38.1 J	23 J	94.2 J
COBALT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COPPER	--	--	--	--	--	--	--	--	--	--	77.8 J	74.1 J	72.8 J	68.5 J
CYANIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LEAD	--	--	--	--	--	--	--	--	--	--	77.9 J	57.7 J	31.8 J	113 J
MAGNESIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MANGANESE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MERCURY	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NICKEL	--	--	--	--	--	--	--	--	--	--	24.7 J	23 J	16 J	41.5 J
POTASSIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SILVER	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
THALLIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ZINC	--	--	--	--	--	--	--	--	--	--	79.6 J	71.3 J	23.7 J	218 J
MISCELLANEOUS PARAMETERS														
PERCENT COARSE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINES (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT GRAVEL (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT MEDIUM SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL SOLIDS (%)	13	28	14	10	32	41	16	35	36	44	11	7.1	23	25
TOTAL ORGANIC CARBON (MG/KG)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PH (S.U.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
J = Estimated concentration
R = Rejected
U = Non-detect
UJ = Non-detect estimated
UR = Non-detect rejected
-- = Not analyzed

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD119	2WSD120	2WSD121	2WSD122	2WSD122	2WSD123	2WSD124	2WSD125	2WSD126	2WSD127	2WSD127	2WSD128	2WSD129	2WSD130
SAMPLE ID	2W-SD-SD119-0001	2W-SD-SD120-0001	2W-SD-SD121-0001	2W-SD-SD122-0001	2W-SD-SD122-0001-D	2W-SD-SD123-0001	2W-SD-SD124-0001	2W-SD-SD125-0001	2W-SD-SD126-0001	2W-SD-SD127-0001	2W-SD-SD127-0001-D	2W-SD-SD128-0001	2W-SD-SD129-0001	2W-SD-SD130-0001
SAMPLE DATE	4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/6/2011	4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/6/2011	4/5/2011
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
VOLATILES (UG/KG)														
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)														
1-METHYLNAPHTHALENE	9 J	9.8 J	5.6 J	3.8 UJ	25 UJ	40 UJ	29 J	12 J	15 J	15 U	13 U	17 J	32 J	39 UJ
2-METHYLNAPHTHALENE	52 UJ	43 UJ	4.7 J	22 UJ	25 UJ	40 UJ	34 J	14 J	43 UJ	15 U	13 U	29 J	38 J	39 UJ
ACENAPHTHENE	52 UJ	9.4 J	6.6 J	5.8 J	5.6 J	19 J	24 U	16 J	26 J	14 J	12 J	17 J	32 J	7.6 J
ACENAPHTHYLENE	30 J	8.7 J	14 J	9.2 J	10 J	18 J	59	25 J	15 J	15 U	13 U	21 J	33 J	9.2 J
ANTHRACENE	52 UJ	15 J	14 J	19 J	18 J	34 J	48 J	41 J	25 J	3.7 J	2.3 J	39 J	52 J	20 J
BENZO(A)ANTHRACENE	57 J	200 J	150 J	190 J	210 J	370 J	140	180 J	400 J	22 J	21 J	200	300 J	230 J
BENZO(A)PYRENE	73 J	210 J	190 J	240 J	240 J	460 J	140	230 J	480 J	31	30	230 J	360 J	290 J
BENZO(B)FLUORANTHENE	78 J	290 J	330 J	420 J	450 J	790 J	220	320 J	740 J	60	56	310	520 J	490 J
BENZO(G,H,I)PERYLENE	40 J	170 J	160 J	140 J	150 J	290 J	88	140 J	340 J	26 J	26 J	160	200 J	210 J
BENZO(K)FLUORANTHENE	19 J	78 J	83 J	120 J	140 J	250 J	62	100 J	170 J	24 J	21 J	92	160 J	160 J
BENZOIC ACID	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHRYSENE	36 J	180 J	200 J	250 J	270 J	470 J	190	210 J	430 J	36	32	230	360 J	280 J
DIBENZO(A,H)ANTHRACENE	52 UJ	72 J	47 J	42 J	45 J	83 J	24 U	45 J	150 J	8.7 J	8.3 J	53 J	79 J	60 J
DIBENZOFURAN	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORANTHENE	60 J	250 J	230 J	370 J	370 J	680 J	220	250 J	600 J	52	46	260	540 J	450 J
FLUORENE	52 UJ	16 J	9.1 J	9.1 J	8.8 J	22 J	86	58 J	21 J	15 U	13 U	46 J	56 J	39 UJ
INDENO(1,2,3-CD)PYRENE	64 J	280 J	180 J	180 J	190 J	360 J	150 J	230 J	560 J	29 J	30	240	350 J	240 J
NAPHTHALENE	52 UJ	43 UJ	6.4 J	22 UJ	25 UJ	40 UJ	32 J	11 J	43 UJ	15 U	13 U	40 J	51 J	39 UJ
PHENANTHRENE	32 J	130 J	100 J	160 J	170 J	230 J	120	150 J	260 J	20 J	20 J	140	240 J	140 J
PHENOL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PYRENE	89 J	460 J	300 J	440 J	500 J	840 J	530	500 J	790 J	53	50	620	850 J	500 J
TOTAL PAHS	578	2369.1	2024.8	2595.1	2777.4	4916	2119	2520	5007	379.4	354.6	2727	4221	3086.8
PESTICIDES/PCBS (UG/KG)														
4,4'-DDD	1800 J	460 J	150 J	41 J	39 J	680 J	25000	3400 J	--	3.7 J	3.4 J	480 J	2600 J	110 J
4,4'-DDE	54 J	23 J	33 J	21 J	22 J	110 J	2700 J	530 J	--	1.8 J	2.8 J	69	73 J	19 J
4,4'-DDT	20 J	11 J	45 J	21 J	19 J	140 J	19 J	380 J	--	5.7 J	7.2	5.3 J	27 J	39 J
ALPHA-CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1260	13 UJ	220 J	640 J	180 J	190 J	2300 J	20 U	28 UJ	--	14 U	14 UJ	22 UJ	310 J	360 J
ENDOSULFAN SULFATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL AROCLOR	0 U	220	640	180	190	2300	0 U	0 U	--	0 U	0 U	0 U	310	360
TOTAL CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL DDT	1874	494	228	83	80	930	27719	4310	--	11.2	13.4	554.3	2700	168

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD119	2WSD120	2WSD121	2WSD122	2WSD122	2WSD123	2WSD124	2WSD125	2WSD126	2WSD127	2WSD127	2WSD128	2WSD129	2WSD130
SAMPLE ID	2W-SD-SD119-0001	2W-SD-SD120-0001	2W-SD-SD121-0001	2W-SD-SD122-0001	2W-SD-SD122-0001-D	2W-SD-SD123-0001	2W-SD-SD124-0001	2W-SD-SD125-0001	2W-SD-SD126-0001	2W-SD-SD127-0001	2W-SD-SD127-0001-D	2W-SD-SD128-0001	2W-SD-SD129-0001	2W-SD-SD130-0001
SAMPLE DATE	4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/6/2011	4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/6/2011	4/5/2011
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
METALS (MG/KG)														
ALUMINUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTIMONY	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARSENIC	10.9 J	14 J	18.2 J	11.7 J	10.9 J	10.7 J	9.8	5.8 J	--	6.9	6	12.2	11.9 J	13 J
BARIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BORON	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM	2.8 J	1.9 J	2.1 J	0.79 J	0.81 J	3 J	3.8	0.14 J	--	0.52 U	0.41 U	1.1 J	0.52 J	2.4 J
CALCIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM	32.2 J	48.8 J	45.8 J	58.1 J	55 J	51.4 J	40	75.6 J	--	4.5	3.5	84.4	83 J	15.7 J
COBALT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COPPER	82.8 J	102 J	133 J	92.8 J	89.6 J	316 J	37	61.2 J	--	30.5 J	27.4	87.2	84.5 J	157 J
CYANIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LEAD	47 J	91.3 J	91.7 J	74.1 J	70.4 J	174 J	23.4	67 J	--	12.8	11.6	53.9	90.3 J	75.3 J
MAGNESIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MANGANESE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MERCURY	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NICKEL	50.2 J	29.3 J	39.8 J	26 J	25.7 J	53.8 J	45.1	25.7 J	--	6.2 J	5.6	35.9	28.8 J	72.2 J
POTASSIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SILVER	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
THALLIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ZINC	366 J	334 J	563 J	180 J	182 J	778 J	569	151 J	--	139 J	119	95.9	159 J	1350 J
MISCELLANEOUS PARAMETERS														
PERCENT COARSE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINES (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT GRAVEL (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT MEDIUM SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL SOLIDS (%)	9.6	12	25	23	22	14	41	30	12	58	59	36	22	14
TOTAL ORGANIC CARBON (MG/KG)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PH (S.U.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
J = Estimated concentration
R = Rejected
U = Non-detect
UJ = Non-detect estimated
UR = Non-detect rejected
-- = Not analyzed

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD131	2WSD132	2WSD133	2WSD134	2WSD135	2WSD136	2WSD137	2WSD138	2WSD139	2WSD140	2WSD141	2WSD142	2WSD143	2WSD144
SAMPLE ID	**2W-SD-SD131-0001**	**2W-SD-SD132-0001**	**2W-SD-SD133-0001**	**2W-SD-SD134-0001**	**2W-SD-SD135-0001**	**2W-SD-SD136-0001**	**2W-SD-SD137-0001**	**2W-SD-SD138-0001**	**2W-SD-SD139-0001**	**2W-SD-SD140-0001**	**2W-SD-SD141-0001**	**2W-SD-SD142-0001**	**2W-SD-SD143-0001**	**2W-SD-SD144-0001**
SAMPLE DATE	**4/5/2011**	**4/6/2011**	**4/5/2011**	**4/5/2011**	**4/6/2011**	**4/5/2011**	**4/5/2011**	**4/5/2011**	**4/6/2011**	**4/5/2011**	**4/5/2011**	**4/6/2011**	**4/6/2011**	**4/5/2011**
SAMPLE DEPTH (FEET)	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**	**0 - 0.33**
VOLATILES (UG/KG)														
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)														
1-METHYLNAPHTHALENE	62 UJ	32 J	38 UJ	17 J	25 J	35 J	28 J	14 J	25 J	40 UJ	55 J	26 J	62 J	26 J
2-METHYLNAPHTHALENE	62 UJ	27 J	38 UJ	8 J	16 J	15 J	49 J	16 J	21 J	40 UJ	35 J	15 J	47 J	12 J
ACENAPHTHENE	66 J	78 J	18 J	25 J	53 J	61 J	31 J	13 J	62 J	20 J	97 J	30 J	120 J	47 J
ACENAPHTHYLENE	8.1 J	54 J	14 J	12 J	19 J	10 J	38 J	24 J	41 J	12 J	37 J	40 J	59 J	39 J
ANTHRACENE	19 J	79 J	36 J	20 J	25 J	57 UJ	68	45 J	54 J	35 J	44 J	88	140 J	120 J
BENZO(A)ANTHRACENE	200 J	540 J	290 J	220 J	250 J	160 J	340	250	460 J	380 J	350 J	1400	1100 J	1100 J
BENZO(A)PYRENE	320 J	600 J	340 J	240 J	290 J	200 J	370	290	580 J	430 J	450 J	1500	1400 J	1000 J
BENZO(B)FLUORANTHENE	370 J	950 J	550 J	360 J	490 J	270 J	510	450	870 J	730 J	730 J	2400	2100 J	1400 J
BENZO(G,H,I)PERYLENE	320 J	300 J	180 J	150 J	150 J	160 J	180	190	340 J	250 J	360 J	560 J	56 J	590 J
BENZO(K)FLUORANTHENE	95 J	220 J	170 J	99 J	130 J	69 J	170	110	270 J	210 J	210 J	600	590 J	530 J
BENZOIC ACID	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHRYSENE	230 J	640 J	310 J	210 J	340 J	150 J	440	340	520 J	440 J	410 J	2000	1400 J	1200 J
DIBENZO(A,H)ANTHRACENE	79 J	110 J	73 J	63 J	49 J	57 UJ	56	55	120 J	78 J	130 J	170 J	300 J	180 J
DIBENZOFURAN	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORANTHENE	300 J	930 J	540 J	310 J	370 J	240 J	720	350	760 J	690 J	660 J	3000	1900 J	2100 J
FLUORENE	56 J	91 J	15 J	26 J	93 J	41 J	91	30 J	72 J	19 J	81 J	53 J	190 J	86 J
INDENO(1,2,3-CD)PYRENE	280 J	530 J	330 J	240 J	190 J	260 J	300	210	590 J	310 J	630 J	710 J	1400 J	690 J
NAPHTHALENE	62 UJ	20 J	11 J	11 J	24 J	23 J	69	29 J	53 UJ	40 UJ	100 UJ	18 J	34 J	13 J
PHENANTHRENE	140 J	310 J	220 J	130 J	200 J	110 J	300	190	290 J	260 J	250 J	1300	1000 J	1100 J
PHENOL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PYRENE	430 J	1800 J	740 J	540 J	740 J	330 J	1300	650	1200 J	830 J	1100 J	3500	3300 J	2200 J
TOTAL PAHS	2913.1	7279	3837	2664	3429	2099	5032	3242	6250	4694	5574	17384	15136	12407
PESTICIDES/PCBS (UG/KG)														
4,4'-DDD	140 J	20000 J	54 J	2000 J	130000 J	12000 J	8300	7100	39000 J	64 J	2200 J	640	120000 J	230 J
4,4'-DDE	28 J	2100 J	24 J	280 J	11000 J	1700 J	1400	930	4600 J	24 J	180 J	240	10000 J	100 J
4,4'-DDT	33 J	2800 J	36 J	830 J	56000 J	2.6 UJ	470 J	360 J	6500 J	35 J	350 UJ	260 J	15000 J	280 J
ALPHA-CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1260	51 UJ	770 J	450 J	250 J	6.3 UJ	290 J	22 U	21 U	42 UJ	560 J	90 UJ	28 UJ	70 UJ	5.3 UJ
ENDOSULFAN SULFATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL AROCLOR	0 U	770	450	250	0 U	290	0 U	0 U	0 U	560	0 U	0 U	0 U	0 U
TOTAL CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL DDT	201	24900	114	3110	197000	13700	10170	8390	50100	123	2380	1140	145000	610

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD131	2WSD132	2WSD133	2WSD134	2WSD135	2WSD136	2WSD137	2WSD138	2WSD139	2WSD140	2WSD141	2WSD142	2WSD143	2WSD144
SAMPLE ID	2W-SD-SD131-0001	2W-SD-SD132-0001	2W-SD-SD133-0001	2W-SD-SD134-0001	2W-SD-SD135-0001	2W-SD-SD136-0001	2W-SD-SD137-0001	2W-SD-SD138-0001	2W-SD-SD139-0001	2W-SD-SD140-0001	2W-SD-SD141-0001	2W-SD-SD142-0001	2W-SD-SD143-0001	2W-SD-SD144-0001
SAMPLE DATE	4/5/2011	4/6/2011	4/5/2011	4/5/2011	4/6/2011	4/5/2011	4/5/2011	4/5/2011	4/6/2011	4/5/2011	4/5/2011	4/6/2011	4/6/2011	4/5/2011
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
METALS (MG/KG)														
ALUMINUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTIMONY	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARSENIC	30.1 J	10.9 J	6.7 J	12.3 J	7.4 J	10.3 J	11.6	12.6 J	18.6 J	9.4 J	3.2 J	20.6	10.2 J	14.8 J
BARIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BORON	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM	7.2 J	1.6 J	0.22 J	1.6 J	2 J	4.3 J	2	1.3 J	2.1 J	0.3 J	2.4 UJ	0.8 J	1.6 J	1.3 UJ
CALCIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM	13.6 J	60.5 J	28.4 J	83.2 J	37.4 J	46 J	93.3	79.1 J	83.2 J	18.1 J	15.9 J	36	47.5 J	18.1 J
COBALT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COPPER	320 J	139 J	176 J	85 J	75.6 J	115 J	58.9	51.7 J	155 J	95.8 J	53.9 J	69.7	85.7 J	35.5 J
CYANIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LEAD	114 J	142 J	98 J	77.4 J	59.2 J	92.9 J	71.9	53.1 J	121 J	48 J	40 J	72	67.5 J	38.7 J
MAGNESIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MANGANESE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MERCURY	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NICKEL	57 J	28.6 J	38 J	31.6 J	27.5 J	37 J	31	28.2	45.9 J	37.9 J	17.7 J	30.4	28.3 J	19 J
POTASSIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SILVER	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
THALLIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ZINC	1870 J	264 J	372 J	220 J	325 J	532 J	166	138	473 J	954 J	192 J	320	338 J	298 J
MISCELLANEOUS PARAMETERS														
PERCENT COARSE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINES (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT GRAVEL (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT MEDIUM SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL SOLIDS (%)	16	24	26	19	20	9.5	39	39	19	14	9.4	31	12	23
TOTAL ORGANIC CARBON (MG/KG)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PH (S.U.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
J = Estimated concentration
R = Rejected
U = Non-detect
UJ = Non-detect estimated
UR = Non-detect rejected
-- = Not analyzed

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD145	2WSD146	2WSD147	2WSD149	2WSD152	2WSD153	2WSD154	2WSD155	2WSD156	2WSD157	2WSD158	2WSD159	2WSD159	2WSD160
SAMPLE ID	2W-SD-SD145-0001	2W-SD-SD146-0001	2W-SD-SD147-0001	2W-SD-SD149-0001	2W-SD-SD152-0001	2W-SD-SD153-0001	2W-SD-SD154-0001	2W-SD-SD155-0001	2W-SD-SD156-0001	2W-SD-SD157-0001	2W-SD-SD158-0001	2W-SD-SD159-0001	2W-SD-SD159-0001-D	2W-SD-SD160-0001
SAMPLE DATE	4/6/2011	4/5/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
VOLATILES (UG/KG)														
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)														
1-METHYLNAPHTHALENE	49 J	44 J	5 J	9.6 U	6.9 J	180 J	20 J	110 J	22 J	48 UJ	15 J	570 J	390	54 J
2-METHYLNAPHTHALENE	30 J	32 UJ	16 U	9.6 U	27 UJ	120 J	21 J	40 J	30 J	48 UJ	6.2 J	100 J	57	90 J
ACENAPHTHENE	130 J	110 J	11 J	9.6 U	34 J	310 J	120 J	440 J	35 J	27 J	30 J	390 J	120 J	55 J
ACENAPHTHYLENE	34 UJ	16 J	19 J	9.6 U	27 UJ	58 UJ	20 UJ	36 UJ	29 J	7.1 J	6.8 J	60 UJ	26 U	81 J
ANTHRACENE	110 J	38 J	45	9.6 U	10 J	180 J	45 J	53 J	27 J	53 J	22 J	60 UJ	52 J	120 J
BENZO(A)ANTHRACENE	460 J	430 J	440	13 J	140 J	180 J	190 J	88 J	220 J	300 J	210	170 J	80 J	570 J
BENZO(A)PYRENE	550 J	440 J	510	17 J	160 J	180 J	180 J	110 J	260 J	330 J	200	170 J	72 J	610 J
BENZO(B)FLUORANTHENE	840 J	690 J	740	17 J	220 J	320 J	240 J	170 J	380 J	580 J	260	230 J	110 J	880 J
BENZO(G,H,I)PERYLENE	240 J	240 J	400	8.4 J	150 J	140 J	140 J	91 J	160 J	240 J	170	190 J	62 J	350 J
BENZO(K)FLUORANTHENE	260 J	210 J	200	8.1 J	60 J	100 J	77 J	49 J	140 J	170 J	63	63 J	27 J	290 J
BENZOIC ACID	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHRYSENE	590 J	520 J	540	11 J	120 J	260 J	270 J	110 J	290 J	400 J	170	140 J	73 J	650 J
DIBENZO(A,H)ANTHRACENE	77 J	80 J	150	7.7 J	42 J	50 J	30 J	36 J	67 J	84 J	30 J	74 J	26 U	130 J
DIBENZOFURAN	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORANTHENE	620 J	770 J	820	24	210 J	370 J	130 J	220 J	410 J	640 J	260	340 J	140 J	1000 J
FLUORENE	100 J	38 J	16 J	9.6 U	26 J	620 J	98 J	370 J	34 J	26 J	24 J	490 J	260 J	160 J
INDENO(1,2,3-CD)PYRENE	430 J	290 J	410	14 J	240 J	230 J	140 J	160 J	280 J	410 J	280 J	260 J	98 J	580 J
NAPHTHALENE	22 J	32 UJ	7.2 J	9.6 U	27 UJ	78 J	40 J	56 J	50 J	48 UJ	12 J	170 J	70 J	120 J
PHENANTHRENE	360 J	390 J	310	8.4 J	75 J	730 J	140 J	300 J	220 J	340 J	120	740 J	580	430 J
PHENOL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PYRENE	2000 J	1000 J	960	30	260 J	790 J	450 J	320 J	630 J	820 J	330	450 J	180 J	1800 J
TOTAL PAHS	6819	5262	5578.2	158.6	1747	4658	2311	2613	3262	4427.1	2194	3977	1981	7916
PESTICIDES/PCBS (UG/KG)														
4,4'-DDD	14000 J	210 J	120 J	0.82 J	51 J	50 U	730 J	95 J	38 U	13 U	82	56 J	62	110 J
4,4'-DDE	2400 J	280 J	35 J	1.7 U	6.5 J	9.6 J	390 J	6 J	7.9 J	3.9 J	16 J	11 J	6.6 J	13 J
4,4'-DDT	3500 J	710 J	48 J	1.7 UJ	11 J	9.8 J	0.86 UJ	12 J	19 J	7.5 UJ	20 J	0.93 UJ	9.9 J	19 J
ALPHA-CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1260	28 UJ	7.2 UJ	15 U	8.9 UJ	170 J	49 UJ	4.4 UJ	150 J	46 UJ	39 UJ	280 J	150 J	130 J	62 UJ
ENDOSULFAN SULFATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL AROCLOR	0 U	0 U	0 U	0 U	170	0 U	0 U	150	0 U	0 U	280	150	130	0 U
TOTAL CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL DDT	19900	1200	203	0.82	68.5	19.4	1120	113	26.9	3.9	118	67	78.5	142

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD145	2WSD146	2WSD147	2WSD149	2WSD152	2WSD153	2WSD154	2WSD155	2WSD156	2WSD157	2WSD158	2WSD159	2WSD159	2WSD160
SAMPLE ID	2W-SD-SD145-0001	2W-SD-SD146-0001	2W-SD-SD147-0001	2W-SD-SD149-0001	2W-SD-SD152-0001	2W-SD-SD153-0001	2W-SD-SD154-0001	2W-SD-SD155-0001	2W-SD-SD156-0001	2W-SD-SD157-0001	2W-SD-SD158-0001	2W-SD-SD159-0001	2W-SD-SD159-0001-D	2W-SD-SD160-0001
SAMPLE DATE	4/6/2011	4/5/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
METALS (MG/KG)														
ALUMINUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTIMONY	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARSENIC	12.8 J	9.2 J	6.1 J	1.8 J	15 J	12.4 J	18.4 J	7 J	13.3 J	5 J	11.4 J	12.6 J	4.3 J	26.3 J
BARIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BORON	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM	1.1 J	3.6 UJ	0.34 J	0.09 J	1.6 J	3.7 UJ	3.5 J	0.82 UJ	1.6 UJ	0.89 UJ	1.1 J	1.1 J	0.54 J	2.1 UJ
CALCIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM	68 J	9.4 J	17.4 J	10 J	22.3 J	21.1 J	100 J	59 J	64.1 J	9.6 J	30 J	63.5 J	16 J	218 J
COBALT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COPPER	69.6 J	37.3 J	50.5 J	16.3 J	62.6 J	41.4 J	109 J	72.3 J	82.2 J	33.6 J	73.3 J	106 J	59.8 J	842 J
CYANIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LEAD	63.1 J	24.7 J	34.3 J	4.9 J	37.1 J	28.9 J	77.4 J	76.8 J	78.1 J	15.2 J	51 J	82.4 J	34 J	355 J
MAGNESIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MANGANESE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MERCURY	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NICKEL	30.4 J	33 J	14.3	6.5	17.4 J	17.2 J	47.9 J	19.6 J	50.5 J	12.8 J	22.9	27.1 J	9.8	93.2 J
POTASSIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SILVER	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
THALLIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ZINC	204 J	1200 J	264	19.8	453 J	396 J	400 J	245 J	298 J	433 J	327	352 J	256	901 J
MISCELLANEOUS PARAMETERS														
PERCENT COARSE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINES (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT GRAVEL (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT MEDIUM SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL SOLIDS (%)	28	17	56	94	17	17	27	26	18	20	46	25	36	13
TOTAL ORGANIC CARBON (MG/KG)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PH (S.U.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
J = Estimated concentration
R = Rejected
U = Non-detect
UJ = Non-detect estimated
UR = Non-detect rejected
-- = Not analyzed

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD161	2WSD162	2WSD163	2WSD164	2WSD165	2WSD165	2WSD166	2WSD167	2WSD168	2WSD169	2WSD170	2WSD171	2WSD172	2WSD173
SAMPLE ID	2W-SD-SD161-0001	2W-SD-SD162-0001	2W-SD-SD163-0001	2W-SD-SD164-0001	2W-SD-SD165-0001	2W-SD-SD165-0001-D	2W-SD-SD166-0001	2W-SD-SD167-0001	2W-SD-SD168-0001	2W-SD-SD169-0001	2W-SD-SD170-0001	2W-SD-SD171-0001	2W-SD-SD172-0001	2W-SD-SD173-0001
SAMPLE DATE	4/4/2011	4/4/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/7/2011	9/7/2011
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
VOLATILES (UG/KG)														
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)														
1-METHYLNAPHTHALENE	11 J	55 UJ	24 U	38 U	55 U	54 UJ	6 J	37 UJ	41 UJ	5.6 J	39 UJ	49 UJ	--	--
2-METHYLNAPHTHALENE	26 U	55 UJ	24 U	38 U	55 U	54 UJ	31 U	37 UJ	41 UJ	26 U	39 UJ	49 UJ	--	--
ACENAPHTHENE	72	55 UJ	7.2 J	16 J	55 U	54 UJ	17 J	26 J	9.3 J	12 J	30 J	49 UJ	--	--
ACENAPHTHYLENE	26 U	55 UJ	13 J	11 J	55 U	54 UJ	27 J	24 J	37 J	35 J	28 J	12 J	--	--
ANTHRACENE	50 J	10 J	25 J	44 J	8.9 J	16 J	60 J	73 J	33 J	44 J	99 J	22 J	--	--
BENZO(A)ANTHRACENE	280	68 J	220	2100	150	120 J	780 J	1800 J	280 J	480 J	2400 J	380 J	--	--
BENZO(A)PYRENE	240	86 J	280 J	2300 J	210 J	140 J	960 J	2200 J	320 J	580 J	3000 J	490 J	--	--
BENZO(B)FLUORANTHENE	320	170 J	540	3500	320	250 J	1500 J	130 J	440 J	890 J	4200 J	760 J	--	--
BENZO(G,H,I)PERYLENE	180	61 J	160 J	1200 J	110 J	81 J	700 J	1500 J	220 J	300 J	1700 J	370 J	--	--
BENZO(K)FLUORANTHENE	83	51 J	140	1200	110 J	67 J	920 J	2200 J	280 J	580 J	2800 J	420 J	--	--
BENZOIC ACID	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHRYSENE	240	110 J	320	2000	150	120 J	910 J	1900 J	300 J	530 J	2500 J	380 J	--	--
DIBENZO(A,H)ANTHRACENE	79	17 J	52 J	410 J	32 J	54 UJ	180 J	360 J	76 J	92 J	340 J	110 J	--	--
DIBENZOFURAN	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORANTHENE	420	180 J	380	3000	230	200 J	1600 J	3500 J	510 J	920 J	4500 J	790 J	--	--
FLUORENE	97	55 UJ	12 J	14 J	55 U	54 UJ	26 J	26 J	19 J	20 J	34 J	49 UJ	--	--
INDENO(1,2,3-CD)PYRENE	290 J	100 J	270 J	2000 J	180 J	130 J	720 J	1500 J	240 J	340 J	1800 J	410 J	--	--
NAPHTHALENE	10 J	55 UJ	7.8 J	38 U	55 U	54 UJ	31 U	37 UJ	41 UJ	6.8 J	39 UJ	49 UJ	--	--
PHENANTHRENE	180	80 J	210	430	100 J	110 J	700 J	940 J	300 J	460 J	1100 J	260 J	--	--
PHENOL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PYRENE	530	140 J	430	2800	260	210 J	1900 J	4000 J	690 J	1100 J	5200 J	990 J	--	--
TOTAL PAHS	3071	1073	3067	21025	1860.9	1444	11000	20179	3754.3	6389.8	29731	5394	--	--
PESTICIDES/PCBS (UG/KG)														
4,4'-DDD	4.2 U	9.2 J	--	--	--	--	--	--	--	--	--	--	290	1400 J
4,4'-DDE	4.2 UJ	7.4 J	--	--	--	--	--	--	--	--	--	--	17 J	330 J
4,4'-DDT	4.2 UJ	8.4 J	--	--	--	--	--	--	--	--	--	--	7.9 J	11 J
ALPHA-CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1260	47 J	47 UJ	--	--	--	--	--	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL AROCLOR	47	0 U	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL DDT	0 U	25	--	--	--	--	--	--	--	--	--	--	314.9	1741

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD161	2WSD162	2WSD163	2WSD164	2WSD165	2WSD165	2WSD166	2WSD167	2WSD168	2WSD169	2WSD170	2WSD171	2WSD172	2WSD173
SAMPLE ID	2W-SD-SD161-0001	2W-SD-SD162-0001	2W-SD-SD163-0001	2W-SD-SD164-0001	2W-SD-SD165-0001	2W-SD-SD165-0001-D	2W-SD-SD166-0001	2W-SD-SD167-0001	2W-SD-SD168-0001	2W-SD-SD169-0001	2W-SD-SD170-0001	2W-SD-SD171-0001	2W-SD-SD172-0001	2W-SD-SD173-0001
SAMPLE DATE	4/4/2011	4/4/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/7/2011	9/7/2011
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
METALS (MG/KG)														
ALUMINUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTIMONY	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARSENIC	5.8 J	13.6 J	--	--	--	--	--	--	--	--	--	--	--	--
BARIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BORON	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM	1.8 J	2.3 UJ	--	--	--	--	--	--	--	--	--	--	--	--
CALCIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM	17.2 J	9.4 J	--	--	--	--	--	--	--	--	--	--	--	--
COBALT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COPPER	246 J	43.3 J	--	--	--	--	--	--	--	--	--	--	--	--
CYANIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LEAD	42.8 J	21.9 J	--	--	--	--	--	--	--	--	--	--	--	--
MAGNESIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MANGANESE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MERCURY	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NICKEL	17.8	15 J	--	--	--	--	--	--	--	--	--	--	--	--
POTASSIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SILVER	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
THALLIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ZINC	659	753 J	--	--	--	--	--	--	--	--	--	--	--	--
MISCELLANEOUS PARAMETERS														
PERCENT COARSE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINES (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT GRAVEL (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT MEDIUM SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL SOLIDS (%)	38	17	38	24	17	18	32	27	24	38	25	20	7.9	11
TOTAL ORGANIC CARBON (MG/KG)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PH (S.U.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
J = Estimated concentration
R = Rejected
U = Non-detect
UJ = Non-detect estimated
UR = Non-detect rejected
-- = Not analyzed

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD173	2WSD174	2WSD175	2WSD180	2WSD180	2WSD181	2WSD183	2WSD184	2WSD185	2WSD186	2WSD187	2WSD188	2WSD189	2WSD190
SAMPLE ID	2W-SD-SD173-0001-D	2W-SD-SD174-0001	2W-SD-SD175-0001	2W-SD-SD180-0001	2W-SD-SD180-0001-D	2W-SD-SD181-0001	2W-SD-SD183-0001	2W-SD-SD184-0001	2W-SD-SD185-0001	2W-SD-SD186-0001	2W-SD-SD187-0001	2W-SD-SD188-0001	2W-SD-SD189-0001	2W-SD-SD190-0001
SAMPLE DATE	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	11/2/2011	11/3/2011	11/2/2011	11/2/2011	11/2/2011	11/3/2011	11/3/2011	11/3/2011
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
VOLATILES (UG/KG)														
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)														
1-METHYLNAPHTHALENE	--	--	--	66 U	--	50 U	5.2 J	38 UJ	4.9 J	10 J	85 UJ	76 UJ	67 UJ	70 UJ
2-METHYLNAPHTHALENE	--	--	--	66 U	--	50 U	6.4 J	38 UJ	9.2 J	15 J	85 UJ	76 UJ	33 J	70 UJ
ACENAPHTHENE	--	--	--	100 J	--	40 J	5.8 J	6.7 J	9.3 J	24 J	85 UJ	15 J	60 J	28 J
ACENAPHTHYLENE	--	--	--	79 J	--	13 J	23 J	30 J	32 J	31 J	85 UJ	19 J	66 J	36 J
ANTHRACENE	--	--	--	73 J	--	15 J	20 J	23 J	26 J	66 J	85 UJ	38 J	93 J	55 J
BENZO(A)ANTHRACENE	--	--	--	280	--	89 J	130	170 J	160	880 J	72 J	520 J	620 J	640 J
BENZO(A)PYRENE	--	--	--	330 J	--	100 J	160	220 J	190	1300 J	97 J	700 J	890 J	880 J
BENZO(B)FLUORANTHENE	--	--	--	66 U	--	190	200	380 J	230	2400 J	160 J	1100 J	1800 J	1500 J
BENZO(G,H,I)PERYLENE	--	--	--	200 J	--	70 J	130	180 J	150	1100 J	120 J	610 J	870 J	780 J
BENZO(K)FLUORANTHENE	--	--	--	66 U	--	60 J	170	230 J	190	1200 J	120 J	750 J	860 J	880 J
BENZOIC ACID	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHRYSENE	--	--	--	410	--	99 J	190	290 J	230	1500 J	120 J	750 J	1100 J	840 J
DIBENZO(A,H)ANTHRACENE	--	--	--	66 UJ	--	50 U	36 J	55 J	48	230 J	37 J	150 J	280 J	210 J
DIBENZOFURAN	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORANTHENE	--	--	--	420	--	130	250	420 J	290	2200 J	210 J	1200 J	1500 J	1400 J
FLUORENE	--	--	--	100 J	--	33 J	12 J	14 J	15 J	32 J	85 UJ	76 UJ	68 J	37 J
INDENO(1,2,3-CD)PYRENE	--	--	--	280 J	--	96 J	120	180 J	140	1100 J	100 U	580 J	850 J	740 J
NAPHTHALENE	--	--	--	32 J	--	50 U	7.6 J	38 UJ	11 J	57 UJ	85 UJ	76 UJ	29 J	70 UJ
PHENANTHRENE	--	--	--	230	--	86 J	150	200 J	170	710 J	83 J	350 J	500 J	340 J
PHENOL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PYRENE	--	--	--	950	--	190	330 J	440 J	360 J	2300 J	220 J	1400 J	1500 J	1700 J
TOTAL PAHS	--	--	--	3484	--	1211	1940.8	2838.7	2260.5	15088	1239	8182	11119	10066
PESTICIDES/PCBS (UG/KG)														
4,4'-DDD	2700 J	2000	4800	16000	--	16 J	--	--	--	--	--	--	--	--
4,4'-DDE	610 J	330	840	2000 J	--	3.9 J	--	--	--	--	--	--	--	--
4,4'-DDT	14 J	9.7 J	540 J	30	--	6.8 J	--	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1260	--	--	--	59 UJ	46 U	43 U	--	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL AROCLOR	--	--	--	0 U	0 U	0 U	--	--	--	--	--	--	--	--
TOTAL CHLORDANE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL DDT	3324	2339.7	6180	18030	--	26.7	--	--	--	--	--	--	--	--

APPENDIX E

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD173	2WSD174	2WSD175	2WSD180	2WSD180	2WSD181	2WSD183	2WSD184	2WSD185	2WSD186	2WSD187	2WSD188	2WSD189	2WSD190
SAMPLE ID	2W-SD-SD173-0001-D	2W-SD-SD174-0001	2W-SD-SD175-0001	2W-SD-SD180-0001	2W-SD-SD180-0001-D	2W-SD-SD181-0001	2W-SD-SD183-0001	2W-SD-SD184-0001	2W-SD-SD185-0001	2W-SD-SD186-0001	2W-SD-SD187-0001	2W-SD-SD188-0001	2W-SD-SD189-0001	2W-SD-SD190-0001
SAMPLE DATE	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	11/2/2011	11/3/2011	11/2/2011	11/2/2011	11/2/2011	11/3/2011	11/3/2011	11/3/2011
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
METALS (MG/KG)														
ALUMINUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTIMONY	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARSENIC	--	--	--	15.9 J	7.6 J	16.8 J	--	--	--	--	--	--	--	--
BARIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BORON	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM	--	--	--	2.9 J	0.59 J	0.63 J	--	--	--	--	--	--	--	--
CALCIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM	--	--	--	100 J	32.7 J	33.4 J	--	--	--	--	--	--	--	--
COBALT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COPPER	--	--	--	106 J	48.1 J	66.2 J	--	--	--	--	--	--	--	--
CYANIDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LEAD	--	--	--	87 J	40.3 J	44.5 J	--	--	--	--	--	--	--	--
MAGNESIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MANGANESE	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MERCURY	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NICKEL	--	--	--	50.2 J	18.6 J	30.1 J	--	--	--	--	--	--	--	--
POTASSIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SILVER	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
THALLIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ZINC	--	--	--	397 J	220 J	302 J	--	--	--	--	--	--	--	--
MISCELLANEOUS PARAMETERS														
PERCENT COARSE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINE SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT FINES (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT GRAVEL (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PERCENT MEDIUM SAND (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL SOLIDS (%)	12	20	26	14	18	19	47	26	46	16	11	13	15	14
TOTAL ORGANIC CARBON (MG/KG)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PH (S.U.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
J = Estimated concentration
R = Rejected
U = Non-detect
UJ = Non-detect estimated
UR = Non-detect rejected
-- = Not analyzed

LOCATION	2WSD190	2WSD191	2WSD193	2WSD194	2WSD195	2WSD196	2WSD197
SAMPLE ID	2W-SD-SD190-0001-D	2W-SD-SD191-0001	2W-SD-SD193-0001	2W-SD-SD194-0001	2W-SD-SD195-0001	2W-SD-SD196-0001	2W-SD-SD197-0001
SAMPLE DATE	11/3/2011	11/3/2011	11/3/2011	11/3/2011	11/3/2011	11/3/2011	11/3/2011
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
VOLATILES (UG/KG)							
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--
2-BUTANONE	--	--	--	--	--	--	--
ACETONE	--	--	--	--	--	--	--
CARBON DISULFIDE	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	--	--	--	--
TOLUENE	--	--	--	--	--	--	--
TRICHLOROETHENE	--	--	--	--	--	--	--
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)							
1-METHYLNAPHTHALENE	64 UJ	51 UJ	50 UJ	51 UJ	57 UJ	46 UJ	53 UJ
2-METHYLNAPHTHALENE	64 UJ	51 UJ	50 UJ	51 UJ	57 UJ	31 J	53 UJ
ACENAPHTHENE	14 J	51 UJ	9.4 J	51 UJ	10 J	77 J	11 J
ACENAPHTHYLENE	64 UJ	51 UJ	50 UJ	51 UJ	57 UJ	67 J	53 UJ
ANTHRACENE	35 J	13 J	29 J	20 J	26 J	58 J	27 J
BENZO(A)ANTHRACENE	630 J	96 J	240 J	170 J	240 J	300 J	230 J
BENZO(A)PYRENE	750 J	130 J	270 J	200 J	280 J	310 J	250 J
BENZO(B)FLUORANTHENE	1200 J	220 J	350 J	300 J	430 J	470 J	350 J
BENZO(G,H,I)PERYLENE	750 J	100 J	270 J	190 J	310 J	290 J	230 J
BENZO(K)FLUORANTHENE	800 J	120 J	320 J	180 J	330 J	310 J	270 J
BENZOIC ACID	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--
BUTYL BENZYL PHTHALATE	--	--	--	--	--	--	--
CARBAZOLE	--	--	--	--	--	--	--
CHRYSENE	840 J	150 J	400 J	260 J	400 J	410 J	340 J
DIBENZO(A,H)ANTHRACENE	200 J	29 J	61 J	51 J	76 J	77 J	72 J
DIBENZOFURAN	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	--	--	--	--	--	--	--
DI-N-OCTYL PHTHALATE	--	--	--	--	--	--	--
FLUORANTHENE	1400 J	240 J	510 J	420 J	640 J	770 J	510 J
FLUORENE	64 UJ	51 UJ	50 UJ	51 UJ	57 UJ	96 J	17 UJ
INDENO(1,2,3-CD)PYRENE	670 J	99 J	240 J	170 J	280 J	260 J	210 J
NAPHTHALENE	64 UJ	51 UJ	50 UJ	51 UJ	57 UJ	46 UJ	53 UJ
PHENANTHRENE	310 J	100 J	240 J	180 J	250 J	580 J	230 J
PHENOL	--	--	--	--	--	--	--
PYRENE	1200 J	270 J	480 J	370 J	530 J	620 J	440 J
TOTAL PAHS	8799	1567	3419.4	2511	3802	4726	3170
PESTICIDES/PCBS (UG/KG)							
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
ALPHA-CHLORDANE	--	--	--	--	--	--	--
AROCLOR-1260	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	--	--	--	--	--	--	--
ENDRIN	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	--	--	--	--	--	--	--
GAMMA-BHC (LINDANE)	--	--	--	--	--	--	--
GAMMA-CHLORDANE	--	--	--	--	--	--	--
METHOXYCHLOR	--	--	--	--	--	--	--
TOTAL AROCLOR	--	--	--	--	--	--	--
TOTAL CHLORDANE	--	--	--	--	--	--	--
TOTAL DDT	--	--	--	--	--	--	--

ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED IN THE AREA A WETLAND - SITE 2B
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

LOCATION	2WSD190	2WSD191	2WSD193	2WSD194	2WSD195	2WSD196	2WSD197
SAMPLE ID	2W-SD-SD190-0001-D	2W-SD-SD191-0001	2W-SD-SD193-0001	2W-SD-SD194-0001	2W-SD-SD195-0001	2W-SD-SD196-0001	2W-SD-SD197-0001
SAMPLE DATE	11/3/2011	11/3/2011	11/3/2011	11/3/2011	11/3/2011	11/3/2011	11/3/2011
SAMPLE DEPTH (FEET)	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33	0 - 0.33
METALS (MG/KG)							
ALUMINUM	--	--	--	--	--	--	--
ANTIMONY	--	--	--	--	--	--	--
ARSENIC	--	--	--	--	--	--	--
BARIUM	--	--	--	--	--	--	--
BERYLLIUM	--	--	--	--	--	--	--
BORON	--	--	--	--	--	--	--
CADMIUM	--	--	--	--	--	--	--
CALCIUM	--	--	--	--	--	--	--
CHROMIUM	--	--	--	--	--	--	--
COBALT	--	--	--	--	--	--	--
COPPER	--	--	--	--	--	--	--
CYANIDE	--	--	--	--	--	--	--
IRON	--	--	--	--	--	--	--
LEAD	--	--	--	--	--	--	--
MAGNESIUM	--	--	--	--	--	--	--
MANGANESE	--	--	--	--	--	--	--
MERCURY	--	--	--	--	--	--	--
NICKEL	--	--	--	--	--	--	--
POTASSIUM	--	--	--	--	--	--	--
SELENIUM	--	--	--	--	--	--	--
SILVER	--	--	--	--	--	--	--
SODIUM	--	--	--	--	--	--	--
THALLIUM	--	--	--	--	--	--	--
VANADIUM	--	--	--	--	--	--	--
ZINC	--	--	--	--	--	--	--
MISCELLANEOUS PARAMETERS							
PERCENT COARSE SAND (%)	--	--	--	--	--	--	--
PERCENT FINE SAND (%)	--	--	--	--	--	--	--
PERCENT FINES (%)	--	--	--	--	--	--	--
PERCENT GRAVEL (%)	--	--	--	--	--	--	--
PERCENT MEDIUM SAND (%)	--	--	--	--	--	--	--
TOTAL SOLIDS (%)	--	14	20	18	17	21	18
TOTAL ORGANIC CARBON (MG/KG)	--	--	--	--	--	--	--
PH (S.U.)	--	--	--	--	--	--	--

Notes:
J = Estimated concentration
R = Rejected
U = Non-detect
UJ = Non-detect estimated
UR = Non-detect rejected
-- = Not analyzed