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SITE ASSESSMENT REPORT FOR SITE A-824 WITH TRANSMITTAL LETTER NAS KEY WEST FL
11/29/2004
TETRA TECH NUS

TETRA TECH NUS, INC.

AIK-04-0299

November 29, 2004

Project Number N4779 *via FedEx*

Commander
Department of the Navy
SOUTHDIV NAVFACENGCOM
ATTN: Byas Glover (Code ES24)
P.O. Box 190010
North Charleston, South Carolina 29419-9010

Reference: CLEAN Contract No. N62467-94-D-0888
Contract Task Order No. 0318

Subject: Site Assessment Report for Site A-824, Rev. 0, Naval Air Station, Key West, Florida

Dear Mr. Glover:

TtNUS is pleased to submit the enclosed PDF file for the final Site Assessment Report for Site A-824, Rev. 0, Naval Air Station (NAS), Key West, Florida. As you requested, a copy of this plan is being sent to NAS Key West for review and comment prior to submittal to the Florida Department of Environmental Protection.

Please call me at (803) 649-7963, extension 345, if you have any questions regarding the enclosed report.

Sincerely,

C. M. Bryan
Project Manager

CMB:spc

Enclosure

c: Ms. Debra M. Humbert (Cover Letter Only)
Mr. M. Perry/File
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File N4779-7.3.1

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Site Assessment Report
for
Site A-824

Naval Air Station
Key West, Florida

Southern Division
Naval Facilities Engineering Command

Contract Number N62467-94-D-0888
Contract Task Order 0318

November 2004

Rev. 0
11/29/04

SITE ASSESSMENT REPORT
FOR
SITE A-824

NAVAL AIR STATION
KEY WEST, FLORIDA

COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

Submitted to:
Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
North Charleston, South Carolina 29406

Submitted by:
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CONTRACT NUMBER N62467-94-D-0888
CONTRACT TASK ORDER 0318

NOVEMBER 2004

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ACRONYMS/ABBREVIATIONS

ABB	ABB Environmental Services, Inc.
B&RE	Brown and Root Environmental, Inc.
bls	Below land surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CAP	Contamination Assessment Plan
CoC	Contaminant of Concern
CTO	Contract Task Order
EDB	Ethylene Dibromide
EPA	United States Environmental Protection Agency
F.A.C.	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FKAA	Florida Keys Aqueduct Authority
FL-PRO	Florida Petroleum Range Organics
GCTL	Groundwater Cleanup Target Level
ID	Inside Diameter
IT	IT Corporation
K	Hydraulic Conductivity
KAG	Kerosene Analytical Group
µg/L	Micrograms per Liter
mg/kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
msl	Mean Sea Level
MTBE	Methyl-tertiary butyl ether
NAS	Naval Air Station
NAVFAC EFD SOUTH	Southern Division, Naval Facilities Engineering Command
PAH	Polynuclear Aromatic Hydrocarbon
PID	Photo-ionization Detector
PPL	Priority Pollutant List
ppm	Parts per Million
PVC	Polyvinyl Chloride
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RI	Remedial Investigation
SAR	Site Assessment Report
SCTL	Soil Cleanup Target Level

SOP	Standard Operating Procedure
SWL	Static Water Level
SWMU	Solid Waste Management Unit
TOC	Top of Casing
TRPH	Total Recoverable Petroleum Hydrocarbon
TtNUS	Tetra Tech NUS, Inc.
UST	Underground Storage Tank
VOC	Volatile Organic Compound
VOH	Volatile Organic Halocarbon

EXECUTIVE SUMMARY

Tetra Tech NUS, Inc. (TtNUS) has been authorized by Southern Division, Naval Facilities Engineering Command (NAVFAC EFD SOUTH) to prepare a Site Assessment Report (SAR) for Site A-824 at Naval Air Station (NAS) Key West, Florida. This SAR has been prepared to evaluate soil and groundwater conditions at a suspected roadside spill of diesel fuel adjacent to the site.

Site Assessment Activities

The following site assessment activities were conducted by TtNUS:

- Reviewed available Navy documents to collect historical information about the site, evaluate public and private potable wells, locate utility line areas, locate nearby surface water bodies, and assess surface hydrology and drainage.
- Collected soil samples from six locations for head space screening and laboratory analyses. Samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl-tertiary butyl ether (MTBE), polynuclear aromatic hydrocarbons (PAHs), and total recoverable petroleum hydrocarbons (TRPH).
- Installed three shallow monitoring wells to assess the extent of contamination.
- Collected groundwater samples from the four permanent monitoring wells (three new wells and one existing well) for laboratory analysis of the kerosene analytical group (KAG) group, which included BTEX, MTBE, Priority Pollutant List (PPL) volatile organic halocarbons (VOHs), PAHs, ethylene dibromide (EDB), TRPH, and lead.
- Conducted a study to evaluate the effects of tidal influences on the movement of groundwater at the site.

Conclusions

The following conclusions were drawn based on site assessment activities:

- Concentrations of petroleum contaminants detected in the soil samples collected for this investigation were below Soil Cleanup Target Levels (SCTLs) for Residential Direct Exposure, as specified in the Chapter 62-777, Florida Administrative Code (F.A.C.), Table II.
- Free product was not observed during the site assessment activities.

- Concentrations of petroleum contaminants of concern (CoCs) in site groundwater were below the Groundwater Cleanup Target Levels (GCTLs) for VOCs, PAHs, TRPH and lead as specified in Chapter 62-777, F.A.C., Table I for two consecutive sampling events. EDB was detected above its GCTL in one well during the first sampling event; however, it was not detected in the well during two subsequent sampling events.

Recommendation

Based on the hydrogeological and chemical data presented in this SAR and the requirements of Chapter 62-770, F.A.C., the site qualifies for No Futher Action.

1.0 SITE DESCRIPTION AND BACKGROUND INFORMATION

TtNUS, under contract with NAVFAC EFD SOUTH, is submitting this SAR documenting the findings of the site assessment performed at Site A-824, NAS Key West, Florida. This SAR was prepared on behalf of the Navy under Contract No. N62467-94-D-0888, Contract Task Order (CTO) 0318, and summarizes the environmental assessment activities conducted by TtNUS.

1.1 SITE LOCATION AND CONDITIONS

Key West is located in southern Monroe County, Florida, approximately 150 miles southwest of Miami. The site is located in Section 29, Township 67 South, Range 29 East, on the north side of NAS Key West, on Boca Chica Key, Florida (Figure 1-1). The site topography is level and the elevation of the site is less than 5 feet above mean sea level (msl). The site is less than one-quarter-mile from the Atlantic Ocean. Figure 1-2 shows the site layout. A sensitive ecological habitat for the Lower Keys Marsh Rabbit is located within the boundaries of the site.

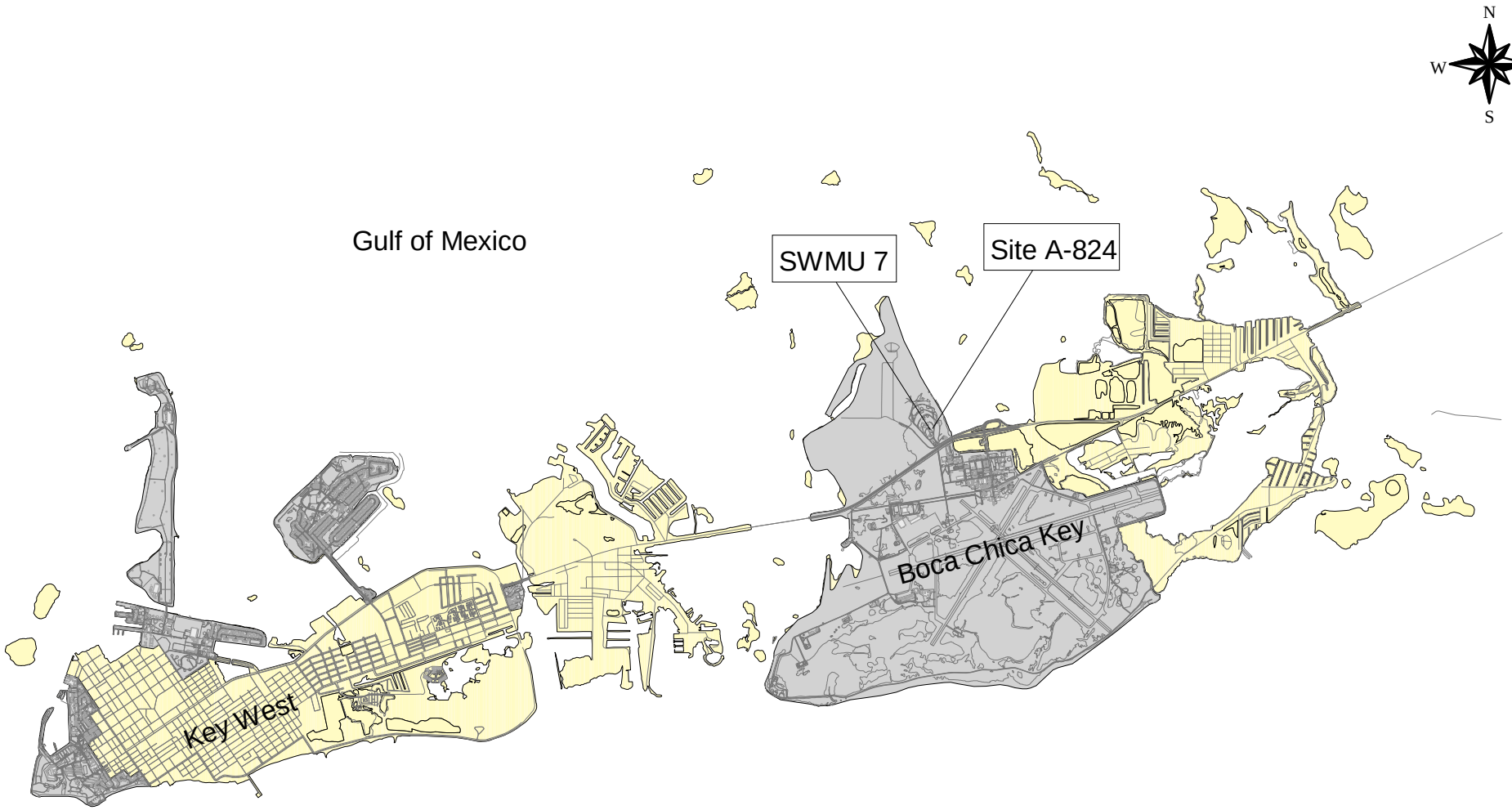
1.2 SITE HISTORY

Building A-824 is located within the boundaries of Solid Waste Management Unit (SWMU) 7. This building was previously used to store supplies and small electrical transformers. It was also used for temporary staging of 55-gallon drums of hazardous waste. Although no reported release of petroleum hydrocarbon contaminants was recorded, fuel contamination identified to the east of the building during the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI)/Remedial Investigation (RI) suggested a possible roadside diesel spill [IT Corporation (IT), 1994]. Fuel constituents were also discovered in the area between the access roads to the east of Building A-824 during the Supplemental RFI/RI performed by Brown and Root Environmental, Inc. (B&RE, 1998). Additional investigation under the NAS Key West Underground Storage Tank (UST) program was recommended in the Supplemental RFI/RI because the contamination was deemed a petroleum issue that should not be associated with the RCRA activities at SWMU 7.

1.3 PREVIOUS INVESTIGATIONS

IT conducted the RFI/RI at SWMU 7 in 1993 (IT, 1994). Soil samples were collected from two locations in the area now known as Site A-824. These locations are shown on figures contained in Appendix A. Multiple PAHs were detected in samples collected from the surface and subsurface at these two locations; however, only benzo(a)pyrene in one surface soil sample exceeds current residential SCTLs.

During the Supplemental RFI/RI performed in 1997 (B&RE, 1998), surface soil samples were collected from four additional locations in the Site A-824 area. Three PAHs, benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene, detected in one surface soil sample exceed current residential SCTLs. Soil data from the RFI/RI and Supplemental RFI/RI are included as Appendix A. No prior groundwater investigation has been performed at Site A-824.



LEGEND

NAS Key West Property

0.5 0 0.5 1 1.5 2 Miles

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SCALE: AS NOTED	

SITE A-824 SITE ASSESSMENT REPORT

SITE LOCATION MAP

NAVAL AIR STATION

KEY WEST, FLORIDA

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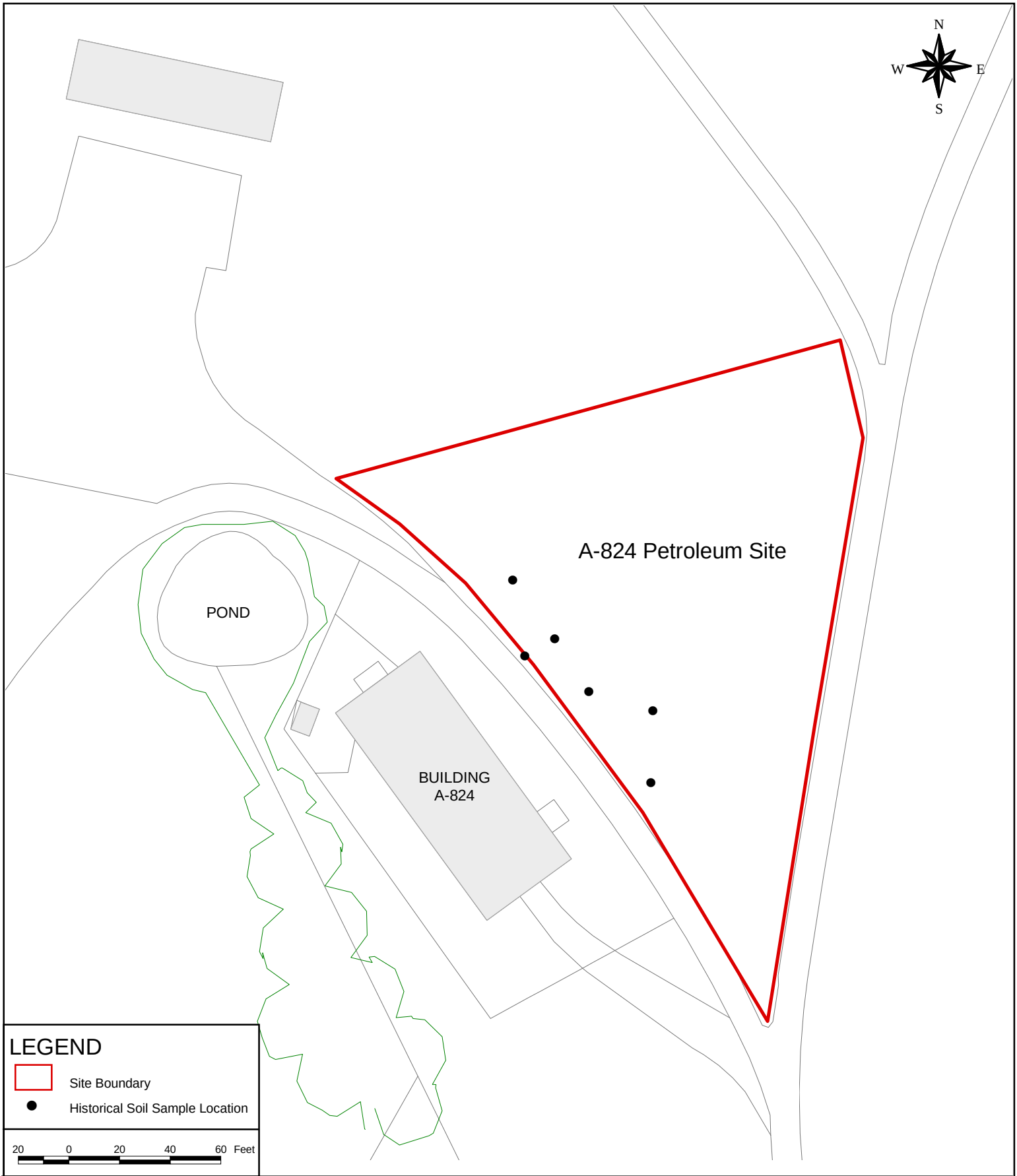
K:\A824 SAR.APR LAYOUT: FIGURE 1-1 SAR REV. 0 BY: EHM 08/16/2004



LEGEND

- Site Boundary
- Historical Soil Sample Location

20 0 20 40 60 Feet

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SITE A-824 SITE ASSESSMENT REPORT
SITE LAYOUT
NAVAL AIR STATION
KEY WEST, FLORIDA

CONTRACT NUMBER: N4779	
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FIGURE NO.: 1-2	REV.: 0

K:\A824 SAR.APR LAYOUT: FIGURE 1-2 SAR REV.0 BY: EHM 08/09/2004

2.0 SITE ASSESSMENT METHODOLOGY

Site assessment activities were carried out at Site A-824 in 2004 in accordance with the Contamination Assessment Plan (CAP) (TtNUS, 2003). Soil samples were collected during this investigation for laboratory analysis and headspace screening. Groundwater samples were also collected for laboratory analysis. Following the installation of soil borings, monitoring wells were installed to evaluate the groundwater. Groundwater samples were collected for laboratory analysis and evaluation of natural attenuation parameters. Aquifer properties were evaluated using data collected during the monitoring well elevation survey, tidal study, and static water level (SWL) measurements, along with referenced slug test data (conducted at a site on Boca Chica Key). The results of the site assessment are discussed in Sections 3.0 and 4.0.

2.1 QUALITY ASSURANCE

Field activities were conducted in accordance with Florida Department of Environmental Protection (FDEP) Standard Operating Procedures (SOPs) (FDEP, 2002). Equipment used to advance the soil borings, install monitoring wells, and collect soil or groundwater samples was decontaminated prior to and following each use. Organic vapor measurements were made with a Photo Ionization Detector (PID). Prior to each day's activities, the PID was field calibrated in accordance with manufacturer directions.

Groundwater screening and monitoring well samples were collected in pre-preserved containers obtained from Katahdin Analytical Services in Westbrook, Maine. The laboratory's certification number is E87604. Quality control samples (i.e., duplicates, equipment blanks, and trip blanks) were prepared and submitted to the laboratory. Sampling activities were documented in a site-specific field logbook and samples were transmitted under chain-of-custody protocol to the laboratory.

2.2 SOIL BORING PROGRAM

The soil screening investigation was conducted at Site A-824 to evaluate the extent to which petroleum constituents previously detected in samples had impacted the site soils. The borings were located around the perimeter of the site as intrusive work was not permitted within the sensitive ecological habitat area. The soil screening investigation was conducted by installing six soil borings using a hand auger (Figure 2-1). Soil samples from the borings were collected for headspace screening with a PID.

2.2.1 Soil Core Sampling

Soil borings for the preliminary assessment were advanced using a hand auger. Oolitic limestone was encountered in the soil borings. Groundwater was encountered at varying depths in the six borings and occurred between 8 and 18 inches below land surface (bls). The soil borings were advanced to the depth of

the vadose zone and samples were collected within the intervals at each location for headspace screening. The site geologist logged the soil properties, including texture, color, and soil moisture for each soil core and noted if staining or odors were present. Soil boring logs are provided in Appendix B.

2.2.2 Soil Headspace Screening

Soil samples were collected from the vadose zone in each location for headspace screening. From the interval, a 16-ounce glass jar was half-filled with the soil sample, sealed with aluminum foil, and labeled. The soil samples were allowed to equilibrate to ambient air temperature. The PID response to total headspace organic vapors was measured by inserting the PID probe through the foil sample cover and recording the highest instrument reading.

2.3 SOIL SAMPLING PROGRAM

Six soil samples were collected for laboratory analysis to confirm headspace vapor screening results. One sample was collected from each boring and analyzed for BTEX and MTBE by SW-846 Method 8260B, PAHs (including 1- and 2-methylnaphthalene) by SW-846 Method 8270C, and TRPH by the Florida Petroleum Range Organics (FL-PRO) method. The validated analytical report is included in Appendix C.

2.4 MONITORING WELL INSTALLATION PROGRAM

Following the soil boring installations, three shallow (12 feet bls) monitoring wells were installed at the site. These were used for groundwater sampling and collecting data to evaluate aquifer properties.

2.4.1 Monitoring Well Locations

Monitoring well locations were spatially selected to maximize the coverage area necessary to delineate any possible groundwater plume that might exist. Based on site conditions and limitations due to sensitive ecological habitat, upgradient, downgradient and source area wells were installed in the selected locations (Figure 2-2).

2.4.2 Shallow Monitoring Well Installation

The monitoring well borings were drilled with a truck-mounted drill rig and 4.25-inch inside diameter (ID) hollow-stem auger. Each well was constructed of 2-inch-ID, flush-threaded, schedule 40 polyvinyl chloride (PVC) riser, and 0.010-inch-slot well screen with a 6-inch point cap. Three shallow wells were installed to approximately 12 feet bls with a 10-foot screen. The annulus around each well was filled to approximately 1 foot above the top of the screen with U.S. Standard Sieve size 20/30 silica sand, followed by a 0.5 foot 30/65 fine sand seal. The remainder of the annulus was grouted to the surface. Each well was secured with a locking, watertight cap within a steel, 8-inch-diameter steel manhole. The manhole was set

in a 24-inch-square concrete apron finished slightly above grade. A typical shallow well installation is illustrated on Figure 2-3. Monitoring well construction details are summarized in Table 2-1 and the monitoring well completion diagram for this event is provided in Appendix B.

2.4.3 Monitoring Well Development

Each monitoring well was developed by using a centrifugal pump. The wells were developed until the purge water became clear, normally after approximately 20 gallons had been removed.

2.5 GROUNDWATER SAMPLING PROGRAM

Groundwater samples collected from the monitoring wells were submitted to Katahdin Analytical Services in Westbrook, Maine to be analyzed for KAG constituents.

2.5.2 Monitoring Well Sampling

Samples were collected from site monitoring wells to evaluate groundwater quality in the shallow surficial aquifer. These samples were collected using the low-flow quiescent purging and sampling method. New Teflon® tubing was installed in each well for groundwater sampling. Approximately three to five well volumes were removed from each well using a peristaltic pump and Teflon® tubing. Temperature, pH, specific conductivity, dissolved oxygen, and turbidity were monitored while the wells were purged. The field measurements, well purge volumes, and depths to groundwater were recorded during well purging and at the time of sample collection. Groundwater sample log sheets are provided in Appendix B.

Groundwater samples were analyzed for KAG constituents, consisting of BTEX, MTBE, and PPL VOHs (including 1,2-dichloroethane) (SW-846 Method 8260B), PAHs (SW-846 Method 8270C), EDB by United States Environmental Protection Agency (EPA) Method 504.1, TRPH (FL-PRO), and lead (SW-846 Method 6010B). The groundwater samples were placed on ice and shipped to Katahdin Analytical Services in Westbrook, Maine, for analysis. Groundwater analytical validation reports are presented in Appendix C.

2.5.3 Natural Attenuation Parameter Sampling

During the groundwater sampling event, additional analyses were performed for groundwater collected from selected monitoring wells to evaluate the potential for naturally occurring biodegradation of petroleum constituents at the site. Field samples were analyzed for dissolved oxygen and carbon dioxide. The field data sheets are included in Appendix B. These samples were analyzed at a laboratory for methane (RSK 175), sulfate (EPA Method 375.4), and nitrate (EPA Method 353.2). Laboratory data for natural attenuation parameters are included in Appendix C.

2.6 AQUIFER CHARACTERIZATION PROGRAM

Data were collected during the site investigation to evaluate the movement of groundwater at the site. Groundwater elevations were determined from SWL measurements, a well top of casing (TOC) elevation survey and a tidal study.

2.6.1 Well TOC Survey

A reference point was marked on the top of each monitoring well casing on the north side. The elevations of the reference points were surveyed to the nearest 0.01-foot by the surveyor, Island Surveying and Mapping Company of Merritt Island, Florida. The field survey data is included in Appendix B.

2.6.2 SWL Measurements

Depth-to-groundwater measurements were made in site monitoring wells during February and May 2004. Measurements were made from the reference points marked on the tops of well casings, using an electronic water level indicator. SWL measurements were made to the nearest 0.01-foot. Groundwater elevations were calculated from the TOC survey elevations and the SWL measurements.

2.6.3 Tidal Study

Fluctuations in groundwater elevation were measured in the three newly installed monitoring wells, and correlated with tides to determine the extent of tidal influence on the surficial aquifer in the site vicinity. Prior to conducting the test, the monitoring wells were opened and allowed to equilibrate to ambient conditions. Once the wells had stabilized, SWL was recorded and used to calculate the height of the water column in each well. A submersible data logger, the In-Situ MiniTroll, was then installed in each well and the water level was allowed to restabilize. The lead wire from the data logger was secured to the well to ensure that the data logger remained at a constant depth during the test. The data logger was connected to a computer to begin the test and start recording water levels in the well. It was programmed to record water levels every 15 minutes. The test was allowed to run for a period of 48 hours to ensure that any fluctuations would be recorded. The tidal study data and graphical representation are presented in Appendix D.

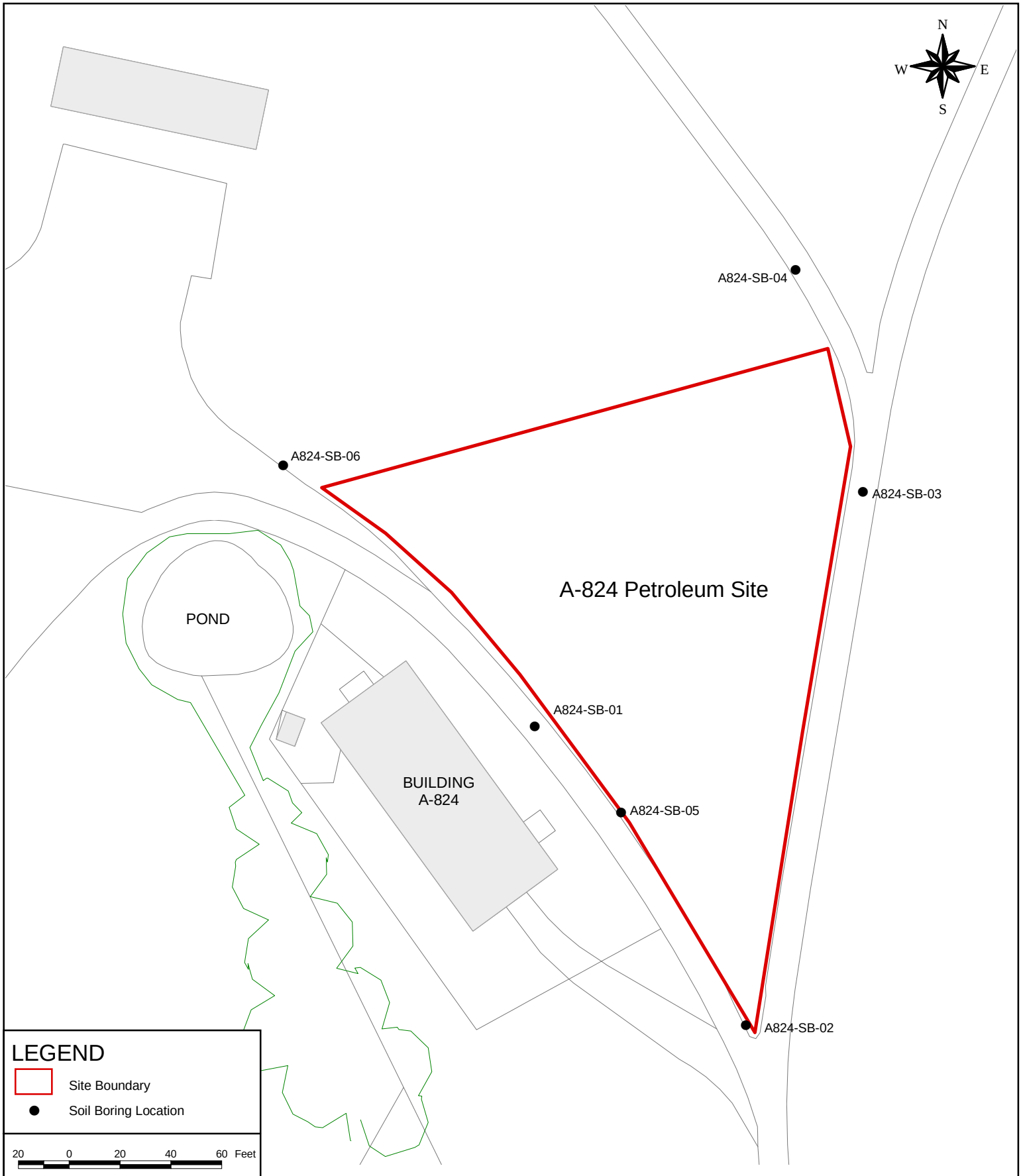
As hypothesized, water-level data recorded in the monitoring wells during the tidal study indicate that the groundwater cycles semi-diurnally with the tides. During low tides, the SWLs recorded in the monitoring well were at the lowest elevation. Likewise, high tides produced the greatest water levels, indicating that the groundwater fluctuation corresponds with the tide cycle.

TABLE 2-1

MONITORING WELL CONSTRUCTION DETAILS
SITE A-824
SITE ASSESSMENT REPORT
NAVAL AIR STATION
KEY WEST, FLORIDA

Well No.	Date Installed	Drilling Method	TOC Elevation	A/G Riser Length (if Applicable)	Total Well Depth (feet)	Screened Interval (feet bls)	Well Diameter (inches)	Lithology of Screened Interval
A824-MW-01	2/3/2004	HSA	2.95	NA	12	2-12	2	Oolitic limestone
A824-MW-02	2/3/2004	HSA	2.72	NA	12	2-12	2	Oolitic limestone
A824-MW-03	2/3/2004	HSA	2.83	NA	12	2-12	2	Oolitic limestone
RR-MW-06	6/11/1996	HSA	3.29	NA	15	5-15	2	Oolitic limestone

TOC elevations surveyed by Island Surveying in 2004.
HSA Hollow-stem auger
TOC Top of casing
A/G Aboveground
NA Not Applicable
bls Below land surface



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SITE A-824 SITE ASSESSMENT REPORT
SOIL BORING LOCATIONS
NAVAL AIR STATION
KEY WEST, FLORIDA

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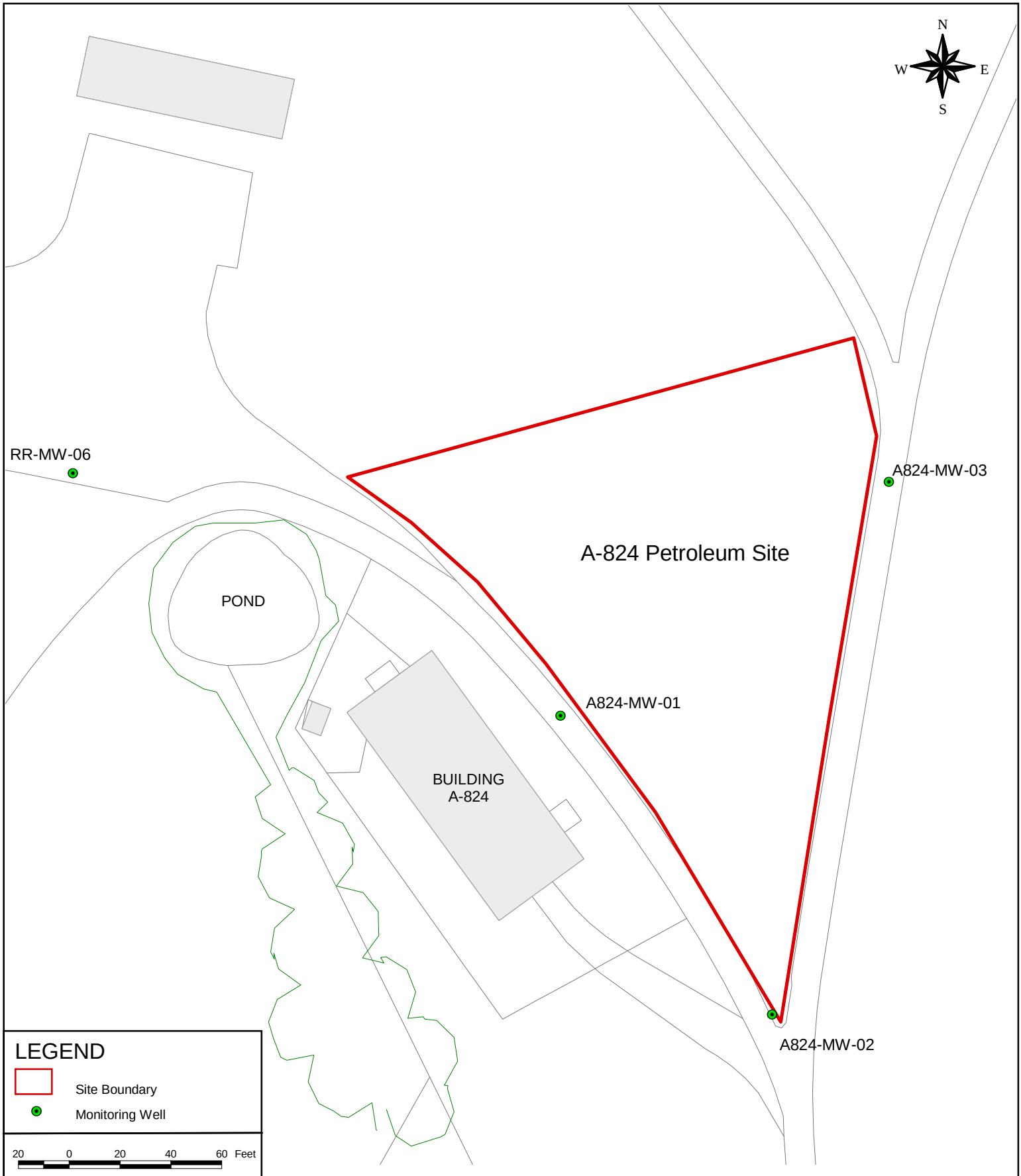

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SITE A-824 SITE ASSESSMENT REPORT
MONITORING WELL LOCATIONS
NAVAL AIR STATION
KEY WEST, FLORIDA

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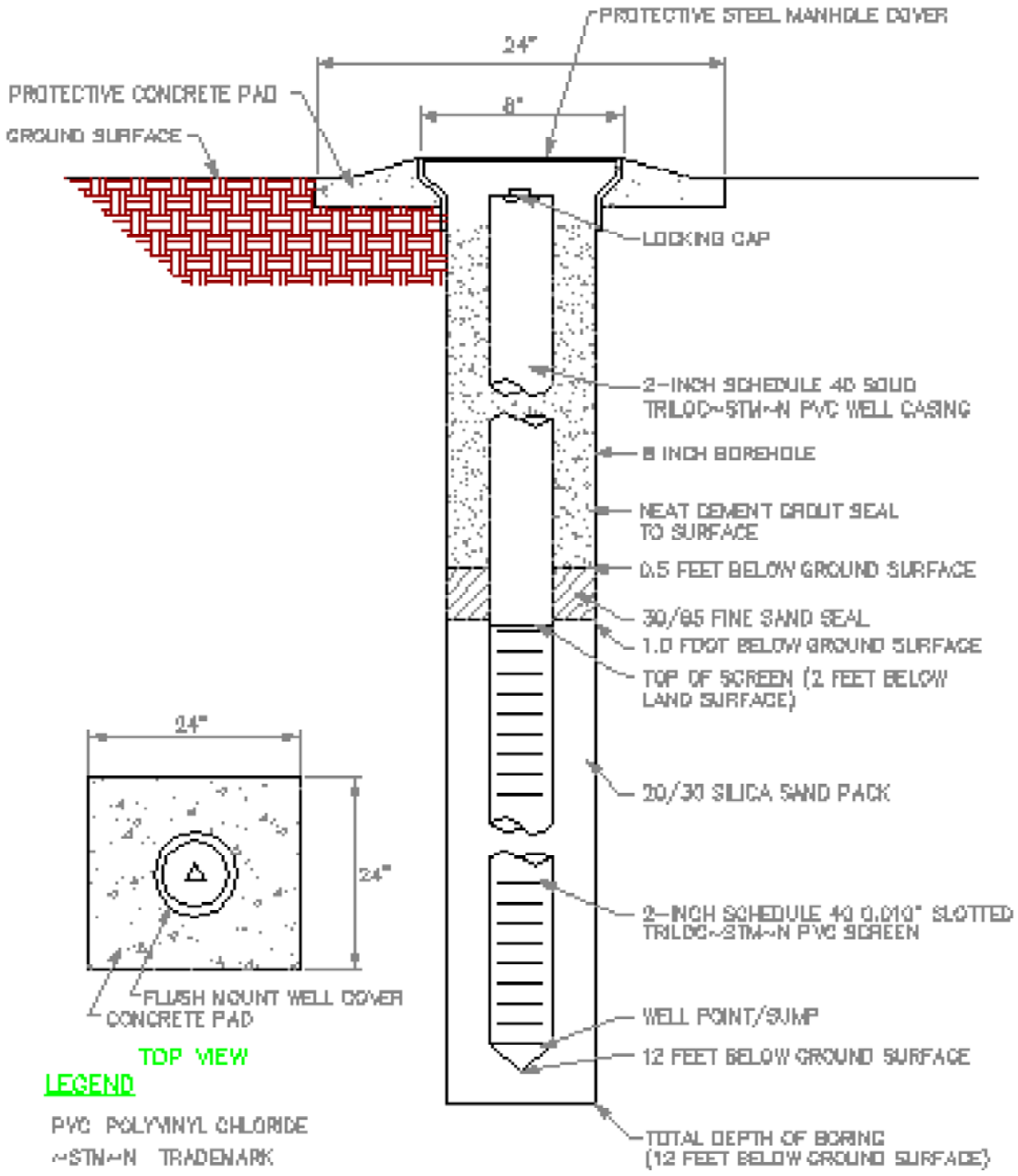
K:\A824 SAR.APR LAYOUT: FIGURE 2-2 SAR REV. 0 BY: EHM 08/09/2004



DRAWN BY: EHM	DATE: 08/09/2004			CONTRACT NUMBER: N4779
CHECKED BY: GB	DATE: 08/09/2004		SITE A-824 SITE ASSESSMENT REPORT TYPICAL SHALLOW WELL INSTALLATION NAVAL AIR STATION KEY WEST, FLORIDA	APPROVED BY: CMB / DATE: 11/29/2004
COST/SCHEDULE-AREA				APPROVED BY / DATE
SCALE: AS NOTED				FIGURE NO.: 2-3 / REV.: 0

K:\A824 SAR.APR LAYOUT: FIGURE 2-3 SAR REV. 0 BY: EHM 11/22/2004

3.0 GEOLOGY AND HYDROGEOLOGY

Data collected during the site assessment were used to evaluate geologic and hydrogeologic conditions at the site that may influence the fate and transport of hydrocarbons released to the environment. Lithology and stratigraphy were described for the shallow surficial aquifer at the site. Aquifer properties evaluated as part of the site assessment included depth to groundwater and groundwater elevation, groundwater flow direction and gradient, and tidal influence in the area.

The Lower Keys, which are within the southern geomorphic division of Florida, were formed during the Pleistocene Era. The Lower Keys are known as the "Oolitic Keys," a reference to the Oolitic Member of the Miami Limestone. The Oolitic Member consists of variably sandy, fossiliferous limestone composed primarily of ooids. The Oolitic Member is divided into two lithofacies: an ooid calcarenite and an oomoldic-recrystalline facies. The Key Largo Limestone underlies the Miami Limestone. The Key Largo Limestone is a light-gray to light-yellow coralline limestone comprised of coral heads encased in a matrix of calcarenite. In the Key West area, the Miami Limestone is approximately 27 feet thick and the Key Largo limestone is more than 270 feet thick (B&RE, 1997).

The surficial aquifer system in the lower Keys is an unconfined, porous, highly permeable solution-riddled unit, as described above. Rainfall recharge seeps quickly into the ocean and saltwater intrusion is common. The water table ranges in depth from less than 1 foot to approximately 2.5 feet below msl and fluctuates diurnally due to tidal effects. Water in the surficial aquifer is non-potable.

3.1 SITE STRATIGRAPHY

Interpretation of site lithology and stratigraphy was based on visual examination of soil cores collected from soil borings and from drill cuttings observed during the monitoring well installation.

The site surface is underlain by light-brown-to-beige-to-white, silty sand and oolitic limestone. This lithology extends to at least 12 feet bls, which was the maximum depth drilled during the investigation. Due to the homogeneity of the subsurface, no lithologic cross-section was constructed. Soil boring logs are included in Appendix B.

3.2 SITE HYDROGEOLOGY

Hydrogeologic data were collected during the site assessment to evaluate movement of groundwater in the shallow surficial aquifer at the site. Depth to groundwater and groundwater elevation were used to determine the groundwater flow direction and hydraulic gradient for the shallow surficial aquifer at the site. Hydraulic conductivity for the shallow surficial aquifer was obtained from slug tests conducted during a

previous investigation on Boca Chica Key. Groundwater flow velocity at the site was estimated from the hydraulic conductivity and gradient data.

3.2.1 SWL and Groundwater Elevations

SWL data were collected from site monitoring wells during two gauging events in February and May 2004. Groundwater elevation measurements in shallow monitoring wells ranged from 1.28 to 1.72 feet on February 9, 2004 and from 0.73 to 0.94 feet on May 21, 2004 (Table 3-1).

The SWL data and the elevations from the well TOC survey were used to determine a groundwater elevation at each well for the two gauging events (Table 3-1).

3.2.2 Groundwater Flow Direction

To evaluate the direction of groundwater flow at the site, the groundwater elevations were plotted on site maps for each gauging event (Figures 3-1 and 3-2). Groundwater elevation isocontours were calculated from the plotted data. Groundwater flow direction is predicted to be perpendicular to the elevation isocontours. Interpretation of data from the February 2004 gauging event indicated a northern flow, while the May 2004 event indicated a flow to the northeast. This inconsistent pattern of groundwater movement is indicative of tidal influence on the surficial aquifer.

3.2.3 Water Table Gradient

The average hydraulic gradient across the site was calculated for each gauging event from the groundwater elevations measured in shallow monitoring wells and the estimated groundwater flow direction.

The hydraulic gradient was determined by using the following equation:

$$i = \frac{h_1 - h_2}{d}$$

Where:

- i = the hydraulic gradient
- h_1 = the water elevation at point 1, the highest value
- h_2 = the water elevation at point 2, the lowest value
- d = the horizontal distance between point 1 and point 2, parallel to the direction of groundwater flow

The highest and lowest groundwater elevation values measured in shallow monitoring wells during each gauging event were used to determine the difference in groundwater elevation across the site. The

horizontal distance between the high and low groundwater elevation points was measured parallel to the estimated groundwater flow direction.

On February 9, 2004, the groundwater elevation in A824-MW-01, 1.72 feet, was the highest value and the groundwater elevation in A824-MW-03, 1.52 feet, was the lowest value used in preparing contours. The horizontal distance parallel to groundwater flow was 92 feet. These data indicate a hydraulic gradient of 0.002 feet per foot.

On May 21, 2004, the groundwater elevation in RR-MW-06, 0.94 feet, was the highest value and the groundwater elevation in A824-MW-03, 0.73 feet, was the lowest value. The horizontal distance parallel to groundwater flow was 275 feet. These data indicate an average hydraulic gradient of 0.00076 feet per foot.

The arithmetic mean of the two calculated gradient values is 0.0015 feet per foot.

3.2.4 Hydraulic Conductivity

Hydraulic conductivity values for the site were obtained from slug tests conducted at the Jet Engine Test Cell site (SWMU 9) on Boca Chica Key [ABB Environmental Services, Inc. (ABB), 1994]. The results from this location were considered suitable for use at Site A-824 because the lithology and well construction details were similar. The hydraulic conductivity (K) in the test was calculated using the Bouwer and Rice (1976, 1989) methods for partially penetrating wells screened in unconfined aquifers. The average K value (calculated from the data collected from two wells) was estimated to be 0.72 feet per day. The slug test data is presented in Appendix E.

3.2.5 Groundwater Flow Velocity

Potential movement of groundwater at the site may be described in terms of transportation by natural flow in the saturated zone, while assuming that groundwater flow follows Darcy's Law. Darcy's Law may be expressed as:

$$V = \frac{(K \times i)}{n}$$

Where:

V = groundwater flow velocity
K = average hydraulic conductivity
n = effective porosity
i = average hydraulic gradient

Data from borings advanced during the investigation indicate that oolitic limestone is the typical lithology at the site. Review of standard references suggests that a representative effective porosity for weathered oolitic limestone is approximately 30 percent (Davis and Deweist, 1966).

Using a hydraulic conductivity of 0.72 feet per day, the mean hydraulic gradient of 0.0015 feet per foot, an inferred effective porosity value of 0.30, and Darcy's Law, the groundwater seepage velocity across the site was calculated at 0.0035 feet per day.

3.2.6 Potable Water Supply Well Survey

No freshwater public or registered domestic wells are in use on NAS Key West (ABB, 1995). Some residences in Key West have wells that withdraw water from the surficial aquifer for non-potable uses. The Florida Keys Aqueduct Authority (FKAA) operates and maintains the Florida Keys Aqueduct, which supplies potable water to all of the Keys. This water is drawn from wells near Florida City in southeastern Dade County. It is pumped 130 miles through a water main that parallels U.S. Highway 1 and terminates in Key West. The Monroe County Health Department recognizes the public water supply as the only potable water source available in Key West.

Alternative sources of potable water and non-potable water used in the Keys include private cisterns, private wells utilizing reverse osmosis, home desalination systems, and bottled water. The number of people who may be using water from these alternative sources is unknown. The best estimate of the number of people using local groundwater for non-potable domestic purposes is less than 500.

3.2.7 Tidal Influence

The data collected during the tidal survey conducted on the three newly installed monitoring wells revealed a fluctuation of approximately 0.013 feet in water level during the day cycle, while the night cycle was 0.026 feet. This data suggests that there is a tidal influence on the surficial aquifer at the site. The data from the tidal survey is provided in Appendix D.

3.3 SURFACE WATER

There are no naturally occurring surface water bodies in the immediate vicinity of the site. A small man-made pond is located approximately 30 feet north of Building A-824. The Gulf of Mexico is located approximately 700 feet to the east.

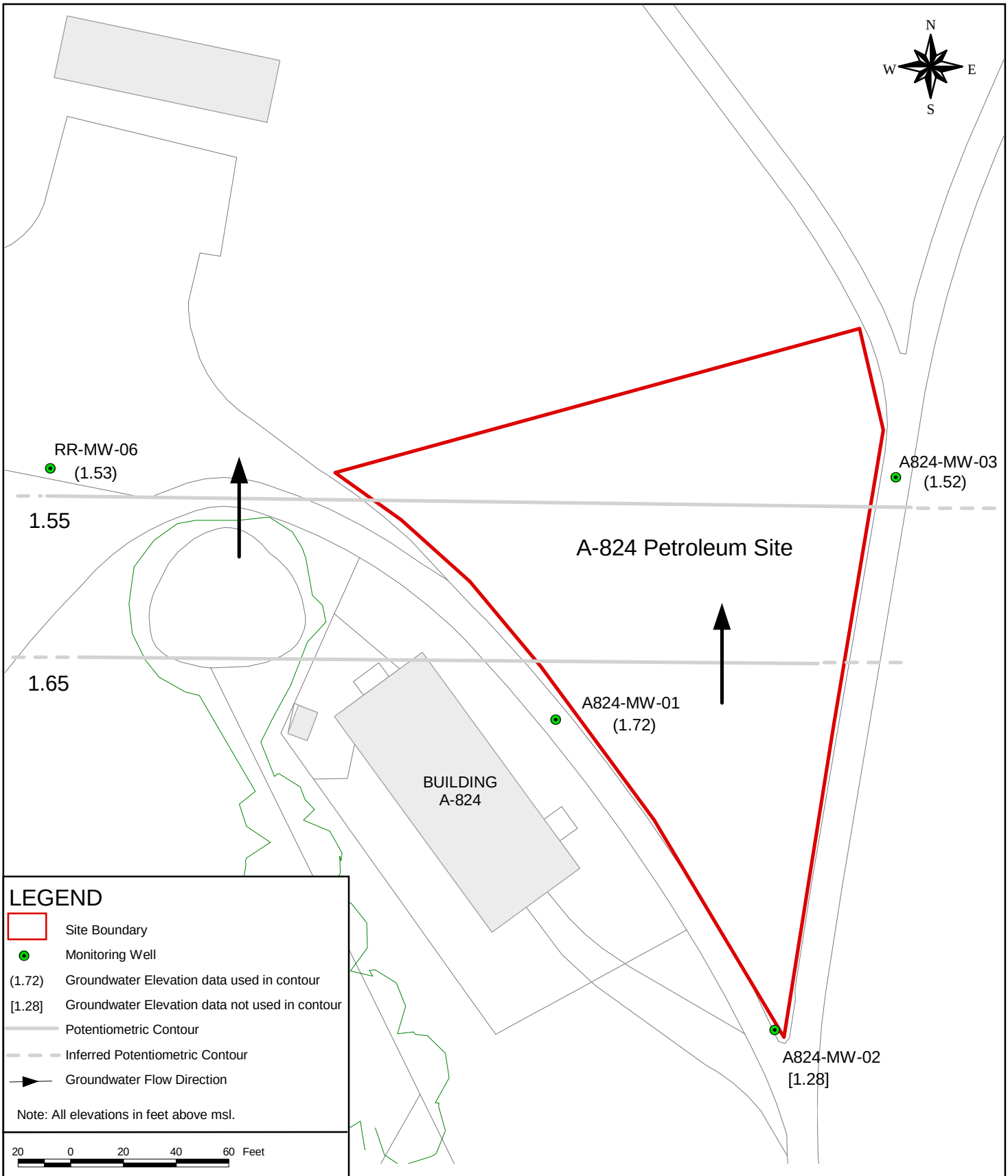
TABLE 3-1

GROUNDWATER ELEVATION SUMMARY
SITE A-824
SITE ASSESSMENT REPORT
NAVAL AIR STATION
KEY WEST, FLORIDA

Well No.	**A824-MW-01**			**A824-MW-02**			**A824-MW-03**			**RR-MW-06**		
Well Diameter	2 inch			2 inch			2 inch			2 inch		
Well Depth (bls)	12			12			12			15		
Screened Interval (bls)	2-12			2-12			2-12			5-15		
TOC Elevation (msl)	2.95			2.72			2.83			3.29		
Date	**ELEV**	**DTW**	**FP**	**ELEV**	**DTW**	**FP**	**ELEV**	**DTW**	**FP**	**ELEV**	**DTW**	**FP**
2/9/2004	1.72	1.23	ND	1.28	1.44	ND	1.52	1.31	ND	1.53	1.76	ND
5/21/2004	0.85	2.10	ND	0.90	1.82	ND	0.73	2.10	ND	0.94	2.35	ND

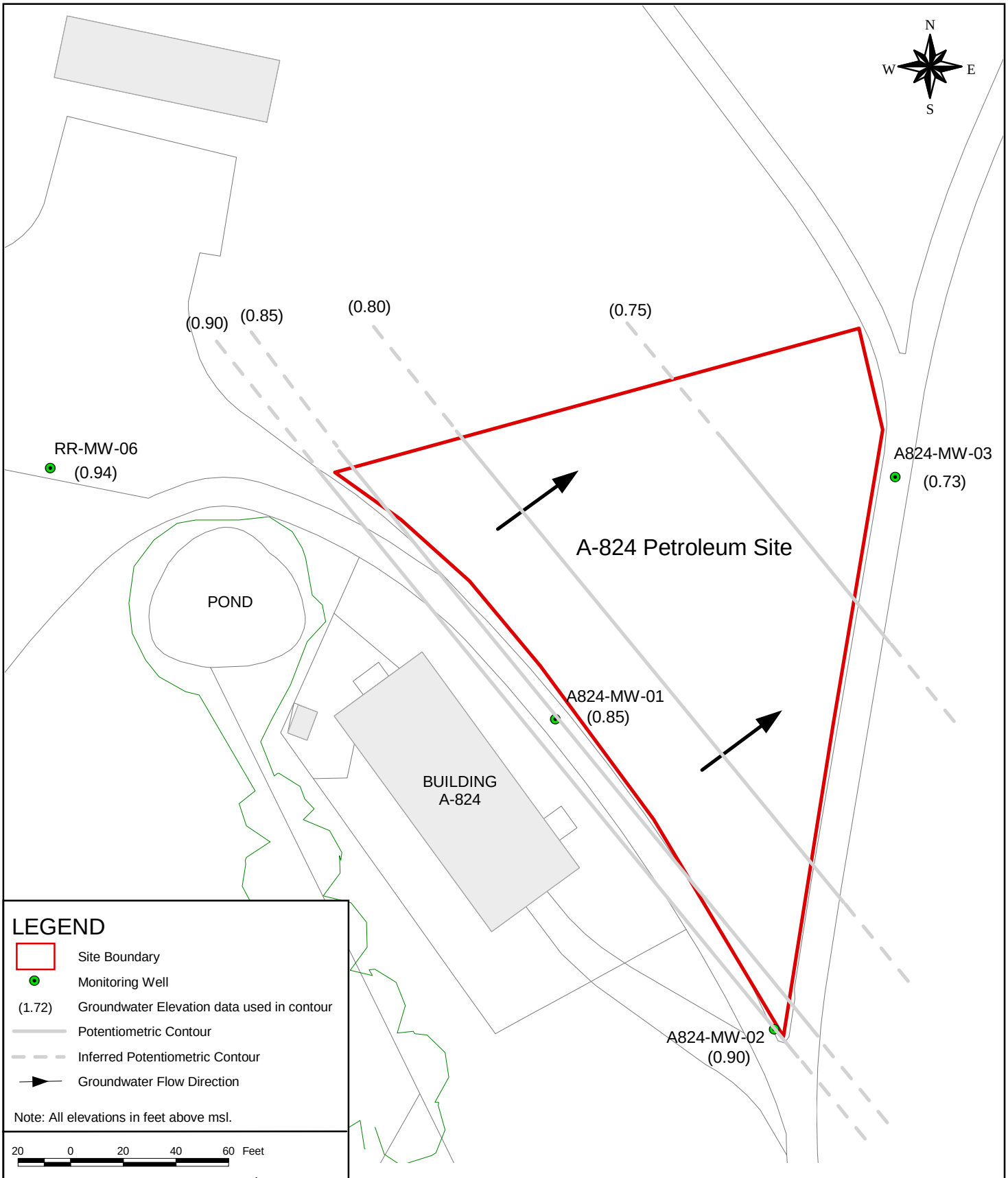
NOTES:

Measurements in feet except for well diameter
TOC elevations surveyed 05/25/2004 (NGVD 29)
TOC Top of casing
ELEV Groundwater elevation (msl)
DTW Depth to water (below TOC)
FP Free product thickness
ND Not detected
msl mean sea level
bls below land surface



DRAWN BY: EHM	DATE: 08/06/2004	SITE A-824 SITE ASSESSMENT REPORT GROUNDWATER ELEVATION CONTOUR MAP FEBRUARY 2004 NAVAL AIR STATION KEY WEST, FLORIDA	CONTRACT NUMBER: N4779
CHECKED BY: GB	DATE: 08/07/2004		APPROVED BY: CMB DATE: 08/13/2004
COST/SCHEDULE-AREA			APPROVED BY DATE
SCALE: AS NOTED			FIGURE NO.: 3-1 REV.: 0

K:\A824 SAR.APR LAYOUT: FIGURE 3-1 SAR REV. 0 BY: EHM 08/16/2004



DRAWN BY: EHM	DATE: 08/09/2004	SITE A-824 SITE ASSESSMENT REPORT GROUNDWATER ELEVATION CONTOUR MAP MAY 2004 NAVAL AIR STATION KEY WEST, FLORIDA	CONTRACT NUMBER: N4779
CHECKED BY: GB	DATE: 08/09/2004		APPROVED BY: CMB DATE: 08/13/2004
COST/SCHEDULE-AREA			APPROVED BY DATE
SCALE: AS NOTED			FIGURE NO.: 3-2 REV.: 0

K:\A824 SAR.APR LAYOUT: FIGURE 3-2 SAR REV. 0 BY: EHM 08/16/2004

4.0 SITE ASSESSMENT RESULTS

Soil samples were collected at the site for headspace vapor screening and laboratory analysis. Groundwater samples were collected at the site during the groundwater assessment. The results of groundwater analyses were compared to the FDEP GCTLs, listed in Chapter 62-777, F.A.C., Table I.

Natural attenuation parameters were measured from the wells during each groundwater sampling event.

4.1 SOIL ASSESSMENT RESULTS

4.1.1 Headspace Screening

Vadose zone soils were evaluated for headspace vapor screening to estimate the extent of petroleum impacted soil at the site. A summary of soil PID screening results is presented in Table 4-1. Soil boring locations and vapor readings are depicted on Figure 4-1.

Soils with a detectable headspace screening response of 32 parts per million (ppm) were encountered in one boring (A824-SB-01) in the vadose zone between 0 and 0.66 feet bls. All other screening responses were at 0 ppm (Figure 4-1).

4.1.2 Laboratory Soil Sample Analysis

Six soil samples were collected for laboratory analyses. The samples were collected from A824-SB-01, -SB-02, -SB-03, -SB-04, -SB-05 and -SB-06 (Figure 4-2) and analyzed for KAG constituents. Laboratory analytical reports can be found in Appendix C.

TRPH was reported in soil samples A824-SB-01, A824-SB-03, A824-SB-04 and A824-SB-06 at concentrations of 210 milligrams per kilogram (mg/kg), 97 mg/kg, 95 mg/kg, and 25 mg/kg respectively. Total xylenes were detected in A824-SB-04. Ethylbenzene and total xylenes were also detected in A824-SB-04 and A824-SB-06. No PAH compounds or lead were detected in the soil samples. None of the constituents detected were above their respective residential SCTLs in any of the soil samples collected. A summary of the soil analytical results is presented in Table 4-2.

4.2 GROUNDWATER ASSESSMENT RESULTS

4.2.1 Monitoring Well Sampling

Groundwater samples were collected from the four on-site monitoring wells (A824-MW-01, 02, 03, 04 and RR-MW-06) in February and May 2004 and analyzed for KAG constituents (BTEX, MTBE, PPL VOHs, PAHs, EDB, TRPH, and lead). Additional confirmatory samples were also collected from A824-MW-01 and

RR-MW-06 in August 2004 for the same parameters. Figure 2-2 shows the four monitoring well locations. The validated analytical reports can be found in Appendix C.

During the February 2004 sampling event, EDB was detected at a level of 0.036 micrograms per liter (μg/L) in RR-MW-06. This concentration was above the GCTL of 0.02 μg/L. Benzene and toluene were also detected in A824-MW-02; however, both concentrations were below their respective GCTLs. PAHs, TRPH, and lead were not detected in any of the samples collected. The groundwater exceedance is shown on Figure 4-3. Detections are reported in Table 4-3.

During the May 2004 sampling event, the volatile organic compounds VOCs, benzene and toluene were again detected in A824-MW-02. Similar to the previous event, levels were below GCTLs. EDB was not detected in RR-MW-06. PAHs, TRPH, lead, and EDB were not detected in any of the other wells sampled. Detected results are reported in Table 4-4.

On August 19, 2004, samples were collected from A824-MW-01 and RR-MW-06 to confirm levels of KAG constituents in both wells. KAG constituents were not detected in RR-MW-06 during this event. A low concentration of total xylenes, below GCTLs was detected in A824-MW-01. Detected results for the event are presented in Table 4-5. The validated sample results for all sampling events can be found in Appendix C.

4.3 NATURAL ATTENUATION SAMPLING

Samples collected from A824-MW-01, -02, -03 and RR-MW-06 were analyzed for natural attenuation parameters (sulfate, nitrate, and methane) during the February and May 2004 events. Natural attenuation parameters were also collected from A824-MW-01 and RR-MW-06 during the August event. Results are reported in Table 4-6. During the February event, methane was detected in samples from wells A824-MW-01, A824-MW-02 and RR-MW-06 at concentrations of 0.12 milligrams per liter (mg/L), 0.011 mg/L and 0.052 mg/L respectively. Nitrates were detected in all wells sampled and ranged from a low of 0.018 mg/L in A824-MW-03 to a high of 0.59 mg/L in A824-MW-01. Sulfate was also detected in all monitoring wells ranging from 88 to 450 mg/L.

During the May 2004 event, methane was detected in A824-MW-01 and A824-MW-02 at levels of 0.21 and 0.03 mg/L, respectively. Nitrate was only detected in RR-MW-06 at a concentration of 0.014 mg/L. Sulfate was detected in all monitoring wells at levels ranging from a low of 28 mg/L in A824-MW-01 to a high of 390 mg/L in A824-MW-02. Sulfate levels were lowest in A824-MW-01 and highest A824-MW-02 for both events. The sulfate levels in A824-MW-03 and RR-MW-06 were approximately the same in the February 2004 to May 2004 sampling events. Methane detections increased for each well, except A824-MW-03, from the February to May events while the nitrate levels decreased during this period. Methane levels were highest in A824-MW-01 (160 μg/L) and RR-MW-06 (130 μg/L) during the August event.

TABLE 4-1

**SOIL HEADSPACE ANALYTICAL RESULTS
SITE A-824
SITE ASSESSMENT REPORT
NAVAL AIR STATION
KEY WEST, FLORIDA**

LOCATION NO.	DATE COLLECTED	DEPTH TO WATER (feet bls)	SAMPLE INTERVAL (feet bls)	PID READING (ppm)
A824-SB-01	2/3/2004	0.66	0-0.66	32
A824-SB-02	2/3/2004	1	0-1	0
A824-SB-03	2/3/2004	0.66	0-0.66	0
A824-SB-04	2/3/2004	1	0-1	0
A824-SB-05	2/3/2004	1.5	0-1.5	0
A824-SB-06	2/3/2004	0.83	0-0.83	0

Notes: bls - below land surface
ppm - parts per million
PID - photo-ionization detector

TABLE 4-2

SOIL ANALYTICAL RESULTS, FEBRUARY 2004
SITE A-824
SITE ASSESSMENT REPORT
NAVAL AIR STATION
KEY WEST, FLORIDA

DEPTH (feet)	LOCATION	PARAMETER	RESULT (mg/kg)	QUAL.[a]	SCTL[b] (mg/kg)
Total Recoverable Petroleum Hydrocarbons					
0 - 0.66	A824-SB-01	Total Petroleum Hydrocarbons	210		340
0 - 0.66	A824-SB-03	Total Petroleum Hydrocarbons	97		340
0 – 1	A824-SB-04	Total Xylenes	0.002	J	5900
0 – 1	A824-SB-04	Total Petroleum Hydrocarbons	95		340
0 – 0.83	A824-SB-06	Total Xylenes	0.002	J	5900
0 – 0.83	A824-SB-06	Ethylbenzene	0.006		1100
0 – 0.83	A824-SB-06	Total Petroleum Hydrocarbons	25	J	340

Notes:

(a) Qualifier (Qual.)Codes:
J – The result is an estimated quantity.
(b) Soil Cleanup Target Level (SCTL), Residential Criteria for direct exposure as listed in Chapter 62-777, F.A.C., Table II.
bls – below land surface
mg/kg – milligram per kilogram

TABLE 4-3

GROUNDWATER ANALYTICAL RESULTS, FEBRUARY 2004
SITE A-824
SITE ASSESSMENT REPORT
NAVAL AIR STATION
KEY WEST, FLORIDA

LOCATION	PARAMETER	RESULT (µg/L)	QUAL[(a)]	GCTL[(b)] (µg/L)
VOLATILE ORGANIC COMPOUNDS				
A824-MW-02	Benzene	0.1	J	1
A824-MW-02	Toluene	0.2	J	40
RR-MW-06	1,2-Dibromoethane (EDB)	0.036		0.02

Notes:

(a) Qualifier (Qual.)Codes:
J – The result is an estimated quantity
(b) Groundwater Cleanup Target Level (GCTL), as listed in Chapter 62-777, F.A.C., Table I.

TABLE 4-4

GROUNDWATER ANALYTICAL RESULTS, MAY 2004
SITE A-824
SITE ASSESSMENT REPORT
NAVAL AIR STATION
KEY WEST, FLORIDA

LOCATION	PARAMETER	RESULT (µg/L)	QUAL[a]	GCTL[b] (µg/L)
VOLATILE ORGANIC COMPOUNDS				
A824-MW-02	Benzene	0.2	J	1
A824-MW-02	Toluene	0.5	J	40

Notes:
(a) Qualifier (Qual.) Codes:
J – The result is an estimated quantity
(b) Groundwater Cleanup Target Level (GCTL), as listed in Chapter 62-777, F.A.C., Table I.

TABLE 4-5

GROUNDWATER ANALYTICAL RESULTS, AUGUST 2004
SITE A-824
SITE ASSESSMENT REPORT
NAVAL AIR STATION
KEY WEST, FLORIDA

LOCATION	PARAMETER	RESULT (µg/L)	QUAL[(a)]	GCTL[(b)] (µg/L)
VOLATILE ORGANIC COMPOUNDS				
A824-MW-01	Total Xylenes	0.9	J	20

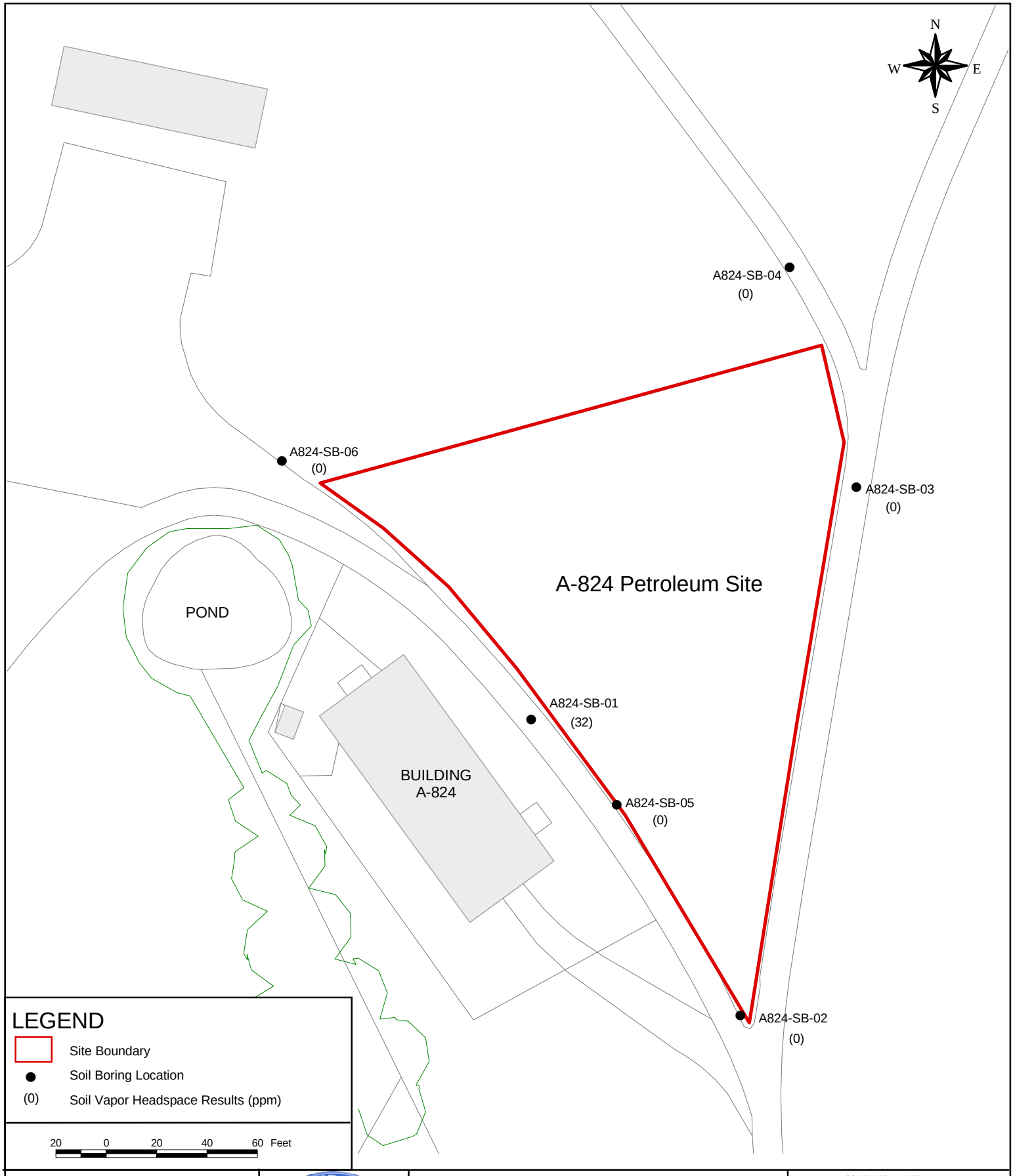
Notes:
(a) Qualifier (Qual.) Codes
J – The result is an estimated quantity
(b) Groundwater Cleanup Target Level (GCTL), as listed in Chapter 62-777, F.A.C., Table I.

TABLE 4-6

NATURAL ATTENUATION PARAMETERS SUMMARY
SITE A-824
SITE ASSESSMENT REPORT
NAVAL AIR STATION
KEY WEST, FLORIDA

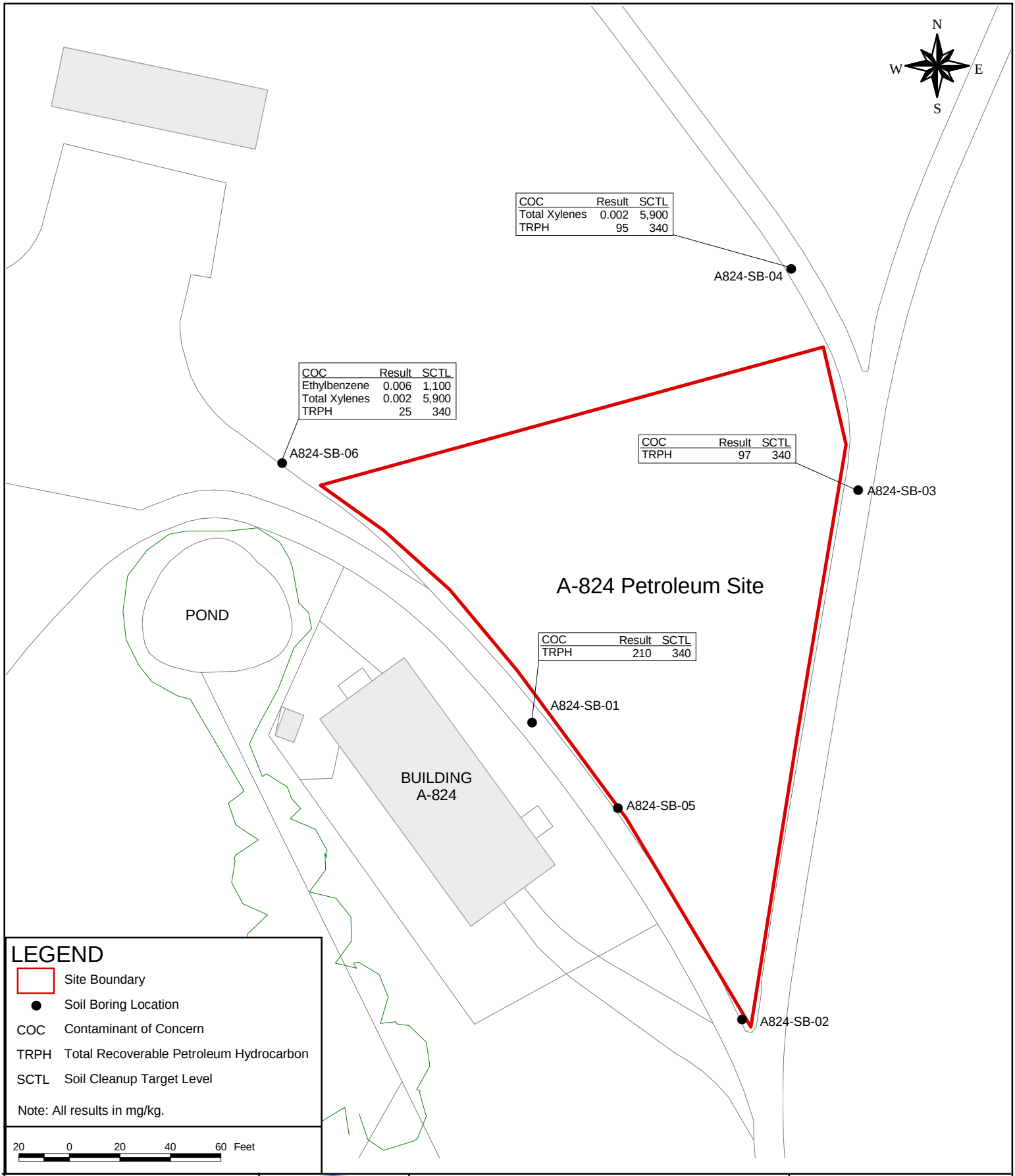
Measurements	Parameters			
Monitoring Well	**Date**	**Methane (µg/L)**	**Nitrate (mg/L)**	**Sulfate (mg/L)**
A824-MW-01	2/9/2004	0.12	0.59	88
	5/21/2004	0.21	ND	37J*
	8/19/2004	160	0.54	290
A824-MW-02	2/9/2004	0.011	0.078	450
	5/21/2004	0.03	ND	390J
A824-MW-03	2/9/2004	ND	0.018J	100
	5/21/2004	ND	ND	110J
RR-MW-06	2/9/2004	0.052	0.032J	200
	5/21/2004	0.17	0.014J	230J
	8/19/2004	130	ND	82

Notes:
The qualifier J indicates that the result is estimated.
ND = Not Detected
*Duplicates were collected and the results were averaged for the reported result.



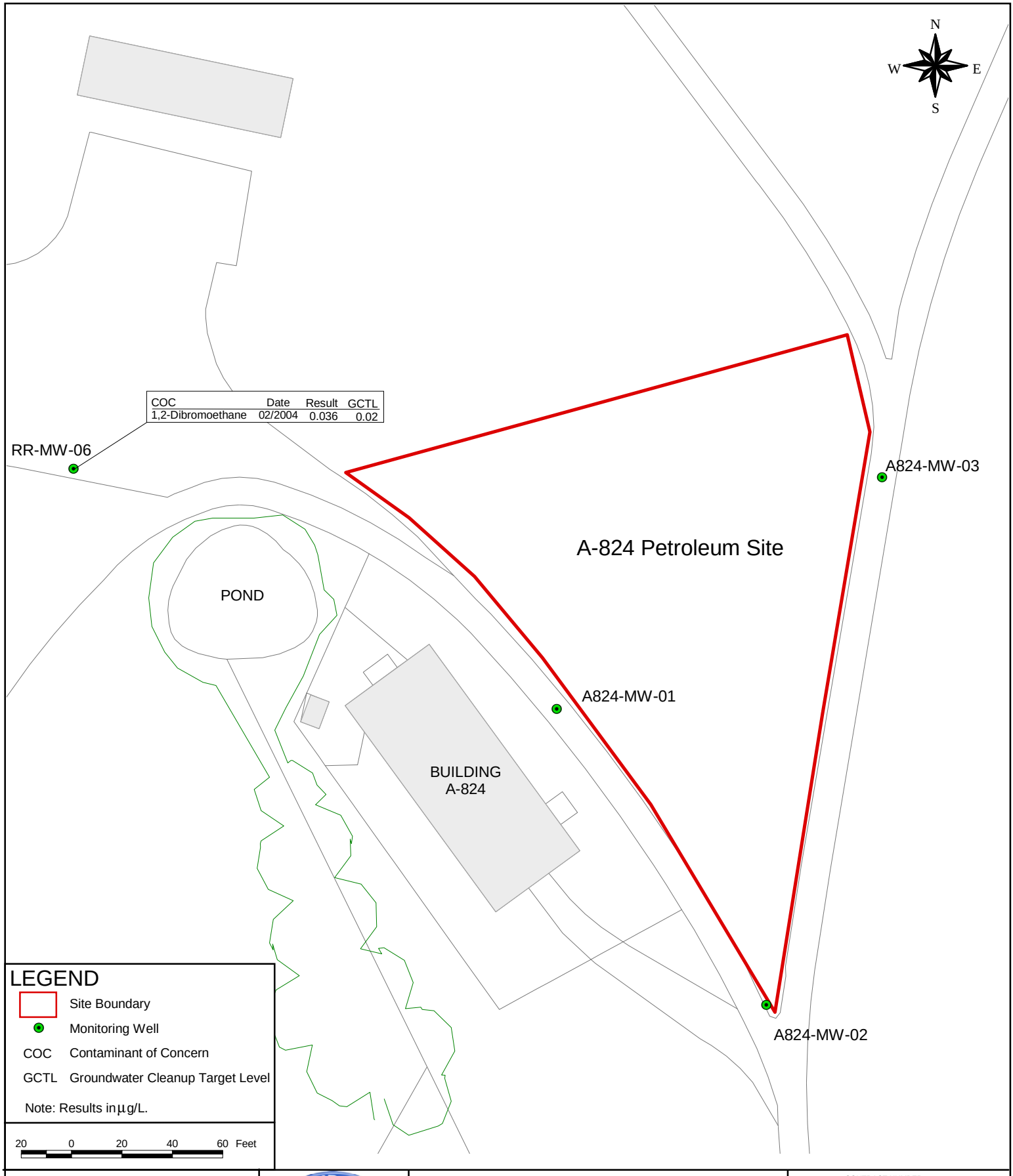
DRAWN BY: EHM	DATE: 08/09/2004	SITE A-824 SITE ASSESSMENT REPORT SOIL HEADSPACE READINGS NAVAL AIR STATION KEY WEST, FLORIDA	CONTRACT NUMBER: N4779
CHECKED BY: GB	DATE: 08/09/2004		APPROVED BY: CMB — DATE: 08/13/2004
COST/SCHEDULE-AREA			APPROVED BY — DATE
SCALE: AS NOTED			FIGURE NO.: 4-1 — REV.: 0

K:\A824 SAR.APR LAYOUT: FIGURE 4-1 SAR REV. 0 BY: EHM 11/22/2004



DRAWN BY: EHM	DATE: 08/09/2004	SITE A-824 SITE ASSESSMENT REPORT SOIL ANALYTICAL RESULTS FEBRUARY 2004 NAVAL AIR STATION KEY WEST, FLORIDA	CONTRACT NUMBER: N4779
CHECKED BY: GB	DATE: 08/09/2004		APPROVED BY: CMB DATE: 08/13/2004
COST/SCHEDULE-AREA			APPROVED BY DATE
SCALE: AS NOTED			FIGURE NO.: 4-2 REV.: 0

K:\A824 SAR.APR LAYOUT: FIGURE 4-2 SAR REV. 0 BY: EHM 11/22/2004



DRAWN BY: EHM	DATE: 08/09/2004	SITE A-824 SITE ASSESSMENT REPORT MONITORING WELL LOCATIONS AND GROUNDWATER EXCEEDANCES NAVAL AIR STATION KEY WEST, FLORIDA	CONTRACT NUMBER: N4779
CHECKED BY: GB	DATE: 08/09/2004		APPROVED BY: CMB DATE: 08/13/2004
COST/SCHEDULE-AREA			APPROVED BY DATE
SCALE: AS NOTED			FIGURE NO.: 4-3 REV.: 0

K:\A824 SAR.APR LAYOUT: FIGURE 4-3 SAR REV. 0 BY: EHM 11/22/2004

5.0 SITE INVESTIGATION SUMMARY

The significant findings from each phase of site assessment activities are discussed below.

5.1 SOURCE OF HYDROCARBONS

The RFI conducted in 1994 by IT suggested that a possible roadside diesel spill had occurred at the site. Fuel contamination was identified to the east of the building, although an actual release of petroleum hydrocarbons was not reported. In 1998, a Supplemental RFI/RI performed by B&RE identified petroleum contamination between the access roads to the east of Building A-824. The contamination was determined not to be associated with SWMU 7 and further investigation was recommended under the NAS Key West UST program.

5.2 SITE CONDITIONS

The site is underlain by oolitic limestone fill material to approximately 12 feet bls. Lithologies suggesting the presence of confining layers were not observed at the site. Groundwater elevations in the surficial aquifer ranged from 1.28 feet to 1.72 feet during February 2004 and from 0.73 feet to 0.94 feet during May 2004. Groundwater elevations were calculated from the SWL and TOC elevation survey data. These data points were used to calculate the groundwater flow direction and hydraulic gradient at the time of each gauging event. Groundwater flow at the site during the February 2004 event was to the north and to the northeast during the May 2004 event. The average hydraulic gradient calculated for the site was 0.0015 feet per foot. The average hydraulic conductivity values for the site was determined to be 0.72 feet per day from data obtained by slug tests conducted during a site assessment conducted on Boca Chica Key. The groundwater flow velocity was calculated from gradient and hydraulic conductivity values, and is estimated at 0.0035 feet per day. A tidal study at the site revealed the presence of a fluctuation in water levels of 0.013 and 0.026 feet during a 24-hour period. No known active potable water supply or irrigation wells occur on Boca Chica Key.

5.3 SOIL ASSESSMENT

Headspace vapor analysis of vadose zone soil samples collected during the investigation did not indicate “excessively contaminated soil” for KAG constituents, as defined in Chapter 62-770.200(12), F.A.C. TRPH and some VOCs were detected in the soil samples collected for laboratory analysis; however, the concentrations were below their respective SCTLs. Concentrations of all other CoCs were below standard laboratory detection limits.

5.4 GROUNDWATER ASSESSMENT

A slight exceedance of EDB above its GCTL of 0.02 µg/L was detected in RR-MW-06 at a concentration of 0.036 µg/L during the February 2004 event. However, EDB was not detected in RR-MW-06 or any of the other wells sampled during the May 2004 event. The well was sampled again in August 2004, and EDB or other KAG constituents were not detected during the event. Monitoring well A824-MW-01, located downgradient of RR-MW-06 was also sampled in August 2004. KAG constitutents were not detected in the well. Benzene and toluene were detected in monitoring well A824-MW-02 during the February and May sampling events; however, no GCTL exceedances were found. All other constituents analyzed within the KAG were not detected in any of the on-site wells.

6.0 CONCLUSIONS AND RECOMMENDATION

The conclusions, based on the data collected during the site assessment performed by TtNUS at Site A-824, are summarized as follows:

- The site is underlain by a surficial aquifer comprised of oolitic limestone. No confining layers were encountered within the upper 12 feet of the surficial aquifer.
- Headspace vapor analysis was conducted on soils from the vadose zone nearest to the surface. No vadose zone samples produced PID readings indicating the presence of "excessively contaminated soil".
- The surficial aquifer is non-potable and tidally influenced in the site vicinity.
- The direction of groundwater flow was north during one event and to the northeast during another, suggesting a tidal influence. The surficial aquifer flows at a calculated velocity of 0.0035 feet per day.
- No free product was observed at the site during assessment activities.
- Petroleum contaminants were detected in soil samples collected, but were below residential SCTLs.
- An exceedance of EDB above GCTLs were detected in one well during the February 2004 event. EDB was not detected in any of the samples during the two subsequent events.

Based on the hydrogeological and chemical data presented in this SAR, and supported by the criteria sited in Chapter 62-770, F.A.C., it is recommended that a No Further Action status be granted for the site.

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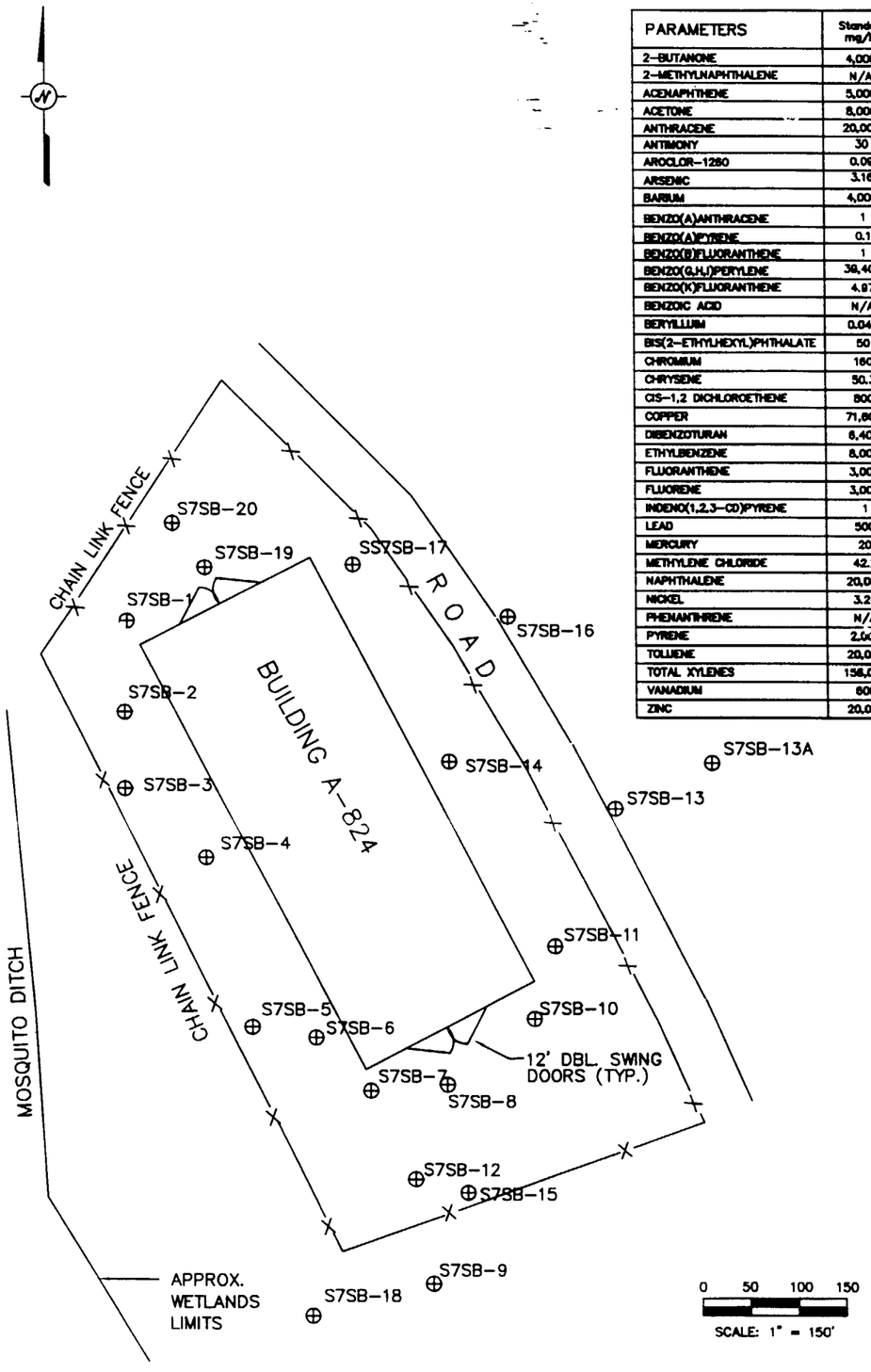
APPENDIX A

PREVIOUS INVESTIGATION DATA

INITIATOR: J. COSTELLO	DRAWING NO.: 2028818	CAD FILE: 2028818.DWG	PLOT: @ 1=150
PROJ. MGR.: M. JONES	PROJ. NO.: 422028	ARCHIVED:	
STARTING DATE: 10/8/93	LAST REV DATE: 8/3/94	CHECKED BY:	
DRAWN BY: L. PLANZ	DRAWN BY: SDJF	APPROVED BY:	



SOIL SAMPLES:

Sample ID/Location:

PARAMETERS	Standard mg/Kg	AS1531/ S7SB-1 (0-1')	AS1539/ S7SB-4 (1-3')	AS1540/ S7SB-5 (0-1')	AS1541/ S7SB-6 (1-3')	AS1542/ S7SB-7 (0-1')	AS1543/ S7SB-8 (1-3')	AS1537/ S7SB-9 (0-1')	AS1525/ S7SB-10 (1-3')	AS1546/ S7SB-11 (0-1')	AS1547/ S7SB-12A (0-1')	AS1535/ S7SB-14 (0-1')	AS1548/ S7SB-16 (1-3')	AS1550/ S7SB-18 (0-1')	AS1533/ S7SB-19 (0-1')	AS1532/ S7SB-2 (1-3')	AS1534/ S7SB-20 (0-1')	AS1536/ S7SB-17 (1-3')	AS1538/ S7SB-3 (0-1')	AS1544/ S7SB-12 (0-1')	AS1545/ S7SB-15 (1-3')
2-BUTANONE	4,000								0.004 J				0.018								
2-METHYLNAPHTHALENE	N/A												19								
ACENAPHTHENE	5,000												0.66 J								
ACETONE	8,000			0.083					0.062		0.042		0.077								
ANTHRACENE	20,000												0.12 J								
ANTIMONY	30					4.7 B		5.5 B	3.8 B	3.7 B	4.2 B										
AROCLOR-1260	0.09	0.97													10						
ARSENIC	3.16	10.9	0.33	1.2		0.57 B	0.31 B	0.39 B	0.3 B	0.97 B	3.6	4.0	3.9	4.8	0.55 B	0.91 B	1.8	0.41 B	0.71 B	0.29 B	0.34 B
BARIUM	4,000	3.8 B		6.8 B	4.9 B	4.8 B	4.5 B	5 B	5.7 B	9.3 B	7.8 B	4 B	5.8 B	4.9 B	10.1	4.4	6.3 B	5 B	7.6 B	4.8 B	4.5
BENZO(A)ANTHRACENE	1										0.27 J										
BENZO(A)PYRENE	0.1										0.36 J										
BENZO(B)FLUORANTHENE	1										0.38 J										
BENZO(G,H,I)PERYLENE	38,400										0.28 J										
BENZO(K)FLUORANTHENE	4.87										0.31 J										
BENZOIC ACID	N/A								0.094 J												
BERYLLIUM	0.047			0.14 B		0.13 B	0.13 B			0.18 B	0.15 B							0.15 B			
BIS(2-ETHYLHEXYL)PHTHALATE	50										0.68 J		0.83 J						0.14 B		
CHROMIUM	160	6	3.5	5.2	2.8	31.5	4.2	3.5	4.2	22.1	4.4	4.2	4	3.3	14.3	3	3.8	3.3	3.9	2.6	3.3
CHRYSENE	50.3										0.38 J										
CIS-1,2 DICHLOROETHENE	800			0.002 J					0.002 J				0.005 J								
COPPER	71,800					5.7				4.4	11.1				4.9						
DIBENZOFURAN	6,400												0.85 J								
ETHYLBENZENE	8,000												3.21								
FLUORANTHENE	3,000										0.38 J										
FLUORENE	3,000												0.79 J								
INDENO(1,2,3-CD)PYRENE	1										0.24 J										
LEAD	500	8.6	0.37 B	0.48 B		36.5		4.1		12.7	18.7	4.5	1.6	0.3	13	0.29 B	0.25 B	0.34 B			0.28 B
MERCURY	20	0.02	0.03	0.06	0.02	0.03	0.04		0.03	0.03	0.03	0.03			0.02						
METHYLENE CHLORIDE	42.2			0.028 B					0.027 B												
NAPHTHALENE	20,000												7.9								
NICKEL	3.24																				
PHENANTHRENE	N/A									2.8			1.2 J								
PYRENE	2,000										0.35 J										
TOLUENE	20,000			0.001 J									0.046								
TOTAL XYLENES	156,000												2								
VANADIUM	600			2 B		1.3 B				3.5 B	1.4 B						1.4 B				
ZINC	20,000	14				208				119		6.7			121	1.7 B	2.2 B	1.7 B			

NOTES:
1. STANDARD REFERS TO CORRECTIVE ACTION LEVEL, COMMERCIAL/INDUSTRIAL PRG, OR FDEP GENERAL WORKER SCG, WHICHEVER IS MORE RESTRICTIVE (SEE TABLE 1-12).
2. ALL VALUES EXCEED BACKGROUND CONCENTRATION.
3. SHADED VALUES EXCEED STANDARD.
4. J INDICATES AN ESTIMATED VALUE.

LEGEND:

S3SB-1 ⊕	SOIL BORING
AS1531/ S7SB-1	SAMPLE ID/ SAMPLE LOCATION
(0-1')	DEPTH OF SAMPLE COLLECTED
▬	CHEMICAL OF CONCERN

SOURCE: FREDERICK H. HILDERBRANDT, INC.
ENGINEERS-SURVEYORS-PLANNERS
15321 S. DIXIE HWY., SUITE 202
MIAMI, FLORIDA 33157

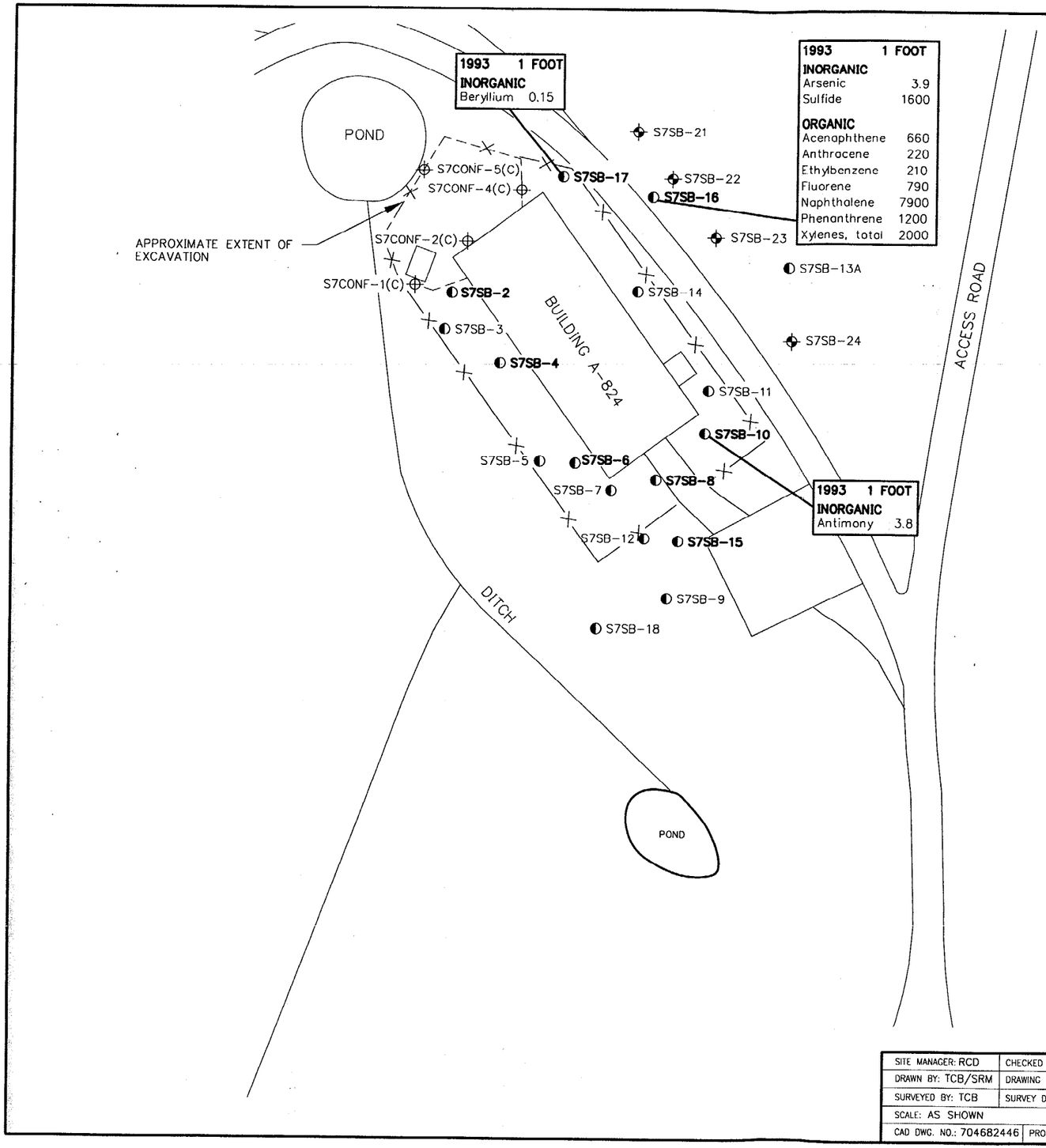
FIGURE 7-4

CHEMICAL CONCENTRATIONS IN SOIL SAMPLES
SWMU NO. 7 - BUILDING A-824

Prepared for:

NAS - KEY WEST
KEY WEST, FLORIDA

INTERNATIONAL TECHNOLOGY CORPORATION



PARAMETER	SCREENING VALUE +
INORGANIC	
Antimony	0.79
Arsenic	2.6
Beryllium	0.15
Sulfide	98
ORGANIC	
Acenaphthene	100
Anthracene	100
Ethylbenzene	100
Fluorene	100
Naphthalene	100
Phenanthrene	100
Xylenes, total	100

+ THE SELECTION OF THE NATURE AND EXTENT SCREENING VALUES IS DISCUSSED IN APPENDIX C.

NOTE: ALL ORGANIC CONCENTRATIONS ARE IN µg/kg.

NOTE: ALL INORGANIC CONCENTRATIONS ARE IN mg/kg.

NOTE: THE DEPTHS IN THE RESULT BOXES INDICATE THE TOP OF THE INTERVAL SAMPLED.

NOTE: SUBSURFACE SOIL SAMPLE LOCATIONS ARE BOLD.

LEGEND

S7SB-2 ◐ SOIL SAMPLE LOCATION IT CORPORATION (1993)

S7CONF-1(C) ⊕ SOIL SAMPLE LOCATION BEI (1995)

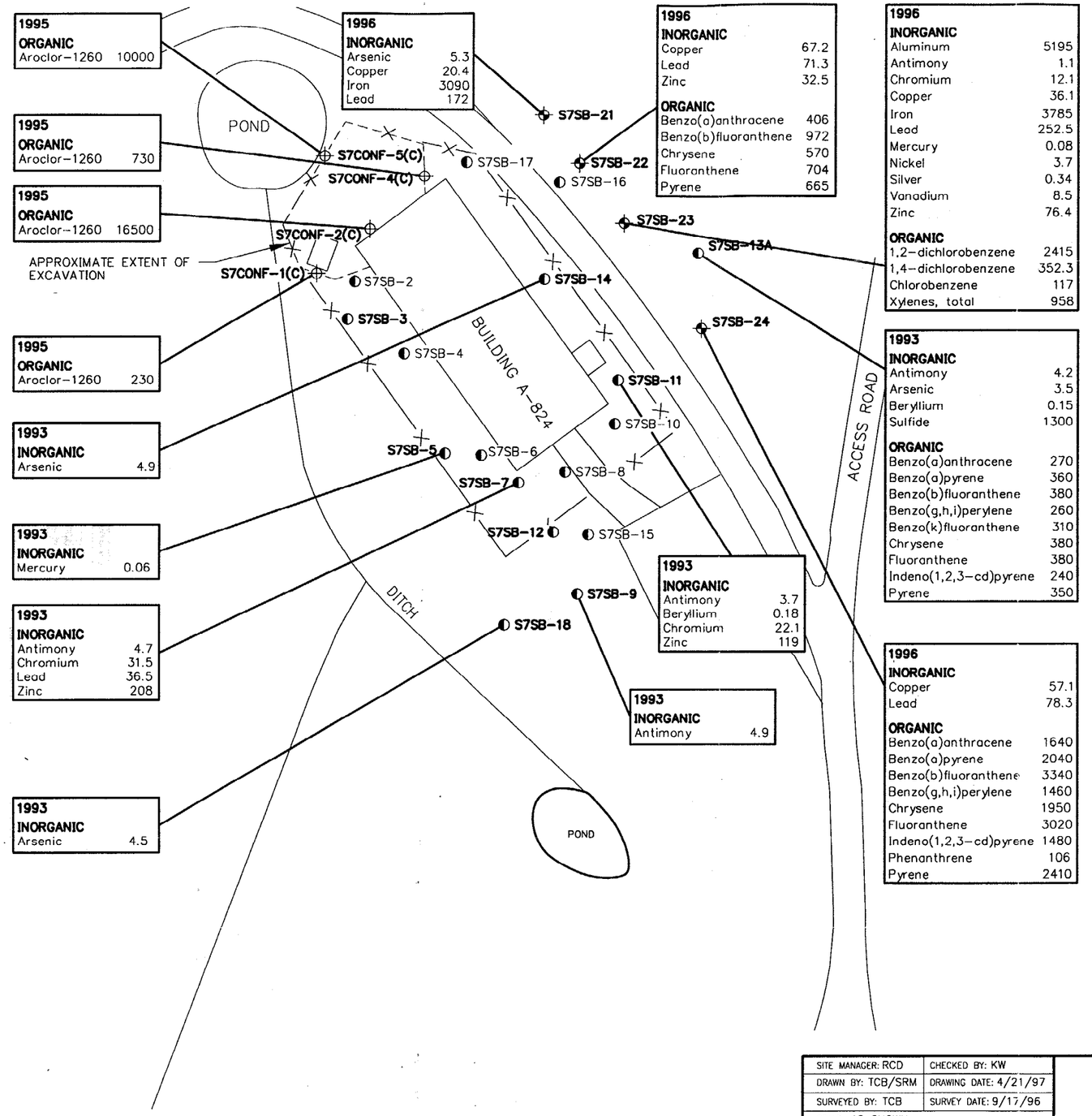
S7SB-21 ✦ SOIL SAMPLE LOCATION B&R ENVIRONMENTAL (1996)

SITE MANAGER: RCD	CHECKED BY: KW
DRAWN BY: TCB/SRM	DRAWING DATE: 4/21/97
SURVEYED BY: TCB	SURVEY DATE: 9/17/96
SCALE: AS SHOWN	
CAD DWG. NO.: 704682446	PROJ. NO.: HK7046

Brown & Root Environmental

FIGURE 4-6
SUBSURFACE SOIL CHEMICAL CONCENTRATIONS
SWMU 7
NAVAL AIR STATION
KEY WEST, FLORIDA

OAKE W3



PARAMETER	SCREENING VALUE +
INORGANIC	
Aluminum	3800
Antimony	0.79
Arsenic	2.6
Beryllium	0.15
Chromium	12
Copper	15
Iron	2300
Lead	31
Mercury	0.06
Nickel	3.4
Silver	1E-05
Sulfide	98
Vanadium	7.9
Zinc	30
ORGANIC	
1,2-dichlorobenzene	100
1,4-dichlorobenzene	100
Aroclor-1260	96
Benzo(a)anthracene	100
Benzo(a)pyrene	88
Benzo(b)fluoranthene	100
Benzo(g,h,i)perylene	100
Benzo(k)fluoranthene	100
Chlorobenzene	100
Chrysene	100
Fluoranthene	100
Indeno(1,2,3-cd)pyrene	100
Phenanthrene	100
Pyrene	100
Xylenes, total	100

+ THE SELECTION OF THE NATURE AND EXTENT SCREENING VALUES IS DISCUSSED IN APPENDIX C.

NOTE: ALL ORGANIC CONCENTRATIONS ARE IN µg/kg.

NOTE: ALL INORGANIC CONCENTRATIONS ARE IN mg/kg.

NOTE: SURFACE SOIL SAMPLE LOCATIONS ARE BOLD.

LEGEND

S7SB-2 ◐ SOIL SAMPLE LOCATION iT CORPORATION (1993)

S7CONF-1(C) ⊕ SOIL SAMPLE LOCATION BEI (1995)

S7SB-21 ⊕ SOIL SAMPLE LOCATION B&R ENVIRONMENTAL (1996)

SITE MANAGER: RCD	CHECKED BY: KW
DRAWN BY: TCB/SRM	DRAWING DATE: 4/21/97
SURVEYED BY: TCB	SURVEY DATE: 9/17/96
SCALE: AS SHOWN	
CAD DWG. NO.: 704682447	PROJ. NO.: HK7046

Brown & Root Environmental

FIGURE 4-7
SURFACE SOIL CHEMICAL CONCENTRATIONS SWMU 7
NAVAL AIR STATION
KEY WEST, FLORIDA

APPENDIX B

FIELD DATA FORMS

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: A-824
PROJECT NUMBER: N4779 RAO 050 CT0318
DRILLING COMPANY: Precision
DRILLING RIG: B-57 - Hollow stem

BORING No.: A-824 MW-01 / SB-01
DATE: 2/3/04
GEOLOGIST: Amanda Shearer
DRILLER: Precision - Scott Hauge

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**	PID ppm
	0-1"						asphalt							
G	1"-6"				loose	2.5y	lt. yellow w/ mix of grey silty oolite sand w/	SM	lab sample WT ~ 8"	@ 6" 32.1				32.1
	6"-10'					8/2	limestone fragments SAA		≤3cm					
	10'-12'				loose to	2.5y	white oolitic limestone w/ semi-							
					semi-consolidated	8/1	consolidated limestone frags. silty.							

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: SAA = same as above

Drilling Area Background (ppm): 0.0

PE Photovac - Mod. 2020

Converted to Well: Yes ✓ No _____ Well I.D. #: A-824-MW-01

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: A-824
PROJECT NUMBER: CTO 318
DRILLING COMPANY: Precision
DRILLING RIG: B-57

BORING No.: A-824 MW-02 / SB-02
DATE: 2/3/04
GEOLOGIST: A. Shearer
DRILLER: Scott Hauge - Precision

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**	PID
	0-1"						asphalt							
G	0-1'					2.5Y 8/2	lt. yellow w/minor gray silty oolite sand w/		1st sample at WT-14"	0.0				0.0
	1'-12'				loose		limestone fragments	<	3cm					
							SAA	sm						
	10-15'				semi consolidated	2.5Y 8/1	white - semi-limestone - consolidated oolite silty							

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: SAA = same as above

PE Photo vac model 2020

Drilling Area Background (ppm): 0.0

Converted to Well: Yes ✓ No ____ Well I.D. #: MW-02

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: A-824
PROJECT NUMBER: CTO 318
DRILLING COMPANY: Precision
DRILLING RIG: B-57

BORING No.: A-824-MW-03 / SB-03
DATE: 2/3/04
GEOLOGIST: A. Shearer
DRILLER: Scott Hauge Precision

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**	PID
	0-1"						asphalt							
lab sample G	1"-6"					2.5Y 8/2	lt yellow w/minor gray silty oolite sand w/		lab sample @ 6" WT ~ 9"	0.0				0.0
	6"-8'						limestone fragments < 3cm							
							SAA	SM						
	8'-14'					2.5Y 8/1	white oolitic limestone w/ semi consolidated limestone fragments. silty							

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: SAA = same as above

PE photovac mod 2020

Drilling Area Background (ppm): 0.0

Converted to Well: Yes ✓ No _____ Well I.D. #: A-824 MW-03

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: A-824
PROJECT NUMBER: CTO-318
DRILLING COMPANY: Precision
~~DRILLING RIG~~: hand auger

BORING No.: SB-04
DATE: 2/3/04
GEOLOGIST: Amanda Shearer
DRILLER:

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**	PID
	0-1"						asphalt							
G	1"-14"				loose	2.5Y 8/2	lt yellow w/ minor gray silty oolite sand w/ limestone fragments	SM	lab sample 1' WT ~ 14"	0.0				0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: lab sample

Drilling Area Background (ppm): 0.0

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: A-824
PROJECT NUMBER: CTO 318
DRILLING COMPANY: Precision
~~DRILLING RIG~~: Hand auger

BORING No.: SB-05
DATE: 2/3/04
GEOLOGIST: [illegible]
DRILLER:

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**	PID
	0-18"					2.5y 8/2	lt yellow w/minor gray silty oolite sand							
					loose		w/limestone frags.		lot sample	0.0				0
								Sm	WT ~18"					

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: lot sample

Drilling Area Background (ppm): 0.0

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: A-824
PROJECT NUMBER: CTO-318
DRILLING COMPANY: Precision
~~DRILLING~~ RIG: hand auger

BORING No.: SB-06
DATE: 2/3/04
GEOLOGIST: [illegible]
DRILLER:

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**	PID
	0					2.5Y 8/2	lt yellow w/minor gray silty oolitic		lab sample	00				0
					loose		sand w/limestone frags.	SM	WT ~10"					

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: _____

Drilling Area Background (ppm): 0.0

Converted to Well: Yes _____ No ✓ Well I.D. #: _____

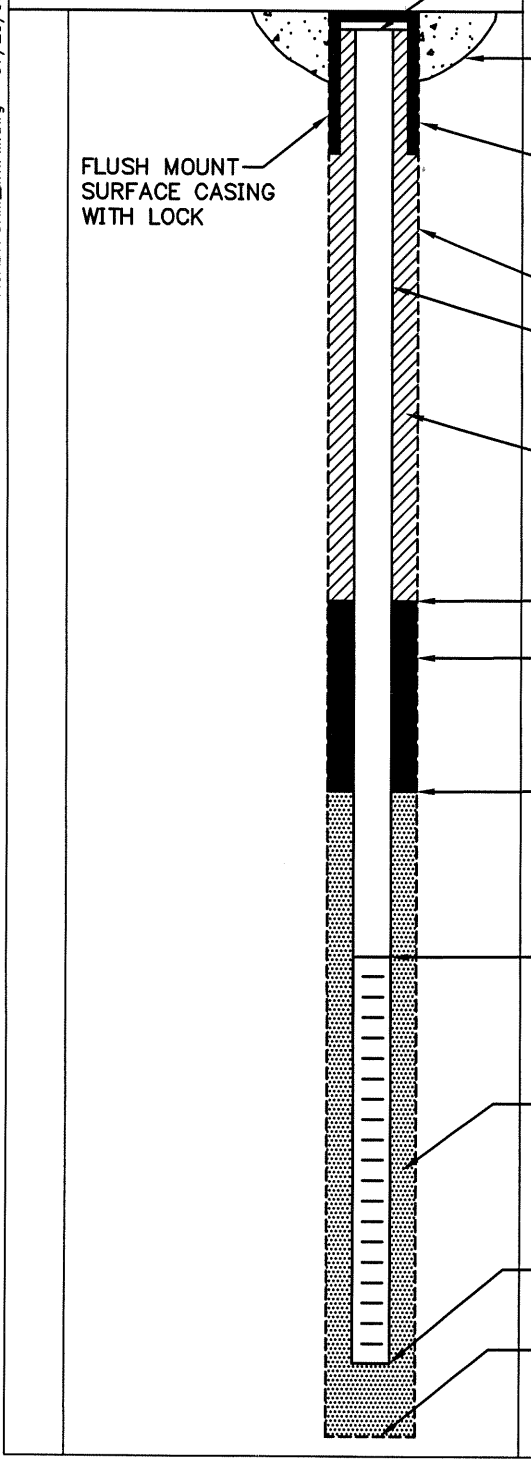
A-824

WELL NO.: mw-01, mw-02, mw-03

Tetra Tech NUS, Inc.

OVERBURDEN
MONITORING WELL SHEET
FLUSH - MOUNT

PROJECT A-824	LOCATION NASKW A-824	DRILLER Precision
PROJECT NO. CTO 318	BORING A-824-mw-01, 02, 03	DRILLING METHOD Hollow Stem Auger
DATE BEGUN 2/3/04	DATE COMPLETED 2/3/04	
FIELD GEOLOGIST A. Shemer		DEVELOPMENT METHOD peristaltic
GROUND ELEVATION	DATUM	



ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: Sakrete

TYPE OF PROTECTIVE CASING: Steel

I.D. OF PROTECTIVE CASING: 8-in

DIAMETER OF HOLE: 4.25" ID

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: Ø

ELEVATION/DEPTH TOP OF SEAL: 16"

TYPE OF SEAL: 30/65 fine sand seal 6"

ELEVATION/DEPTH TOP OF SAND: 11'

ELEVATION/DEPTH TOP OF SCREEN: 12'

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010 x 10'

TYPE OF SAND PACK: 20/30

DIAMETER OF HOLE IN BEDROCK: 4.25 inch

ELEVATION / DEPTH BOTTOM OF SCREEN: 112'

ELEVATION / DEPTH BOTTOM OF SAND: 112'

ELEVATION/DEPTH BOTTOM OF HOLE: 112'

BACKFILL MATERIAL BELOW SAND: silty oolitic lime s-d. (flowing)

ACAD:FORM_MWFM.dwg 07/20/99 INL

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: A-824
Project No.: N4779

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

Sample ID No.: A824-SB-01-0204
Sample Location: A824-SB-01
Sampled By: KM/BC
C.O.C. No.: 3882

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

GRAB SAMPLE DATA:

Date: 2/3/04	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1200	0-8"		
Method: grab			
Monitor Reading (ppm): 32			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

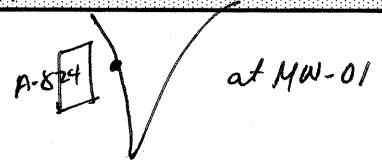
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
BTEX, MTBE	4x40mL (3 DI, 1 CH_3OH)	✓	
PAH	4oz	✓	
TRPH	4oz	✓	

OBSERVATIONS / NOTES:

12604 - meth
12628 - DI
12616
12640

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Eric McLean

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASKW - A824
Project No.: N4779

Sample ID No.: A824-SB-02-0204
Sample Location: A824-SB-02
Sampled By: EM/BC
C.O.C. No.: 3882

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

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

GRAB SAMPLE DATA:

Date: 2/3/04	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1220	0-1'		
Method: grab			
Monitor Reading (ppm): 0.0			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

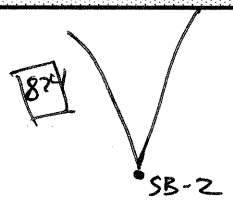
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
BTEX, MTBE	4x40mL (3 DI, 1 CH_3OH)	✓	
PAH	4 oz	✓	
TRPH	4 oz	✓	

OBSERVATIONS / NOTES:

12605 - meth
12641 - DI
12629
12617

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Em McKee

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: A824
Project No.: N4779

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

Sample ID No.: A824-SB-03-0204
Sample Location: A824-SB-03
Sampled By: EM/BC
C.O.C. No.: 3882

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

GRAB SAMPLE DATA:

Date: 2/3/04 Time: 1245 Method: grab Monitor Reading (ppm): 0.0	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0-8"		

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

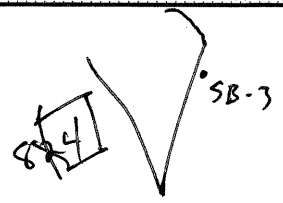
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
BTEX, MTBE	4x40mL(3D), 1CH3OH)	✓	
PAH	4oz	✓	
TRPH	4oz		

OBSERVATIONS / NOTES:

12606 - meth
12618 -
12630 D1
12640

MAP:



Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Ej McLa

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASKW - A824
Project No.: N4779

Sample ID No.: A824-SB-04-0204
Sample Location: A824-SB-04
Sampled By: EM/BC
C.O.C. No.: 3892

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

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

GRAB SAMPLE DATA:

Date: 2/3/04	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1315	0-1'		
Method: grab			
Monitor Reading (ppm): 0.0			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

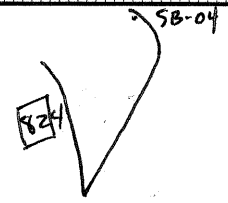
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
BTEX, MTBE	4x40mL (3DI, 1 CH_3OH)	✓	
PAH	4oz	✓	
TRPH	4oz	✓	

OBSERVATIONS / NOTES:

12631 - DI
12619
12643
12614 - CH_3OH

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Eg McKee

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASKW-A824
Project No.: N4779

Sample ID No.: A824-SB-05-0204
Sample Location: A824-SB-05
Sampled By: EM/BC
C.O.C. No.: 3882

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

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

GRAB SAMPLE DATA:

Date: 02/03/04	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1355	0-18"		
Method: grab			
Monitor Reading (ppm): 0.0			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

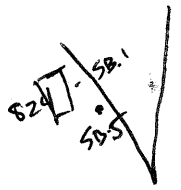
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
BTEX, MTBE	1 40mL meth, 3 40mL DI	✓	
PAH	1 4oz	✓	
TRPH	4oz	✓	

OBSERVATIONS / NOTES:

12603 - meth
12639 - DI
12627
12615

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASKW - A824
Project No.: N4779

Sample ID No.: A824-SB-06-0204
Sample Location: A824-SB-06
Sampled By: EM/BC
C.O.C. No.: 3882

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

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

GRAB SAMPLE DATA:

Date: 2/3/04	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1425	0-10"		
Method: grab			
Monitor Reading (ppm): 0.0			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
BTEX, MTBE	4 x 40mL (3 DI, 1 CH_3OH)	✓	
PAH	4 oz	✓	
TRPH	4 oz	✓	

OBSERVATIONS / NOTES:

SW846
12608 - Methanol
12633 - DI
12622
12623

- Duplicate
12609 - methanol
12620
12621
12632

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
	KW-DUP-01-0204

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: NAS KW - Site A-824 **Project No.:** CTO 318/ N4779
Location: NAS KW, Florida **Personnel:** Emily McRee, Brian Cole
Weather Conditions: cloudy, windy - 65°F **Measuring Device:** Heron WLM 100'
Tidally Influenced: Yes X No ___ **Remarks:**

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
A824-MW-01	2/9/04	0730	No survey data yet	12.35	1.23			
A824-MW-02	↓	1000		11.41	1.44			
A824-MW-03		0930		11.52	1.31			
RR-MW-06	✓	0745		14.34	1.76			

E. McRa

* All measurements to the nearest 0.01 foot

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS KEY WEST - Site A824
Project No.: N4779

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: A824-MW-01-02004
Sample Location: A824-MW-01
Sampled By: BC
C.O.C. No.: 3832
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA:

Date: 2/9/04	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: 0830								
Method: peri. pump	Clear	7.41	0.104	24.53	23.6	5.50	0.05	

PURGE DATA: No purge data was collected for groundwater screening samples.

Date: 2/9/04	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: peri. pump	INT	6.48	0.106	23.46	93.1	6.81	0.05	0745
Monitor Reading (ppm): —	0.5	7.15	0.107	24.34	67.9	6.23	0.05	0750
Well Casing Diameter & Material	1.0	7.26	0.107	24.41	49.6	6.18	0.05	0755
Type: 2" PVC	1.5	7.33	0.106	24.46	49.4	6.08	0.05	0800
Total Well Depth (TD): 12.35	2.0	7.38	0.106	24.52	36.9	5.91	0.05	0805
Static Water Level (WL): 1.23	2.5	7.39	0.105	24.50	27.2	5.78	0.05	0810
One Casing Volume(gal/L): 1.78	3.0	7.40	0.105	24.51	27.3	5.60	0.05	0815
Start Purge (hrs): 0745	3.5	7.41	0.105	24.50	23.5	5.52	0.05	0820
End Purge (hrs): 0830	4.0	7.41	0.104	24.51	24.8	5.49	0.05	0825
Total Purge Time (min): 45	4.5	7.41	0.104	24.53	23.6	5.50	0.05	0830
Total Vol. Purged (gal/L): 4.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
PPL VOHs, BTEX, MTBE	HCl	3x40mL	3
EDB	HCl	2x40mL	2
methane	HCl	2x40mL	2
PAHs	none	2 x 1L amber	2
TRPH	HCl	2x1L amber	2
Nitrate + Sulfate	none	1x 125mL HDPE	1
As, Cd, Cr, Pb	HNO_3	1x 250mL HDPE	1

OBSERVATIONS / NOTES:

DO = CHEMets K7512 = 4.0 mg/L

CO_2 = CHEMets K1910 = 22.0 mg/L
(10-100)

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS KEY WEST - Site A-B24
Project No.: CTO 319/N4779

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: A824-MW-02-0204
Sample Location: A824-MW-02
Sampled By: Emily McRee
C.O.C. No.: 3832
Type of Sample:
[X] Low Concentration
[ ]-High Concentration

SAMPLING DATA:

Date: 2/9/04	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1130	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	
Method: peristaltic-low flow	clear	7.06	1.38	25.7	94.5	6.55	0.8	

PURGE DATA: No purge data was collected for groundwater screening samples.

Date: 2/9/04	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: peristaltic low flow	0.66 gal	7.03	1.34	25.8	592	17.08	0.8	1030
Monitor Reading (ppm): —	1.0	7.05	1.35	25.8	451	13.02	0.8	1035
Well Casing Diameter & Material	2.0	7.07	1.38	25.8	179	8.90	0.8	1040
Type: 2" PVC	2.33	7.10	1.38	25.8	140	7.95	0.8	1055
Total Well Depth (TD): 11.41	2.66	7.11	1.38	25.7	123	7.01	0.8	1100
Static Water Level (WL): 1.40	3.0	7.09	1.38	25.7	113	7.02	0.8	1105
One Casing Volume (gal/L): 1.6	3.33	7.13	1.38	25.8	112	6.88	0.8	1110
Start Purge (hrs): 1020	3.66	7.13	1.38	25.7	95.9	6.74	0.8	1115
End Purge (hrs): 1125	4.0	7.06	1.38	25.7	97.0	6.56	0.8	1120
Total Purge Time (min): 65	4.33	7.06	1.38	25.7	94.5	6.55	0.8	1125
Total Vol. Purged (gal/L): 4.3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
PPL VOHs, BTEX, MTBE	HCl	3x40mL	✓
PAH	—	2x1L amber	✓
TRPH	HCl	2x1L amber	✓
Lead	HNO_3	250 mL HDPE	✓
EDB	HCl	2x40mL	✓
Methane	HCl	2x40mL	✓
Nitrate+Sulfate	—	125 mL HDPE	✓
DO = 2.5 mg/L			
CO_2 = 21 mg/L			

OBSERVATIONS / NOTES:

- well screen fully submerged - water level stable at 1.6' BTOC
- pump rate = 300 mL/min
- @ 25.8°C . 209% sat DO = 1.629 mg/L
  TDS = 9 g/L
  ORP = -101 mV

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Emily McRee

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS KEY WEST - Site A-824
Project No.: N4779

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: A824-MW-03-0204
Sample Location: A8-24-MW-03
Sampled By: BC
C.O.C. No.: 3832
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA:

Date: 2/9/04 Time: 1105 Method: peri. pump	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
	Clear	7.35	0.156	25.73	20.4	1.42	0.07	

PURGE DATA: No purge data was collected for groundwater screening samples.

Well Casing Diameter & Material Type: 2" PVC
Total Well Depth (TD): 11.52
Static Water Level (WL): 1.31
One Casing Volume (gal/L): 1.63
Start Purge (hrs): 0940
End Purge (hrs): 1105
Total Purge Time (min): 85
Total Vol. Purged (gal/L): 8.5

Date: 2/9/04 Method: peri. pump Monitor Reading (ppm): —	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
	INT	7.42	0.175	25.19	367.0	4.39	0.08	0940
	1.0	7.29	0.175	25.46	842.0	2.90	0.08	0950
	2.0	7.31	0.175	25.40	864.0	3.02	0.08	1000
	3.0	7.31	0.172	25.69	308.0	2.16	0.08	1010
	4.0	7.33	0.162	25.62	53.5	1.63	0.08	1020
	5.0	7.35	0.160	25.69	41.1	1.52	0.07	1030
	6.0	7.35	0.158	25.66	35.9	1.49	0.07	1040
	7.0	7.35	0.157	25.74	26.8	1.47	0.07	1050
	7.5	7.35	0.157	25.73	24.2	1.42	0.07	1055
	8.0	7.36	0.156	25.78	21.5	1.43	0.07	1100
	8.5	7.35	0.156	25.73	20.4	1.42	0.07	1105

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
PPL VOHs, BTEX, MTBE	HCl	3x40mL	3
EDB	HCl	2x40mL	2
methane	HCl	2x40mL	2
PAH	none	2x1L amber	2
TRPH	HCl	2x1L amber	2
Nitrate + Sulfate	none	1x125mL HDPE	1
As, Cd, Cr, Pb	HNO_3	1x250mL HDPE	1

OBSERVATIONS / NOTES:

DO = CHEMets K7512 = 1.5 mg/L

CO_2 = CHEMets K1910 = 29.0 mg/L
(10-100)

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): B Cole

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS KEY WEST - Site A-824
Project No.: CTO 318/N4779

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: RR-MW-06-0204
Sample Location: RR-MW-06
Sampled By: Emily McRee
C.O.C. No.: 3832
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA:

Date: 2/9/04 Time: 0925 Method: peristaltic-low flow	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
	clear	7.01	0.350	27.7	43.7	7.88	0.2	

PURGE DATA: ~~No purge data was collected for groundwater screening samples.~~

Date: 2/9/04	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	~~Other~~ Time
Method: peristaltic-low flow	0.66gal	6.98	0.314	27.0	64.4	14.7	0.2	0805
Monitor Reading (ppm): —	1.0	6.99	0.323	27.0	61.4	6.06	0.2	0810
Well Casing Diameter & Material	1.33	6.99	0.325	27.0	62.7	10.60	0.2	0815
Type: 2" PVC	1.66	7.00	0.330	27.1	80.4	10.82	0.2	0820
Total Well Depth (TD): 14.74	2.0	6.99	0.336	27.1	82.2	10.69	0.2	0825
Static Water Level (WL): 1.76	2.33	6.99	0.338	27.1	80.1	7.76	0.2	0830
One Casing Volume (gal/L): 2.03	2.66	7.00	0.338	27.3	78.3	9.04	0.2	0835
Start Purge (hrs): 0755	3.0	7.00	0.341	27.5	85.0	6.74	0.2	0840
End Purge (hrs): 0920	3.33	7.00	0.343	27.6	79.7	9.37	0.2	0845
Total Purge Time (min): 85	3.66	7.01	0.344	27.3	74.6	6.29	0.2	0850
Total Vol. Purged (gal/L): 5.66	4.0	7.01	0.346	27.5	57.1	7.55	0.2	0855

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
PPL VOHs, BTEX, MTBE	HCl	3x40mL	✓
TRPH	HCl	2x1L amber	✓
PAH	—	2x1L amber	✓
EDB	HCl	3x40mL	✓
Lead	HNO_3	250mL HDPE	✓
Methane	HCl	2x40mL	✓
Nitrate+Sulfate	—	125mL HDPE	✓
DO = 1.5 mg/L			
CO_2 = 30 mg/L			

OBSERVATIONS / NOTES:

- well screen fully submerged - tubing placed at ≈ 9' BTOC
- water level stable at 1.90'
- @ 27.6°C, 209 oct DO = 1.577 mg/L
- DO + turbidity would not drop below specs, waited for stabilization + sampled.

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Emily McRee

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS KEY WEST - Site A-824
Project No.: CTO 318/N4779

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: KR-MW-06-0204
Sample Location: KR-MW-06
Sampled By: Emily McRee
C.O.C. No.: 3832
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA:

Date: 2/9/04	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time:	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	
Method: See page 1 of 2								

PURGE DATA: ~~No purge data was collected for groundwater screening samples.~~

Date: 2/9/04	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	~~Other~~ Time
Method:	4.33	7.01	0.347	27.4	52.8	8.30	0.2	0900
Monitor Reading (ppm):	4.66	7.01	0.346	27.6	59.0	7.03	0.2	0905
Well Casing Diameter & Material	5.0	7.01	0.349	27.6	40.8	8.05	0.2	0910
Type:	5.33	7.01	0.349	27.7	40.9	7.80	0.2	0915
Total Well Depth (TD):	5.66	7.01	0.350	27.7	43.7	7.88	0.2	0920
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
PPL VOHs, BTEX, MTBE	HCl	3x40mL	

See page 1 of 2

OBSERVATIONS / NOTES:

TDS = 2.2 g/L
ORP = -286 mV

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Emily McRee

Tetra Tech NUS, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: NAS KW - Site A-824 **Project No.:** CTO 318/ N4779

Location: NAS KW, Florida **Personnel:** Gary Braganza, Brian Cole

Weather Conditions: Partly Cloudy 82° **Measuring Device:** Slope

Tidally Influenced: Yes X No ___ **Remarks:**

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
A824-MW-01	5/21/04	9:46		12.02	2.10			
A824-MW-02		9:47		11.52	1.82			
A824-MW-03		9:49		11.49	2.10			
RR-MW-06		9:44		11.35	2.35			

* All measurements to the nearest 0.01 foot

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NAS KEY WEST -
Project No.:

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: A-824-MW-01-0504
Sample Location: A824-MW-01
Sampled By: BC
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 5/21/04								
Time: 1050								
Method: peri pump	clear							

PURGE DATA: No purge data was collected for groundwater screening samples.

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 5/21/04								
Method: peri pump	INT	7.46	1.39	26.88	13.9	0.72	0.06	1010
Monitor Reading (ppm): 0.0	1.0	7.43	1.31	26.69	12.7	0.31	0.06	1020
Well Casing Diameter & Material	2.0	7.43	1.30	27.06	15.3	0.27	0.06	1030
Type: 2" PVC	3.0	7.43	1.29	27.24	13.4	0.27	0.06	1040
Total Well Depth (TD): 12.0	3.5	7.41	1.29	27.27	16.2	0.26	0.06	1045
Static Water Level (WL): 2.10	4.0	7.41	1.29	27.16	15.9	0.26	0.06	1050
One Casing Volume (gal/L): 1.584								
Start Purge (hrs): 1010								
End Purge (hrs): 1050								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): 4.0								

9.9
-1.16
8.584

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
PPL VOHs, BTEX, MTBE	HCl	3x40mL	6
PAH	none	2 x 1 L amber	4
TRPH	HCl	2 x 1 L amber	4
EDB	HCl	2 x 40 mL glass	4
methane	HCl	2 x 40 mL glass	4
lead	HNO_3	1 x 250mL poly	2
nitrate + sulfate	none	1 x 125mL poly	2

OBSERVATIONS / NOTES:

DO = 0.4 mg/L

CO_2 = 22 ppm

Circle if Applicable:

MS/MSD

Duplicate ID No.: KW-DUP-03-0504

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NAS KEY WEST -
Project No.:

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: A824-MW-02-0504
Sample Location: A824-MW-02
Sampled By: BC
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 5/21/04								
Time: 1320								
Method: peri pump	clear							

PURGE DATA: No purge data was collected for groundwater screening samples.

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 5/21/04								
Method: peri pump	INT	7.26	16.1	27.66	197.3	0.66	0.95	1235
Monitor Reading (ppm): 0.0	1.0	7.26	15.9	27.72	208.4	0.30	0.93	1245
Well Casing Diameter & Material Type: 2" PVC	2.0	7.31	14.5	28.07	75.9	0.26	0.84	1255
	3.0	7.30	14.4	28.10	41.9	0.26	0.84	1305
Total Well Depth (TD): 11.52	4.0	7.29	14.4	28.05	16.7	0.26	0.84	1315
Static Water Level (WL): 1.82	4.5	7.28	14.5	28.02	15.3	0.26	0.84	1320
One Casing Volume (gal/L): 1.552								
Start Purge (hrs): 1235								
End Purge (hrs): 1320								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): 4.5								

9.7
.16
1.552

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
PPL VOHs, BTEX, MTBE	HCl	3x40mL	3
PAH	none	2 x 1L amber	2
TRPH	HCl	2 x 1L amber	2
methane	HCl	2 x 40mL glass	2
EDB	HCl	2 x 40mL glass	2
Pb	HNO_3	1 x 250mL poly	1
nitrate + sulfate	none	1 x 125mL poly	1

OBSERVATIONS / NOTES:

DO = 0.5 mg/L

CO_2 = 40 ppm

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS KEY WEST -
Project No.:

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: A824-MW-03-0504
Sample Location: A824-MW-03
Sampled By: GB
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 5/21/04								
Time: 13:05								
Method: Peristaltic								-276

PURGE DATA: No purge data was collected for groundwater screening samples.

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other Time
Date: 5/21/04								
Method: Peristaltic Pump	3000	7.07	6.78	28.0	290	0.05	0.36	12:20
Monitor Reading (ppm):	10000 ml	7.20	5.60	28.52	>999	0.04	0.30	12:25
Well Casing Diameter & Material	1000 ml	7.18	5.95	28.42	395.0	0.00	0.32	12:30
Type: 2" PVC	1000 ml	7.20	5.77	28.45	128	0.00	0.31	12:35
Total Well Depth (TD): 11.49	1000 ml	7.21	5.54	28.45	54.6	0.0	0.29	12:40
Static Water Level (WL): 2.10	1000 ml	7.22	5.33	28.42	27.2	0.0	0.28	12:45
One Casing Volume(gal/L): 5.7L	1000 ml	7.22	5.17	28.40	29.2	0.0	0.27	12:50
Start Purge (hrs): 12:05	1000 ml	7.22	5.16	28.40	15.2	0.0	0.26	12:55
End Purge (hrs):	1000 ml	7.22	5.16	28.39	2.7	0.0	0.26	13:00
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
PPL VOHs, BTEX, MTBE	HCl	3x40mL	✓
PAH	—	2x 1 liter amber	✓
TRPH	HCl	2x 1 liter amber	✓
EDB	HCl	2x 40 ml	✓
Lead	HNO_3	1x 250 ml	✓
NO_3 + SO_4	—	1x 125 ml	✓
Methane	HCl	2x 40 ml	✓

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): Gary Bragman

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS KEY WEST -
Project No.:

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: RR-MW-06-0504
Sample Location: ~~RR-MW-06~~ RR-MW-06
Sampled By: GB
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA:

Date: 5/21/04	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 10:35								
Method: Peristaltic/Low Flow	clear	7.11	5.87	29.13	0	0.00	0.31	-296

PURGE DATA: No purge data was collected for groundwater screening samples.

Date: 5/21/04	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other Time
Method: Peristaltic/Low Flow	~~2000~~	7.10	5.98	28.98	86.1	0.66	0.32	10:05
Monitor Reading (ppm): N/A	1000	7.11	5.96	28.99	83.8	0.44	0.32	10:10
Well Casing Diameter & Material Type: 2" PVC	1000	7.11	5.96	29.07	72.8	0.26	0.32	10:15
	1000	7.11	5.88	29.11	70.0	0.14	0.31	10:20
Total Well Depth (TD): 11.35	1000	7.11	5.87	29.12	11.9	0.06	0.31	10:~~25~~ 30
Static Water Level (WL): 2.35	1000	7.11	5.87	29.13	0	0.00	0.31	10:30
One Casing Volume(gal/L):								
Start Purge (hrs): 9:55								
End Purge (hrs): 10:30								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): 7L								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
PPL VOHs, BTEX, MTBE	HCl	3x40mL	✓
PAH			✓
TRPH	HCl		✓
EDB	HCl		✓
Lead	HNO_3		✓
NO_3 + SO_4	-		✓
CH_4	-		✓
			✓

OBSERVATIONS / NOTES:

CO_2 = 70 ppm
DO = 0.1 ppm

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Gary Burgess

MONITORING WELL SURVEY DATA
NAVAL AIR STATION KEY WEST
BOCA CHICA KEY BLDG. 824 SITE
prepared for Tetra Tech, NUS, Inc.
prepared by Donaldson, Garrett & Associates, Inc. d/b/a/ Island Surveying & Mapping Co.
May 25, 2004

DESCRIPTION	NORTH	EAST	ELEVATION	
			GROUND	TOC
A824-MW-01	93,303.05	424,338.85	3.18	2.95
A824-MW-02	93,185.44	424,421.89	3.10	2.72
A824-MW-03	93,394.99	424,467.85	3.17	2.83
RR-MW-06	93,398.39	424,147.18	3.63	3.29

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS KEY WEST - A824
Project No.:

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: A824-MW-01-0804
Sample Location: A824-MW01
Sampled By: SRM
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA:

Date: 8-19-04 / Time: 1115 / Method:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
	clear	7.21	1.58	31.5	18.7	1.47	0.1	-183

PURGE DATA: No purge data was collected for groundwater screening samples.

Date: 8-19-04
Method: Peristaltic Pump
Monitor Reading (ppm): 0
Well Casing Diameter & Material Type: 2" PVC
Total Well Depth (TD): 12.0
Static Water Level (WL): 1.40
One Casing Volume(gal/L): 10.6
Start Purge (hrs): 1000
End Purge (hrs): ~~10~~ 1115
Total Purge Time (min): 75
Total Vol. Purged (gal/L): 7.5

Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
1.0	7.22	1.56	30.7	182.1	1.97	0.1	32
1.5	7.24	1.55	31.2	158.0	2.01	0.1	-25
2.0	7.23	1.55	31.3	137.0	1.92	0.1	-112
2.5	7.23	1.55	31.5	131.0	1.90	0.1	-131
3.0	7.23	1.56	31.7	123.0	1.87	0.1	-150
4.0	7.23	1.57	31.8	86.0	1.70	0.1	-166
5.0	7.22	1.58	31.8	50.1	1.59	0.1	-167
6.0	7.22	1.58	31.6	41.2	1.47	0.1	-181
7.0	7.21	1.58	31.5	27.1	1.45	0.1	-185
7.5	7.21	1.58	31.5	18.7	1.47	0.1	-183

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
PPL VOHs, BTEX, MTBE	HCl	3x40mL	✓
PAH - Nitrate, Sulfate	None	2-liter Amber	✓
TRPH	HCl	2-1-liter Amber	✓
EDB	HCl	2x40ml	✓
Methane	HCl	2x40 ml	✓
Lead	HNO3	1x125ml Poly	✓

OBSERVATIONS / NOTES:

Drawdown 1.40 to 1.50 Flowrate = 100 ml/min
Equipment Volume = 409 ml
Flow Cell 325 ml
Tubing = 7ml/ft x 12ft = 84ml

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): Scott R. McGlynn

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS KEY WEST -
Project No.:

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: RR-MW-06-0804
Sample Location: RR-MW-06
Sampled By: S. McGuire
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 8-19-04								
Time: ~~1220~~ 1220								
Method:	clear	6.95	5.52	32.1	16.6	1.19	0.3	ORP -241

PURGE DATA: No purge data was collected for groundwater screening samples.

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 8-19-04								
Method: Peristaltic Pump	1.0	6.95	5.47	32.1	96.9	1.31	0.3	-237
Monitor Reading (ppm): 0	~~2.0~~ 1.5	6.94	5.50	32.1	39.6	1.26	0.3	-239
Well Casing Diameter & Material	2.0	6.95	5.51	32.0	32.7	1.25	0.3	-239
Type: 2" PVC	2.5	6.95	5.51	32.1	26.9	1.22	0.3	-240
Total Well Depth (TD): 12.0	3.0	6.95	5.52	32.1	16.6	1.19	0.3	-241
Static Water Level (WL): 1.50								
One Casing Volume(gal/L): 10.5								
Start Purge (hrs): 1145								
End Purge (hrs): 1215								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): 3.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
PPL VOHs, BTEX, MTBE	HCl	3x40mL	✓
PAH, Nitrate - Sulfate	None	2 x 1 liter Amber	✓
TRPH	Hcl	2x 1 liter Amber	✓
EDB	Hcl	2x 40 ml	✓
Methane	Hcl	2x 40 ml	✓
Lead	HNO3	1x 125 ml Poly	✓

OBSERVATIONS / NOTES:

Drawdown 1.50 to 1.62
Equipment volume = 409 ml
Flow Cell = 325 ml
Tubing = 7 ml/ft x 12 = 84 ml

Flowrate = 100 ml/min

Needs well cap

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Scott R. McGuire

APPENDIX C

VALIDATION REPORTS

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**C. BRYAN**	**DATE:**	**MARCH 29, 2004**
FROM:	**SETH C. STAFFEN**	**COPIES:**	**DV FILE**
SUBJECT:	**ORGANIC DATA VALIDATION – VOA/PAH/TPH** **CTO 318 NAS KEY WEST** **SDG: WU0293**		

SAMPLES: 1/AQUEOUS

KWTB-020304

7/SOLID

A824-SB-01-0204	A824-SB-02-0204	A824-SB-03-0204
A824-SB-04-0204	A824-SB-05-0204	A824-SB-06-0204
KW-DUP-01-0204		

OVERVIEW

The sample set for CTO 318, NAS Key West, SDG WU0293 consists of seven (7) soil boring environmental samples, and one (1) trip blank. All samples were analyzed for select volatile organic compounds (BTEX and MTBE), polynuclear aromatic hydrocarbons (PAHs), and total petroleum hydrocarbons. The trip blank (KTB-020304) was analyzed for BTEX and MTBE only. One field duplicate pair was included in this SDG: A824-SB-06-0204 / KW-DUP-01-0204.

The samples were collected by Tetra Tech NUS on February 3rd, 2004 and analyzed by Katahdin Analytical Services. All analyses were conducted in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria using SW-846 Methods 8260B, 8270C, and Florida PRO analytical and reporting protocols. The data contained in this SDG were validated with regard to the following parameters:

* • Data completeness
* • Holding times
* • Initial and continuing calibration/recoveries
* • Laboratory method blank results
• Field duplicate precision
* • Detection limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

The text of this report is formulated to address only gross non-compliances resulting in the rejection of data and the elimination of false positives.

VOLATILE

All quality control parameters were met for this fraction.

Field duplicate imprecision occurred between sample A824-SB-06-0204 and its duplicate KW-DUP-01-0204 for several volatile compounds. However, no qualification action was taken because the reported results were less than 2X the reporting limit.

PAH

The continuing calibration on 3/3/04 at 1258 contained a percent difference (%D) that exceeded the 25% quality control limit for pyrene. No qualification action was taken because results were nondetects and the noncompliance was < 90%.

The internal standard of chrysene-D12 fell below the -50% quality control limit for samples A824-SB-01-0204, KW-DUP-01-0204. Sample A824-SB-01-0204 was not re-analyzed. Sample KW-DUP-01-0204 was re-analyzed and yielded identical results. The original sample was used for data validation purposes. No qualification action because the noncompliance is not a gross noncompliance.

The surrogate recoveries of 2-fluorobiphenyl and terphenyl-d14 exceeded the upper quality control limits for samples A824-SB-01-0204 and KW-DUP-01-0204. The surrogate recoveries of nitrobenzene-d5 and 2-fluorobiphenyl exceeded the upper quality control limit for sample A824-SB-05-0204. The surrogate recovery of terphenyl-d14 exceeded the upper quality control limit for samples A824-SB-02-0204, A824-SB-03-0204, and A824-SB-04-0204. No qualification action was taken because the reported results were nondetects.

TPH

The following compound was detected in the laboratory method blank at the maximum concentration indicated below:

Compound	Concentration	Action Level
TPH	3.1 mg/Kg	15.5 mg/Kg

Blank Actions

- Value < Reporting Limit (RL); report RL followed by a U.
- Value > RL and < action level; report value followed by a U.
- Value > RL and > action level; report value unqualified.

An action level of 5X the maximum contaminant concentration was established to evaluate laboratory contamination. Dilution factors, percent solids, and sample aliquots were taken into consideration during the application of all action levels. The positive results below the action level were qualified as nondetected, U, as a result of blank contamination for TPH.

Field duplicate imprecision (RPD > 50%) occurred between sample A824-SB-06-0204 and its duplicate KW-DUP-01-0204 for TPH. Positive and nondetected results in the field pair were qualified as estimated, J, and, UJ, respectively.

Additional Comments

Positive results reported below the reporting limit (RL) were qualified as estimated, J.

EXECUTIVE SUMMARY

Laboratory Performance Issues: TPH was detected in the laboratory method blank. Surrogate %Rs and internal standard noncompliances were noted in the PAH fraction.

Other Factors Affecting Data Quality: Field duplicate imprecision was noted for the TPH fraction.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (October, 1999), and the NFESC guidelines IRCDQM (September, 1999). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS

Seth C. Staffen
Environmental Scientist/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 - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % 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 (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.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 less than sample activity

PROJ_NO: 4779

SDG: WU0293 MEDIA: WATER DATA FRACTION: OV

nsample	KWTB-020304
samp_date	1/6/2004
lab_id	WU0293-8
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
BENZENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
O-XYLENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	

PROJ_NO: 4779

SDG: WU0293 MEDIA: SOIL DATA FRACTION: OV

nsample	A824-SB-01-0204	nsample	A824-SB-02-0204	nsample	A824-SB-03-0204
samp_date	2/3/2004	samp_date	2/3/2004	samp_date	2/3/2004
lab_id	WU0293-1	lab_id	WU0293-2	lab_id	WU0293-3
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	84.8	Pct_Solids	79.8	Pct_Solids	88.0
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
BENZENE	5	U	
ETHYLBENZENE	5	U	
M+P-XYLENES	10	U	
METHYL TERT-BUTYL ETHER	10	U	
O-XYLENE	5	U	
TOLUENE	5	U	
TOTAL XYLENES	15	U	

Parameter	Result	Val Qual	Qual Code
BENZENE	5	U	
ETHYLBENZENE	5	U	
M+P-XYLENES	10	U	
METHYL TERT-BUTYL ETHER	10	U	
O-XYLENE	5	U	
TOLUENE	5	U	
TOTAL XYLENES	15	U	

Parameter	Result	Val Qual	Qual Code
BENZENE	6	U	
ETHYLBENZENE	6	U	
M+P-XYLENES	12	U	
METHYL TERT-BUTYL ETHER	12	U	
O-XYLENE	6	U	
TOLUENE	6	U	
TOTAL XYLENES	18	U	

PROJ_NO: 4779

SDG: WU0293 MEDIA: SOIL DATA FRACTION: OV

nsample	A824-SB-04-0204	nsample	A824-SB-05-0204	nsample	A824-SB-06-0204
samp_date	2/3/2004	samp_date	2/3/2004	samp_date	2/3/2004
lab_id	WU0293-4	lab_id	WU0293-5	lab_id	WU0293-6
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	86.5	Pct_Solids	95.2	Pct_Solids	79.9
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
BENZENE	6	U	
ETHYLBENZENE	6	U	
M+P-XYLENES	2	J	P
METHYL TERT-BUTYL ETHER	13	U	
O-XYLENE	6	U	
TOLUENE	6	U	
TOTAL XYLENES	2	J	P

Parameter	Result	Val Qual	Qual Code
BENZENE	5	U	
ETHYLBENZENE	5	U	
M+P-XYLENES	10	U	
METHYL TERT-BUTYL ETHER	10	U	
O-XYLENE	5	U	
TOLUENE	5	U	
TOTAL XYLENES	15	U	

Parameter	Result	Val Qual	Qual Code
BENZENE	6	U	
ETHYLBENZENE	6	U	
M+P-XYLENES	2	J	P
METHYL TERT-BUTYL ETHER	13	U	
O-XYLENE	6	U	
TOLUENE	6	U	
TOTAL XYLENES	2	J	P

PROJ_NO: 4779

SDG: WU0293 MEDIA: SOIL DATA FRACTION: OV

nsample	KW-DUP-01-0204
samp_date	2/3/2004
lab_id	WU0293-7
qc_type	NM
units	UG/KG
Pct_Solids	84.5
DUP_OF:	A824-SB-06-0204

Parameter	Result	Val Qual	Qual Code
BENZENE	5	U	
ETHYLBENZENE	2	J	P
M+P-XYLENES	10	J	P
METHYL TERT-BUTYL ETHER	10	U	
O-XYLENE	4	J	P
TOLUENE	5	U	
TOTAL XYLENES	14	J	P

PROJ_NO: 4779

SDG: WU0293 MEDIA: SOIL DATA FRACTION: OS

nsample	A824-SB-01-0204	nsample	A824-SB-02-0204	nsample	A824-SB-03-0204
samp_date	2/3/2004	samp_date	2/3/2004	samp_date	2/3/2004
lab_id	WU0293-1RA	lab_id	WU0293-2RA	lab_id	WU0293-3RA
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	84.8	Pct_Solids	79.8	Pct_Solids	88.0
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	390	U	
2-METHYLNAPHTHALENE	390	U	
ACENAPHTHENE	390	U	
ACENAPHTHYLENE	390	U	
ANTHRACENE	390	U	
BENZO(A)ANTHRACENE	390	U	
BENZO(A)PYRENE	390	U	
BENZO(B)FLUORANTHENE	390	U	
BENZO(G,H,I)PERYLENE	390	U	
BENZO(K)FLUORANTHENE	390	U	
CHRYSENE	390	U	
DIBENZO(A,H)ANTHRACENE	390	U	
FLUORANTHENE	390	U	
FLUORENE	390	U	
INDENO(1,2,3-CD)PYRENE	390	U	
NAPHTHALENE	390	U	
PHENANTHRENE	390	U	
PYRENE	390	U	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	410	U	
2-METHYLNAPHTHALENE	410	U	
ACENAPHTHENE	410	U	
ACENAPHTHYLENE	410	U	
ANTHRACENE	410	U	
BENZO(A)ANTHRACENE	410	U	
BENZO(A)PYRENE	410	U	
BENZO(B)FLUORANTHENE	410	U	
BENZO(G,H,I)PERYLENE	410	U	
BENZO(K)FLUORANTHENE	410	U	
CHRYSENE	410	U	
DIBENZO(A,H)ANTHRACENE	410	U	
FLUORANTHENE	410	U	
FLUORENE	410	U	
INDENO(1,2,3-CD)PYRENE	410	U	
NAPHTHALENE	410	U	
PHENANTHRENE	410	U	
PYRENE	410	U	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	380	U	
2-METHYLNAPHTHALENE	380	U	
ACENAPHTHENE	380	U	
ACENAPHTHYLENE	380	U	
ANTHRACENE	380	U	
BENZO(A)ANTHRACENE	380	U	
BENZO(A)PYRENE	380	U	
BENZO(B)FLUORANTHENE	380	U	
BENZO(G,H,I)PERYLENE	380	U	
BENZO(K)FLUORANTHENE	380	U	
CHRYSENE	380	U	
DIBENZO(A,H)ANTHRACENE	380	U	
FLUORANTHENE	380	U	
FLUORENE	380	U	
INDENO(1,2,3-CD)PYRENE	380	U	
NAPHTHALENE	380	U	
PHENANTHRENE	380	U	
PYRENE	380	U	

PROJ_NO: 4779

SDG: WU0293 MEDIA: SOIL DATA FRACTION: OS

nsample	A824-SB-04-0204	nsample	A824-SB-05-0204	nsample	A824-SB-06-0204
samp_date	2/3/2004	samp_date	2/3/2004	samp_date	2/3/2004
lab_id	WU0293-4	lab_id	WU0293-5RA	lab_id	WU0293-6RA
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	86.5	Pct_Solids	95.2	Pct_Solids	79.9
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	380	U	
2-METHYLNAPHTHALENE	380	U	
ACENAPHTHENE	380	U	
ACENAPHTHYLENE	380	U	
ANTHRACENE	380	U	
BENZO(A)ANTHRACENE	380	U	
BENZO(A)PYRENE	380	U	
BENZO(B)FLUORANTHENE	380	U	
BENZO(G,H,I)PERYLENE	380	U	
BENZO(K)FLUORANTHENE	380	U	
CHRYSENE	380	U	
DIBENZO(A,H)ANTHRACENE	380	U	
FLUORANTHENE	380	U	
FLUORENE	380	U	
INDENO(1,2,3-CD)PYRENE	380	U	
NAPHTHALENE	380	U	
PHENANTHRENE	380	U	
PYRENE	380	U	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	350	U	
2-METHYLNAPHTHALENE	350	U	
ACENAPHTHENE	350	U	
ACENAPHTHYLENE	350	U	
ANTHRACENE	350	U	
BENZO(A)ANTHRACENE	350	U	
BENZO(A)PYRENE	350	U	
BENZO(B)FLUORANTHENE	350	U	
BENZO(G,H,I)PERYLENE	350	U	
BENZO(K)FLUORANTHENE	350	U	
CHRYSENE	350	U	
DIBENZO(A,H)ANTHRACENE	350	U	
FLUORANTHENE	350	U	
FLUORENE	350	U	
INDENO(1,2,3-CD)PYRENE	350	U	
NAPHTHALENE	350	U	
PHENANTHRENE	350	U	
PYRENE	350	U	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	410	U	
2-METHYLNAPHTHALENE	410	U	
ACENAPHTHENE	410	U	
ACENAPHTHYLENE	410	U	
ANTHRACENE	410	U	
BENZO(A)ANTHRACENE	410	U	
BENZO(A)PYRENE	410	U	
BENZO(B)FLUORANTHENE	410	U	
BENZO(G,H,I)PERYLENE	410	U	
BENZO(K)FLUORANTHENE	410	U	
CHRYSENE	410	U	
DIBENZO(A,H)ANTHRACENE	410	U	
FLUORANTHENE	410	U	
FLUORENE	410	U	
INDENO(1,2,3-CD)PYRENE	410	U	
NAPHTHALENE	410	U	
PHENANTHRENE	410	U	
PYRENE	410	U	

PROJ_NO: 4779

SDG: WU0293 MEDIA: SOIL DATA FRACTION: OS

nsample	KW-DUP-01-0204
samp_date	2/3/2004
lab_id	WU0293-7RA2
qc_type	NM
units	UG/KG
Pct_Solids	84.5
DUP_OF:	A824-SB-06-0204

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	390	U	
2-METHYLNAPHTHALENE	390	U	
ACENAPHTHENE	390	U	
ACENAPHTHYLENE	390	U	
ANTHRACENE	390	U	
BENZO(A)ANTHRACENE	390	U	
BENZO(A)PYRENE	390	U	
BENZO(B)FLUORANTHENE	390	U	
BENZO(G,H,I)PERYLENE	390	U	
BENZO(K)FLUORANTHENE	390	U	
CHRYSENE	390	U	
DIBENZO(A,H)ANTHRACENE	390	U	
FLUORANTHENE	390	U	
FLUORENE	390	U	
INDENO(1,2,3-CD)PYRENE	390	U	
NAPHTHALENE	390	U	
PHENANTHRENE	390	U	
PYRENE	390	U	

PROJ_NO: 4779

SDG: WU0293 MEDIA: SOIL DATA FRACTION: PET

nsample	A824-SB-01-0204	nsample	A824-SB-02-0204	nsample	A824-SB-03-0204
samp_date	2/3/2004	samp_date	2/3/2004	samp_date	2/3/2004
lab_id	WU0293-1	lab_id	WU0293-2	lab_id	WU0293-3
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/KG	units	MG/KG	units	MG/KG
Pct_Solids	84.8	Pct_Solids	79.8	Pct_Solids	88.0
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	210		

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	25	U	A

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	97		

PROJ_NO: 4779

SDG: WU0293 MEDIA: SOIL DATA FRACTION: PET

nsample	A824-SB-04-0204
samp_date	2/3/2004
lab_id	WU0293-4
qc_type	NM
units	MG/KG
Pct_Solids	86.5
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	95		

nsample	A824-SB-05-0204
samp_date	2/3/2004
lab_id	WU0293-5
qc_type	NM
units	MG/KG
Pct_Solids	95.2
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	21	U	A

nsample	A824-SB-06-0204
samp_date	2/3/2004
lab_id	WU0293-6
qc_type	NM
units	MG/KG
Pct_Solids	79.9
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	25	UJ	AG

PROJ_NO: 4779

SDG: WU0293 MEDIA: SOIL DATA FRACTION: PET

nsample	KW-DUP-01-0204
samp_date	2/3/2004
lab_id	WU0293-7
qc_type	NM
units	MG/KG
Pct_Solids	84.5
DUP_OF:	A824-SB-06-0204

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	82		

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 01/06/04
Received Date: 02/04/04
Extraction Date:
Analysis Date: 02/12/04
Report Date: 03/01/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0293-8
Client ID: KWTB-020304
SDG: WU0293
Extracted by:
Extraction Method: SW846 5030
Analyst: KMB
Analysis Method: SW846 8260B
Lab Prep Batch: WG6009
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
108-88-3	Toluene	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
1868-53-7	Dibromofluoromethane		96%				
17060-07-0	1,2-Dichloroethane-D4		96%				
2037-26-5	Toluene-D8		89%				
460-00-4	P-Bromofluorobenzene		84%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date:
Analysis Date: 02/12/04
Report Date: 03/01/2004
Matrix: SOIL
% Solids: 84.8

Lab ID: WU0293-1
Client ID: A824-SB-01-0204
SDG: WU0293
Extracted by:
Extraction Method: SW846 5035
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6020
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
108-88-3	Toluene	U	5	1.0	5	5	0.6
71-43-2	Benzene	U	5	1.0	5	5	0.7
100-41-4	Ethylbenzene	U	5	1.0	5	5	0.6
	m+p-Xylenes	U	10	1.0	10	10	1
95-47-6	o-Xylene	U	5	1.0	5	5	0.8
1330-20-7	Xylenes (total)	U	15	1.0	15	15	2
1634-04-4	Methyl tert-butyl ether	U	10	1.0	10	10	1
1868-53-7	Dibromofluoromethane		82%				
17060-07-0	1,2-Dichloroethane-D4		76%				
2037-26-5	Toluene-D8		111%				
460-00-4	P-Bromofluorobenzene		115%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date:
Analysis Date: 02/12/04
Report Date: 03/01/2004
Matrix: SOIL
% Solids: 79.8

Lab ID: WU0293-2
Client ID: A824-SB-02-0204
SDG: WU0293
Extracted by:
Extraction Method: SW846 5035
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6020
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
108-88-3	Toluene	U	5	1.0	5	5	0.6
71-43-2	Benzene	U	5	1.0	5	5	0.7
100-41-4	Ethylbenzene	U	5	1.0	5	5	0.6
	m+p-Xylenes	U	10	1.0	10	10	1
95-47-6	o-Xylene	U	5	1.0	5	5	0.7
1330-20-7	Xylenes (total)	U	15	1.0	15	15	2
1634-04-4	Methyl tert-butyl ether	U	10	1.0	10	10	1
1868-53-7	Dibromofluoromethane		77%				
17060-07-0	1,2-Dichloroethane-D4		74%				
2037-26-5	Toluene-D8		105%				
460-00-4	P-Bromofluorobenzene		102%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date:
Analysis Date: 02/12/04
Report Date: 03/01/2004
Matrix: SOIL
% Solids: 88.0

Lab ID: WU0293-3
Client ID: A824-SB-03-0204
SDG: WU0293
Extracted by:
Extraction Method: SW846 5035
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6020
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
108-88-3	Toluene	U	6	1.0	5	6	0.8
71-43-2	Benzene	U	6	1.0	5	6	0.9
100-41-4	Ethylbenzene	U	6	1.0	5	6	0.8
	m+p-Xylenes	U	12	1.0	10	12	2
95-47-6	o-Xylene	U	6	1.0	5	6	1.0
1330-20-7	Xylenes (total)	U	18	1.0	15	18	2
1634-04-4	Methyl tert-butyl ether	U	12	1.0	10	12	1
1868-53-7	Dibromofluoromethane		84%				
17060-07-0	1,2-Dichloroethane-D4		80%				
2037-26-5	Toluene-D8		110%				
460-00-4	P-Bromofluorobenzene		97%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date:
Analysis Date: 02/12/04
Report Date: 03/01/2004
Matrix: SOIL
% Solids: 86.5

Lab ID: WU0293-4
Client ID: A824-SB-04-0204
SDG: WU0293
Extracted by:
Extraction Method: SW846 5035
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6020
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
108-88-3	Toluene	U	6	1.0	5	6	0.8
71-43-2	Benzene	U	6	1.0	5	6	0.9
100-41-4	Ethylbenzene	U	6	1.0	5	6	0.8
	m+p-Xylenes	J	2	1.0	10	13	2
95-47-6	o-Xylene	U	6	1.0	5	6	1
1330-20-7	Xylenes (total)	U	19	1.0	15	19	3
1634-04-4	Methyl tert-butyl ether	U	13	1.0	10	13	2
1868-53-7	Dibromofluoromethane		74%				
17060-07-0	1,2-Dichloroethane-D4		72%				
2037-26-5	Toluene-D8		98%				
460-00-4	P-Bromofluorobenzene		84%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date:
Analysis Date: 02/12/04
Report Date: 03/01/2004
Matrix: SOIL
% Solids: 95.2

Lab ID: WU0293-5
Client ID: A824-SB-05-0204
SDG: WU0293
Extracted by:
Extraction Method: SW846 5035
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6020
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
108-88-3	Toluene	U	5	1.0	5	5	0.6
71-43-2	Benzene	U	5	1.0	5	5	0.7
100-41-4	Ethylbenzene	U	5	1.0	5	5	0.6
	m+p-Xylenes	U	10	1.0	10	10	1
95-47-6	o-Xylene	U	5	1.0	5	5	0.8
1330-20-7	Xylenes (total)	U	15	1.0	15	15	2
1634-04-4	Methyl tert-butyl ether	U	10	1.0	10	10	1
1868-53-7	Dibromofluoromethane		78%				
17060-07-0	1,2-Dichloroethane-D4		75%				
2037-26-5	Toluene-D8		104%				
460-00-4	P-Bromofluorobenzene		107%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date:
Analysis Date: 02/12/04
Report Date: 03/01/2004
Matrix: SOIL
% Solids: 79.9

Lab ID: WU0293-6
Client ID: A824-SB-06-0204
SDG: WU0293
Extracted by:
Extraction Method: SW846 5035
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6020
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
108-88-3	Toluene	U	6	1.0	5	6	0.8
71-43-2	Benzene	U	6	1.0	5	6	0.9
100-41-4	Ethylbenzene	U	6	1.0	5	6	0.8
	m+p-Xylenes	J	2	1.0	10	13	2
95-47-6	o-Xylene	U	6	1.0	5	6	1
1330-20-7	Xylenes (total)	U	19	1.0	15	19	3
1634-04-4	Methyl tert-butyl ether	U	13	1.0	10	13	2
1868-53-7	Dibromofluoromethane		83%				
17060-07-0	1,2-Dichloroethane-D4		79%				
2037-26-5	Toluene-D8		109%				
460-00-4	P-Bromofluorobenzene		109%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date:
Analysis Date: 02/12/04
Report Date: 03/01/2004
Matrix: SOIL
% Solids: 84.5

Lab ID: WU0293-7
Client ID: KW-DUP-01-0204
SDG: WU0293
Extracted by:
Extraction Method: SW846 5035
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6020
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
108-88-3	Toluene	U	5	1.0	5	5	0.6
71-43-2	Benzene	U	5	1.0	5	5	0.7
100-41-4	Ethylbenzene	J	2	1.0	5	5	0.6
	m+p-Xylenes	J	10	1.0	10	10	1
95-47-6	o-Xylene	J	4	1.0	5	5	0.8
1330-20-7	Xylenes (total)	J	14	1.0	15	15	2
1634-04-4	Methyl tert-butyl ether	U	10	1.0	10	10	1
1868-53-7	Dibromofluoromethane		80%				
17060-07-0	1,2-Dichloroethane-D4		77%				
2037-26-5	Toluene-D8		108%				
460-00-4	P-Bromofluorobenzene		97%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date: 02/05/04
Analysis Date: 03/04/04
Report Date: 03/11/2004
Matrix: SOIL
% Solids: 84.8

Lab ID: WU0293-1RA
Client ID: A824-SB-01-0204
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3540
Analyst: LRS
Analysis Method: SW846 8270C
Lab Prep Batch: WG5862
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	390	1.0	330	390	44
91-57-6	2-Methylnaphthalene	U	390	1.0	330	390	180
90-12-0	1-Methylnaphthalene	U	390	1.0	330	390	180
208-96-8	Acenaphthylene	U	390	1.0	330	390	32
83-32-9	Acenaphthene	U	390	1.0	330	390	42
86-73-7	Fluorene	U	390	1.0	330	390	32
85-01-8	Phenanthrene	U	390	1.0	330	390	34
120-12-7	Anthracene	U	390	1.0	330	390	35
206-44-0	Fluoranthene	U	390	1.0	330	390	36
129-00-0	Pyrene	U	390	1.0	330	390	38
56-55-3	Benzo(a)anthracene	U	390	1.0	330	390	29
218-01-9	Chrysene	U	390	1.0	330	390	45
205-99-2	Benzo(b)fluoranthene	U	390	1.0	330	390	48
207-08-9	Benzo(k)fluoranthene	U	390	1.0	330	390	40
50-32-8	Benzo(a)pyrene	U	390	1.0	330	390	37
193-39-5	Indeno(1,2,3-cd)pyrene	U	390	1.0	330	390	57
53-70-3	Dibenzo(a,h)anthracene	U	390	1.0	330	390	47
191-24-2	Benzo(g,h,i)perylene	U	390	1.0	330	390	45
4165-60-0	Nitrobenzene-D5		97%				
321-60-8	2-Fluorobiphenyl		*114%				
1718-51-0	Terphenyl-D14		*165%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date: 02/05/04
Analysis Date: 03/04/04
Report Date: 03/11/2004
Matrix: SOIL
% Solids: 79.8

Lab ID: WU0293-2RA
Client ID: A824-SB-02-0204
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3540
Analyst: LRS
Analysis Method: SW846 8270C
Lab Prep Batch: WG5862
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	410	1.0	330	410	47
91-57-6	2-Methylnaphthalene	U	410	1.0	330	410	190
90-12-0	1-Methylnaphthalene	U	410	1.0	330	410	190
208-96-8	Acenaphthylene	U	410	1.0	330	410	34
83-32-9	Acenaphthene	U	410	1.0	330	410	45
86-73-7	Fluorene	U	410	1.0	330	410	34
85-01-8	Phenanthrene	U	410	1.0	330	410	36
120-12-7	Anthracene	U	410	1.0	330	410	37
206-44-0	Fluoranthene	U	410	1.0	330	410	38
129-00-0	Pyrene	U	410	1.0	330	410	40
56-55-3	Benzo(a)anthracene	U	410	1.0	330	410	31
218-01-9	Chrysene	U	410	1.0	330	410	48
205-99-2	Benzo(b)fluoranthene	U	410	1.0	330	410	52
207-08-9	Benzo(k)fluoranthene	U	410	1.0	330	410	42
50-32-8	Benzo(a)pyrene	U	410	1.0	330	410	39
193-39-5	Indeno(1,2,3-cd)pyrene	U	410	1.0	330	410	61
53-70-3	Dibenzo(a,h)anthracene	U	410	1.0	330	410	50
191-24-2	Benzo(g,h,i)perylene	U	410	1.0	330	410	48
4165-60-0	Nitrobenzene-D5		99%				
321-60-8	2-Fluorobiphenyl		99%				
1718-51-0	Terphenyl-D14		*160%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date: 02/05/04
Analysis Date: 03/04/04
Report Date: 03/11/2004
Matrix: SOIL
% Solids: 88.0

Lab ID: WU0293-3RA
Client ID: A824-SB-03-0204
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3540
Analyst: LRS
Analysis Method: SW846 8270C
Lab Prep Batch: WG5862
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	380	1.0	330	380	43
91-57-6	2-Methylnaphthalene	U	380	1.0	330	380	170
90-12-0	1-Methylnaphthalene	U	380	1.0	330	380	170
208-96-8	Acenaphthylene	U	380	1.0	330	380	30
83-32-9	Acenaphthene	U	380	1.0	330	380	40
86-73-7	Fluorene	U	380	1.0	330	380	31
85-01-8	Phenanthrene	U	380	1.0	330	380	32
120-12-7	Anthracene	U	380	1.0	330	380	34
206-44-0	Fluoranthene	U	380	1.0	330	380	35
129-00-0	Pyrene	U	380	1.0	330	380	36
56-55-3	Benzo(a)anthracene	U	380	1.0	330	380	28
218-01-9	Chrysene	U	380	1.0	330	380	44
205-99-2	Benzo(b)fluoranthene	U	380	1.0	330	380	47
207-08-9	Benzo(k)fluoranthene	U	380	1.0	330	380	38
50-32-8	Benzo(a)pyrene	U	380	1.0	330	380	35
193-39-5	Indeno(1,2,3-cd)pyrene	U	380	1.0	330	380	55
53-70-3	Dibenzo(a,h)anthracene	U	380	1.0	330	380	46
191-24-2	Benzo(g,h,i)perylene	U	380	1.0	330	380	44
4165-60-0	Nitrobenzene-D5		94%				
321-60-8	2-Fluorobiphenyl		106%				
1718-51-0	Terphenyl-D14		*147%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date: 02/05/04
Analysis Date: 03/04/04
Report Date: 03/11/2004
Matrix: SOIL
% Solids: 86.5

Lab ID: WU0293-4
Client ID: A824-SB-04-0204
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3540
Analyst: LRS
Analysis Method: SW846 8270C
Lab Prep Batch: WG5862
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	380	1.0	330	380	43
91-57-6	2-Methylnaphthalene	U	380	1.0	330	380	170
90-12-0	1-Methylnaphthalene	U	380	1.0	330	380	170
208-96-8	Acenaphthylene	U	380	1.0	330	380	31
83-32-9	Acenaphthene	U	380	1.0	330	380	41
86-73-7	Fluorene	U	380	1.0	330	380	32
85-01-8	Phenanthrene	U	380	1.0	330	380	33
120-12-7	Anthracene	U	380	1.0	330	380	34
206-44-0	Fluoranthene	U	380	1.0	330	380	35
129-00-0	Pyrene	U	380	1.0	330	380	37
56-55-3	Benzo(a)anthracene	U	380	1.0	330	380	29
218-01-9	Chrysene	U	380	1.0	330	380	44
205-99-2	Benzo(b)fluoranthene	U	380	1.0	330	380	48
207-08-9	Benzo(k)fluoranthene	U	380	1.0	330	380	39
50-32-8	Benzo(a)pyrene	U	380	1.0	330	380	36
193-39-5	Indeno(1,2,3-cd)pyrene	U	380	1.0	330	380	56
53-70-3	Dibenzo(a,h)anthracene	U	380	1.0	330	380	46
191-24-2	Benzo(g,h,i)perylene	U	380	1.0	330	380	44
4165-60-0	Nitrobenzene-D5		86%				
321-60-8	2-Fluorobiphenyl		100%				
1718-51-0	Terphenyl-D14		*143%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date: 02/05/04
Analysis Date: 03/10/04
Report Date: 03/11/2004
Matrix: SOIL
% Solids: 95.2

Lab ID: WU0293-5RA
Client ID: A824-SB-05-0204
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3540
Analyst: JCG
Analysis Method: SW846 8270C
Lab Prep Batch: WG5862
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	350	1.0	330	350	39
91-57-6	2-Methylnaphthalene	U	350	1.0	330	350	160
90-12-0	1-Methylnaphthalene	U	350	1.0	330	350	160
208-96-8	Acenaphthylene	U	350	1.0	330	350	28
83-32-9	Acenaphthene	U	350	1.0	330	350	37
86-73-7	Fluorene	U	350	1.0	330	350	29
85-01-8	Phenanthrene	U	350	1.0	330	350	30
120-12-7	Anthracene	U	350	1.0	330	350	31
206-44-0	Fluoranthene	U	350	1.0	330	350	32
129-00-0	Pyrene	U	350	1.0	330	350	34
56-55-3	Benzo(a)anthracene	U	350	1.0	330	350	26
218-01-9	Chrysene	U	350	1.0	330	350	40
205-99-2	Benzo(b)fluoranthene	U	350	1.0	330	350	43
207-08-9	Benzo(k)fluoranthene	U	350	1.0	330	350	35
50-32-8	Benzo(a)pyrene	U	350	1.0	330	350	33
193-39-5	Indeno(1,2,3-cd)pyrene	U	350	1.0	330	350	51
53-70-3	Dibenzo(a,h)anthracene	U	350	1.0	330	350	42
191-24-2	Benzo(g,h,i)perylene	U	350	1.0	330	350	40
4165-60-0	Nitrobenzene-D5		*110%				
321-60-8	2-Fluorobiphenyl		*133%				
1718-51-0	Terphenyl-D14		100%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date: 02/05/04
Analysis Date: 03/10/04
Report Date: 03/11/2004
Matrix: SOIL
% Solids: 79.9

Lab ID: WU0293-6RA
Client ID: A824-SB-06-0204
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3540
Analyst: JCG
Analysis Method: SW846 8270C
Lab Prep Batch: WG5862
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	410	1.0	330	410	47
91-57-6	2-Methylnaphthalene	U	410	1.0	330	410	190
90-12-0	1-Methylnaphthalene	U	410	1.0	330	410	190
208-96-8	Acenaphthylene	U	410	1.0	330	410	34
83-32-9	Acenaphthene	U	410	1.0	330	410	44
86-73-7	Fluorene	U	410	1.0	330	410	34
85-01-8	Phenanthrene	U	410	1.0	330	410	36
120-12-7	Anthracene	U	410	1.0	330	410	37
206-44-0	Fluoranthene	U	410	1.0	330	410	38
129-00-0	Pyrene	U	410	1.0	330	410	40
56-55-3	Benzo(a)anthracene	U	410	1.0	330	410	31
218-01-9	Chrysene	U	410	1.0	330	410	48
205-99-2	Benzo(b)fluoranthene	U	410	1.0	330	410	52
207-08-9	Benzo(k)fluoranthene	U	410	1.0	330	410	42
50-32-8	Benzo(a)pyrene	U	410	1.0	330	410	39
193-39-5	Indeno(1,2,3-cd)pyrene	U	410	1.0	330	410	61
53-70-3	Dibenzo(a,h)anthracene	U	410	1.0	330	410	50
191-24-2	Benzo(g,h,i)perylene	U	410	1.0	330	410	48
4165-60-0	Nitrobenzene-D5		86%				
321-60-8	2-Fluorobiphenyl		104%				
1718-51-0	Terphenyl-D14		113%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date: 02/05/04
Analysis Date: 03/10/04
Report Date: 03/11/2004
Matrix: SOIL
% Solids: 84.5

Lab ID: WU0293-7RA
Client ID: KW-DUP-01-0204
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3540
Analyst: JCG
Analysis Method: SW846 8270C
Lab Prep Batch: WG5862
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	390	1.0	330	390	44
91-57-6	2-Methylnaphthalene	U	390	1.0	330	390	180
90-12-0	1-Methylnaphthalene	U	390	1.0	330	390	180
208-96-8	Acenaphthylene	U	390	1.0	330	390	32
83-32-9	Acenaphthene	U	390	1.0	330	390	42
86-73-7	Fluorene	U	390	1.0	330	390	32
85-01-8	Phenanthrene	U	390	1.0	330	390	34
120-12-7	Anthracene	U	390	1.0	330	390	35
206-44-0	Fluoranthene	U	390	1.0	330	390	36
129-00-0	Pyrene	U	390	1.0	330	390	38
56-55-3	Benzo(a)anthracene	U	390	1.0	330	390	29
218-01-9	Chrysene	U	390	1.0	330	390	45
205-99-2	Benzo(b)fluoranthene	U	390	1.0	330	390	49
207-08-9	Benzo(k)fluoranthene	U	390	1.0	330	390	40
50-32-8	Benzo(a)pyrene	U	390	1.0	330	390	37
193-39-5	Indeno(1,2,3-cd)pyrene	U	390	1.0	330	390	57
53-70-3	Dibenzo(a,h)anthracene	U	390	1.0	330	390	48
191-24-2	Benzo(g,h,i)perylene	U	390	1.0	330	390	46
4165-60-0	Nitrobenzene-D5		95%				
321-60-8	2-Fluorobiphenyl		*123%				
1718-51-0	Terphenyl-D14		*185%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date: 02/05/04
Analysis Date: 03/10/04
Report Date: 03/11/2004
Matrix: SOIL
% Solids: 84.5

Lab ID: WU0293-7RA2
Client ID: KW-DUP-01-0204
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3540
Analyst: JCG
Analysis Method: SW846 8270C
Lab Prep Batch: WG5862
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	390	1.0	330	390	44
91-57-6	2-Methylnaphthalene	U	390	1.0	330	390	180
90-12-0	1-Methylnaphthalene	U	390	1.0	330	390	180
208-96-8	Acenaphthylene	U	390	1.0	330	390	32
83-32-9	Acenaphthene	U	390	1.0	330	390	42
86-73-7	Fluorene	U	390	1.0	330	390	32
85-01-8	Phenanthrene	U	390	1.0	330	390	34
120-12-7	Anthracene	U	390	1.0	330	390	35
206-44-0	Fluoranthene	U	390	1.0	330	390	36
129-00-0	Pyrene	U	390	1.0	330	390	38
56-55-3	Benzo(a)anthracene	U	390	1.0	330	390	29
218-01-9	Chrysene	U	390	1.0	330	390	45
205-99-2	Benzo(b)fluoranthene	U	390	1.0	330	390	49
207-08-9	Benzo(k)fluoranthene	U	390	1.0	330	390	40
50-32-8	Benzo(a)pyrene	U	390	1.0	330	390	37
193-39-5	Indeno(1,2,3-cd)pyrene	U	390	1.0	330	390	57
53-70-3	Dibenzo(a,h)anthracene	U	390	1.0	330	390	48
191-24-2	Benzo(g,h,i)perylene	U	390	1.0	330	390	46
4165-60-0	Nitrobenzene-D5		97%				
321-60-8	2-Fluorobiphenyl		*126%				
1718-51-0	Terphenyl-D14		*180%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date: 02/05/04
Analysis Date: 02/25/04
Report Date: 02/26/2004
Matrix: SOIL
% Solids: 84.8

Lab ID: WU0293-1
Client ID: A824-SB-01-0204
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3550
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5863
Units: mg/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	B	210	1.0	20	24	1.6
	n-Triacontane-D62		80%				
	O-Terphenyl		91%				

CUB2033.d

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date: 02/05/04
Analysis Date: 02/25/04
Report Date: 02/26/2004
Matrix: SOIL
% Solids: 79.8

Lab ID: WU0293-2
Client ID: A824-SB-02-0204
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3550
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5863
Units: mg/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	JB	5.0	1.0	20	25	1.8
	n-Triacontane-D62		72%				
	O-Terphenyl		79%				

CUB2027.d

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date: 02/05/04
Analysis Date: 02/25/04
Report Date: 02/26/2004
Matrix: SOIL
% Solids: 88.0

Lab ID: WU0293-3
Client ID: A824-SB-03-0204
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3550
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5863
Units: mg/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	B	97	1.0	20	23	1.6
	n-Triacontane-D62		68%				
	O-Terphenyl		75%				

CUB2031.d

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date: 02/05/04
Analysis Date: 02/25/04
Report Date: 02/26/2004
Matrix: SOIL
% Solids: 86.5

Lab ID: WU0293-4
Client ID: A824-SB-04-0204
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3550
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5863
Units: mg/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	B	95	1.0	20	23	1.6
	n-Triacontane-D62		75%				
	O-Terphenyl		86%				

CUB2030.d

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date: 02/05/04
Analysis Date: 02/25/04
Report Date: 02/26/2004
Matrix: SOIL
% Solids: 95.2

Lab ID: WU0293-5
Client ID: A824-SB-05-0204
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3550
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5863
Units: mg/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	JB	4.7	1.0	20	21	1.5
	n-Triacontane-D62		67%				
	O-Terphenyl		75%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/03/04
Received Date: 02/04/04
Extraction Date: 02/05/04
Analysis Date: 02/25/04
Report Date: 02/26/2004
Matrix: SOIL
% Solids: 79.9

Lab ID: WU0293-6
Client ID: A824-SB-06-0204
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3550
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5863
Units: mg/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	JB	16	1.0	20	25	1.8
	n-Triacontane-D62		82%				
	O-Terphenyl		90%				

APPENDIX C

SUPPORT DOCUMENTATION

CWO297

TETRA TECH NUS, INC. | **CHAIN OF CUSTODY** | **NUMBER** 3882 | **PAGE** 1 **OF** 1

PROJECT NO: N4779	**FACILITY:** NAS Key West	**PROJECT MANAGER** Chuck Bryan	**PHONE NUMBER** 803-649-7963	**LABORATORY NAME AND CONTACT:** Katahdin - Andrea Colby
SAMPLERS (SIGNATURE)		**FIELD OPERATIONS LEADER** Emily McRae	**PHONE NUMBER** 803 649 7963	**ADDRESS** 340 County Rd. No. 5
		CARRIER/WAYBILL NUMBER 834182781602		**CITY, STATE** Westbrook, ME

STANDARD TAT [X]
RUSH TAT [ ] ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2004)	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 BTEX, MTBE	PAH	TPH						COMMENTS
									G	G	G						5 ml 1:1 HCl															
2/3	1200	A824-SB-01-0204	A824 SB-01	0	8"	SO	G	6																	4	1	1				
2/3	1220	A824-SB-02-0204	A824-SB-02	0	1'	SO	G	6																	4	1	1				
2/3	1245	A824-SB-03-0204	A824 SB-03	0	8"	SO	G	6																	4	1	1				
2/3	1315	A824-SB-04-0204	A824 SB-03	6	1'	SO	G	6																	4	1	1				
2/3	1355	A824-SB-05-0204	A824 SB-04	0	18"	SO	G	6																	4	1	1				
2/3	1425	A824-SB-06-0204	A824 SB-05	0	10"	SO	G	6																	4	1	1				
2/3	0000	KW-DUP-01-0204	—	0	10"	SO	G	6																	4	1	1				
1/6	0935	KWTB-020304																							2						* pres. HCl

1. RELINQUISHED BY		DATE 2/3/04	TIME 1700	1. RECEIVED BY		DATE 2/4/04	TIME 0855
2. RELINQUISHED BY		DATE	TIME	2. RECEIVED BY		DATE	TIME
3. RELINQUISHED BY		DATE	TIME	3. RECEIVED BY		DATE	TIME
COMMENTS							

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC.
CTO297 NAS KEY WEST
WU0293

KATAHDIN ANALYTICAL SERVICES, INC.
340 COUNTY ROAD 5
WESTBROOK, ME 04092

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE NAS KEY WEST CTO 297
TASK ORDER MANAGER: CHARLES BRYAN
WU0293

Sample Receipt

The following samples were received on February 4, 2004 and were logged in under Katahdin Analytical Services work order number WU0293 for a hardcopy due date of March 1, 2004.

KATAHDIN Sample No.	TTNUS Sample Identification
WU0293-1	A824-SB-01-0204
WU0293-2	A824-SB-02-0204
WU0293-3	A824-SB-03-0204
WU0293-4	A824-SB-04-0204
WU0293-5	A824-SB-05-0204
WU0293-6	A824-SB-06-0204
WU0293-7	KW-DUP-01-0204
WU0293-8	KWTB-020304

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.

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, **Andrea J. Colby**. This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order WU0293 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/or Method for Determination of Petroleum Range Organics (Method #FL-PRO), Florida Department of Environmental Protection, November 1, 1995, for the specific methods listed below or on the Report of Analysis. Some manual integrations may have been performed due to split peaks and/or corrected baselines. All have been flagged with a "M" (software-generated) on the pertinent quantitation report.

FL-PRO Analysis

Some method blanks may have detected one or more target analytes above the MDL. Any of these analytes that were also detected in any of the associated samples were flagged with a "B" qualifier indicating that the analyte was detected in the method blank analyzed and/or extracted concurrently with the sample.

8260B Analysis

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived for the full list of spiked compounds. The acceptance limits for the MS/MSD are for a short list of the spiked compounds. Katahdin standard operating procedure is not to take corrective action until greater than ten percent of the spiked analytes (with the exception of the common laboratory contaminants acetone and methylene chloride) in the LCS are outside of the QC limits.

8720C Analysis

Samples WU0293-1 through 5 and 7 had high recoveries for one or more surrogates, which were outside the laboratory established acceptance limits. Since this would indicate a high biased and no target analytes were detected above the MDL, the samples were not reanalyzed.

Sample WU0293-1 had a response for the internal standard chrysene-d12 that resulted in a %D which was low and outside the method acceptance limit of -50% to +100% of the response of the internal standard of the daily calibration verification standard. The sample had been analyzed on 3/4/04 one hour and five minutes outside of the 12-hour analytical sequence and had acceptable internal standard responses but had a recovery for one surrogate that was high and outside of the laboratory established acceptance limits. Since there were no target analytes detected above the MDL for both analyses, the sample was not reanalyzed. The result from the second analysis is included in the report.

Sample WU0293-7 had responses for the internal standards chrysene-d12 and perylene-d12 which were low and outside the method acceptance limit of -50% to +100% of the response of the internal standard of the daily calibration verification standard. The sample was reanalyzed with similar responses for the internal standards indicating a matrix effect. The results from both analyses are included in the report.

The continuing calibration standard (file K6557) had a response for the internal standard perylene-d12, which was low and resulted in %D's that were outside the method acceptance limits of -50% to +100% of the response of the mid-point standard level of the initial calibration.

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

Wet Chemistry Analysis

The samples of Work Order WU0293 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to U.S. EPA Contract Laboratory Program Statement of Work for Inorganic Analysis, SOW 788.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limit (MDL). These levels are indicated in the result field of the analytical report. For hits that fall between the MDL and Katahdin's Practical Quantitation Limit (PQL), a "J" flag has been used.

All analyses were performed within analytical hold time. All quality control criteria were met. No deviations were noted by the Wet Chemistry group.

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 Laboratory Manager, Quality Assurance Officer, or the Data Management Supervisor as verified by the following signature.

María Crouch
03.11.04
María Crouch
Quality Assurance Officer

HOLDTIME

SDG WU0293

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TS	%	A824-SB-06-0204	WU0293-6	NM	02/03/2004	02/05/2004	02/06/2004	2	1	3
TS	%	A824-SB-05-0204	WU0293-5	NM	02/03/2004	02/05/2004	02/06/2004	2	1	3
TS	%	A824-SB-04-0204	WU0293-4	NM	02/03/2004	02/05/2004	02/06/2004	2	1	3
TS	%	A824-SB-03-0204	WU0293-3	NM	02/03/2004	02/05/2004	02/06/2004	2	1	3
TS	%	A824-SB-02-0204	WU0293-2	NM	02/03/2004	02/05/2004	02/06/2004	2	1	3
TS	%	A824-SB-01-0204	WU0293-1	NM	02/03/2004	02/05/2004	02/06/2004	2	1	3
TS	%	KW-DUP-01-0204	WU0293-7	NM	02/03/2004	02/05/2004	02/06/2004	2	1	3
OS	%	A824-SB-03-0204RA	WU0293-3RA	NM	02/03/2004	02/05/2004	03/04/2004	2	28	30
OS	%	A824-SB-01-0204RA	WU0293-1RA	NM	02/03/2004	02/05/2004	03/04/2004	2	28	30
OS	%	KW-DUP-01-0204RA	WU0293-7RA	NM	02/03/2004	02/05/2004	03/10/2004	2	34	36
OS	%	KW-DUP-01-0204	WU0293-7RA2	NM	02/03/2004	02/05/2004	03/10/2004	2	34	36
OS	%	A824-SB-06-0204RA	WU0293-6RA	NM	02/03/2004	02/05/2004	03/10/2004	2	34	36
OS	%	A824-SB-04-0204	WU0293-4	NM	02/03/2004	02/05/2004	03/04/2004	2	28	30
OS	%	A824-SB-02-0204RA	WU0293-2RA	NM	02/03/2004	02/05/2004	03/04/2004	2	28	30
OS	%	A824-SB-05-0204RA	WU0293-5RA	NM	02/03/2004	02/05/2004	03/10/2004	2	34	36

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OS	UG/KG	A824-SB-06-0204RA	WU0293-6RA	NM	02/03/2004	02/05/2004	03/10/2004	2	34	36
OS	UG/KG	A824-SB-02-0204RA	WU0293-2RA	NM	02/03/2004	02/05/2004	03/04/2004	2	28	30
OS	UG/KG	KW-DUP-01-0204RA	WU0293-7RA	NM	02/03/2004	02/05/2004	03/10/2004	2	34	36
OS	UG/KG	KW-DUP-01-0204	WU0293-7RA2	NM	02/03/2004	02/05/2004	03/10/2004	2	34	36
OS	UG/KG	A824-SB-05-0204RA	WU0293-5RA	NM	02/03/2004	02/05/2004	03/10/2004	2	34	36
OS	UG/KG	A824-SB-03-0204RA	WU0293-3RA	NM	02/03/2004	02/05/2004	03/04/2004	2	28	30
OS	UG/KG	A824-SB-01-0204RA	WU0293-1RA	NM	02/03/2004	02/05/2004	03/04/2004	2	28	30
OS	UG/KG	A824-SB-04-0204	WU0293-4	NM	02/03/2004	02/05/2004	03/04/2004	2	28	30
OV	%	A824-SB-06-0204	WU0293-6	NM	02/03/2004	02/12/2004	02/12/2004	9	0	9
OV	%	A824-SB-01-0204	WU0293-1	NM	02/03/2004	02/12/2004	02/12/2004	9	0	9
OV	%	A824-SB-02-0204	WU0293-2	NM	02/03/2004	02/12/2004	02/12/2004	9	0	9
OV	%	A824-SB-03-0204	WU0293-3	NM	02/03/2004	02/12/2004	02/12/2004	9	0	9
OV	%	A824-SB-04-0204	WU0293-4	NM	02/03/2004	02/12/2004	02/12/2004	9	0	9
OV	%	A824-SB-05-0204	WU0293-5	NM	02/03/2004	02/12/2004	02/12/2004	9	0	9
OV	%	KWTB-020304	WU0293-8	NM	01/06/2004	02/12/2004	02/12/2004	37	0	37
OV	%	KW-DUP-01-0204	WU0293-7	NM	02/03/2004	02/12/2004	02/12/2004	9	0	9
OV	UG/KG	A824-SB-04-0204	WU0293-4	NM	02/03/2004	02/12/2004	02/12/2004	9	0	9
OV	UG/KG	A824-SB-03-0204	WU0293-3	NM	02/03/2004	02/12/2004	02/12/2004	9	0	9

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/KG	A824-SB-05-0204	WU0293-5	NM	02/03/2004	02/12/2004	02/12/2004	9	0	9
OV	UG/KG	A824-SB-06-0204	WU0293-6	NM	02/03/2004	02/12/2004	02/12/2004	9	0	9
OV	UG/KG	KW-DUP-01-0204	WU0293-7	NM	02/03/2004	02/12/2004	02/12/2004	9	0	9
OV	UG/KG	A824-SB-02-0204	WU0293-2	NM	02/03/2004	02/12/2004	02/12/2004	9	0	9
OV	UG/KG	A824-SB-01-0204	WU0293-1	NM	02/03/2004	02/12/2004	02/12/2004	9	0	9
OV	UG/L	KWTB-020304	WU0293-8	NM	01/06/2004	02/12/2004	02/12/2004	37	0	37
TPH	%	A824-SB-04-0204	WU0293-4	NM	02/03/2004	02/05/2004	02/25/2004	2	20	22
TPH	%	KW-DUP-01-0204	WU0293-7	NM	02/03/2004	02/05/2004	02/25/2004	2	20	22
TPH	%	A824-SB-05-0204	WU0293-5	NM	02/03/2004	02/05/2004	02/25/2004	2	20	22
TPH	%	A824-SB-03-0204	WU0293-3	NM	02/03/2004	02/05/2004	02/25/2004	2	20	22
TPH	%	A824-SB-02-0204	WU0293-2	NM	02/03/2004	02/05/2004	02/25/2004	2	20	22
TPH	%	A824-SB-01-0204	WU0293-1	NM	02/03/2004	02/05/2004	02/25/2004	2	20	22
TPH	%	A824-SB-06-0204	WU0293-6	NM	02/03/2004	02/05/2004	02/25/2004	2	20	22
TPH	MG/KG	A824-SB-01-0204	WU0293-1	NM	02/03/2004	02/05/2004	02/25/2004	2	20	22
TPH	MG/KG	A824-SB-02-0204	WU0293-2	NM	02/03/2004	02/05/2004	02/25/2004	2	20	22
TPH	MG/KG	A824-SB-03-0204	WU0293-3	NM	02/03/2004	02/05/2004	02/25/2004	2	20	22
TPH	MG/KG	A824-SB-04-0204	WU0293-4	NM	02/03/2004	02/05/2004	02/25/2004	2	20	22
TPH	MG/KG	A824-SB-05-0204	WU0293-5	NM	02/03/2004	02/05/2004	02/25/2004	2	20	22

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TPH	MG/KG	A824-SB-06-0204	WU0293-6	NM	02/03/2004	02/05/2004	02/25/2004	2	20	22
TPH	MG/KG	KW-DUP-01-0204	WU0293-7	NM	02/03/2004	02/05/2004	02/25/2004	2	20	22

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG6020-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID: M2028 Lab Sample ID: WG6020-2

Date Analyzed: 02/12/04 Time Analyzed: 1517

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

Instrument ID: GCMS-M

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	WG6020-LCS	WG6020-1	M2026	02/12/04	1351
02	A824-SB-01-0204	WU0293-1	M2031	02/12/04	1707
03	A824-SB-02-0204	WU0293-2	M2032	02/12/04	1741
04	A824-SB-03-0204	WU0293-3	M2033	02/12/04	1814
05	A824-SB-04-0204	WU0293-4	M2034	02/12/04	1848
06	A824-SB-05-0204	WU0293-5	M2035	02/12/04	1922
07	A824-SB-06-0204	WU0293-6	M2036	02/12/04	1955
08	KW-DUP-01-0204	WU0293-7	M2037	02/12/04	2029
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COMMENTS:

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO297 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 02/12/04
Report Date: 03/01/2004
Matrix: SOIL
% Solids: 100

Lab ID: WG6020-2
Client ID: WG6020-BLANK
SDG: WU0293
Extracted by:
Extraction Method: SW846 5035
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6020
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
108-88-3	Toluene	U	5	1.0	5	5	0.6
71-43-2	Benzene	U	5	1.0	5	5	0.7
100-41-4	Ethylbenzene	U	5	1.0	5	5	0.6
	m+p-Xylenes	U	10	1.0	10	10	1
95-47-6	o-Xylene	U	5	1.0	5	5	0.8
1330-20-7	Xylenes (total)	U	15	1.0	15	15	2
1634-04-4	Methyl tert-butyl ether	U	10	1.0	10	10	1
1868-53-7	Dibromofluoromethane		88%				
17060-07-0	1,2-Dichloroethane-D4		85%				
2037-26-5	Toluene-D8		119%				
460-00-4	P-Bromofluorobenzene		112%				

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG6009-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID: S9977 Lab Sample ID: WG6009-2

Date Analyzed: 02/12/04 Time Analyzed: 0950

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: GCMS-S

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	WG6009-LCS	WG6009-1	S9975	02/12/04	0837
02	KWTB-020304	WU0293-8	S9980	02/12/04	1145
03					
04					
05					
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COMMENTS:

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO297 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 02/12/04
Report Date: 03/01/2004
Matrix: WATER
% Solids: NA

Lab ID: WG6009-2
Client ID: WG6009-Blank
SDG: WU0293
Extracted by:
Extraction Method: SW846 5030
Analyst: KMB
Analysis Method: SW846 8260B
Lab Prep Batch: WG6009
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
108-88-3	Toluene	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
1868-53-7	Dibromofluoromethane		91%				
17060-07-0	1,2-Dichloroethane-D4		89%				
2037-26-5	Toluene-D8		89%				
460-00-4	P-Bromofluorobenzene		83%				

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID: MB541 BFB Injection Date: 01/30/04

Instrument ID: GCMS-M BFB Injection Time: 1139

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	41.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	84.8
175	5.0 - 9.0% of mass 174	5.7 (6.7)1
176	95.0 - 101.0% of mass 174	81.9 (96.6)1
177	5.0 - 9.0% of mass 176	5.9 (7.3)2

1-Value is % mass 174 2-Value is % mass 176

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		VSTD020M30A	M1824	01/30/04	1325
02		VSTD200M30A	M1827	01/30/04	1507
03		VSTD100M30A	M1828	01/30/04	1540
04		VSTD010M30B	M1831	01/30/04	1721
05		VSTD005M30B	M1832	01/30/04	1755
06		VSTD050M30C	M1835	01/30/04	1936
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22					

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO297 NAS KEY WEST SDG No.: WU0293

Instrument ID: GCMS-M Calibration Date(s): 01/30/04 01/30/04

Column: RTX-VMS ID: 0.18 (mm) Calibration Time(s): 1325 1936

LAB FILE ID: RF5: M1832 RF10: M1831 RF20: M1824
RF50: M1835 RF100: M1828 RF200: M1827

COMPOUND	RF5	RF10	RF20	RF50	RF100	RF200	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2	MAX %RSD OR R^2
Toluene	0.686	0.744	0.712	0.820	0.794	0.754	AVRG		0.75176096	6.601	15.000
Benzene	1.026	1.109	1.122	1.241	1.237	1.152	AVRG		1.14770266	7.158	15.000
Ethylbenzene	1.462	1.530	1.592	1.845	1.904	1.703	AVRG		1.67265277	10.529	15.000
m+p-Xylenes	0.574	0.604	0.625	0.710	0.736	0.674	AVRG		0.65392120	9.651	15.000
o-Xylene	0.562	0.584	0.591	0.705	0.719	0.681	AVRG		0.64041092	10.735	15.000
Xylenes (total)							AVRG				0.000
Methyl tert-butyl ether	128850	289480	616890	1576400	2989400	5904200	LINR	-4.66e-002	0.56460978	0.99940	0.99000
Dibromofluoromethane	0.622	0.668	0.637	0.823	0.772	0.780	AVRG		0.71714596	11.826	15.000
1,2-Dichloroethane-D4	0.595	0.515	0.502	0.602	0.658	0.586	AVRG		0.57672250	10.112	15.000
Toluene-D8	1.086	1.126	0.966	1.259	1.180	1.133	AVRG		1.12514499	8.709	15.000
P-Bromofluorobenzene	0.395	0.362	0.303	0.389	0.374	0.368	AVRG		0.36529753	9.047	15.000

Average %RSD test result.

Calculate Average %RSD: 9.268060684
Maximum Average %RSD: 15.00000000

Note: Passes Average %RSD Test.

FORM VI VOA

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID: MB555 BFB Injection Date: 02/12/04

Instrument ID: GCMS-M BFB Injection Time: 1236

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.1
75	30.0 - 60.0% of mass 95	39.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	89.0
175	5.0 - 9.0% of mass 174	6.4 (7.2)1
176	95.0 - 101.0% of mass 174	85.9 (96.6)1
177	5.0 - 9.0% of mass 176	5.7 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

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		VSTD050M12A	M2025	02/12/04	1306
02	WG6020-LCS	WG6020-1	M2026	02/12/04	1351
03	WG6020-BLANK	WG6020-2	M2028	02/12/04	1517
04	A824-SB-01-0204	WU0293-1	M2031	02/12/04	1707
05	A824-SB-02-0204	WU0293-2	M2032	02/12/04	1741
06	A824-SB-03-0204	WU0293-3	M2033	02/12/04	1814
07	A824-SB-04-0204	WU0293-4	M2034	02/12/04	1848
08	A824-SB-05-0204	WU0293-5	M2035	02/12/04	1922
09	A824-SB-06-0204	WU0293-6	M2036	02/12/04	1955
10	KW-DUP-01-0204	WU0293-7	M2037	02/12/04	2029
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Instrument ID: GCMS-M Calibration Date: 02/12/04 Time: 1306

Lab File ID: M2025 Init. Calib. Date(s): 01/30/04 01/30/04

Init. Calib. Times: 1325 1936

GC Column: RTX-VMS ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Toluene	0.7520000	0.8634000	0.8634000	0.01	14.81	20.00	AVRG	
Benzene	1.1480000	1.3123000	1.3123000	0.01	14.31		AVRG	
Ethylbenzene	1.6730000	2.0027000	2.0027000	0.01	19.71	20.00	AVRG	
m+p-Xylenes	0.6540000	0.7969700	0.7969700	0.01	21.86		AVRG	
o-Xylene	0.6400000	0.7648900	0.7648900	0.01	19.51		AVRG	
Xylenes (total)	0.0000000	0.7862800	0.7862800	0.01	0.00		AVRG	<-
Methyl tert-butyl ether	80.138000	100.00000	1.4606000	0.01	-19.86		LINR	
Dibromofluoromethane	0.7170000	0.7679900	0.7679900	0.01	7.11		AVRG	
1,2-Dichloroethane-D4	0.5760000	0.6200700	0.6200700	0.01	7.65		AVRG	
Toluene-D8	1.1250000	1.2666000	1.2666000	0.01	12.59		AVRG	
P-Bromofluorobenzene	0.3650000	0.3922900	0.3922900	0.01	7.48		AVRG	

FORM VII PEST

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID: SB593 BFB Injection Date: 02/04/04

Instrument ID: GCMS-S BFB Injection Time: 1553

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.2
75	30.0 - 60.0% of mass 95	52.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	81.4
175	5.0 - 9.0% of mass 174	6.0 (7.3)1
176	95.0 - 101.0% of mass 174	79.4 (97.6)1
177	5.0 - 9.0% of mass 176	4.3 (5.4)2

1-Value is % mass 174 2-Value is % mass 176

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		VSTD020S04A	S9839	02/04/04	1654
02		VSTD005S04A	S9840	02/04/04	1729
03		VSTD001S04B	S9842	02/04/04	1840
04		VSTD200S04A	S9843	02/04/04	1916
05		VSTD100S04A	S9844	02/04/04	1951
06		VSTD050S04B	S9845	02/04/04	2026
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08					
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FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO297 NAS KEY WEST SDG No.: WU0293

Instrument ID: GCMS-S Calibration Date(s): 02/04/04 02/04/04

Column: RTX-VMS ID: 0.18 (mm) Calibration Time(s): 1618 2026

LAB FILE ID: RF1: S9842 RF5: S9840 RF20: S9839
RF50: S9845 RF100: S9844 RF200: S9843

COMPOUND	RF1	RF5	RF20	RF50	RF100	RF200	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2	MAX %RSD OR R^2
Toluene	0.625	0.787	0.861	0.817	0.796	0.798	AVRG		0.78067826	10.326	15.000
Benzene	1.190	1.372	1.421	1.381	1.340	1.305	AVRG		1.33482101	6.074	15.000
Ethylbenzene	1.435	1.783	1.877	1.772	1.767	1.744	AVRG		1.72961207	8.770	15.000
m+p-Xylenes	0.477	0.641	0.661	0.623	0.622	0.598	AVRG		0.60382697	10.834	15.000
o-Xylene	2915	23295	104140	283810	559290	1050700	LINR	-4.1e-003	1.65503587	0.99997	0.99000
Xylenes (total)							AVRG				0.000
Methyl tert-butyl ether	1.272	1.408	1.476	1.392	1.374	1.322	AVRG		1.37395426	5.143	15.000
Dibromofluoromethane	0.674	0.542	0.548	0.526	0.513	0.502	AVRG		0.55099583	11.338	15.000
1,2-Dichloroethane-D4	0.827	0.702	0.675	0.603	0.604	0.633	AVRG		0.67392586	12.538	15.000
Toluene-D8	1.182	1.120	1.160	1.139	1.077	1.070	AVRG		1.12489403	3.986	15.000
P-Bromofluorobenzene	6122	22233	88398	249960	489430	912440	LINR	-4.81e-003	2.24730393	0.99974	0.99000

Average %RSD test result.

Calculate Average %RSD: 9.023885727
Maximum Average %RSD: 15.00000000

Note: Passes Average %RSD Test.

FORM VI VOA

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID: SB600 BFB Injection Date: 02/12/04

Instrument ID: GCMS-S BFB Injection Time: 0731

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.5
75	30.0 - 60.0% of mass 95	52.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	66.5
175	5.0 - 9.0% of mass 174	5.1 (7.6)1
176	95.0 - 101.0% of mass 174	65.3 (98.2)1
177	5.0 - 9.0% of mass 176	4.6 (7.1)2

1-Value is % mass 174 2-Value is % mass 176

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		VSTD050S12A	S9974	02/12/04	0758
02	WG6009-LCS	WG6009-1	S9975	02/12/04	0837
03	WG6009-BLANK	WG6009-2	S9977	02/12/04	0950
04	KWTB-020304	WU0293-8	S9980	02/12/04	1145
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FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Instrument ID: GCMS-S Calibration Date: 02/12/04 Time: 0758

Lab File ID: S9974 Init. Calib. Date(s): 02/04/04 02/04/04

Init. Calib. Times: 1618 2026

GC Column: RTX-VMS ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Toluene	0.7810000	0.9064700	0.9064700	0.01	16.06	20.00	AVRG	
Benzene	1.3350000	1.4991000	1.4991000	0.01	12.29		AVRG	
Ethylbenzene	1.7300000	1.8662000	1.8662000	0.01	7.87	20.00	AVRG	
m+p-Xylenes	0.6040000	0.6510300	0.6510300	0.01	7.79		AVRG	
o-Xylene	52.392000	50.000000	0.6356000	0.01	4.78		LINR	
Xylenes (total)	0.0000000	1.9377000	1.9377000	0.01	0.00		AVRG	<-
Methyl tert-butyl ether	1.3740000	1.2347000	1.2347000	0.01	-10.14		AVRG	
Dibromofluoromethane	0.5510000	0.4569400	0.4569400	0.01	-17.07		AVRG	
1,2-Dichloroethane-D4	0.6740000	0.5311700	0.5311700	0.01	-21.19		AVRG	
Toluene-D8	1.1250000	1.0397000	1.0397000	0.01	-7.58		AVRG	
P-Bromofluorobenzene	46.129000	50.000000	0.4126700	0.01	-7.74		LINR	

FORM VII PEST

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG5862-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID: K6546 Lab Sample ID: WG5862-1

Instrument ID: GCMS-K Date Extracted: 02/05/04

Matrix: (soil/water) SOIL Date Analyzed: 03/03/04

Level:(low/med) LOW Time Analyzed: 1924

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	WG5862-LCS	WG5862-2	K6547	03/03/04	2014
02	WG5862-LCSD	WG5862-3	K6548	03/03/04	2104
03	A824-SB-01-0204	WU0293-1RA	K6564	03/04/04	1850
04	A824-SB-02-0204	WU0293-2RA	K6565	03/04/04	1940
05	A824-SB-03-0204	WU0293-3RA	K6566	03/04/04	2031
06	A824-SB-04-0204	WU0293-4	K6567	03/04/04	2121
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COMMENTS:

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO297 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 02/05/04
Analysis Date: 03/03/04
Report Date: 03/11/2004
Matrix: SOIL
% Solids: 100

Lab ID: WG5862-1
Client ID: WG5862-Blank
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3540
Analyst: LRS
Analysis Method: SW846 8270C
Lab Prep Batch: WG5862
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	330	1.0	330	330	38
91-57-6	2-Methylnaphthalene	U	330	1.0	330	330	150
90-12-0	1-Methylnaphthalene	U	330	1.0	330	330	150
208-96-8	Acenaphthylene	U	330	1.0	330	330	27
83-32-9	Acenaphthene	U	330	1.0	330	330	36
86-73-7	Fluorene	U	330	1.0	330	330	27
85-01-8	Phenanthrene	U	330	1.0	330	330	29
120-12-7	Anthracene	U	330	1.0	330	330	30
206-44-0	Fluoranthene	U	330	1.0	330	330	30
129-00-0	Pyrene	U	330	1.0	330	330	32
56-55-3	Benzo(a)anthracene	U	330	1.0	330	330	25
218-01-9	Chrysene	U	330	1.0	330	330	38
205-99-2	Benzo(b)fluoranthene	U	330	1.0	330	330	41
207-08-9	Benzo(k)fluoranthene	U	330	1.0	330	330	34
50-32-8	Benzo(a)pyrene	U	330	1.0	330	330	31
193-39-5	Indeno(1,2,3-cd)pyrene	U	330	1.0	330	330	48
53-70-3	Dibenzo(a,h)anthracene	U	330	1.0	330	330	40
191-24-2	Benzo(g,h,i)perylene	U	330	1.0	330	330	38
4165-60-0	Nitrobenzene-D5		73%				
321-60-8	2-Fluorobiphenyl		82%				
1718-51-0	Terphenyl-D14		96%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO297 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 02/05/04
Analysis Date: 03/10/04
Report Date: 03/11/2004
Matrix: SOIL
% Solids: 100

Lab ID: WG5862-1RA
Client ID: WG5862-Blank
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3540
Analyst: JCG
Analysis Method: SW846 8270C
Lab Prep Batch: WG5862
Units: ug/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	330	1.0	330	330	38
91-57-6	2-Methylnaphthalene	U	330	1.0	330	330	150
90-12-0	1-Methylnaphthalene	U	330	1.0	330	330	150
208-96-8	Acenaphthylene	U	330	1.0	330	330	27
83-32-9	Acenaphthene	U	330	1.0	330	330	36
86-73-7	Fluorene	U	330	1.0	330	330	27
85-01-8	Phenanthrene	U	330	1.0	330	330	29
120-12-7	Anthracene	U	330	1.0	330	330	30
206-44-0	Fluoranthene	U	330	1.0	330	330	30
129-00-0	Pyrene	U	330	1.0	330	330	32
56-55-3	Benzo(a)anthracene	U	330	1.0	330	330	25
218-01-9	Chrysene	U	330	1.0	330	330	38
205-99-2	Benzo(b)fluoranthene	U	330	1.0	330	330	41
207-08-9	Benzo(k)fluoranthene	U	330	1.0	330	330	34
50-32-8	Benzo(a)pyrene	U	330	1.0	330	330	31
193-39-5	Indeno(1,2,3-cd)pyrene	U	330	1.0	330	330	48
53-70-3	Dibenzo(a,h)anthracene	U	330	1.0	330	330	40
191-24-2	Benzo(g,h,i)perylene	U	330	1.0	330	330	38
4165-60-0	Nitrobenzene-D5		87%				
321-60-8	2-Fluorobiphenyl		102%				
1718-51-0	Terphenyl-D14		93%				

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG5862-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID: X4707 Lab Sample ID: WG5862-1RA

Instrument ID: GCMS-X Date Extracted: 02/05/04

Matrix: (soil/water) SOIL Date Analyzed: 03/10/04

Level: (low/med) LOW Time Analyzed: 1340

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	A824-SB-05-0204	WU0293-5RA	X4714	03/10/04	1900
02	A824-SB-06-0204	WU0293-6RA	X4715	03/10/04	1944
03	KW-DUP-01-0204	WU0293-7RA	X4716	03/10/04	2030
04	KW-DUP-01-0204	WU0293-7RA2	X4717	03/10/04	2115
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COMMENTS:

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID: KD293 DFTPP Injection Date: 03/03/04

Instrument ID: GCMS-K DFTPP Injection Time: 1301

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	49.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Less than 100.0% of mass 198	54.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	46.9
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	7.3
275	10.0 - 30.0% of mass 198	18.5
365	1.0 - 100.0% of mass 198	1.7
441	0.0 - 100.0% of mass 443	6.9 (85.9)2
442	40.0 - 100.0% of mass 198	43.7
443	17.0 - 23.0% of mass 442	8.0 (18.4)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		SSTD200K0303	K6540	03/03/04	1421
02		SSTD160K0303	K6541	03/03/04	1512
03		SSTD120K0303	K6542	03/03/04	1602
04		SSTD020K0303	K6543	03/03/04	1654
05		SSTD010K0303	K6544	03/03/04	1744
06		SSTD050K0303	K6545	03/03/04	1834
07	WG5862-BLANK	WG5862-1	K6546	03/03/04	1924
08	WG5862-LCS	WG5862-2	K6547	03/03/04	2014
09	WG5862-LCSD	WG5862-3	K6548	03/03/04	2104
10					
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18					
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20					

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO297 NAS KEY WEST SDG No.: WU0293

Instrument ID: GCMS-K Calibration Date(s): 03/03/04 03/03/04

Column: DB5-MS ID: 0.25 (mm) Calibration Time(s): 1421 1834

LAB FILE ID: RF10: K6544 RF20: K6543 RF50: K6545
RF120: K6542 RF160: K6541 RF200: K6540

								COEFFICENTS			%RSD	MAX %RSD	
COMPOUND	RF10	RF20	RF50	RF120	RF160	RF200	CURVE	A0	A1	A2	OR R^2	OR R^2	
Naphthalene	280190	520560	1095500	2814000	3463800	4054000	2ORDR	1.83e-002	0.85269027	0.25885333	0.99719	0.99000	
2-Methylnaphthalene	194150	358420	804840	2162600	2584700	3058100	2ORDR	8.613e-002	1.02094921	0.49427416	0.99847	0.99000	
1-Methylnaphthalene	186200	337250	752800	1959700	2339400		2ORDR	0.11291120	0.92324707	0.72301334	0.99659	0.99000	
Acenaphthylene	292570	567840	1198700	3277100	3856700	4522100	2ORDR	1.962e-002	0.48472982	0.10000416	0.99368	0.99000	
Acenaphthene	187040	357880	748320	1946400	2333500	2815500	2ORDR	-1.29e-002	0.89586752	0.23228367	0.99304	0.99000	
Fluorene	208490	406910	865460	2393000	2866500	3554800	2ORDR	-2.15e-002	0.85600231	0.11119334	0.99535	0.99000	
Phenanthrene	314610	603450	1264100	3617800	4192100	5186400	2ORDR	-2.05e-002	1.05710850	0.16607845	0.99605	0.99000	
Anthracene	314800	588860	1308100	3698300	4071500	5095600	2ORDR	9.658e-003	0.89950581	0.23094213	0.99814	0.99000	
Fluoranthene	1.000	1.088	1.105	0.838	0.874	0.751	AVRG		0.94257332		15.224	15.000	<
Pyrene	1.022	1.184	1.196	0.867	0.969	1.003	AVRG		1.04002489		12.267	15.000	
Benzo(a)anthracene	0.912	1.017	1.137	0.862	0.913	0.918	AVRG		0.95963655		10.468	15.000	
Chrysene	381640	630300	1392400	3747000	4268700	4699400	LINR	-0.1210596	1.32159180		0.99152	0.99000	
Benzo(b)fluoranthene	1.025	1.103	1.259	1.015	1.220	1.132	AVRG		1.12568807		8.844	15.000	
Benzo(k)fluoranthene	1.356	1.374	1.451	0.986	1.100	1.146	AVRG		1.23563671		14.869	15.000	
Benzo(a)pyrene	0.938	1.032	1.097	0.889	1.016	0.965	AVRG		0.98938961		7.477	15.000	
Indeno(1,2,3-cd)pyrene	1.029	1.067	1.153	0.949	0.790	0.930	AVRG		0.98653381		12.758	15.000	
Dibenzo(a,h)anthracene	0.787	0.843	0.910	0.739	0.758	0.729	AVRG		0.79431243		8.798	15.000	
Benzo(g,h,i)perylene	0.891	0.914	1.013	0.766	0.776	0.742	AVRG		0.85041406		12.536	15.000	
Nitrobenzene-D5	0.260	0.303	0.333	0.288	0.307	0.284	AVRG		0.29574633		8.344	15.000	
2-Fluorobiphenyl	239140	461710	941900	2443600	2953700	3503500	2ORDR	-1.26e-002	0.69440471	0.15357282	0.99172	0.99000	
Terphenyl-D14	0.792	0.874	0.940	0.692	0.719	0.745	AVRG		0.79342337		12.108	15.000	

Average %RSD test result.

Calculate Average %RSD: 13.59736729
Maximum Average %RSD: 15.00000000

Note: Passes Average %RSD Test.

FORM VI SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID: KD294 DFTPP Injection Date: 03/04/04

Instrument ID: GCMS-K DFTPP Injection Time: 1145

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	49.4
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Less than 100.0% of mass 198	62.0
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	48.8
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	6.4
275	10.0 - 30.0% of mass 198	17.8
365	1.0 - 100.0% of mass 198	1.9
441	0.0 - 100.0% of mass 443	6.6 (86.1)2
442	40.0 - 100.0% of mass 198	41.4
443	17.0 - 23.0% of mass 442	7.7 (18.6)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		SSTD050K0304	K6557	03/04/04	1258
02	A824-SB-01-0204	WU0293-1RA	K6564	03/04/04	1850
03	A824-SB-02-0204	WU0293-2RA	K6565	03/04/04	1940
04	A824-SB-03-0204	WU0293-3RA	K6566	03/04/04	2031
05	A824-SB-04-0204	WU0293-4	K6567	03/04/04	2121
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FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Instrument ID: GCMS-K Calibration Date: 03/04/04 Time: 1258

Lab File ID: K6557 Init. Calib. Date(s): 03/03/04 03/03/04

Init. Calib. Times: 1421 1834

GC Column: DB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Naphthalene	47.710000	50.000000	0.8787200	0.01	-4.58		2RDR
2-Methylnaphthalene	44.513000	50.000000	0.5789800	0.01	-10.97		2RDR
1-Methylnaphthalene	43.362000	50.000000	0.5444500	0.01	-13.28		2RDR
Acenaphthylene	51.910000	50.000000	1.5196000	0.01	3.82		2RDR
Acenaphthene	52.154000	50.000000	0.9312400	0.01	4.31		2RDR
Fluorene	47.010000	50.000000	0.9460900	0.01	-5.98		2RDR
Phenanthrene	52.805000	50.000000	0.8840400	0.01	5.61		2RDR
Anthracene	51.162000	50.000000	0.8606400	0.01	2.32		2RDR
Fluoranthene	0.9430000	0.8638300	0.8638300	0.01	-8.40	20.00	AVRG
Pyrene	1.0400000	1.3339000	1.3339000	0.01	28.26		AVRG
Benzo(a)anthracene	0.9600000	0.9522400	0.9522400	0.01	-0.81		AVRG
Chrysene	53.934000	50.000000	0.9387900	0.01	7.87		LINR
Benzo(b)fluoranthene	1.1260000	1.1443000	1.1443000	0.01	1.62		AVRG
Benzo(k)fluoranthene	1.2360000	1.3475000	1.3475000	0.01	9.02		AVRG
Benzo(a)pyrene	0.9900000	1.0547000	1.0547000	0.01	6.54	20.00	AVRG
Indeno(1,2,3-cd)pyrene	0.9860000	1.0210000	1.0210000	0.01	3.55		AVRG
Dibenzo(a,h)anthracene	0.7940000	0.8416600	0.8416600	0.01	6.00		AVRG
Benzo(g,h,i)perylene	0.8500000	0.8801300	0.8801300	0.01	3.54		AVRG
Nitrobenzene-D5	0.2960000	0.3492300	0.3492300	0.01	17.98		AVRG
2-Fluorobiphenyl	54.874000	50.000000	1.1504000	0.01	9.75		2RDR
Terphenyl-D14	0.7940000	0.8751500	0.8751500	0.01	10.22		AVRG

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID: XD210 DFTPP Injection Date: 03/09/04

Instrument ID: GCMS-X DFTPP Injection Time: 1044

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	58.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Less than 100.0% of mass 198	66.8
70	Less than 2.0% of mass 69	0.5 (0.7)1
127	40.0 - 60.0% of mass 198	47.0
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	7.1
275	10.0 - 30.0% of mass 198	20.3
365	1.0 - 100.0% of mass 198	1.8
441	0.0 - 100.0% of mass 443	6.6 (84.4)2
442	40.0 - 100.0% of mass 198	43.2
443	17.0 - 23.0% of mass 442	7.8 (18.0)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		SSTD050X0309	X4691	03/09/04	1416
02		SSTD010X0309	X4692	03/09/04	1502
03		SSTD020X0309	X4693	03/09/04	1548
04		SSTD120X0309	X4694	03/09/04	1634
05		SSTD160X0309	X4695	03/09/04	1720
06		SSTD200X0309	X4696	03/09/04	1805
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FORM V SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO297 NAS KEY WEST SDG No.: WU0293

Instrument ID: GCMS-X Calibration Date(s): 03/09/04 03/09/04

Column: DB5-MS ID: 0.25 (mm) Calibration Time(s): 1111 1805

LAB FILE ID: RF10: X4692 RF20: X4693 RF50: X4691
RF120: X4694 RF160: X4695 RF200: X4696

COMPOUND	RF10	RF20	RF50	RF120	RF160	RF200	CURVE	COEFFICENTS A0	COEFFICENTS A1	COEFFICENTS A2	%RSD OR R^2	MAX %RSD OR R^2
Naphthalene	419560	895700	2158200	3970800	5776900	5972900	LINR	-0.1761611	1.47001832		0.99188	0.99000
2-Methylnaphthalene	0.597	0.658	0.604	0.521	0.499	0.514	AVRG		0.56560700		11.212	15.000
1-Methylnaphthalene	0.565	0.591	0.559	0.448	0.449		AVRG		0.52241453		13.107	15.000
Acenaphthylene	372840	807620	2112000	3623100	5532800	5703200	LINR	-0.1835599	0.79554259		0.99177	0.99000
Acenaphthene	234560	506550	1274800	2215500	3362400	3374800	2ORDR	2.883e-002	0.71507620	0.16833455	0.99907	0.99000
Fluorene	1.150	1.188	1.153	0.992	0.970	0.876	AVRG		1.05480084		11.981	15.000
Phenanthrene	0.974	0.989	0.898	0.834	0.772	0.764	AVRG		0.87172876		11.237	15.000
Anthracene	0.966	0.949	0.886	0.811	0.754	0.750	AVRG		0.85273032		11.166	15.000
Fluoranthene	0.912	0.914	0.930	0.844	0.765	0.764	AVRG		0.85481729		8.896	15.000
Pyrene	1.636	1.712	1.676	1.794	2.248	1.836	AVRG		1.81680164		12.306	15.000
Benzo(a)anthracene	1.182	1.266	1.203	1.180	1.210	1.151	AVRG		1.19870420		3.248	15.000
Chrysene	1.101	1.139	1.046	0.980	0.979	0.936	AVRG		1.03009208		7.644	15.000
Benzo(b)fluoranthene	1.268	1.458	1.583	1.437	1.411	1.390	AVRG		1.42444021		7.169	15.000
Benzo(k)fluoranthene	1.472	1.439	1.531	1.412	1.485	1.396	AVRG		1.45593978		3.445	15.000
Benzo(a)pyrene	1.102	1.185	1.192	1.172	1.186	1.159	AVRG		1.16602836		2.892	15.000
Indeno(1,2,3-cd)pyrene	0.682	0.750	0.698	0.772	0.870	0.813	AVRG		0.76427318		9.232	15.000
Dibenzo(a,h)anthracene	0.724	0.743	0.709	0.751	0.819	0.782	AVRG		0.75470736		5.297	15.000
Benzo(g,h,i)perylene	0.773	0.732	0.745	0.789	0.860	0.798	AVRG		0.78293246		5.832	15.000
Nitrobenzene-D5	0.369	0.408	0.398	0.375	0.390	0.376	AVRG		0.38596830		3.931	15.000
2-Fluorobiphenyl	287270	598690	1494300	2699000	4103500	4213400	LINR	-0.1763477	1.07387735		0.99255	0.99000
Terphenyl-D14	0.859	0.978	0.988	1.079	1.295	1.091	AVRG		1.04839109		14.018	15.000

Average %RSD test result.

Calculate Average %RSD: 10.85221195
Maximum Average %RSD: 15.00000000

Note: Passes Average %RSD Test.

FORM VI SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID: XD211 DFTPP Injection Date: 03/10/04

Instrument ID: GCMS-X DFTPP Injection Time: 1010

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Less than 100.0% of mass 198	70.2
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	51.3
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	6.1
275	10.0 - 30.0% of mass 198	18.3
365	1.0 - 100.0% of mass 198	1.7
441	0.0 - 100.0% of mass 443	6.5 (90.9)2
442	40.0 - 100.0% of mass 198	41.7
443	17.0 - 23.0% of mass 442	7.1 (17.0)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		SSTD050X0310	X4703	03/10/04	1033
02	WG5862-BLANK	WG5862-1RA	X4707	03/10/04	1340
03	A824-SB-05-0204	WU0293-5RA	X4714	03/10/04	1900
04	A824-SB-06-0204	WU0293-6RA	X4715	03/10/04	1944
05	KW-DUP-01-0204	WU0293-7RA	X4716	03/10/04	2030
06	KW-DUP-01-0204	WU0293-7RA2	X4717	03/10/04	2115
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FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Instrument ID: GCMS-X Calibration Date: 03/10/04 Time: 1033

Lab File ID: X4703 Init. Calib. Date(s): 03/09/04 03/09/04

Init. Calib. Times: 1111 1805

GC Column: DB5-MS ID: 0.25 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Naphthalene	59.968000	50.000000	0.9117500	0.01	19.94	100.00	LINR
2-Methylnaphthalene	0.5660000	0.6375300	0.6375300	0.01	12.64	100.00	AVRG
1-Methylnaphthalene	0.5220000	0.5610500	0.5610500	0.01	7.48	100.00	AVRG
Acenaphthylene	58.885000	50.000000	1.6650000	0.01	17.77	100.00	LINR
Acenaphthene	47.507000	50.000000	1.0014000	0.01	-4.99	20.00	2RDR
Fluorene	1.0550000	1.0950000	1.0950000	0.01	3.79	100.00	AVRG
Phenanthrene	0.8720000	0.8985600	0.8985600	0.01	3.04	100.00	AVRG
Anthracene	0.8530000	0.9147000	0.9147000	0.01	7.23	100.00	AVRG
Fluoranthene	0.8550000	0.9037500	0.9037500	0.01	5.70	20.00	AVRG
Pyrene	1.8170000	1.5903000	1.5903000	0.01	-12.48	100.00	AVRG
Benzo(a)anthracene	1.1990000	1.2303000	1.2303000	0.01	2.61	100.00	AVRG
Chrysene	1.0300000	1.0537000	1.0537000	0.01	2.30	100.00	AVRG
Benzo(b)fluoranthene	1.4240000	1.3145000	1.3145000	0.01	-7.69	100.00	AVRG
Benzo(k)fluoranthene	1.4560000	1.2965000	1.2965000	0.01	-10.96	100.00	AVRG
Benzo(a)pyrene	1.1660000	1.1185000	1.1185000	0.01	-4.07	20.00	AVRG
Indeno(1,2,3-cd)pyrene	0.7640000	0.6394700	0.6394700	0.01	-16.30	100.00	AVRG
Dibenzo(a,h)anthracene	0.7550000	0.6304300	0.6304300	0.01	-16.50	100.00	AVRG
Benzo(g,h,i)perylene	0.7830000	0.6543500	0.6543500	0.01	-16.43	100.00	AVRG
Nitrobenzene-D5	0.3860000	0.4300600	0.4300600	0.01	11.41	100.00	AVRG
2-Fluorobiphenyl	58.265000	50.000000	1.2165000	0.01	16.53	100.00	LINR
Terphenyl-D14	1.0480000	0.9565400	0.9565400	0.01	-8.73	100.00	AVRG

FORM 2
SOIL SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Level:(low/med) LOW

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 NBZ#	S2 FBP#	S3 TPH#	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	WG5862-BLANK	WG5862-1	73	82	96						0
02	WG5862-LCS	WG5862-2	86	90	93						0
03	WG5862-LCSD	WG5862-3	89	86	101						0
04	A824-SB-01-0204	WU0293-1RA	97	114*	165*						2
05	A824-SB-02-0204	WU0293-2RA	99	99	160*						1
06	A824-SB-03-0204	WU0293-3RA	94	106	147*						1
07	A824-SB-04-0204	WU0293-4	86	100	143*						1
08	WG5862-BLANK	WG5862-1RA	87	102	93						0
09	A824-SB-05-0204	WU0293-5RA	110*	133*	100						2
10	A824-SB-06-0204	WU0293-6RA	86	104	113						0
11	KW-DUP-01-0204	WU0293-7RA	95	123*	185*						2
12	KW-DUP-01-0204	WU0293-7RA2	97	126*	180*						2
13											
14											
15											
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28											

	QC LIMITS
S1 (NBZ) = Nitrobenzene-D5	(14-107)
S2 (FBP) = 2-Fluorobiphenyl	(32-109)
S3 (TPH) = Terphenyl-D14	(26-116)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID (Standard): K6557 Date Analyzed: 03/04/04

Instrument ID: GCMS-K Time Analyzed: 1258

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
12 HOUR STD		351822		9.25		1101137		12.10		621852		16.24	
UPPER LIMIT		703644		9.75		2202274		12.60		1243704		16.74	
LOWER LIMIT		175911		8.75		550569		11.60		310926		15.74	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	A824-SB-01-0204	WU0293-1RA		289026		9.26		1002410		12.08		529158		16.22	
02	A824-SB-02-0204	WU0293-2RA		239129		9.26		870383		12.08		489695		16.22	
03	A824-SB-03-0204	WU0293-3RA		302409		9.26		1059454		12.09		560919		16.23	
04	A824-SB-04-0204	WU0293-4		309827		9.25		1117352		12.09		604103		16.23	
05															
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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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 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: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID (Standard): K6557 Date Analyzed: 03/04/04

Instrument ID: GCMS-K Time Analyzed: 1258

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
12 HOUR STD		933161		19.69		713306		26.02		433361		29.20	
UPPER LIMIT		1866322		20.19		1426612		26.52		866722		29.70	
LOWER LIMIT		466581		19.19		356653		25.52		216681		28.70	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	A824-SB-01-0204	WU0293-1RA		790734	19.69		347888*		26.01		245729		29.19
02	A824-SB-02-0204	WU0293-2RA		773766	19.69		410676		26.00		265545		29.18
03	A824-SB-03-0204	WU0293-3RA		802734	19.69		385857		26.01		269876		29.18
04	A824-SB-04-0204	WU0293-4		899959	19.68		452273		26.00		267144		29.19
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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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 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: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID (Standard): X4703 Date Analyzed: 03/10/04

Instrument ID: GCMS-X Time Analyzed: 1033

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
12 HOUR STD		489369		8.47		1632722		11.34		815976		15.47	
UPPER LIMIT		978738		8.97		3265444		11.84		1631952		15.97	
LOWER LIMIT		244685		7.97		816361		10.84		407988		14.97	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	WG5862-BLANK	WG5862-1RA		495394		8.47		1756134		11.33		823308		15.47	
02	A824-SB-05-0204	WU0293-5RA		417051		8.47		1555502		11.33		722867		15.47	
03	A824-SB-06-0204	WU0293-6RA		485346		8.47		1801156		11.33		825568		15.47	
04	KW-DUP-01-0204	WU0293-7RA		492866		8.47		1758219		11.33		782644		15.47	
05	KW-DUP-01-0204	WU0293-7RA2		535314		8.47		1894006		11.33		820662		15.47	
06															
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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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 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: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID (Standard): X4703 Date Analyzed: 03/10/04

Instrument ID: GCMS-X Time Analyzed: 1033

		IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		1227887	18.92	711867	25.20	465456	28.33
UPPER LIMIT		2455774	19.42	1423734	25.70	930912	28.83
LOWER LIMIT		613944	18.42	355934	24.70	232728	27.83
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01	WG5862-BLANK	WG5862-1RA	1300538	18.91	737883	25.20	464599	28.34
02	A824-SB-05-0204	WU0293-5RA	1045489	18.91	544853	25.19	335004	28.33
03	A824-SB-06-0204	WU0293-6RA	1215290	18.91	558120	25.19	247646	28.33
04	KW-DUP-01-0204	WU0293-7RA	1056770	18.91	225466*	25.19	81043*	28.33
05	KW-DUP-01-0204	WU0293-7RA2	1006614	18.91	192352*	25.20	85850*	28.34
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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
FL-PRO ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code:

Project: CTO297 NAS KEY WEST SDG No.: WU0293

GC Column: ZB-1 ID: 0.53 (mm) Init. Calib. Date(s): 01/15/04 01/15/04

Instrument ID: GC12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 18.20 S2 : 24.42

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
01	ICAL	FLPRO 5 UG/M	01/15/04	0329	18.20	24.42
02	ICAL	FLPRO 20 UG/	01/15/04	0438	18.20	24.42
03	ICAL	FLPRO 50 UG/	01/15/04	0548	18.20	24.42
04	ICAL	FLPRO 100UG/	01/15/04	0658	18.20	24.42
05	ICAL	FLPRO 200UG/	01/15/04	0809	18.20	24.42
06	INDSOURCE	FLPRO IND	01/15/04	0919	18.20	24.42
07	CV	FLPRO 50 UG/	02/25/04	1112	18.20	24.41
08	WG5863-BLANK	WG5863-1	02/25/04	1304	18.20	24.41
09	WG5863-LCS	WG5863-2	02/25/04	1414	18.20	24.40
10	WG5863-LCSD	WG5863-3	02/25/04	1524	18.20	24.41
11	A824-SB-02-0	WU0293-2	02/25/04	1634	18.20	24.40
12	A824-SB-05-0	WU0293-5	02/25/04	1744	18.20	24.40
13	A824-SB-06-0	WU0293-6	02/25/04	1854	18.20	24.41
14	A824-SB-04-0	WU0293-4	02/25/04	2004	18.20	24.41
15	A824-SB-03-0	WU0293-3	02/25/04	2114	18.20	24.40
16	KW-DUP-01-02	WU0293-7	02/25/04	2224	18.20	24.41
17	A824-SB-01-0	WU0293-1	02/25/04	2334	18.20	24.41
18	CV	FLPRO 50 UG/	02/26/04	0413	18.20	24.41
19						
20						

QC LIMITS

S1 = O-Terphenyl (+/- 0.36 MINUTES)
S2 = n-Triacontane-D62 (+/- 0.49 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 4

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG5863-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code:

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Lab File ID: CUB2024 Lab Sample ID: WG5863-1

Instrument ID: GC12 Date Extracted: 02/05/04

Matrix: (soil/water) SOIL Date Analyzed: 02/25/04

Level: (low/med) LOW Time Analyzed: 1304

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	WG5863-LCS	WG5863-2	CUB2025	02/25/04	1414
02	WG5863-LCSD	WG5863-3	CUB2026	02/25/04	1524
03	A824-SB-02-0204	WU0293-2	CUB2027	02/25/04	1634
04	A824-SB-05-0204	WU0293-5	CUB2028	02/25/04	1744
05	A824-SB-06-0204	WU0293-6	CUB2029	02/25/04	1854
06	A824-SB-04-0204	WU0293-4	CUB2030	02/25/04	2004
07	A824-SB-03-0204	WU0293-3	CUB2031	02/25/04	2114
08	KW-DUP-01-0204	WU0293-7	CUB2032	02/25/04	2224
09	A824-SB-01-0204	WU0293-1	CUB2033	02/25/04	2334
10					
11					
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COMMENTS:

FORM IV SV

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO297 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 02/05/04
Analysis Date: 02/25/04
Report Date: 02/26/2004
Matrix: SOIL
% Solids: 100

Lab ID: WG5863-1
Client ID: WG5863-Blank
SDG: WU0293
Extracted by: AZ
Extraction Method: SW846 3550
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5863
Units: mg/Kg

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	J	3.1	1.0	20	20	1.4
	n-Triacontane-D62		73%				
	O-Terphenyl		86%				

Sample Data Summary A0000077

FORM 6
FL-PRO INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code:

Project CTO297 NAS KEY WEST SDG No.: WU0293

Instrument ID: GC12 Calibration Date(s): 01/15/04 01/15/04

Column: ZB-1 ID: 0.53 (mm) Calibration Time(s): 0329 0809

LAB FILE ID: RF5: CUA2058 RF20: CUA2059 RF50: CUA2060
RF100: CUA2061 RF200: CUA2062

COMPOUND	RF5	RF20	RF50	RF100	RF200	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2	MAX %RSD OR R^2
C-24	28608	115080	291160	567020	1159700	LINR	0.21946184	1.729e-004	0.99986	0.99000
C-8	29571	113520	285540	559500	1120700	LINR	-0.3179999	1.787e-004	0.99998	0.99000
C-10	44616	119260	291320	572080	1153100	LINR	-0.9962156	1.747e-004	0.99981	0.99000
C-12	8727	118790	296890	573940	1155400	LINR	0.67416490	1.722e-004	0.99955	0.99000
C-14	30797	116970	289990	572110	1157900	LINR	-5.64e-002	1.731e-004	0.99996	0.99000
C-16	30385	117240	293420	575020	1165800	LINR	-3.37e-002	1.72e-004	0.99994	0.99000
C-18	29940	116910	292420	573010	1166600	LINR	8.384e-002	1.719e-004	0.99991	0.99000
C-28	29723	116310	294110	572040	1164400	LINR	3.314e-002	1.722e-004	0.99990	0.99000
C-20	29610	116560	293280	571720	1164600	LINR	6.577e-002	1.722e-004	0.99990	0.99000
C-22	29259	116660	293340	572810	1169300	LINR	0.16148628	1.715e-004	0.99989	0.99000
FL-PRO peaks C8-C40	491470	1955200	4966100	9706200	2.e+007	LINR	0.84359268	1.732e-004	0.99994	0.99000
C-26	29407	115890	294330	572720	1167500	LINR	0.11742793	1.717e-004	0.99989	0.99000
C-38	28905	107560	279190	558160	1129200	LINR	0.41790430	1.771e-004	0.99995	0.99000
C-40	23709	102680	285040	550470	1136800	LINR	1.00039501	1.758e-004	0.99970	0.99000
C-30	31378	117890	295870	573650	1161900	LINR	-0.2570571	1.727e-004	0.99992	0.99000
C-32	29450	114070	293980	572950	1156100	LINR	-4.48e-002	1.732e-004	0.99995	0.99000
C-34	29113	115760	300230	585980	1178500	LINR	-2.36e-002	1.698e-004	0.99995	0.99000
C-36	28271	114090	296030	583060	1159300	LINR	-0.1381361	1.723e-004	0.99995	0.99000
O-Terphenyl	6399.80	6360.20	6552.40	6396.50	6295.50	AVRG		6400.87200	1.477	40.000
n-Triacontane-D62	5100.80	5099.40	5229.10	5106.60	5062.00	AVRG		5119.58333	1.245	40.000

FORM VI FL-PRO

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code:

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Instrument ID: GC12 Calibration Date: 02/25/04 Time: 1112

Lab File ID: CUB2023 Init. Calib. Date(s): 01/15/04 01/15/04

Init. Calib. Times: 0329 0809

GC Column: ZB-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
C-24	50.520000	50.000000	5819.3000	0.01	1.04	25.00	LINR
C-8	50.270000	50.000000	5660.8000	0.01	0.54	25.00	LINR
C-10	47.376000	50.000000	5536.7000	0.01	-5.25	25.00	LINR
C-12	52.334000	50.000000	5998.5000	0.01	4.67	25.00	LINR
C-14	50.769000	50.000000	5870.8000	0.01	1.54	25.00	LINR
C-16	50.761000	50.000000	5907.7000	0.01	1.52	25.00	LINR
C-18	50.992000	50.000000	5923.7000	0.01	1.98	25.00	LINR
C-28	50.628000	50.000000	5876.3000	0.01	1.26	25.00	LINR
C-20	50.950000	50.000000	5910.9000	0.01	1.90	25.00	LINR
C-22	51.187000	50.000000	5951.7000	0.01	2.37	25.00	LINR
FL-PRO peaks C8-C40	851.70000	850.00000	5781.6000	0.01	0.20	25.00	LINR
C-26	50.474000	50.000000	5865.4000	0.01	0.95	25.00	LINR
C-38	48.926000	50.000000	5477.3000	0.01	-2.15	25.00	LINR
C-40	46.586000	50.000000	5185.4000	0.01	-6.83	25.00	LINR
C-30	50.397000	50.000000	5867.0000	0.01	0.79	25.00	LINR
C-32	50.288000	50.000000	5811.7000	0.01	0.58	25.00	LINR
C-34	49.916000	50.000000	5883.0000	0.01	-0.17	25.00	LINR
C-36	49.324000	50.000000	5740.1000	0.01	-1.35	25.00	LINR
O-Terphenyl	6400.9000	6591.3000	6591.3000	0.01	2.97	25.00	AVRG
n-Triacontane-D62	5119.6000	5175.7000	5175.7000	0.01	1.10	25.00	AVRG

FORM VII PEST

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code:

Project: CTO297 NAS KEY WEST SDG No.: WU0293

Instrument ID: GC12 Calibration Date: 02/26/04 Time: 0413

Lab File ID: CUB2037 Init. Calib. Date(s): 01/15/04 01/15/04

Init. Calib. Times: 0329 0809

GC Column: ZB-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
C-24	47.154000	50.000000	5429.9000	0.01	-5.69	25.00	LINR
C-8	47.103000	50.000000	5306.5000	0.01	-5.79	25.00	LINR
C-10	47.389000	50.000000	5538.3000	0.01	-5.22	25.00	LINR
C-12	49.453000	50.000000	5664.1000	0.01	-1.09	25.00	LINR
C-14	48.809000	50.000000	5644.4000	0.01	-2.38	25.00	LINR
C-16	47.793000	50.000000	5562.5000	0.01	-4.41	25.00	LINR
C-18	48.056000	50.000000	5582.1000	0.01	-3.89	25.00	LINR
C-28	47.164000	50.000000	5474.0000	0.01	-5.67	25.00	LINR
C-20	47.831000	50.000000	5548.6000	0.01	-4.34	25.00	LINR
C-22	47.338000	50.000000	5502.8000	0.01	-5.32	25.00	LINR
FL-PRO peaks C8-C40	812.03000	850.00000	5510.7000	0.01	-4.47	25.00	LINR
C-26	47.022000	50.000000	5463.3000	0.01	-5.96	25.00	LINR
C-38	48.758000	50.000000	5458.3000	0.01	-2.48	25.00	LINR
C-40	50.142000	50.000000	5589.9000	0.01	0.28	25.00	LINR
C-30	46.918000	50.000000	5464.1000	0.01	-6.16	25.00	LINR
C-32	46.581000	50.000000	5383.6000	0.01	-6.84	25.00	LINR
C-34	46.926000	50.000000	5530.7000	0.01	-6.15	25.00	LINR
C-36	47.595000	50.000000	5539.4000	0.01	-4.81	25.00	LINR
O-Terphenyl	6400.9000	6202.4000	6202.4000	0.01	-3.10	25.00	AVRG
n-Triacontane-D62	5119.6000	4860.4000	4860.4000	0.01	-5.06	25.00	AVRG

FORM VII PEST

Field Duplicates - WU0293

	Sample		Duplicate		RPD %	Difference
	A824-SB-06-0204		KW-DUP-01-0204			
	UG/KG		UG/KG			
Ethylbenzene	6.0	U	2.0	J	100.0	4
m+p-xylenes	2.0	J	10.0	J	133.3	8
o-xylene	6.0	U	4	J	40.0	2
total xylenes	2	J	14	J	150.0	12
TPH	16	J	82		134.7	66

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **C. BRYAN** **DATE:** **APRIL 2, 2004**

FROM: **SETH C. STAFFEN** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOA/PAH/TPH/OVG**
CTO(s): 301 and 318 - NAS KEY WEST
SDG: WU0359

SAMPLES: CTO 301: 5/AQUEOUS

FC-MW-05-0204	FC-MW-06-0204
FC-MW-22-0204	KW-DUP-03-0204
KWTB-020904	

CTO 318: 4/AQUEOUS

A824-MW-01-0204	A824-MW-02-0204
A824-MW-03-0204	RR-MW-06-0204

OVERVIEW

The sample set for CTOs 301 and 318, NAS Key West, SDG WU0359 consists of eight (8) aqueous environmental samples and one (1) trip blank. All samples except the trip blank were analyzed for select volatile organic compounds, 1,2-dibromoethane, polynuclear aromatic hydrocarbons (PAHs), and total petroleum hydrocarbons. In addition, the samples listed under CTO 318 were analyzed for methane. The trip blank (KWTB-020904) was analyzed for select volatile organic compounds only. One field duplicate pair was included in this SDG: FC-MW-06-0204 / KW-DUP-03-0204.

The samples were collected by Tetra Tech NUS on February 7th and 9th, 2004 and analyzed by Katahdin Analytical Services and Air Toxics LTD. All analyses were conducted in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria using SW-846 Methods 8260B, 8270C-SIM, Florida PRO, EPA 504.1, and RSK 175 analytical and reporting protocols. The data contained in this SDG were validated with regard to the following parameters:

* • Data completeness
* • Holding times
• Initial and continuing calibration/recoveries
• Laboratory method blank results
* • Field duplicate precision
• Detection limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

The text of this report is formulated to address only gross non-compliances resulting in the rejection of data and the elimination of false positives.

VOLATILE

The following compounds were detected in the laboratory method blank at the maximum concentrations indicated below:

Compound	Concentration	Action Level
Methylene chloride	2.0 ug/L	20 ug/L
Chloroform	0.3 ug/L	1.5 ug/L

Blank Actions

- Value < Reporting Limit (RL); report RL followed by a U.
- Value > RL and < action level; report value followed by a U.
- Value > RL and > action level; report value unqualified.

An action level of 10X (methylene chloride) and 5X (chloroform) the maximum contaminant concentrations were established to evaluate laboratory contamination. Dilution factors and sample aliquots were taken into consideration during the application of all action levels. No qualification action was taken because the reported results for the aforementioned compounds were nondetected in the environmental samples.

The matrix spike and matrix spike duplicate percent recoveries for 2-chloroethyl vinyl ether were zero and the percent recoveries exceeded the upper quality control limits for 1,1,2-trichloroethane. The nondetected result for 2-chloroethyl vinyl ether was rejected, UR, in the unspiked sample FC-MW-22-0204 because the %R was less than 10%. No qualification action was taken for 1,1,2-trichloroethane based on MS/MSD %R noncompliance alone.

The laboratory control sample %R fell below the lower quality control limit for 2-chloroethyl vinyl ether (but > 10%). No qualification action was taken based on the LCS %R noncompliance.

EDB

The continuing calibration on 2/18/04 at 1836 contained a percent difference (%D) that exceeded the 15% quality control limit for 1,2-dibromoethane. No qualification action was taken because the noncompliance was not a gross exceedance (< 90%).

The surrogate recoveries of tetrachloro-m-xylene exceeded the upper quality control limits for sample A824-MW-03-0204 on both columns. No qualification action was taken because the reported result was nondetected. The surrogate recovery exceeded the upper quality control limit for samples FC-MW-22-0204, KW-DUP-03-0204, RR-MW-06-0204, and A824-MW-02-0204 on one column. No qualification action was taken because the other column was complaint

PAH

The continuing calibration on 3/4/04 at 1547 contained percent differences (%Ds) that exceeded the 25% quality control limit for indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene. No qualification action was taken because results were nondetects and the noncompliance was < 90%.

The continuing calibration on 3/5/04 at 0941 contained a percent difference (%D) that exceeded the 25% quality control limit for benzo(g,h,i)perylene. No qualification action was taken because the result was a nondetect and the noncompliance was < 90%.

The surrogate recoveries were diluted out of sample FC-MW-22-0204 that was analyzed at a 100X dilution. No qualification action taken because the sample was analyzed at a dilution.

The matrix spike and matrix spike duplicate %Rs exceeded the upper quality control limit for naphthalene and 2-methylnaphthalene. No qualification action was taken on the unspiked sample FC-MW-22-0204 because the reported results were nondetects. The matrix spike and matrix spike duplicate %RPD exceeded the quality control limit for indeno(1,2,3-cd)pyrene. No qualification action was taken because the matrix spike and matrix spike duplicate %Rs were compliant.

The linear calibration range of the instrument was exceeded by 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene in sample FC-MW-22-0204. The results for the aforementioned compounds were reported from the 100X dilution analysis. The remaining compounds were reported from the undiluted analysis.

TPH

The matrix spike duplicate %R (FC-MW-22-0204) exceeded the upper quality control limit for TPH. No qualification action was taken because the matrix spike %R was compliant.

The surrogate recovery of o-terphenyl fell below the lower quality control limit for samples FC-MW-05-0204 and A824-MW-03-0204. No qualification action was taken.

Methane

All quality control parameters were met for this fraction.

Additional Comments

Positive results reported below the reporting limit (RL) were qualified as estimated, J.

The laboratory did not report down to the required reporting limits (RL) for the following compounds:

	Required RL (ug/L)	Laboratory RL (ug/L)
1,1,2,2-Tetrachloroethane	0.2	1.0
Bromodichloromethane	0.6	1.0
Chlorodibromomethane	0.4	1.0
Cis-1,3-dichloropropene	0.2	1.0
Trans-1,3-dichloropropene	0.2	1.0
Vinyl chloride	1.0	2.0

EXECUTIVE SUMMARY

Laboratory Performance Issues: Methylene chloride and chloroform were detected in the laboratory method blank. Continuing calibration %Ds, surrogate %Rs, and LCS %Rs noncompliances were noted.

Other Factors Affecting Data Quality: , MS/MSD %R and %RPD noncompliances were noted.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (October, 1999), and the NFESC guidelines IRCDQM (September, 1999). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS

Seth C. Staffen
Environmental Scientist/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 - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % 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 (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.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 less than sample activity

PROJ_NO: 5658

SDG: WU0359 MEDIA: WATER DATA FRACTION: OV

nsample	FC-MW-05-0204
samp_date	2/7/2004
lab_id	WU0359-5
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

nsample	FC-MW-05-0204
samp_date	2/7/2004
lab_id	WU0359-5
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

nsample	FC-MW-06-0204
samp_date	2/7/2004
lab_id	WU0359-3
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	0.3	J	P
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	0.4	J	P
M+P-XYLENES	0.4	J	P
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	0.4	J	P
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

PROJ_NO: 5658

SDG: WU0359 MEDIA: WATER DATA FRACTION: OV

nsample	FC-MW-06-0204
samp_date	2/7/2004
lab_id	WU0359-3
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

nsample	FC-MW-22-0204
samp_date	2/7/2004
lab_id	WU0359-2
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	UR	D
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	38		
M+P-XYLENES	7		
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	0.7	J	P
TOTAL XYLENES	7		
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

nsample	FC-MW-22-0204
samp_date	2/7/2004
lab_id	WU0359-2
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

PROJ_NO: 5658

SDG: WU0359 MEDIA: WATER DATA FRACTION: OV

nsample	KW-DUP-03-0204	nsample	KW-DUP-03-0204	nsample	KWTB-020904
samp_date	2/7/2004	samp_date	2/7/2004	samp_date	1/26/2004
lab_id	WU0359-4	lab_id	WU0359-4	lab_id	WU0359-1
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:	FC-MW-06-0204	DUP_OF:	FC-MW-06-0204	DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	0.3	J	P
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	0.4	J	P
M+P-XYLENES	0.4	J	P
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	0.4	J	P
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
VINYL CHLORIDE	2	U	

PROJ_NO: 4779

SDG: WU0359 MEDIA: WATER DATA FRACTION: OV

nsample	A824-MW-01-0204	nsample	A824-MW-01-0204	nsample	A824-MW-02-0204
samp_date	2/9/2004	samp_date	2/9/2004	samp_date	2/9/2004
lab_id	WU0359-7	lab_id	WU0359-7	lab_id	WU0359-8
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	0.1	J	P
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	0.2	J	P
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

PROJ_NO: 4779

SDG: WU0359 MEDIA: WATER DATA FRACTION: OV

nsample	A824-MW-02-0204
samp_date	2/9/2004
lab_id	WU0359-8
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

nsample	A824-MW-03-0204
samp_date	2/9/2004
lab_id	WU0359-9
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

nsample	A824-MW-03-0204
samp_date	2/9/2004
lab_id	WU0359-9
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

PROJ_NO: 4779

SDG: WU0359 MEDIA: WATER DATA FRACTION: OV

nsample	RR-MW-06-0204	nsample	RR-MW-06-0204
samp_date	2/9/2004	samp_date	2/9/2004
lab_id	WU0359-6	lab_id	WU0359-6
qc_type	NM	qc_type	NM
units	UG/L	units	UG/L
Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.036		
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

PROJ_NO: 5658

SDG: WU0359 MEDIA: WATER DATA FRACTION: PAH

nsample	FC-MW-05-0204	nsample	FC-MW-06-0204	nsample	FC-MW-22-0204
samp_date	2/7/2004	samp_date	2/7/2004	samp_date	2/7/2004
lab_id	WU0359-5RA	lab_id	WU0359-3	lab_id	WU0359-2
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.098	J	P
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.099	J	P
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	26		
2-METHYLNAPHTHALENE	53		
ACENAPHTHENE	0.092	J	P
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	150		
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

PROJ_NO: 5658

SDG: WU0359 MEDIA: WATER DATA FRACTION: PAH

nsample	KW-DUP-03-0204
samp_date	2/7/2004
lab_id	WU0359-4RA
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	FC-MW-06-0204

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.091	J	P
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.088	J	P
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

PROJ_NO: 4779

SDG: WU0359 MEDIA: WATER DATA FRACTION: PAH

nsample	A824-MW-01-0204	nsample	A824-MW-02-0204	nsample	A824-MW-03-0204
samp_date	2/9/2004	samp_date	2/9/2004	samp_date	2/9/2004
lab_id	WU0359-7	lab_id	WU0359-8	lab_id	WU0359-9
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

PROJ_NO: 4779

SDG: WU0359 MEDIA: WATER DATA FRACTION: PAH

nsample	RR-MW-06-0204
samp_date	2/9/2004
lab_id	WU0359-6
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

PROJ_NO: 5658

SDG: WU0359 MEDIA: WATER DATA FRACTION: PET

nsample	FC-MW-05-0204	nsample	FC-MW-06-0204	nsample	FC-MW-22-0204
samp_date	2/7/2004	samp_date	2/7/2004	samp_date	2/7/2004
lab_id	WU0359-5	lab_id	WU0359-3	lab_id	WU0359-2
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	2700		

PROJ_NO: 5658

SDG: WU0359 MEDIA: WATER DATA FRACTION: PET

nsample	KW-DUP-03-0204
samp_date	2/7/2004
lab_id	WU0359-4
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	FC-MW-06-0204

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	

PROJ_NO: 4779

SDG: WU0359 MEDIA: WATER DATA FRACTION: PET

nsample	A824-MW-01-0204
samp_date	2/9/2004
lab_id	WU0359-7
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	

nsample	A824-MW-02-0204
samp_date	2/9/2004
lab_id	WU0359-8
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	

nsample	A824-MW-03-0204
samp_date	2/9/2004
lab_id	WU0359-9
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	

PROJ_NO: 4779

SDG: WU0359 MEDIA: WATER DATA FRACTION: PET

nsample	RR-MW-06-0204
samp_date	2/9/2004
lab_id	WU0359-6
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	

PROJ_NO: 4779

SDG: WU0359 MEDIA: WATER DATA FRACTION: OVG

nsample	A824-MW-01-0204	nsample	A824-MW-02-0204	nsample	A824-MW-03-0204
samp_date	2/9/2004	samp_date	2/9/2004	samp_date	2/9/2004
lab_id	0402235-02A	lab_id	0402235-03A	lab_id	0402235-04A
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
METHANE	0.12		

Parameter	Result	Val Qual	Qual Code
METHANE	0.011		

Parameter	Result	Val Qual	Qual Code
METHANE	0.01	U	

PROJ_NO: 4779

SDG: WU0359 MEDIA: WATER DATA FRACTION: OVG

nsample	RR-MW-06-0204
samp_date	2/9/2004
lab_id	0402235-01A
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
METHANE	0.052		

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date:
Analysis Date: 02/13/04
Report Date: 03/02/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-7
Client ID: A824-MW-01-0204
SDG: WU0359
Extracted by:
Extraction Method: SW846 5030
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6033
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		94%				
17060-07-0	1,2-Dichloroethane-D4		97%				
2037-26-5	Toluene-D8		94%				
460-00-4	P-Bromofluorobenzene		101%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date: 02/18/04
Analysis Date: 02/18/04
Report Date: 03/05/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-7
Client ID: A824-MW-01-0204
SDG: WU0359
Extracted by: SAW
Extraction Method: 504.1
Analyst: JLP
Analysis Method: EPA 504.1
Lab Prep Batch: WG6101
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		116%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date:
Analysis Date: 02/13/04
Report Date: 03/02/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-8
Client ID: A824-MW-02-0204
SDG: WU0359
Extracted by:
Extraction Method: SW846 5030
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6033
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	J	0.10	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	J	0.2	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		95%				
17060-07-0	1,2-Dichloroethane-D4		100%				
2037-26-5	Toluene-D8		96%				
460-00-4	P-Bromofluorobenzene		102%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CT0297 NAS KEY WEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date: 02/18/04
Analysis Date: 02/18/04
Report Date: 03/05/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-8
Client ID: A824-MW-02-0204
SDG: WU0359
Extracted by: SAW
Extraction Method: 504.1
Analyst: JLP
Analysis Method: EPA 504.1
Lab Prep Batch: WG6101
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		*143%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date:
Analysis Date: 02/13/04
Report Date: 03/02/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-9
Client ID: A824-MW-03-0204
SDG: WU0359
Extracted by:
Extraction Method: SW846 5030
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6033
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		94%				
17060-07-0	1,2-Dichloroethane-D4		99%				
2037-26-5	Toluene-D8		94%				
460-00-4	P-Bromofluorobenzene		101%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date: 02/18/04
Analysis Date: 02/18/04
Report Date: 03/05/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-9
Client ID: A824-MW-03-0204
SDG: WU0359
Extracted by: SAW
Extraction Method: 504.1
Analyst: JLP
Analysis Method: EPA 504.1
Lab Prep Batch: WG6101
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		*155%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date:
Analysis Date: 02/13/04
Report Date: 03/02/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-6
Client ID: RR-MW-06-0204
SDG: WU0359
Extracted by:
Extraction Method: SW846 5030
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6033
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		93%				
17060-07-0	1,2-Dichloroethane-D4		98%				
2037-26-5	Toluene-D8		96%				
460-00-4	P-Bromofluorobenzene		101%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date: 02/18/04
Analysis Date: 02/18/04
Report Date: 03/05/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-6
Client ID: RR-MW-06-0204
SDG: WU0359
Extracted by: SAW
Extraction Method: 504.1
Analyst: JLP
Analysis Method: EPA 504.1
Lab Prep Batch: WG6101
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		*137%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date:
Analysis Date: 02/13/04
Report Date: 03/02/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-5
Client ID: FC-MW-05-0204
SDG: WU0359
Extracted by:
Extraction Method: SW846 5030
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6033
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		97%				
17060-07-0	1,2-Dichloroethane-D4		101%				
2037-26-5	Toluene-D8		96%				
460-00-4	P-Bromofluorobenzene		99%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date: 02/18/04
Analysis Date: 02/18/04
Report Date: 03/05/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-5
Client ID: FC-MW-05-0204
SDG: WU0359
Extracted by: SAW
Extraction Method: 504.1
Analyst: JLP
Analysis Method: EPA 504.1
Lab Prep Batch: WG6101
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		91%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date:
Analysis Date: 02/13/04
Report Date: 03/02/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-3
Client ID: FC-MW-06-0204
SDG: WU0359
Extracted by:
Extraction Method: SW846 5030
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6033
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	J	0.3	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	J	0.4	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	J	0.4	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		95%				
17060-07-0	1,2-Dichloroethane-D4		97%				
2037-26-5	Toluene-D8		98%				
460-00-4	P-Bromofluorobenzene		104%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date: 02/18/04
Analysis Date: 02/18/04
Report Date: 03/05/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-3
Client ID: FC-MW-06-0204
SDG: WU0359
Extracted by: SAW
Extraction Method: 504.1
Analyst: JLP
Analysis Method: EPA 504.1
Lab Prep Batch: WG6101
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		114%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date:
Analysis Date: 02/13/04
Report Date: 03/02/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-2
Client ID: FC-MW-22-0204
SDG: WU0359
Extracted by:
Extraction Method: SW846 5030
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6033
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	J	0.7	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene		38	1.0	1	1	0.2
1330-20-7	Xylenes (total)		7	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes		7	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		93%				
17060-07-0	1,2-Dichloroethane-D4		99%				
2037-26-5	Toluene-D8		99%				
460-00-4	P-Bromofluorobenzene		106%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date: 02/18/04
Analysis Date: 02/18/04
Report Date: 03/05/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-2
Client ID: FC-MW-22-0204
SDG: WU0359
Extracted by: SAW
Extraction Method: 504.1
Analyst: JLP
Analysis Method: EPA 504.1
Lab Prep Batch: WG6101
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		*135%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date:
Analysis Date: 02/13/04
Report Date: 03/02/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-4
Client ID: KW-DUP-03-0204
SDG: WU0359
Extracted by:
Extraction Method: SW846 5030
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6033
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	J	0.3	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	J	0.4	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	J	0.4	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		95%				
17060-07-0	1,2-Dichloroethane-D4		99%				
2037-26-5	Toluene-D8		98%				
460-00-4	P-Bromofluorobenzene		100%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date: 02/18/04
Analysis Date: 02/18/04
Report Date: 03/05/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-4
Client ID: KW-DUP-03-0204
SDG: WU0359
Extracted by: SAW
Extraction Method: 504.1
Analyst: JLP
Analysis Method: EPA 504.1
Lab Prep Batch: WG6101
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		*133%				

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KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 01/26/04
Received Date: 02/10/04
Extraction Date:
Analysis Date: 02/13/04
Report Date: 03/02/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-1
Client ID: KWTB-020904
SDG: WU0359
Extracted by:
Extraction Method: SW846 5030
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6033
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		94%				
17060-07-0	1,2-Dichloroethane-D4		96%				
2037-26-5	Toluene-D8		98%				
460-00-4	P-Bromofluorobenzene		102%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEYWEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date: 02/13/04
Analysis Date: 03/05/04
Report Date: 03/08/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-7
Client ID: A824-MW-01-0204
SDG: WU0359
Extracted by: AB
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG6030
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.077
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.058
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.077
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.077
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.077
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.096
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.077
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
7297-45-2	2-Methylnaphthalene-d10		83%				
81103-79-9	Fluorene-d10		76%				
1718-52-1	Pyrene-d10		93%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEYWEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date: 02/13/04
Analysis Date: 03/05/04
Report Date: 03/08/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-8
Client ID: A824-MW-02-0204
SDG: WU0359
Extracted by: AB
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG6030
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.049
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.078
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.049
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.078
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.059
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.078
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.078
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.11
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.088
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.069
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.088
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.078
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.088
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.098
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.15
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.078
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.078
7297-45-2	2-Methylnaphthalene-d10		65%				
81103-79-9	Fluorene-d10		63%				
1718-52-1	Pyrene-d10		79%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEYWEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date: 02/13/04
Analysis Date: 03/05/04
Report Date: 03/08/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-9
Client ID: A824-MW-03-0204
SDG: WU0359
Extracted by: AB
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG6030
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.076
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.076
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.057
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.076
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.076
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.11
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.076
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.095
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.076
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.076
7297-45-2	2-Methylnaphthalene-d10		79%				
81103-79-9	Fluorene-d10		67%				
1718-52-1	Pyrene-d10		74%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEYWEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date: 02/13/04
Analysis Date: 03/05/04
Report Date: 03/08/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-6
Client ID: RR-MW-06-0204
SDG: WU0359
Extracted by: AB
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG6030
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.077
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.058
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.077
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.077
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.077
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.096
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.077
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
7297-45-2	2-Methylnaphthalene-d10		64%				
81103-79-9	Fluorene-d10		54%				
1718-52-1	Pyrene-d10		73%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEYWEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date: 02/13/04
Analysis Date: 03/05/04
Report Date: 03/08/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-5RA
Client ID: FC-MW-05-0204
SDG: WU0359
Extracted by: AB
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG6030
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.077
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.058
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.077
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.077
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.077
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.096
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.077
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
7297-45-2	2-Methylnaphthalene-d10		60%				
81103-79-9	Fluorene-d10		58%				
1718-52-1	Pyrene-d10		92%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEYWEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date: 02/13/04
Analysis Date: 03/04/04
Report Date: 03/08/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-3
Client ID: FC-MW-06-0204
SDG: WU0359
Extracted by: AB
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG6030
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	0.099	1.0	0.20	0.20	0.047
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.075
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.047
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.075
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.057
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.075
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.075
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.085
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.11
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.066
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.085
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.075
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.085
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.094
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.075
90-12-0	1-Methylnaphthalene	J	0.098	1.0	0.20	0.20	0.075
7297-45-2	2-Methylnaphthalene-d10		87%				
81103-79-9	Fluorene-d10		76%				
1718-52-1	Pyrene-d10		122%				

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KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEYWEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date: 02/13/04
Analysis Date: 03/03/04
Report Date: 03/08/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-2
Client ID: FC-MW-22-0204
SDG: WU0359
Extracted by: AB
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG6030
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	E	47	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	E	29	1.0	0.20	0.20	0.078
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	J	0.092	1.0	0.20	0.20	0.078
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.058
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.078
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.078
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.11
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.087
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.068
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.087
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.078
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.087
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.097
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.078
90-12-0	1-Methylnaphthalene	E	16	1.0	0.20	0.20	0.078
7297-45-2	2-Methylnaphthalene-d10		82%				
81103-79-9	Fluorene-d10		71%				
1718-52-1	Pyrene-d10		80%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEYWEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date: 02/13/04
Analysis Date: 03/07/04
Report Date: 03/08/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-2DL3
Client ID: FC-MW-22-0204
SDG: WU0359
Extracted by: AB
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG6030
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene		150	100	0.20	19	4.8
91-57-6	2-Methylnaphthalene		53	100	0.20	19	7.8
208-96-8	Acenaphthylene	U	19	100	0.20	19	4.8
83-32-9	Acenaphthene	U	19	100	0.20	19	7.8
86-73-7	Fluorene	U	19	100	0.20	19	5.8
85-01-8	Phenanthrene	U	19	100	0.20	19	7.8
120-12-7	Anthracene	U	19	100	0.20	19	7.8
206-44-0	Fluoranthene	U	19	100	0.20	19	11
129-00-0	Pyrene	U	19	100	0.20	19	8.7
56-55-3	Benzo(a)anthracene	U	19	100	0.20	19	12
218-01-9	Chrysene	U	19	100	0.20	19	6.8
205-99-2	Benzo(b)fluoranthene	U	19	100	0.20	19	8.7
207-08-9	Benzo(k)fluoranthene	U	19	100	0.20	19	7.8
50-32-8	Benzo(a)pyrene	U	19	100	0.20	19	8.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	19	100	0.20	19	9.7
53-70-3	Dibenzo(a,h)anthracene	U	19	100	0.20	19	14
191-24-2	Benzo(g,h,i)perylene	U	19	100	0.20	19	7.8
90-12-0	1-Methylnaphthalene		26	100	0.20	19	7.8
7297-45-2	2-Methylnaphthalene-d10		D				
81103-79-9	Fluorene-d10		D				
1718-52-1	Pyrene-d10		D				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEYWEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date: 02/13/04
Analysis Date: 03/05/04
Report Date: 03/08/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-4RA
Client ID: KW-DUP-03-0204
SDG: WU0359
Extracted by: AB
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG6030
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	0.088	1.0	0.20	0.20	0.047
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.075
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.047
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.075
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.057
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.075
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.075
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.085
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.11
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.066
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.085
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.075
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.085
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.094
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.075
90-12-0	1-Methylnaphthalene	J	0.091	1.0	0.20	0.20	0.075
7297-45-2	2-Methylnaphthalene-d10		75%				
81103-79-9	Fluorene-d10		71%				
1718-52-1	Pyrene-d10		97%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date: 02/11/04
Analysis Date: 02/27/04
Report Date: 03/01/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-7
Client ID: A824-MW-01-0204
SDG: WU0359
Extracted by: JP
Extraction Method: SW846 3510
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5979
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	270
	n-Triacontane-D62		93%				
	O-Terphenyl		101%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date: 02/11/04
Analysis Date: 02/27/04
Report Date: 03/01/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-8
Client ID: A824-MW-02-0204
SDG: WU0359
Extracted by: JP
Extraction Method: SW846 3510
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5979
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	280
	n-Triacontane-D62		77%				
	O-Terphenyl		84%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date: 02/11/04
Analysis Date: 02/27/04
Report Date: 03/01/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-9
Client ID: A824-MW-03-0204
SDG: WU0359
Extracted by: JP
Extraction Method: SW846 3510
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5979
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	270
	n-Triacontane-D62		68%				
	O-Terphenyl		* 79%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/09/04
Received Date: 02/10/04
Extraction Date: 02/11/04
Analysis Date: 02/27/04
Report Date: 03/01/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-6
Client ID: RR-MW-06-0204
SDG: WU0359
Extracted by: JP
Extraction Method: SW846 3510
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5979
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	280
	n-Triacontane-D62		80%				
	O-Terphenyl		89%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date: 02/11/04
Analysis Date: 02/27/04
Report Date: 03/01/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-5
Client ID: FC-MW-05-0204
SDG: WU0359
Extracted by: JP
Extraction Method: SW846 3510
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5979
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	270
	n-Triacontane-D62		70%				
	O-Terphenyl		* 75%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date: 02/11/04
Analysis Date: 02/27/04
Report Date: 03/01/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-3
Client ID: FC-MW-06-0204
SDG: WU0359
Extracted by: JP
Extraction Method: SW846 3510
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5979
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	270
	n-Triacontane-D62		77%				
	O-Terphenyl		86%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date: 02/11/04
Analysis Date: 02/27/04
Report Date: 03/01/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-2
Client ID: FC-MW-22-0204
SDG: WU0359
Extracted by: JP
Extraction Method: SW846 3510
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5979
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics		2700	1.0	500	500	280
	n-Triacontane-D62		90%				
	O-Terphenyl		94%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date: 02/11/04
Analysis Date: 02/27/04
Report Date: 03/01/2004
Matrix: WATER
% Solids: NA

Lab ID: WU0359-4
Client ID: KW-DUP-03-0204
SDG: WU0359
Extracted by: JP
Extraction Method: SW846 3510
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5979
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	270
	n-Triacontane-D62		81%				
	O-Terphenyl		90%				

AIR TOXICS LTD.

SAMPLE NAME: A824-MW-01-0204

ID#: 0402235-02A

MODIFIED METHOD RSK-175 GC/FID

File Name:	021912	Date of Collection:	2/9/04
Dil. Factor:	1.00	Date of Analysis:	2/19/04 02:07 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.12
Ethane	0.010	Not Detected
Ethene	0.010	Not Detected

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: A824-MW-02-0204

ID#: 0402235-03A

MODIFIED METHOD RSK-175 GC/FID

File Name:	021913	Date of Collection:	2/9/04
Dil Factor:	1.00	Date of Analysis:	2/19/04 02:28 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.011
Ethane	0.010	Not Detected
Ethene	0.010	Not Detected

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: A824-MW-03-0204

ID#: 0402235-04A

MODIFIED METHOD RSK-175 GC/FID

File Name:	702-014	Date of Collection: 2/9/04	
Dil. Factor:	1.00	Date of Analysis: 2/19/04 02:19 PM	

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Ethane	0.010	Not Detected
Ethene	0.010	Not Detected

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: RR-MW-06-0204

ID#: 0402235-01A

MODIFIED METHOD RSK-175 GC/FID

File Name:	70219.D	Date of Collection: 2/9/04	
Dil. Factor:	1.00	Date of Analysis: 2/19/04 01:45 PM	

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.052
Ethane	0.010	Not Detected
Ethene	0.010	Not Detected

Container Type: VOA Vial-40 mL

APPENDIX C

SUPPORT DOCUMENTATION

TETRA TECH NUS, INC.
CTO297 NAS KEY WEST
WU0359

KATAHDIN ANALYTICAL SERVICES, INC.
340 COUNTY ROAD 5
WESTBROOK, ME 04092

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE NAS KEY WEST CTO 297
TASK ORDER MANAGER: CHARLES BRYAN
WU0359

Sample Receipt

The following samples were received on February 10, 2004 and were logged in under Katahdin Analytical Services work order number WU0359 for a hardcopy due date of March 5, 2004.

KATAHDIN Sample No.	TTNUS Sample Identification
WU0359-1	KWTB-020904
WU0359-2	FC-MW-22-0204
WU0359-3	FC-MW-06-0204
WU0359-4	KW-DUP-03-0204
WU0359-5	FC-MW-05-0204
WU0359-6	RR-MW-06-0204
WU0359-7	A824-MW-01-0204
WU0359-8	A824-MW-02-0204
WU0359-9	A824-MW-03-0204

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.

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, **Andrea J. Colby**. This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order WU0359 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, Office of Solid Waste and Emergency Response, U.S. EPA and/or Method for Determination of Petroleum Range Organics (Method #FL-PRO), Florida Department of Environmental Protection, November 1, 1995, and/or "Methods for the Determination of Organic Compounds in Drinking Water", U.S. EPA, Environmental Monitoring and Support Laboratory - Cincinnati (September 1995), and/or for the specific methods listed below or on the Report of Analysis. A matrix spike and matrix spike duplicate sample analysis was performed on sample WU0359-2, as per client request. Some manual integrations may have been performed due to split peaks and/or corrected baselines. All have been flagged with a "M" (software-generated) on the pertinent quantitation report.

FL-PRO Analysis

Samples WU0359-5 and 9 and the matrix spike sample, WG5979-3, had recoveries for the surrogate, o-terphenyl that were low and outside of the method acceptance limits. Since the recoveries for the second surrogate were acceptable, the samples were not reextracted.

The matrix spike duplicate sample, WG5979-4, had a PRO recovery of 112%, which is above the method acceptance limit of 101% and is likely due to matrix interference. Since the matrix spike sample, WG5979-3, and the laboratory control sample, WG5979-2, had acceptable recoveries, the associated samples were not reextracted.

8260B Analysis

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived for the full list of spiked compounds. The acceptance limits for the MS/MSD are for a short list of the spiked compounds. Katahdin standard operating procedure is not to take corrective action until greater than ten percent of the spiked analytes (with the exception of the common laboratory contaminants acetone and methylene chloride) in the LCS are outside of the QC limits.

8270C SIM Analysis

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived for the full list of spiked compounds. The acceptance limits for the MS/MSD are for a short list of the spiked compounds. Katahdin standard operating procedure is not to take corrective action until greater than ten percent of the spiked analytes (with the exception of the common laboratory phthalate ester contaminants) in the LCS are outside of the QC limits.

The initial calibration analyzed on the X instrument 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 surrogate 2-methylnaphthalene-d10 failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient being less than the method acceptance criteria of 0.990. This compound was calibrated using the average model.

504 Analysis

The opening and closing CV's (files 3UB1202 and 3UB1219) had high responses for the surrogate TCMX on Channel A, which resulted in %D's that were outside of the method acceptance limit. Since the surrogate on the B channel was acceptable, the associated samples were not reanalyzed. The surrogate recoveries may be biased high on channel A.

Samples WU0359-2, 4, 6, 8, the laboratory control duplicate sample (WG6101-3) and the matrix spike samples (WG6101-4 and 5) have high recoveries for the surrogate TCMX on channel A that are outside of laboratory established acceptance limits. Since the surrogate on the second channel was acceptable, the samples were not reextracted.

Sample WU0359-9 and the laboratory method blank WG6101-1 had a high recovery for the surrogate TCMX on both channels that is outside of laboratory established acceptance limits. Since a high recovery

would indicate a high bias and the samples did not detect any target analytes above the MDL, the samples were not reanalyzed.

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

Metals Analysis

The samples of Katahdin SDG WU0359 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Waste", SW-846, November 1986, Third Edition.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Aqueous-matrix Katahdin Sample Nos. WU0359-(2-9) were digested for ICP analysis on 02/20/04 (QC Batch UB20ICW0) in accordance with USEPA Method 3050B. Katahdin Sample No. WU0359-2 was prepared with duplicate matrix-spiked aliquots.

ICP analyses of the Katahdin SDG WU0359 sample digestates were performed in accordance with USEPA Method 6010B, using a Thermo Jarrell Ash (TJA) Trace ICP. All samples were analyzed within holding times and all QC criteria were met with the following comments or exceptions:

Some of the results for run QC samples (ICV, ICB, CCV, CCB, ICSA, and ICSAB) included in the accompanying data package may have exceeded acceptance limits for some elements. Please note that all client samples and batch QC samples associated with out-of-control results for run QC samples were subsequently reanalyzed for the analytes in question.

Matrix QC Summary

The matrix-spiked aliquots of Katahdin Sample No. WU0359-2 was within the laboratory's acceptance criteria (75% - 125% recovery of the added element, if the native concentration is less than four times the amount added) for lead.

The matrix spike duplicate analysis of Katahdin Sample No. WU0359-2 was within the laboratory's acceptance limit (<20% relative difference between duplicate matrix spiked aliquots) for lead.

The serial dilution analyses of Katahdin Sample No. WU0359-2 was within the laboratory's ICP serial dilution acceptance limit (<10% difference between the original sample result and the result for a 5-fold dilution of the sample, if the result for the dilution is at least ten times the instrument detection limit) for lead.

Wet Chemistry Analysis

The samples of Work Order WU0359 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for nitrate and sulfate were performed according to "Methods for Chemical Analysis of Water and Wastes", EPA 600/4-79-020, 1979 Revised 1983, U.S. EPA.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Practical Quantitation Limit (PQL) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U PQL", where "PQL" is the numerical value of the Practical Quantitation Limit.

All analyses were performed within analytical hold times, and all quality control criteria were met. No deviations were noted by the Wet Chemistry group.

Subcontracted Analysis

Analyses for Methane were performed by a subcontract laboratory. Please refer to the subcontracted section of the data package.

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 Laboratory Manager, Quality Assurance Officer, or the Data Management Supervisor as verified by the following signature.

Maria Crouch
03.09.04
Maria Crouch
Quality Assurance Officer

KATAHDIN ANALYTICAL SERVICES, INC.
SAMPLE RECEIPT CONDITION REPORT
Tel. (207) 874-2400
Fax (207) 775-4029

LAB (WORK ORDER) # Wuo359

PAGE: 1 OF 5

COOLER: 1 OF 5

CLIENT: Tetratech

PROJECT: NAS Key West

COC#
SDG#
DATE / TIME RECEIVED: 2/10/04 0900
DELIVERED BY: Fedex
RECEIVED BY: AMB
LIMS ENTRY BY: AMB
LIMS REVIEW BY / PM: MC

	YES	NO	EXCEPTIONS
1. CUSTODY SEALS PRESENT / INTACT?	☑	☐	☐
2.CHAIN OF CUSTODY PRESENT IN THIS COOLER?	☑	☐	☐
3. CHAIN OF CUSTODY SIGNED BY CLIENT?	☑	☐	☐
4. CHAIN OF CUSTODY MATCHES SAMPLES?	☑	☐	☐
5. TEMPERATURE BLANKS PRESENT?	☑	☐	☐
6. SAMPLES RECEIVED AT 4°C +/-2? ICE / ICE PACKS PRESENT (Y) or N?	☑	☐	☐
7. VOLATILES FREE OF HEADSPACE?	☐	☐	☑
8. TRIP BLANK PRESENT IN THIS COOLER	☐	☑	☐
9. PROPER SAMPLE CONTAINERS AND VOLUME?	☑	☐	☐
10. SAMPLES WITHIN HOLD TIME UPON RECEIPT?	☑	☐	☐
11. SAMPLES PROPERLY PRESERVED(1)?	☑	☐	☐
12. CORRECTIVE ACTION REPORT FILED?	☐	☑	N/A

COMMENTS	RESOLUTION
TEMP BLANK TEMP (°C)= 5.7	
COOLER TEMP (°C)= NA (RECORD COOLER TEMP ONLY IF TEMP BLANK IS NOT PRESENT)	

13. ANALYTICAL PROGRAMS (CIRCLE ONE) COMMERCIAL CLP HAZWRAP (NFESC) ACOE AFCEE OTHER (STATE OF ORIGIN):

LOG - IN NOTES(1): All of the TRPH samples were received at a pH of between 3 and 5. 2 mL of HCl were added to all. pH ≤ 2.

(1) Use this space (and additional sheets if necessary) to document samples that are received broken or compromised, C-O-C discrepancies, radiation checks, residual chlorine check, results of pH check if required. If samples required pH adjustment, record volume and type of preservative added.

CWE3758

TETRA TECH NUS, INC. | **CHAIN OF CUSTODY** | **NUMBER** 3832 | **PAGE** 1 **OF** 1

PROJECT NO: CTO 301/318	**FACILITY:** NAS Key West	**PROJECT MANAGER** Chuck Bryan	**PHONE NUMBER** 803-649-7963x345	**LABORATORY NAME AND CONTACT:** Katahdin - Andrea Colby
SAMPLERS (SIGNATURE) Emily McKee		**FIELD OPERATIONS LEADER** Emily McKee	**PHONE NUMBER** 786-295-7331	**ADDRESS** 340 County Rd. No.5
		CARRIER/WAYBILL NUMBER 834182781646		**CITY, STATE** Westbrook, ME 04092

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2004)	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)								
									G	G	G	G	P	G	P		
									HCl	HCl	HCl	HCl	HNO_3	HCl			
									1	1	1	1		1			
PRESERVATIVE USED																	
TYPE OF ANALYSIS									PPL VOHs + BTEX + MTBE	PAH + 1-2-methyl-naphthalene	TRPH	EDB	Lead	Methane	Nitrate+Sulfate		**COMMENTS**
1/26	0950	KWTB-020904				QC	6	2	2								
2/7	1025	FC-MW-22-0204	FC-MW-22			GW	G	30	9	6	6	6	3				MS/MSD
2/7	1020	FC-MW-06-0204	FC-MW-06			GW	G	10	3	2	2	2	1				
2/7	0000	KW-DUP-03-0204				GW	G	10	3	2	2	2	1				
2/7	1220	FC-MW-05-0204	FC-MW-05			GW	G	10	3	2	2	2	1				
2/9	0925	RR-MW-06-0204	RR-MW-06			GW	G	13	3	2	2	2	1	2	1		
2/9	0830	A824-MW-01-0204	A824-MW-01			GW	G	13	3	2	2	2	1	2	1		
2/9	1130	A824-MW-02-0204	A824-MW-02			GW	G	13	3	2	2	2	1	2	1		
2/9	1105	A824-MW-03-0204	A824-MW-03			GW	G	13	3	2	2	2	1	2	1		

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Emily McKee	2/9/04	1600	1. RECEIVED BY	2/10/04	0900
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

ORGANICS DATA QUALIFIERS

U	Indicates the compound was analyzed for but not detected above the laboratory Practical Quantitation Limit.
*	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 Practical Quantitation Limit (PQL), but above the Method Detection Limit (MDL).
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.

HOLDTIME

SDG 0402235

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	A824-MW-01-0204	WU0359-007	NM	02/09/2004	02/20/2004	02/25/2004	11	5	16
M	UG/L	A824-MW-02-0204	WU0359-008	NM	02/09/2004	02/20/2004	02/25/2004	11	5	16
M	UG/L	A824-MW-03-0204	WU0359-009	NM	02/09/2004	02/20/2004	02/25/2004	11	5	16
M	UG/L	FC-MW-05-0204	WU0359-005	NM	02/07/2004	02/20/2004	02/25/2004	13	5	18
M	UG/L	FC-MW-06-0204	WU0359-003	NM	02/07/2004	02/20/2004	02/25/2004	13	5	18
M	UG/L	FC-MW-22-0204	WU0359-002	NM	02/07/2004	02/20/2004	02/25/2004	13	5	18
M	UG/L	KW-DUP-03-0204	WU0359-004	NM	02/07/2004	02/20/2004	02/25/2004	13	5	18
M	UG/L	RR-MW-06-0204	WU0359-006	NM	02/09/2004	02/20/2004	02/25/2004	11	5	16
NTA	MG/L	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/10/2004	02/10/2004	1	0	1
NTA	MG/L	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/10/2004	02/10/2004	1	0	1
NTA	MG/L	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/10/2004	02/10/2004	1	0	1
NTA	MG/L	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/10/2004	02/10/2004	1	0	1
SO4	MG/L	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/27/2004	02/27/2004	18	0	18
SO4	MG/L	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/27/2004	02/27/2004	18	0	18
SO4	MG/L	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/27/2004	02/27/2004	18	0	18

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SO4	MG/L	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/27/2004	02/27/2004	18	0	18
OS	%	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25
OS	%	KW-DUP-03-0204RA	WU0359-4RA	NM	02/07/2004	02/13/2004	03/05/2004	6	21	27
OS	%	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25
OS	%	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25
OS	%	FC-MW-05-0204RA	WU0359-5RA	NM	02/07/2004	02/13/2004	03/05/2004	6	21	27
OS	%	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/13/2004	03/04/2004	6	20	26
OS	%	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/13/2004	03/03/2004	6	19	25
OS	%	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25
OS	%	FC-MW-22-0204	WU0359-2DL3	NM	02/07/2004	02/13/2004	03/07/2004	6	23	29
OS	UG/L	FC-MW-22-0204	WU0359-2DL3	NM	02/07/2004	02/13/2004	03/07/2004	6	23	29
OS	UG/L	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25
OS	UG/L	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25
OS	UG/L	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25
OS	UG/L	FC-MW-05-0204RA	WU0359-5RA	NM	02/07/2004	02/13/2004	03/05/2004	6	21	27
OS	UG/L	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/13/2004	03/03/2004	6	19	25
OS	UG/L	KW-DUP-03-0204RA	WU0359-4RA	NM	02/07/2004	02/13/2004	03/05/2004	6	21	27
OS	UG/L	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OS	UG/L	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/13/2004	03/04/2004	6	20	26
EDB	%	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	%	KW-DUP-03-0204	WU0359-4	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
EDB	%	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
EDB	%	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
EDB	%	FC-MW-05-0204	WU0359-5	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
EDB	%	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	%	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	%	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	UG/L	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	UG/L	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	UG/L	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	UG/L	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	UG/L	FC-MW-05-0204	WU0359-5	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
EDB	UG/L	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
EDB	UG/L	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
EDB	UG/L	KW-DUP-03-0204	WU0359-4	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
OV	%	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	%	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
OV	%	KWTB-020904	WU0359-1	NM	01/26/2004	02/13/2004	02/13/2004	18	0	18
OV	%	KW-DUP-03-0204	WU0359-4	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6
OV	%	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6
OV	%	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
OV	%	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
OV	%	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
OV	%	FC-MW-05-0204	WU0359-5	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6
OV	UG/L	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
OV	UG/L	KWTB-020904	WU0359-1	NM	01/26/2004	02/13/2004	02/13/2004	18	0	18
OV	UG/L	FC-MW-05-0204	WU0359-5	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6
OV	UG/L	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6
OV	UG/L	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
OV	UG/L	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
OV	UG/L	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6
OV	UG/L	KW-DUP-03-0204	WU0359-4	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6
OV	UG/L	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
ETHA	UG/ML	RR-MW-06-0204	0402235-01A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
ETHA	UG/ML	A824-MW-02-0204	0402235-03A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
ETHA	UG/ML	A824-MW-03-0204	0402235-04A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
ETHA	UG/ML	A824-MW-01-0204	0402235-02A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
ETHE	UG/ML	RR-MW-06-0204	0402235-01A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
ETHE	UG/ML	A824-MW-03-0204	0402235-04A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
ETHE	UG/ML	A824-MW-02-0204	0402235-03A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
ETHE	UG/ML	A824-MW-01-0204	0402235-02A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
METH	UG/ML	RR-MW-06-0204	0402235-01A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
METH	UG/ML	A824-MW-01-0204	0402235-02A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
METH	UG/ML	A824-MW-02-0204	0402235-03A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
METH	UG/ML	A824-MW-03-0204	0402235-04A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
TPH	%	KW-DUP-03-0204	WU0359-4	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20
TPH	%	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	%	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	%	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	%	FC-MW-05-0204	WU0359-5	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20
TPH	%	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20
TPH	%	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TPH	%	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	UG/L	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20
TPH	UG/L	KW-DUP-03-0204	WU0359-4	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20
TPH	UG/L	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	UG/L	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	UG/L	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	UG/L	FC-MW-05-0204	WU0359-5	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20
TPH	UG/L	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	UG/L	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

| WG6033-BLANK |

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0359

Lab File ID: M2041 Lab Sample ID: WG6033-2

Date Analyzed: 02/13/04 Time Analyzed: 1055

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: GCMS-M

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	WG6033-LCS	WG6033-1	M2039	02/13/04	0945
02	KWTB-020904	WU0359-1	M2043	02/13/04	1206
03	FC-MW-22-0204	WU0359-2	M2044	02/13/04	1237
04	FC-MW-06-0204	WU0359-3	M2045	02/13/04	1307
05	KW-DUP-03-0204	WU0359-4	M2046	02/13/04	1338
06	FC-MW-05-0204	WU0359-5	M2047	02/13/04	1409
07	RR-MW-06-0204	WU0359-6	M2048	02/13/04	1439
08	A824-MW-01-0204	WU0359-7	M2049	02/13/04	1510
09	A824-MW-02-0204	WU0359-8	M2050	02/13/04	1541
10	A824-MW-03-0204	WU0359-9	M2051	02/13/04	1611
11	FC-MW-22-0204MS	WG6033-3	M2056	02/13/04	1844
12	FC-MW-22-0204MSD	WG6033-4	M2057	02/13/04	1914
13					
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COMMENTS:

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO297 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 02/13/04
Report Date: 03/02/2004
Matrix: WATER
% Solids: NA

Lab ID: WG6033-2
Client ID: WG6033-Blank
SDG: WU0359
Extracted by:
Extraction Method: SW846 5030
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6033
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	1	1.0	1	1	0.6
75-01-4	Vinyl chloride	U	1	1.0	1	1	0.2
74-83-9	Bromomethane	U	1	1.0	1	1	0.6
75-00-3	Chloroethane	U	1	1.0	1	1	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride		2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	J	0.3	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		90%				
17060-07-0	1,2-Dichloroethane-D4		94%				
2037-26-5	Toluene-D8		94%				
460-00-4	P-Bromofluorobenzene		98%				

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0359

Lab File ID: MB547 BFB Injection Date: 02/04/04

Instrument ID: GCMS-M BFB Injection Time: 1443

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.5
75	30.0 - 60.0% of mass 95	40.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	86.5
175	5.0 - 9.0% of mass 174	6.1 (7.0)1
176	95.0 - 101.0% of mass 174	83.9 (97.0)1
177	5.0 - 9.0% of mass 176	5.5 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

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		VSTD050M04A	M1905	02/04/04	1513
02		VSTD020M04A	M1906	02/04/04	1544
03		VSTD005M04A	M1907	02/04/04	1614
04		VSTD100M04A	M1911	02/04/04	1818
05		VSTD001M04C	M1915	02/04/04	2022
06		VSTD200M04B	M1917	02/04/04	2124
07					
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22					

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GCMS-M Calibration Date(s): 02/04/04 02/04/04

Column: RTX-VMS ID: 0.18 (mm) Calibration Time(s): 1513 2124

LAB FILE ID: RF1: M1915 RF5: M1907 RF20: M1906
RF50: M1905 RF100: M1911 RF200: M1917

COMPOUND	RF1	RF5	RF20	RF50	RF100	RF200	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2	MAX %RSD OR R^2
Chloromethane	0.488	0.488	0.487	0.441	0.496	0.470	AVRG		0.47808603	4.189	15.000
Vinyl chloride	0.414	0.422	0.430	0.425	0.477	0.462	AVRG		0.43845245	5.729	15.000
Bromomethane	0.279	0.286	0.307	0.303	0.279	0.308	AVRG		0.29392490	4.714	15.000
Chloroethane	0.303	0.264	0.265	0.264	0.228	0.263	AVRG		0.26447348	8.929	15.000
1,1-Dichloroethene	0.372	0.338	0.350	0.356	0.383	0.380	AVRG		0.36316432	4.916	15.000
Methylene Chloride	25046	51277	146310	324800	655680	1235300	LINR	-3.13e-002	1.84385919	0.99946	0.99000
trans-1,2-Dichloroethene	0.471	0.472	0.489	0.476	0.541	0.525	AVRG		0.49556917	6.043	15.000
Methyl tert-butyl ether	1.092	1.083	1.174	1.087	1.273	1.234	AVRG		1.15729401	7.148	15.000
1,1-Dichloroethane	0.727	0.759	0.796	0.747	0.816	0.793	AVRG		0.77300036	4.401	15.000
cis-1,2-Dichloroethene	0.540	0.527	0.540	0.506	0.571	0.571	AVRG		0.54226738	4.681	15.000
Chloroform	1.023	0.826	0.814	0.785	0.849	0.851	AVRG		0.85816824	9.841	15.000
Carbon Tetrachloride	0.279	0.287	0.295	0.300	0.339	0.353	AVRG		0.30905762	9.677	15.000
1,1,1-Trichloroethane	0.616	0.605	0.644	0.632	0.690	0.690	AVRG		0.64618042	5.624	15.000
Benzene	1.170	1.146	1.178	1.124	1.148	1.096	AVRG		1.14362678	2.628	15.000
1,2-Dichloroethane	0.401	0.330	0.355	0.336	0.350	0.361	AVRG		0.35571795	7.087	15.000
Trichloroethene	0.289	0.282	0.373	0.324	0.332	0.305	AVRG		0.31761690	10.455	15.000
1,2-Dichloropropane	0.303	0.279	0.288	0.280	0.290	0.284	AVRG		0.28731366	3.032	15.000
Bromodichloromethane	0.460	0.381	0.401	0.390	0.407	0.404	AVRG		0.40718464	6.807	15.000
cis-1,3-dichloropropene	0.517	0.455	0.491	0.476	0.494	0.471	AVRG		0.48413572	4.472	15.000
2-Chloroethylvinylether	0.153	0.124	0.139	0.118	0.144	0.138	AVRG		0.13609497	9.525	15.000
Toluene	0.813	0.720	0.774	0.726	0.762	0.727	AVRG		0.75370249	4.830	15.000
Tetrachloroethene	9819	29709	111640	285470	640120	1151200	LINR	4.455e-003	2.46998101	0.99759	0.99000
trans-1,3-Dichloropropene	0.520	0.372	0.403	0.377	0.385	0.369	AVRG		0.40415407	14.313	15.000
1,1,2-Trichloroethane	5918	20804	85182	198080	415210	758120	LINR	-1.08e-002	4.89416809	0.99937	0.99000
Dibromochloromethane	9777	31355	131780	318430	680130	1293400	LINR	1.155e-002	2.21974365	0.99961	0.99000
Chlorobenzene	1.349	0.999	1.049	1.068	1.069	0.972	AVRG		1.08423114	12.502	15.000
Ethylbenzene	2.164	1.571	1.664	1.688	1.704	1.530	AVRG		1.72020498	13.269	15.000
Xylenes (total)							AVRG				0.000
Bromoform	6841	19416	77204	175040	408310	758140	LINR	1.743e-002	3.76953432	0.99841	0.99000
1,1,2,2-Tetrachloroethane	9609	26143	98654	204720	503480	918310	LINR	4.169e-002	1.19869870	0.99823	0.99000
m+p-Xylenes	0.815	0.612	0.661	0.675	0.678	0.595	AVRG		0.67269675	11.566	15.000
o-Xylene	0.799	0.581	0.635	0.656	0.667	0.605	AVRG		0.65727852	11.635	15.000
Dibromofluoromethane	0.596	0.550	0.555	0.514	0.561	0.540	AVRG		0.55279834	4.879	15.000
1,2-Dichloroethane-D4	7335	26688	110880	253680	542460	1006100	LINR	1.234e-002	2.22833120	0.99926	0.99000
Toluene-D8	1.268	1.120	1.116	1.054	1.108	1.037	AVRG		1.11701936	7.297	15.000
P-Bromofluorobenzene	12186	46312	154690	366780	753760	1331400	LINR	-3.95e-002	2.78761235	0.99866	0.99000

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GCMS-M Calibration Date(s): 02/04/04 02/04/04

Column: RTX-VMS ID: 0.18 (mm) Calibration Time(s): 1513 2124

Average %RSD test result.

Calculate Average %RSD: 10.12852097
Maximum Average %RSD: 15.00000000

Note: Passes Average %RSD Test.

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0359

Lab File ID: MB556 BFB Injection Date: 02/13/04

Instrument ID: GCMS-M BFB Injection Time: 0833

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.2
75	30.0 - 60.0% of mass 95	38.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	82.3
175	5.0 - 9.0% of mass 174	7.2 (8.7)1
176	95.0 - 101.0% of mass 174	80.6 (97.9)1
177	5.0 - 9.0% of mass 176	5.3 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

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		VSTD050M13A	M2038	02/13/04	0901
02	WG6033-LCS	WG6033-1	M2039	02/13/04	0945
03	WG6033-BLANK	WG6033-2	M2041	02/13/04	1055
04	KWTB-020904	WU0359-1	M2043	02/13/04	1206
05	FC-MW-22-0204	WU0359-2	M2044	02/13/04	1237
06	FC-MW-06-0204	WU0359-3	M2045	02/13/04	1307
07	KW-DUP-03-0204	WU0359-4	M2046	02/13/04	1338
08	FC-MW-05-0204	WU0359-5	M2047	02/13/04	1409
09	RR-MW-06-0204	WU0359-6	M2048	02/13/04	1439
10	A824-MW-01-0204	WU0359-7	M2049	02/13/04	1510
11	A824-MW-02-0204	WU0359-8	M2050	02/13/04	1541
12	A824-MW-03-0204	WU0359-9	M2051	02/13/04	1611
13	FC-MW-22-0204MS	WG6033-3	M2056	02/13/04	1844
14	FC-MW-22-0204MSD	WG6033-4	M2057	02/13/04	1914
15					
16					
17					
18					
19					
20					
21					
22					

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GCMS-M Calibration Date: 02/13/04 Time: 0901

Lab File ID: M2038 Init. Calib. Date(s): 02/04/04 02/04/04

Init. Calib. Times: 1513 2124

GC Column: RTX-VMS ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Chloromethane	0.4780000	0.4562100	0.4562100	0.1	-4.56		AVRG	
Vinyl chloride	0.4380000	0.4638300	0.4638300	0.01	5.90	20.00	AVRG	
Bromomethane	0.2940000	0.3088700	0.3088700	0.01	5.06		AVRG	
Chloroethane	0.2640000	0.2948300	0.2948300	0.01	11.68		AVRG	
1,1-Dichloroethene	0.3630000	0.4053800	0.4053800	0.1	11.68	20.00	AVRG	
Methylene Chloride	51.776000	50.000000	0.5786000	0.01	3.55		LINR	
trans-1,2-Dichloroethene	0.4960000	0.5557900	0.5557900	0.01	12.05		AVRG	
Methyl tert-butyl ether	1.1570000	1.1442000	1.1442000	0.01	-1.11		AVRG	
1,1-Dichloroethane	0.7730000	0.8564500	0.8564500	0.1	10.80		AVRG	
cis-1,2-Dichloroethene	0.5420000	0.6105300	0.6105300	0.01	12.64		AVRG	
Chloroform	0.8580000	0.8729100	0.8729100	0.01	1.74	20.00	AVRG	
Carbon Tetrachloride	0.3090000	0.3352100	0.3352100	0.01	8.48		AVRG	
1,1,1-Trichloroethane	0.6460000	0.6855900	0.6855900	0.01	6.13		AVRG	
Benzene	1.1440000	1.2572000	1.2572000	0.01	9.90		AVRG	
1,2-Dichloroethane	0.3560000	0.3656100	0.3656100	0.01	2.70		AVRG	
Trichloroethene	0.3180000	0.3652100	0.3652100	0.01	14.85		AVRG	
1,2-Dichloropropane	0.2870000	0.3005200	0.3005200	0.01	4.71	20.00	AVRG	
Bromodichloromethane	0.4070000	0.4251400	0.4251400	0.01	4.46		AVRG	
cis-1,3-dichloropropene	0.4840000	0.5239000	0.5239000	0.01	8.24		AVRG	
2-Chloroethylvinylether	0.1360000	0.1363300	0.1363300	0.01	0.24		AVRG	
Toluene	0.7540000	0.8258800	0.8258800	0.01	9.53	20.00	AVRG	
Tetrachloroethene	44.230000	50.000000	0.3563400	0.01	-11.54		LINR	
trans-1,3-Dichloropropene	0.4040000	0.3992000	0.3992000	0.01	-1.19		AVRG	
1,1,2-Trichloroethane	51.367000	50.000000	0.2121200	0.01	2.73		LINR	
Dibromochloromethane	48.592000	50.000000	0.4326100	0.01	-2.82		LINR	
Chlorobenzene	1.0840000	1.1214000	1.1214000	0.3	3.45		AVRG	
Ethylbenzene	1.7200000	1.7610000	1.7610000	0.01	2.38	20.00	AVRG	
Xylenes (total)	0.0000000	0.6979000	0.6979000	0.01	0.00		AVRG	<-
Bromoform	46.248000	50.000000	0.2407500	0.1	-7.50		LINR	

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GCMS-M Calibration Date: 02/13/04 Time: 0901

Lab File ID: M2038 Init. Calib. Date(s): 02/04/04 02/04/04

Init. Calib. Times: 1513 2124

GC Column: RTX-VMS ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1,1,2,2-Tetrachloroethane	44.514000	50.000000	0.7079200	0.3	-10.97		LINR
m+p-Xylenes	0.6730000	0.7061700	0.7061700	0.01	4.93		AVRG
o-Xylene	0.6570000	0.6813600	0.6813600	0.01	3.71		AVRG
Dibromofluoromethane	0.5530000	0.5101800	0.5101800	0.01	-7.74		AVRG
1,2-Dichloroethane-D4	44.468000	50.000000	0.3935700	0.01	-11.06		LINR
Toluene-D8	1.1170000	1.0754000	1.0754000	0.01	-3.72		AVRG
P-Bromofluorobenzene	50.472000	50.000000	0.3763000	0.01	0.94		LINR

KATAHDIN ANALYTICAL SERVICES
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date:
Analysis Date: 02/13/04
Report Date: 03/02/2004
Matrix: WATER

Lab ID: WG6033-3 & WG6033-4
Client ID: FC-MW-22-0204MS & FC-MW-22-0204MSD
SDG: WU0359
Extracted by:
Extraction Method: SW846 5030
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6033
Units: ug/l

COMPOUND	MS SPIKE	MSD SPIKE	SAMPLE CONC.	MS CONC.	MSD CONC.	MS %REC.	MSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
Chloromethane	50	50	0.00	54	58	109	116	6	20	60-140
Vinyl chloride	50	50	0.00	65	66	130	132	2	20	60-140
Bromomethane	50	50	0.00	33	32	65	65	0.6	20	60-140
Chloroethane	50	50	0.00	62	64	125	129	3	20	60-140
1,1-Dichloroethene	50	50	0.00	63	65	127	130	3	20	44-167
Methylene Chloride	50	50	0.00	50	51	101	102	0.8	20	60-140
trans-1,2-Dichloroethene	50	50	0.00	59	59	117	118	1	20	60-140
Methyl tert-butyl ether	100	100	0.00	91	98	91	98	7	20	60-140
1,1-Dichloroethane	50	50	0.00	56	58	113	115	2	20	60-140
cis-1,2-Dichloroethene	50	50	0.00	55	55	111	110	1	20	60-140
Chloroform	50	50	0.00	53	53	106	105	0.2	20	60-140
Carbon Tetrachloride	50	50	0.00	68	66	135	133	2	20	60-140
1,1,1-Trichloroethane	50	50	0.00	60	59	120	118	1	20	60-140
Benzene	50	50	0.00	57	58	115	116	1	20	64-140
1,2-Dichloroethane	50	50	0.00	53	53	106	106	0.2	20	60-140
Trichloroethene	50	50	0.00	55	55	111	110	0.7	20	62-134
1,2-Dichloropropane	50	50	0.00	57	57	114	114	0.2	20	60-140
Bromodichloromethane	50	50	0.00	50	50	100	99	1	20	60-140
cis-1,3-dichloropropene	50	50	0.00	52	52	104	105	0.4	20	60-140
2-Chloroethylvinylether	50	50	0.00	0.0	0.0	* 0	* 0		20	60-140
Toluene	50	50	0.71	58	58	114	115	1	20	65-142
Tetrachloroethene	50	50	0.00	48	47	96	94	2	20	60-140
trans-1,3-Dichloropropene	50	50	0.00	49	50	99	100	0.8	20	60-140
1,1,2-Trichloroethane	50	50	0.00	129	110	* 258	* 220	16	20	60-140
Dibromochloromethane	50	50	0.00	49	50	98	99	1	20	60-140
Chlorobenzene	50	50	0.00	56	54	112	107	4	20	68-140
Ethylbenzene	50	50	38	96	91	116	106	5	20	60-140
Xylenes (total)	150	150	6.7	173	175	111	112	1	20	60-140
Bromoform	50	50	0.00	44	47	88	94	6	20	60-140
1,1,2,2-Tetrachloroethane	50	50	0.00	42	45	85	89	6	20	60-140
m+p-Xylenes	100	100	6.7	118	119	111	112	0.8	20	60-140
o-Xylene	50	50	0.00	56	56	111	112	0.7	20	60-140

FORM III VOA-1

M2056.D & M2057.D

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: CTO297 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 02/13/04
Report Date: 03/02/2004
Matrix: WATER

Lab ID: WG6033-1
Client ID: WG6033-LCS
SDG: WU0359
Extracted by:
Extraction Method: SW846 5030
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6033
Units: ug/l

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.		%REC.	QC. LIMITS	
Dichlorodifluoromethane	50	NA	61		122	4-217	
Chloromethane	50	NA	55		110	40-163	
Vinyl chloride	50	NA	52		105	55-151	
Bromomethane	50	NA	52		103	24-217	
Chloroethane	50	NA	54		108	69-134	
Trichlorofluoromethane	50	NA	47		93	71-147	
Diethyl Ether	50	NA	48		96	67-135	
Tertiary-butyl alcohol	250	NA	239		96	58-146	
1,1-Dichloroethene	50	NA	52		104	78-136	
Carbon Disulfide	50	NA	55		110	70-136	
Freon-113	50	NA	47		95	60-140	
Iodomethane	50	NA	55		110	60-140	
Acrolein	250	NA	291		116	0-199	NTC
Methylene Chloride	50	NA	51		103	52-115	
Acetone	50	NA	96	*	192	0-158	
Isobutyl Alcohol	1000	NA	947		95	60-140	
trans-1,2-Dichloroethene	50	NA	53		105	84-131	
Allyl Chloride	50	NA	49		98	60-140	
Methyl tert-butyl ether	100	NA	95		95	62-130	
Acetonitrile	500	NA	463		93	53-141	
Di-isopropyl ether	50	NA	50		99	82-130	
Chloroprene	50	NA	51		101	60-140	
Methacrylonitrile	500	NA	400		80	60-140	
Propionitrile	500	NA	422		84	60-140	
1,1-Dichloroethane	50	NA	53		106	81-134	
Acrylonitrile	250	NA	204		82	29-172	
Ethyl tertiary-butyl ether	50	NA	48		95	85-124	
Vinyl Acetate	50	NA	39		79	68-174	
cis-1,2-Dichloroethene	50	NA	49		98	84-123	
1,2-Dichloroethylene (total)	100	NA	102		102	84-131	
Methyl Methacrylate	50	NA	38		77	60-140	
2,2-Dichloropropane	50	NA	55		110	69-150	
Bromochloromethane	50	NA	52		103	77-146	
Chloroform	50	NA	49		98	80-130	
Carbon Tetrachloride	50	NA	46		91	74-137	
Tetrahydrofuran	50	NA	46		92	32-140	
1,1,1-Trichloroethane	50	NA	49		99	76-138	
1,1-Dichloropropene	50	NA	49		97	82-120	
2-Butanone	50	NA	48		95	49-154	
Benzene	50	NA	49		99	88-120	NTC
Cyclohexane	50	NA	0.40	*	1	60-140	
Ethyl Methacrylate	50	NA	44		88	60-140	
Tertiary-amyl methyl ether	50	NA	46		93	85-125	
1,2-Dichloroethane	50	NA	46		93	78-138	
Trichloroethene	50	NA	51		102	80-125	

FORM III VOA-1

M2039.D

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: CTO297 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 02/13/04
Report Date: 03/02/2004
Matrix: WATER

Lab ID: WG6033-1
Client ID: WG6033-LCS
SDG: WU0359
Extracted by:
Extraction Method: SW846 5030
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6033
Units: ug/l

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.		%REC.	QC. LIMITS
Dibromomethane	50	NA	48		95	88-130
1,2-Dichloropropane	50	NA	49		98	80-122
Bromodichloromethane	50	NA	44		88	83-133
cis-1,3-dichloropropene	50	NA	48		96	81-138
1,4-Dioxane	1000	NA	0.00	*	0	60-140
2-Chloroethylvinylether	50	NA	8.3	*	17	50-211
Toluene	50	NA	49		98	88-121
4-methyl-2-pentanone	50	NA	39		78	72-140
Tetrachloroethene	50	NA	41		83	77-129
trans-1,3-Dichloropropene	50	NA	46		92	81-149
1,1,2-Trichloroethane	50	NA	46		92	82-126
Dibromochloromethane	50	NA	46		92	80-133
1,3-Dichloropropane	50	NA	45		90	86-125 NA
1,2-Dibromoethane	50	NA	42	*	84	88-127
2-Hexanone	50	NA	52		103	45-146
Chlorobenzene	50	NA	49		98	84-123
Ethylbenzene	50	NA	47		94	84-134
1,1,1,2-Tetrachloroethane	50	NA	49		98	83-130
Xylenes (total)	150	NA	149		99	88-123
m+p-Xylenes	100	NA	100		100	88-122
o-Xylene	50	NA	49		98	90-123
Styrene	50	NA	47		94	87-131
Bromoform	50	NA	44		87	77-138
Isopropylbenzene	50	NA	48		96	88-125
cis-1,4-Dichloro-2-Butene	50	NA	40		80	60-140
trans-1,4-Dichloro-2-Butene	50	NA	39		77	60-140
Bromobenzene	50	NA	50		99	84-133
N-Propylbenzene	50	NA	52		104	88-124
1,1,2,2-Tetrachloroethane	50	NA	42		84	81-131
1,3,5-Trimethylbenzene	50	NA	51		101	89-124
2-Chlorotoluene	50	NA	50		99	84-128
1,2,3-Trichloropropane	50	NA	40		81	76-132
4-Chlorotoluene	50	NA	50		101	86-132
tert-Butylbenzene	50	NA	48		96	82-131
Pentachloroethane	50	NA	54		109	60-140
1,2,4-Trimethylbenzene	50	NA	48		97	88-121
P-Isopropyltoluene	50	NA	52		104	86-122
1,3-Dichlorobenzene	50	NA	50		100	86-124
1,4-Dichlorobenzene	50	NA	54		107	80-127
N-Butylbenzene	50	NA	51		103	81-133
sec-Butylbenzene	50	NA	48		97	85-122
1,2-Dichlorobenzene	50	NA	48		96	86-126
1,2-Dibromo-3-Chloropropane	50	NA	44		88	61-136
1,3,5-Trichlorobenzene	50	NA	54		108	67-128
Hexachlorobutadiene	50	NA	48		96	52-129

FORM III VOA-1

M2039.D

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: CTO297 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 02/13/04
Report Date: 03/02/2004
Matrix: WATER

Lab ID: WG6033-1
Client ID: WG6033-LCS
SDG: WU0359
Extracted by:
Extraction Method: SW846 5030
Analyst: KM
Analysis Method: SW846 8260B
Lab Prep Batch: WG6033
Units: ug/l

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.	%REC.	QC. LIMITS
1,2,4-Trichlorobenzene	50	NA	48	96	53-157
1,2,3-Trimethylbenzene	50	NA	57	114	60-140
Naphthalene	50	NA	35	70	45-151
1,2,3-Trichlorobenzene	50	NA	44	89	30-164
Methyl Acetate	50	NA	50	99	60-140
Methylcyclohexane	50	NA	48	95	60-140

FORM 8
VOLATILE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0359

GC Column: SPB 608 ID: 0.53 (mm) Init. Calib. Date(s): 02/17/04 02/17/04

Instrument ID: GC03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 12.03

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	RT #
01	ICAL	0.02 PPB	02/17/04	1553	12.03	
02	ICAL	0.05 PPB	02/17/04	1611	12.03	
03	ICAL	0.1 PPB	02/17/04	1630	12.03	
04	ICAL	0.25 PPB	02/17/04	1648	12.03	
05	ICAL	0.5PPB	02/17/04	1706	12.03	
06	ICAL	1.0 PPB	02/17/04	1724	12.03	
07	ICAL	2.5 PPB	02/17/04	1743	12.01	
08	CV	CV 0.5 PPB	02/18/04	1307	12.04	
09	WG6101-BLANK	WG6101-1	02/18/04	1328	12.03	
10	WG6101-LCS	WG6101-2	02/18/04	1346	12.03	
11	WG6101-LCSD	WG6101-3	02/18/04	1404	12.01	
12	FC-MW-22-020	WU0359-2	02/18/04	1533	12.03	
13	FC-MW-06-020	WU0359-3	02/18/04	1551	12.01	
14	KW-DUP-03-02	WU0359-4	02/18/04	1610	12.01	
15	FC-MW-05-020	WU0359-5	02/18/04	1628	12.01	
16	RR-MW-06-020	WU0359-6	02/18/04	1646	12.01	
17	A824-MW-01-0	WU0359-7	02/18/04	1704	12.01	
18	A824-MW-02-0	WU0359-8	02/18/04	1723	12.01	
19	A824-MW-03-0	WU0359-9	02/18/04	1741	12.01	
20	FC-MW-22-020	WG6101-4	02/18/04	1759	12.00	

QC LIMITS
TCX = Tetrachloro-M-Xylene (+/- 0.24 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0359

GC Column: SPB 608 ID: 0.53 (mm) Init. Calib. Date(s): 02/17/04 02/17/04

Instrument ID: GC03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION TCX: 12.03					
	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	RT #
01	FC-MW-22-020	WG6101-5	02/18/04	1817	12.01	
02	CV	CV 0.5 PPB	02/18/04	1836	12.01	
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS

TCX = Tetrachloro-M-Xylene (+/- 0.24 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0359

GC Column: RTX-CLP II ID: 0.53 (mm) Init. Calib. Date(s): 02/17/04 02/17/04

Instrument ID: GC03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 11.33

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	RT #
01	ICAL	0.02 PPB	02/17/04	1553	11.33	
02	ICAL	0.05 PPB	02/17/04	1611	11.33	
03	ICAL	0.1 PPB	02/17/04	1630	11.33	
04	ICAL	0.25 PPB	02/17/04	1648	11.33	
05	ICAL	0.5PPB	02/17/04	1706	11.33	
06	ICAL	1.0 PPB	02/17/04	1724	11.33	
07	ICAL	2.5 PPB	02/17/04	1743	11.33	
08	CV	CV 0.5 PPB	02/18/04	1307	11.35	
09	WG6101-BLANK	WG6101-1	02/18/04	1328	11.33	
10	WG6101-LCS	WG6101-2	02/18/04	1346	11.33	
11	WG6101-LCSD	WG6101-3	02/18/04	1404	11.33	
12	FC-MW-22-020	WU0359-2	02/18/04	1533	11.33	
13	FC-MW-06-020	WU0359-3	02/18/04	1551	11.33	
14	KW-DUP-03-02	WU0359-4	02/18/04	1610	11.32	
15	FC-MW-05-020	WU0359-5	02/18/04	1628	11.32	
16	RR-MW-06-020	WU0359-6	02/18/04	1646	11.32	
17	A824-MW-01-0	WU0359-7	02/18/04	1704	11.32	
18	A824-MW-02-0	WU0359-8	02/18/04	1723	11.32	
19	A824-MW-03-0	WU0359-9	02/18/04	1741	11.32	
20	FC-MW-22-020	WG6101-4	02/18/04	1759	11.32	

QC LIMITS
TCX = Tetrachloro-M-Xylene (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0359

GC Column: RTX-CLP II ID: 0.53 (mm) Init. Calib. Date(s): 02/17/04 02/17/04

Instrument ID: GC03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 11.33

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	RT #
01	FC-MW-22-020	WG6101-5	02/18/04	1817	11.32	
02	CV	CV 0.5 PPB	02/18/04	1836	11.32	
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-M-Xylene (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG6101-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0359

Lab File ID: 3UB1203 Lab Sample ID: WG6101-1

Instrument ID: GC03 Matrix: (soil/water) WATER

Level: (low/med) LOW Date Extracted: 02/18/04

Date Analyzed (1): 02/18/04 Date Analyzed (2): 02/18/04

Time Analyzed (1): 1328 Time Analyzed (2): 1328

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	TIME ANALYZED 2	DATE
01	WG6101-LCS	WG6101-2	3UB1204	02/18/04	1346	02/18/04
02	WG6101-LCSD	WG6101-3	3UB1205	02/18/04	1404	02/18/04
03	FC-MW-22-0204	WU0359-2	3UB1209	02/18/04	1533	02/18/04
04	FC-MW-06-0204	WU0359-3	3UB1210	02/18/04	1551	02/18/04
05	KW-DUP-03-0204	WU0359-4	3UB1211	02/18/04	1610	02/18/04
06	FC-MW-05-0204	WU0359-5	3UB1212	02/18/04	1628	02/18/04
07	RR-MW-06-0204	WU0359-6	3UB1213	02/18/04	1646	02/18/04
08	A824-MW-01-0204	WU0359-7	3UB1214	02/18/04	1704	02/18/04
09	A824-MW-02-0204	WU0359-8	3UB1215	02/18/04	1723	02/18/04
10	A824-MW-03-0204	WU0359-9	3UB1216	02/18/04	1741	02/18/04
11	FC-MW-22-0204MS	WG6101-4	3UB1217	02/18/04	1759	02/18/04
12	FC-MW-22-0204MSD	WG6101-5	3UB1218	02/18/04	1817	02/18/04
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

COMMENTS:

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO297 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 02/18/04
Analysis Date: 02/18/04
Report Date: 03/05/2004
Matrix: WATER
% Solids: NA

Lab ID: WG6101-1
Client ID: WG6101-Blank
SDG: WU0359
Extracted by: SAW
Extraction Method: 504.1
Analyst: JLP
Analysis Method: EPA 504.1
Lab Prep Batch: WG6101
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		*163%				

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GC03 Calibration Date(s): 02/17/04 02/17/04

Column: SPB 608 ID: 0.53 (mm) Calibration Time(s): 1553 1950

LAB FILE ID: RF0.02: 3UB1170 RF0.05: 3UB1171 RF0.1: 3UB1172
RF0.25: 3UB1173 RF0.5: 3UB1174 RF1: 3UB1175

								COEFFICENTS			%RSD	MAX %RSD	
COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	A0	A1	A2	OR R^2	OR R^2	
1,2-Dibromoethane	1347	3756	6141	14782	26925	42656	2ORDR	-1.53e-002	1.783e-005	1.122e-010	0.99890	0.99000	
Tetrachloro-M-Xylene	2620	15850	22271	38420	47616	80078	2ORDR	6.211e-002	2.737e-005	1.211e-011	0.99528	0.99000	

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GC03 Calibration Date(s): 02/17/04 02/17/04

Column: SPB 608 ID: 0.53 (mm) Calibration Time(s): 1553 1950

RF2.5: 3UB1176

			COEFFICENTS			%RSD	MAX %RSD	
COMPOUND	RF2.5	CURVE	A0	A1	A2	OR R^2	OR R^2	
1,2-Dibromoethane	90229	2ORDR	-1.53e-002	1.783e-005	1.122e-010	0.99890	0.99000	
Tetrachloro-M-Xylene	168590	2ORDR	6.211e-002	2.737e-005	1.211e-011	0.99528	0.99000	

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GC03 Calibration Date(s): 02/17/04 02/17/04

Column: RTX-CLP II ID: 0.53 (mm) Calibration Time(s): 1553 1743

LAB FILE ID: RF0.02: 3UB2170 RF0.05: 3UB2171 RF0.1: 3UB2172
RF0.25: 3UB2173 RF0.5: 3UB2174 RF1: 3UB2175

								COEFFICENTS			%RSD	MAX %RSD	
COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	A0	A1	A2	OR R^2	OR R^2	
1,2-Dibromoethane	271	486	887	1871	3378	5392	2ORDR	-3.49e-002	1.666e-004	2.454e-009	0.99801	0.99000	
Tetrachloro-M-Xylene	1018	2217	3312	5641	7338	11693	2ORDR	-7.45e-003	2.122e-004	-1.41e-009	0.99321	0.99000	

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GC03 Calibration Date(s): 02/17/04 02/17/04

Column: RTX-CLP II ID: 0.53 (mm) Calibration Time(s): 1553 1743

RF2.5: 3UB2176

			COEFFICENTS			%RSD	MAX %RSD	
COMPOUND	RF2.5	CURVE	A0	A1	A2	OR R^2	OR R^2	
1,2-Dibromoethane	12831	2ORDR	-3.49e-002	1.666e-004	2.454e-009	0.99801	0.99000	
Tetrachloro-M-Xylene	29470	2ORDR	-7.45e-003	2.122e-004	-1.41e-009	0.99321	0.99000	

FORM VI VOA

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GC03 Calibration Date: 02/18/04 Time: 1307

Lab File ID: 3UB1202 Init. Calib. Date(s): 02/17/04 02/17/04

Init. Calib. Times: 1553 1950

GC Column: SPB 608 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.5000 or AMOUNT	CCAL RRF0.5000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
1,2-Dibromoethane	0.5100800	0.5000000	58188.000	0.01	2.02	30.00	2RDR	
Tetrachloro-M-Xylene	1.9031000	1.2500000	56146.000	0.01	52.25	30.00	2RDR	<-

FORM VII PEST

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GC03 Calibration Date: 02/18/04 Time: 1307

Lab File ID: 3UB2202 Init. Calib. Date(s): 02/17/04 02/17/04

Init. Calib. Times: 1553 1743

GC Column: RTX-CLP II ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.5000 or AMOUNT	CCAL RRF0.5000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
1,2-Dibromoethane	0.5372400	0.5000000	6552.0000	0.01	7.45	30.00	2RDR	
Tetrachloro-M-Xylene	1.6358000	1.2500000	6553.6000	0.01	30.86	30.00	2RDR	<-

FORM VII PEST

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GC03 Calibration Date: 02/18/04 Time: 1836

Lab File ID: 3UB1219 Init. Calib. Date(s): 02/17/04 02/17/04

Init. Calib. Times: 1553 1950

GC Column: SPB 608 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.5000 or AMOUNT	CCAL RRF0.5000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
1,2-Dibromoethane	0.5983800	0.5000000	58188.000	0.01	19.68	30.00	2RDR	
Tetrachloro-M-Xylene	2.0428000	1.2500000	56146.000	0.01	63.42	30.00	2RDR	<-

FORM VII PEST

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GC03 Calibration Date: 02/18/04 Time: 1836

Lab File ID: 3UB2219 Init. Calib. Date(s): 02/17/04 02/17/04

Init. Calib. Times: 1553 1743

GC Column: RTX-CLP II ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.5000 or AMOUNT	CCAL RRF0.5000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1,2-Dibromoethane	0.5716700	0.5000000	6928.0000	0.01	14.33	30.00	2RDR
Tetrachloro-M-Xylene	1.5522000	1.2500000	6200.8000	0.01	24.18	30.00	2RDR

FORM VII PEST

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEY WEST SDG No.: WU0359

GC Column(1): SPB 608 ID: 0.53 (mm) GC Column(2): RTX-CLP IIID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 TCX#	1 S1 TCX#	2 S2 #	1 S2 #	2 S2 #	1 S3 #	2 S3 #	1 S4 OUT	2 S4 OUT
01	WG6101-BLANK	WG6101-1	163*	141*							2
02	WG6101-LCS	WG6101-2	110	100							0
03	WG6101-LCSD	WG6101-3	136*	117							1
04	FC-MW-22-0204	WU0359-2	135*	114							1
05	FC-MW-06-0204	WU0359-3	114	101							0
06	KW-DUP-03-0204	WU0359-4	133*	116							1
07	FC-MW-05-0204	WU0359-5	91	75							0
08	RR-MW-06-0204	WU0359-6	137*	125							1
09	A824-MW-01-0204	WU0359-7	116	101							0
10	A824-MW-02-0204	WU0359-8	143*	127							1
11	A824-MW-03-0204	WU0359-9	155*	140*							2
12	FC-MW-22-0204MS	WG6101-4	144*	128							1
13	FC-MW-22-0204MSD	WG6101-5	134*	121							1
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											

	QC LIMITS
S1 (TCX) = Tetrachloro-M-Xylene	(57-128)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

Katahdin Analytical Services, Inc.
Instrument: GC03
Amount Injected 2 ul

GC Laboratory Instrument Runlog

Method: 8151 / 6640B / (504)
(circle)

Reviewed by/ Date:

Date	Init.	Result File	Sample ID	MI	Y/N	Method	Column	Comments
2-14-04	JLP	34B1/2165	0.02 Test	N	N	504.1/8010A	134/208	
↓	↓	166	↓	↓	↓	↓	↓	
↓	↓	167	↓	↓	↓	↓	↓	
2-17-04	JLP	168	Prime	N	N	504.1/8011A		
		169	↓	N	N			
		170	0.02 PPB ICAL	Y	Y			
		171	0.05	Y				
		172	0.10	Y				
		173	0.25	Y				
		174	0.50	Y				
		175	1.0	Y				
		176	2.5	Y	↓			
		177	WG60088-1	Y	Y			
		178	↓ -1RE	N				
		179	-2	N				
		180	↓ -3	N	↓			
		181	DBCM	Y	Y			
		182	QC 0.25ug/mL	Y				
		183	MDL	Y	↓			
		184	WU0318-2RE	Y	Y			
		185	-3RE	Y				
		186	-4RE	N				
		187	-5RE	Y				
		188	↓ -6RE	N	↓			
		189	WU0334-2RE		Y			
		190	WU0346-1RE	↓	Y			
		191	-3RE	Y				
		192	-5RE	Y				
		193	-7RE	N				
↓	↓	↓ 194	↓ -8RE	↓	↓	↓	↓	

Katahdin Analytical Services, Inc.
Instrument: GC03
Amount Injected 2ul

GC Laboratory Instrument Runlog

Method: 8151 / 6640B / (504)
(circle)

Reviewed by/ Date:

Date	Init.	Result File	Sample ID	MI	Y/N	Method	Column	Comments
2-17-04	JLP	3481/2195	WU0334-9RE	N	Y	504A/8011A	134/208	
↓	↓	↓ 196	↓ -10RE	↓	↓	↓	↓	
2-18-04	↓	↓ 197	CV 0.5 PPB	↓	Y	↓	↓	
2.18.04	JLP	198	Prime	N	N			
		199	↓	N	N			
		200	CV 0.5PPB	Y	Y			
		201	↓	N	Y			
		202	↓	N	Y			B SST
		203	WG6101-1	~~M~~	Y			A+B SST
		204	↓ -2	Y	Y			DBCP↑ on A
		205	↓ -3	Y	Y			DBCP↑ on A
		206	WU0156-13DL	N	Y			1:2
		207	↓ -13	Y	Y			
		208	WG6101-1RA	N	Y			A+B SST
		209	WU0359-2	Y	Y			
		210	↓ -3	N	↓			
		211	-4	N				
		212	-5	Y				A SST
		213	-6	Y				
		214	-7	N				
		215	-8	N				
		216	↓ -9	N	↓			B SST
		217	WG6101-4	Y	Y			WU0359-2MS
		218	↓ -5	YDP	Y			↓ -2MSD
↓	↓	↓ 219	CV 0.5PPB	Y	Y	↓	↓	
2-19-04	JLP	220	Prime	N	N			
		221	↓	N	N			
		222	CV 0.5PPB	Y	Y			
		223	WG6134-1	N	Y			A+B SST
↓	↓	↓ 224	↓ -2	Y	Y	↓	↓	A EDBT A+B SST

FORM 4

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG6030-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEYWEST SDG No.: WU0359

Lab File ID: X4569 Lab Sample ID: WG6030-1

Instrument ID: GCMS-X Date Extracted: 02/13/04

Matrix: (soil/water) WATER Date Analyzed: 03/02/04

Level: (low/med) LOW Time Analyzed: 2331

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	WG6030-LCS	WG6030-2	X4570	03/03/04	0016
02	FC-MW-22-0204MSD	WG6030-4	X4572	03/03/04	0143
03	FC-MW-22-0204	WU0359-2	X4573	03/03/04	0228
04	FC-MW-22-0204MS	WG6030-3RA	X4578	03/03/04	1245
05	FC-MW-06-0204	WU0359-3	X4614	03/04/04	2146
06	RR-MW-06-0204	WU0359-6	X4617	03/05/04	0000
07	A824-MW-01-0204	WU0359-7	X4618	03/05/04	0045
08	A824-MW-02-0204	WU0359-8	X4619	03/05/04	0129
09	A824-MW-03-0204	WU0359-9	X4620	03/05/04	0214
10	KW-DUP-03-0204	WU0359-4RA	X4635	03/05/04	1920
11	FC-MW-05-0204	WU0359-5RA	X4636	03/05/04	2005
12	FC-MW-22-0204	WU0359-2DL3	X4654	03/07/04	1056
13					
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COMMENTS:

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO297 NAS KEYWEST
PO No:
Sample Date:
Received Date:
Extraction Date: 02/13/04
Analysis Date: 03/02/04
Report Date: 03/08/2004
Matrix: WATER
% Solids: NA

Lab ID: WG6030-1
Client ID: WG6030-Blank
SDG: WU0359
Extracted by: AB
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG6030
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.050
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.080
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.050
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.080
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.060
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.080
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.080
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.11
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.090
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.070
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.090
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.080
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.090
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.10
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.15
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.080
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.080
7297-45-2	2-Methylnaphthalene-d10		69%				
81103-79-9	Fluorene-d10		78%				
1718-52-1	Pyrene-d10		118%				

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEYWEST SDG No.: WU0359

Lab File ID: XD198 DFTPP Injection Date: 03/02/04

Instrument ID: GCMS-X DFTPP Injection Time: 0943

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	51.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Less than 100.0% of mass 198	50.0
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	40.0 - 60.0% of mass 198	40.8
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	6.2
275	10.0 - 30.0% of mass 198	21.7
365	1.0 - 100.0% of mass 198	2.3
441	0.0 - 100.0% of mass 443	8.4 (70.3)2
442	40.0 - 100.0% of mass 198	52.6
443	17.0 - 23.0% of mass 442	12.0 (22.7)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		SSTD1.00X0302	X4553	03/02/04	1004
02		SSTD3.00X0302	X4554	03/02/04	1048
03		SSTD2.00X0302	X4555	03/02/04	1132
04		SSTD0.50X0302	X4556	03/02/04	1217
05		SSTD0.20X0302	X4557	03/02/04	1302
06		SSTD0.05X0302	X4558	03/02/04	1345
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FORM V SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO297 NAS KEYWEST SDG No.: WU0359

Instrument ID: GCMS-X Calibration Date(s): 03/02/04 03/02/04

Column: DB5-MS ID: 0.25 (mm) Calibration Time(s): 1004 1345

LAB FILE ID: RF0.05: X4558 RF0.2: X4557 RF0.5: X4556
RF1: X4553 RF2: X4555 RF3: X4554

COMPOUND	RF0.05	RF0.2	RF0.5	RF1	RF2	RF3	CURVE	COEFFICENTS A0	COEFFICENTS A1	COEFFICENTS A2	%RSD OR R^2	MAX %RSD OR R^2	
Naphthalene	1.036	0.901	0.946	1.032	0.864	0.879	AVRG		0.94304046		8.029	15.000	
2-Methylnaphthalene	0.506	0.445	0.491	0.564	0.507	0.529	AVRG		0.50699575		7.805	15.000	
Acenaphthylene	1.048	1.224	1.248	1.388	1.303	1.441	AVRG		1.27520214		10.868	15.000	
Acenaphthene	1.112	1.266	1.102	1.135	0.992	1.050	AVRG		1.10938455		8.310	30.000	
Fluorene	0.881	0.961	1.030	1.135	1.015	1.083	AVRG		1.01747461		8.813	15.000	
Phenanthrene	0.778	0.828	0.801	0.902	0.778	0.848	AVRG		0.82258995		5.805	15.000	
Anthracene	0.572	0.732	0.817	0.808	0.747	0.839	AVRG		0.75239673		13.000	15.000	
Fluoranthene	0.518	0.497	0.533	0.644	0.575	0.702	AVRG		0.57817311		13.833	15.000	
Pyrene	1836	6093	20103	48767	86013	136190	LINR	-6.85e-002	0.59925380		0.99104	0.99000	
Benzo(a)anthracene	0.566	0.594	0.603	0.676	0.560	0.603	AVRG		0.60054255		6.922	15.000	
Chrysene	1.336	1.310	1.390	1.287	1.121	1.206	AVRG		1.27499621		7.576	15.000	
Benzo(b)fluoranthene	446	1360	6023	12410	19927	36944	2ORDR	-1.58e-002	0.96534316	-2.63e-002	0.99016	0.99000	
Benzo(k)fluoranthene	1.969	1.652	1.786	2.326	2.308	2.374	AVRG		2.06927745		14.973	15.000	
Benzo(a)pyrene	1.073	0.798	1.086	1.141	1.170	1.219	AVRG		1.08101917		13.760	30.000	
Indeno(1,2,3-cd)pyrene	0.783	0.702	0.720	0.688	0.673	0.692	AVRG		0.70975495		5.505	15.000	
Dibenzo(a,h)anthracene	0.555	0.553	0.468	0.462	0.501	0.473	AVRG		0.50203161		8.485	15.000	
Benzo(g,h,i)perylene	0.808	0.869	0.738	0.726	0.770	0.701	AVRG		0.76883360		7.988	15.000	
1-Methylnaphthalene	0.437	0.489	0.492	0.566	0.496	0.523	AVRG		0.50078228		8.527	15.000	
2-Methylnaphthalene-d10	0.226	0.304	0.394	0.378	0.360	0.371	AVRG		0.33876273		18.655	15.000	<
Fluorene-d10	0.927	1.010	1.168	1.234	1.092	1.164	AVRG		1.09922892		10.346	15.000	
Pyrene-d10	1.176	1.287	1.262	1.472	1.323	1.287	AVRG		1.30093970		7.472	15.000	

Average %RSD test result.

Calculate Average %RSD: 10.41187382
Maximum Average %RSD: 30.00000000

Note: Passes Average %RSD Test.

FORM VI SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEYWEST SDG No.: WU0359

Lab File ID: XD199 DFTPP Injection Date: 03/02/04

Instrument ID: GCMS-X DFTPP Injection Time: 1542

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	56.1
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Less than 100.0% of mass 198	59.5
70	Less than 2.0% of mass 69	0.9 (1.5)1
127	40.0 - 60.0% of mass 198	42.6
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	23.7
365	1.0 - 100.0% of mass 198	2.5
441	0.0 - 100.0% of mass 443	11.2 (85.9)2
442	40.0 - 100.0% of mass 198	63.1
443	17.0 - 23.0% of mass 442	13.1 (20.7)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		SSTD1.00X0302	X4559	03/02/04	1604
02	WG6030-BLANK	WG6030-1	X4569	03/02/04	2331
03	WG6030-LCS	WG6030-2	X4570	03/03/04	0016
04	FC-MW-22-0204MSD	WG6030-4	X4572	03/03/04	0143
05	FC-MW-22-0204	WU0359-2	X4573	03/03/04	0228
06					
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FORM V SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEYWEST SDG No.: WU0359

Instrument ID: GCMS-X Calibration Date: 03/02/04 Time: 1604

Lab File ID: X4559 Init. Calib. Date(s): 03/02/04 03/02/04

Init. Calib. Times: 1004 1302

GC Column: DB5-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
Naphthalene	0.9240000	0.9959000	0.9959000	0.01	7.78	100.00	AVRG
2-Methylnaphthalene	0.5070000	0.5629700	0.5629700	0.01	11.04	100.00	AVRG
Acenaphthylene	1.3210000	1.3281000	1.3281000	0.01	0.54	100.00	AVRG
Acenaphthene	1.1090000	1.0922000	1.0922000	0.01	-1.51	20.00	AVRG
Fluorene	1.0450000	1.1766000	1.1766000	0.01	12.59	100.00	AVRG
Phenanthrene	0.8310000	0.9031600	0.9031600	0.01	8.68	100.00	AVRG
Anthracene	0.7890000	0.8260800	0.8260800	0.01	4.70	100.00	AVRG
Fluoranthene	0.5900000	0.6038300	0.6038300	0.01	2.34	20.00	AVRG
Pyrene	1.7820000	1.9496000	1.9496000	0.01	9.40	100.00	AVRG
Benzo(a)anthracene	0.6070000	0.6566600	0.6566600	0.01	8.18	100.00	AVRG
Chrysene	1.2630000	1.2589000	1.2589000	0.01	-0.32	100.00	AVRG
Benzo(b)fluoranthene	1.0920000	1.2761000	1.2761000	0.01	16.86	100.00	AVRG
Benzo(k)fluoranthene	1.0865000	1.0000000	2.4390000	0.01	8.65	100.00	LINR
Benzo(a)pyrene	1.0915000	1.0000000	1.2595000	0.01	9.15	20.00	LINR
Indeno(1,2,3-cd)pyrene	0.6950000	0.7439900	0.7439900	0.01	7.05	100.00	AVRG
Dibenzo(a,h)anthracene	0.4910000	0.5044800	0.5044800	0.01	2.74	100.00	AVRG
Benzo(g,h,i)perylene	0.7610000	0.8370200	0.8370200	0.01	9.99	100.00	AVRG
1-Methylnaphthalene	0.5130000	0.5678400	0.5678400	0.01	10.69	100.00	AVRG
2-Methylnaphthalene-d10	0.3610000	0.3873100	0.3873100	0.01	7.29	100.00	AVRG
Fluorene-d10	1.1340000	1.2047000	1.2047000	0.01	6.23	100.00	AVRG
Pyrene-d10	1.3260000	1.3807000	1.3807000	0.01	4.12	100.00	AVRG

FORM VII PEST

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEYWEST SDG No.: WU0359

Lab File ID: XD200 DFTPP Injection Date: 03/03/04

Instrument ID: GCMS-X DFTPP Injection Time: 0827

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	54.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Less than 100.0% of mass 198	56.3
70	Less than 2.0% of mass 69	0.7 (1.3)1
127	40.0 - 60.0% of mass 198	42.7
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	6.8
275	10.0 - 30.0% of mass 198	24.1
365	1.0 - 100.0% of mass 198	2.6
441	0.0 - 100.0% of mass 443	11.8 (86.6)2
442	40.0 - 100.0% of mass 198	66.9
443	17.0 - 23.0% of mass 442	13.6 (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		SSTD1.00X0303	X4576	03/03/04	1054
02	FC-MW-22-0204MS	WG6030-3RA	X4578	03/03/04	1245
03					
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FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEYWEST SDG No.: WU0359

Instrument ID: GCMS-X Calibration Date: 03/03/04 Time: 1054

Lab File ID: X4576 Init. Calib. Date(s): 03/02/04 03/02/04

Init. Calib. Times: 1004 1302

GC Column: DB5-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
Naphthalene	0.9240000	0.9429300	0.9429300	0.01	2.05	100.00	AVRG
2-Methylnaphthalene	0.5070000	0.5782900	0.5782900	0.01	14.06	100.00	AVRG
Acenaphthylene	1.3210000	1.4037000	1.4037000	0.01	6.26	100.00	AVRG
Acenaphthene	1.1090000	0.9394400	0.9394400	0.01	-15.29	20.00	AVRG
Fluorene	1.0450000	0.9846800	0.9846800	0.01	-5.77	100.00	AVRG
Phenanthrene	0.8310000	0.8478500	0.8478500	0.01	2.03	100.00	AVRG
Anthracene	0.7890000	0.6264800	0.6264800	0.01	-20.60	100.00	AVRG
Fluoranthene	0.5900000	0.6012100	0.6012100	0.01	1.90	20.00	AVRG
Pyrene	1.7820000	1.7035000	1.7035000	0.01	-4.40	100.00	AVRG
Benzo(a)anthracene	0.6070000	0.6036300	0.6036300	0.01	-0.56	100.00	AVRG
Chrysene	1.2630000	1.0505000	1.0505000	0.01	-16.82	100.00	AVRG
Benzo(b)fluoranthene	1.0920000	0.9319500	0.9319500	0.01	-14.66	100.00	AVRG
Benzo(k)fluoranthene	0.8642300	1.0000000	1.8965000	0.01	-13.58	100.00	LINR
Benzo(a)pyrene	0.8918200	1.0000000	1.0117000	0.01	-10.82	20.00	LINR
Indeno(1,2,3-cd)pyrene	0.6950000	0.4299600	0.4299600	0.01	-38.14	100.00	AVRG
Dibenzo(a,h)anthracene	0.4910000	0.4441200	0.4441200	0.01	-9.55	100.00	AVRG
Benzo(g,h,i)perylene	0.7610000	0.8107400	0.8107400	0.01	6.54	100.00	AVRG
1-Methylnaphthalene	0.5130000	0.5634500	0.5634500	0.01	9.83	100.00	AVRG
2-Methylnaphthalene-d10	0.3610000	0.4160200	0.4160200	0.01	15.24	100.00	AVRG
Fluorene-d10	1.1340000	1.0110000	1.0110000	0.01	-10.85	100.00	AVRG
Pyrene-d10	1.3260000	1.2247000	1.2247000	0.01	-7.64	100.00	AVRG

FORM VII PEST

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEYWEST SDG No.: WU0359

Lab File ID: XD203 DFTPP Injection Date: 03/04/04

Instrument ID: GCMS-X DFTPP Injection Time: 1527

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	50.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Less than 100.0% of mass 198	54.3
70	Less than 2.0% of mass 69	0.5 (0.9)1
127	40.0 - 60.0% of mass 198	42.1
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	7.5
275	10.0 - 30.0% of mass 198	23.8
365	1.0 - 100.0% of mass 198	2.3
441	0.0 - 100.0% of mass 443	11.2 (80.5)2
442	40.0 - 100.0% of mass 198	74.2
443	17.0 - 23.0% of mass 442	13.8 (18.7)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		SSTD1.00X0304	X4606	03/04/04	1547
02	FC-MW-06-0204	WU0359-3	X4614	03/04/04	2146
03	RR-MW-06-0204	WU0359-6	X4617	03/05/04	0000
04	A824-MW-01-0204	WU0359-7	X4618	03/05/04	0045
05	A824-MW-02-0204	WU0359-8	X4619	03/05/04	0129
06	A824-MW-03-0204	WU0359-9	X4620	03/05/04	0214
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FORM V SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEYWEST SDG No.: WU0359

Instrument ID: GCMS-X Calibration Date: 03/04/04 Time: 1547

Lab File ID: X4606 Init. Calib. Date(s): 03/02/04 03/02/04

Init. Calib. Times: 1004 1302

GC Column: DB5-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
Naphthalene	0.9240000	0.8731800	0.8731800	0.01	-5.50	100.00	AVRG
2-Methylnaphthalene	0.5070000	0.5290500	0.5290500	0.01	4.35	100.00	AVRG
Acenaphthylene	1.3210000	1.3496000	1.3496000	0.01	2.16	100.00	AVRG
Acenaphthene	1.1090000	1.0388000	1.0388000	0.01	-6.33	20.00	AVRG
Fluorene	1.0450000	1.0847000	1.0847000	0.01	3.80	100.00	AVRG
Phenanthrene	0.8310000	0.8359300	0.8359300	0.01	0.59	100.00	AVRG
Anthracene	0.7890000	0.7337300	0.7337300	0.01	-7.00	100.00	AVRG
Fluoranthene	0.5900000	0.6897400	0.6897400	0.01	16.90	20.00	AVRG
Pyrene	1.7820000	1.5444000	1.5444000	0.01	-13.33	100.00	AVRG
Benzo(a)anthracene	0.6070000	0.6935600	0.6935600	0.01	14.26	100.00	AVRG
Chrysene	1.2630000	1.2435000	1.2435000	0.01	-1.54	100.00	AVRG
Benzo(b)fluoranthene	1.0920000	1.3342000	1.3342000	0.01	22.18	100.00	AVRG
Benzo(k)fluoranthene	0.9834400	1.0000000	2.1875000	0.01	-1.66	100.00	LINR
Benzo(a)pyrene	1.0570000	1.0000000	1.2166000	0.01	5.70	20.00	LINR
Indeno(1,2,3-cd)pyrene	0.6950000	1.0712000	1.0712000	0.01	54.13	100.00	AVRG
Dibenzo(a,h)anthracene	0.4910000	0.6490200	0.6490200	0.01	32.18	100.00	AVRG
Benzo(g,h,i)perylene	0.7610000	1.0956000	1.0956000	0.01	43.97	100.00	AVRG
1-Methylnaphthalene	0.5130000	0.5173200	0.5173200	0.01	0.84	100.00	AVRG
2-Methylnaphthalene-d10	0.3610000	0.3865600	0.3865600	0.01	7.08	100.00	AVRG
Fluorene-d10	1.1340000	1.1663000	1.1663000	0.01	2.85	100.00	AVRG
Pyrene-d10	1.3260000	1.1678000	1.1678000	0.01	-11.93	100.00	AVRG

FORM VII PEST

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEYWEST SDG No.: WU0359

Lab File ID: XD204 DFTPP Injection Date: 03/05/04

Instrument ID: GCMS-X DFTPP Injection Time: 0918

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	52.7
68	Less than 2.0% of mass 69	1.0 (1.6)1
69	Less than 100.0% of mass 198	60.2
70	Less than 2.0% of mass 69	0.6 (1.1)1
127	40.0 - 60.0% of mass 198	46.1
197	Less than 1.0% of mass 198	0.7
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	21.5
365	1.0 - 100.0% of mass 198	1.9
441	0.0 - 100.0% of mass 443	8.8 (80.8)2
442	40.0 - 100.0% of mass 198	55.5
443	17.0 - 23.0% of mass 442	10.8 (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		SSTD1.00X0305	X4622	03/05/04	0941
02	KW-DUP-03-0204	WU0359-4RA	X4635	03/05/04	1920
03	FC-MW-05-0204	WU0359-5RA	X4636	03/05/04	2005
04					
05					
06					
07					
08					
09					
10					
11					
12					
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: CTO297 NAS KEYWEST SDG No.: WU0359

Instrument ID: GCMS-X Calibration Date: 03/05/04 Time: 0941

Lab File ID: X4622 Init. Calib. Date(s): 03/02/04 03/02/04

Init. Calib. Times: 1004 1302

GC Column: DB5-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
Naphthalene	0.9240000	0.9681100	0.9681100	0.01	4.77	100.00	AVRG
2-Methylnaphthalene	0.5070000	0.5489100	0.5489100	0.01	8.27	100.00	AVRG
Acenaphthylene	1.3210000	1.3041000	1.3041000	0.01	-1.28	100.00	AVRG
Acenaphthene	1.1090000	1.1156000	1.1156000	0.01	0.60	20.00	AVRG
Fluorene	1.0450000	1.0985000	1.0985000	0.01	5.12	100.00	AVRG
Phenanthrene	0.8310000	0.9686700	0.9686700	0.01	16.57	100.00	AVRG
Anthracene	0.7890000	0.7915900	0.7915900	0.01	0.33	100.00	AVRG
Fluoranthene	0.5900000	0.6504400	0.6504400	0.01	10.24	20.00	AVRG
Pyrene	1.7820000	1.9814000	1.9814000	0.01	11.19	100.00	AVRG
Benzo(a)anthracene	0.6070000	0.6005100	0.6005100	0.01	-1.07	100.00	AVRG
Chrysene	1.2630000	1.2860000	1.2860000	0.01	1.82	100.00	AVRG
Benzo(b)fluoranthene	1.0920000	1.0732000	1.0732000	0.01	-1.72	100.00	AVRG
Benzo(k)fluoranthene	0.9027900	1.0000000	1.9906000	0.01	-9.72	100.00	LINR
Benzo(a)pyrene	0.9364400	1.0000000	1.0671000	0.01	-6.36	20.00	LINR
Indeno(1,2,3-cd)pyrene	0.6950000	0.7709200	0.7709200	0.01	10.92	100.00	AVRG
Dibenzo(a,h)anthracene	0.4910000	0.5002200	0.5002200	0.01	1.88	100.00	AVRG
Benzo(g,h,i)perylene	0.7610000	0.9570700	0.9570700	0.01	25.76	100.00	AVRG
1-Methylnaphthalene	0.5130000	0.5608600	0.5608600	0.01	9.33	100.00	AVRG
2-Methylnaphthalene-d10	0.3610000	0.3454800	0.3454800	0.01	-4.30	100.00	AVRG
Fluorene-d10	1.1340000	0.9958100	0.9958100	0.01	-12.19	100.00	AVRG
Pyrene-d10	1.3260000	1.2911000	1.2911000	0.01	-2.63	100.00	AVRG

FORM VII PEST

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEYWEST SDG No.: WU0359

Lab File ID: XD206 DFTPP Injection Date: 03/07/04

Instrument ID: GCMS-X DFTPP Injection Time: 0944

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Less than 100.0% of mass 198	65.2
70	Less than 2.0% of mass 69	0.4 (0.6)1
127	40.0 - 60.0% of mass 198	45.9
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	7.1
275	10.0 - 30.0% of mass 198	20.5
365	1.0 - 100.0% of mass 198	1.8
441	0.0 - 100.0% of mass 443	7.4 (83.6)2
442	40.0 - 100.0% of mass 198	47.2
443	17.0 - 23.0% of mass 442	8.9 (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		SSTD1.00X0307	X4653	03/07/04	1010
02	FC-MW-22-0204	WU0359-2DL3	X4654	03/07/04	1056
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEYWEST SDG No.: WU0359

Instrument ID: GCMS-X Calibration Date: 03/07/04 Time: 1010

Lab File ID: X4653 Init. Calib. Date(s): 03/06/04 03/06/04

Init. Calib. Times: 1011 1310

GC Column: DB5-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
Naphthalene	0.8170000	0.8578600	0.8578600	0.01	5.00	100.00	AVRG
2-Methylnaphthalene	0.4780000	0.5095600	0.5095600	0.01	6.60	100.00	AVRG
Acenaphthylene	1.1730000	1.2420000	1.2420000	0.01	5.88	100.00	AVRG
Acenaphthene	0.9070000	0.9337700	0.9337700	0.01	2.95	20.00	AVRG
Fluorene	0.8860000	0.9495800	0.9495800	0.01	7.18	100.00	AVRG
Phenanthrene	1.0650000	0.8866200	0.8866200	0.01	-16.75	100.00	AVRG
Anthracene	0.8690000	0.7476400	0.7476400	0.01	-13.96	100.00	AVRG
Fluoranthene	0.6480000	0.6200400	0.6200400	0.01	-4.31	20.00	AVRG
Pyrene	1.8500000	1.7509000	1.7509000	0.01	-5.36	100.00	AVRG
Benzo(a)anthracene	0.6470000	0.6472200	0.6472200	0.01	0.03	100.00	AVRG
Chrysene	1.2320000	1.1607000	1.1607000	0.01	-5.79	100.00	AVRG
Benzo(b)fluoranthene	1.0510000	1.1828000	1.1828000	0.01	12.54	100.00	AVRG
Benzo(k)fluoranthene	1.8420000	1.9849000	1.9849000	0.01	7.76	100.00	AVRG
Benzo(a)pyrene	1.0420000	1.1845000	1.1845000	0.01	13.68	20.00	AVRG
Indeno(1,2,3-cd)pyrene	0.7860000	0.9689100	0.9689100	0.01	23.27	100.00	AVRG
Dibenzo(a,h)anthracene	1.2499000	1.0000000	0.5918000	0.01	24.99	100.00	2RDR
Benzo(g,h,i)perylene	0.9180000	0.8889800	0.8889800	0.01	-3.16	100.00	AVRG
1-Methylnaphthalene	0.4710000	0.5038200	0.5038200	0.01	6.97	100.00	AVRG
2-Methylnaphthalene-d10	0.3510000	0.3722400	0.3722400	0.01	6.05	100.00	AVRG
Fluorene-d10	0.9020000	0.9737900	0.9737900	0.01	7.96	100.00	AVRG
Pyrene-d10	1.3310000	1.2574000	1.2574000	0.01	-5.53	100.00	AVRG

FORM VII PEST

KATAHDIN ANALYTICAL SERVICES
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEYWEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date: 02/13/04
Analysis Date: 03/03/04
Report Date: 03/08/2004
Matrix: WATER

Lab ID: WG6030-3RA& WG6030-4
Client ID: FC-MW-22-0204MS & FC-MW-22-0204MSD
SDG: WU0359
Extracted by: AB
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG6030
Units: ug/L

COMPOUND	MS SPIKE	MSD SPIKE	SAMPLE CONC.	MS CONC.	MSD CONC.	MS %REC.	MSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
Naphthalene	1.9	1.9	47	53	56	* 307	* 458	6	30	30-150
2-Methylnaphthalene	1.9	1.9	29	32	35	* 180	* 322	8	30	30-150
Acenaphthylene	1.9	1.9	0.00	1.5	1.9	78	99	25	30	30-150
Acenaphthene	1.9	1.9	0.09	1.3	1.5	62	74	19	30	30-150
Fluorene	1.9	1.9	0.00	1.4	1.7	76	89	18	30	30-150
Phenanthrene	1.9	1.9	0.00	1.6	1.6	83	85	5	30	30-150
Anthracene	1.9	1.9	0.00	1.5	1.6	79	81	4	30	30-150
Fluoranthene	1.9	1.9	0.00	2.0	2.3	109	118	11	30	30-150
Pyrene	1.9	1.9	0.00	1.3	1.5	71	79	12	30	30-150
Benzo(a)anthracene	1.9	1.9	0.00	2.4	2.6	129	134	6	30	30-150
Chrysene	1.9	1.9	0.00	1.4	1.6	74	85	16	30	30-150
Benzo(b)fluoranthene	1.9	1.9	0.00	1.3	1.5	70	77	11	30	30-150
Benzo(k)fluoranthene	1.9	1.9	0.00	1.3	1.6	70	81	16	30	30-150
Benzo(a)pyrene	1.9	1.9	0.00	1.5	1.5	80	79	0.7	30	30-150
Indeno(1,2,3-cd)pyrene	1.9	1.9	0.00	0.77	1.4	41	72 * 57		30	30-150
Dibenzo(a,h)anthracene	1.9	1.9	0.00	1.3	1.2	67	64	2	30	30-150
Benzo(g,h,i)perylene	1.9	1.9	0.00	1.4	1.2	76	61	19	30	30-150

FORM III SV-1

X4578.D & X4572.D

FORM 2
WATER SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO297 NAS KEYWEST SDG No.: WU0359

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	WG6030-BLANK	WG6030-1	69	78	118						0
02	WG6030-LCS	WG6030-2	74	76	74						0
03	FC-MW-22-0204MSD	WG6030-4	101	84	90						0
04	FC-MW-22-0204	WU0359-2	82	71	80						0
05	FC-MW-22-0204MS	WG6030-3RA	90	68	79						0
06	FC-MW-06-0204	WU0359-3	87	76	122						0
07	RR-MW-06-0204	WU0359-6	64	54	73						0
08	A824-MW-01-0204	WU0359-7	83	76	93						0
09	A824-MW-02-0204	WU0359-8	65	63	79						0
10	A824-MW-03-0204	WU0359-9	79	67	74						0
11	KW-DUP-03-0204	WU0359-4RA	75	71	97						0
12	FC-MW-05-0204	WU0359-5RA	60	58	92						0
13	FC-MW-22-0204	WU0359-2DL3	D	D	D						0
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											

		QC LIMITS
S1	= 2-Methylnaphthalene-d1	(30-150)
S2	= Fluorene-d10	(30-150)
S3	= Pyrene-d10	(30-150)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 8
FL-PRO ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code:

Project: CTO297 NAS KEY WEST SDG No.: WU0359

GC Column: ZB-1 ID: 0.53 (mm) Init. Calib. Date(s): 01/15/04 01/15/04

Instrument ID: GC12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 18.20 S2 : 24.42

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
01	ICAL	FLPRO 5 UG/M	01/15/04	0329	18.20		24.42	
02	ICAL	FLPRO 20 UG/	01/15/04	0438	18.20		24.42	
03	ICAL	FLPRO 50 UG/	01/15/04	0548	18.20		24.42	
04	ICAL	FLPRO 100UG/	01/15/04	0658	18.20		24.42	
05	ICAL	FLPRO 200UG/	01/15/04	0809	18.20		24.42	
06	INDSOURCE	FLPRO IND	01/15/04	0919	18.20		24.42	
07	CV	FLPRO 50 UG/	02/26/04	1924	18.19		24.40	
08	WG5979-BLANK	WG5979-1	02/26/04	2034	18.19		24.41	
09	WG5979-LCS	WG5979-2	02/26/04	2144	18.20		24.40	
10	CV	FLPRO 50 UG/	02/27/04	0922	18.19		24.40	
11	FC-MW-22-020	WU0359-2	02/27/04	1032	18.20		24.40	
12	FC-MW-06-020	WU0359-3	02/27/04	1142	18.19		24.40	
13	KW-DUP-03-02	WU0359-4	02/27/04	1252	18.19		24.40	
14	FC-MW-05-020	WU0359-5	02/27/04	1402	18.20		24.40	
15	RR-MW-06-020	WU0359-6	02/27/04	1513	18.19		24.40	
16	A824-MW-01-0	WU0359-7	02/27/04	1623	18.20		24.40	
17	A824-MW-02-0	WU0359-8	02/27/04	1733	18.20		24.40	
18	A824-MW-03-0	WU0359-9	02/27/04	1843	18.20		24.40	
19	FC-MW-22-020	WG5979-3	02/27/04	1952	18.20		24.40	
20	FC-MW-22-020	WG5979-4	02/27/04	2103	18.20		24.41	

QC LIMITS

S1 = O-Terphenyl (+/- 0.36 MINUTES)
S2 = n-Triacontane-D62 (+/- 0.49 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
FL-PRO ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code:

Project: CTO297 NAS KEY WEST SDG No.: WU0359

GC Column: ZB-1 ID: 0.53 (mm) Init. Calib. Date(s): 01/15/04 01/15/04

Instrument ID: GC12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 18.20 S2 : 24.42

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
01	CV	FLPRO 50 UG/	02/28/04	0032	18.20	24.41
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS

S1 = O-Terphenyl (+/- 0.36 MINUTES)
S2 = n-Triacontane-D62 (+/- 0.49 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG5979-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code:

Project: CTO297 NAS KEY WEST SDG No.: WU0359

Lab File ID: CUB2051 Lab Sample ID: WG5979-1

Instrument ID: GC12 Date Extracted: 02/11/04

Matrix: (soil/water) WATER Date Analyzed: 02/26/04

Level: (low/med) LOW Time Analyzed: 2034

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	WG5979-LCS	WG5979-2	CUB2052	02/26/04	2144
02	FC-MW-22-0204	WU0359-2	CUB2063	02/27/04	1032
03	FC-MW-06-0204	WU0359-3	CUB2064	02/27/04	1142
04	KW-DUP-03-0204	WU0359-4	CUB2065	02/27/04	1252
05	FC-MW-05-0204	WU0359-5	CUB2066	02/27/04	1402
06	RR-MW-06-0204	WU0359-6	CUB2067	02/27/04	1513
07	A824-MW-01-0204	WU0359-7	CUB2068	02/27/04	1623
08	A824-MW-02-0204	WU0359-8	CUB2069	02/27/04	1733
09	A824-MW-03-0204	WU0359-9	CUB2070	02/27/04	1843
10	FC-MW-22-0204MS	WG5979-3	CUB2071	02/27/04	1952
11	FC-MW-22-0204MSD	WG5979-4	CUB2072	02/27/04	2103
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO297 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 02/11/04
Analysis Date: 02/26/04
Report Date: 03/01/2004
Matrix: WATER
% Solids: NA

Lab ID: WG5979-1
Client ID: WG5979-Blank
SDG: WU0359
Extracted by: JP
Extraction Method: SW846 3510
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5979
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	280
	n-Triacontane-D62		104%				
	O-Terphenyl		119%				

FORM 6
FL-PRO INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code:

Project CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GC12 Calibration Date(s): 01/15/04 01/15/04

Column: ZB-1 ID: 0.53 (mm) Calibration Time(s): 0329 0809

LAB FILE ID: RF5: CUA2058 RF20: CUA2059 RF50: CUA2060
RF100: CUA2061 RF200: CUA2062

COMPOUND	RF5	RF20	RF50	RF100	RF200	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2	MAX %RSD OR R^2
C-24	28608	115080	291160	567020	1159700	LINR	0.21946184	1.729e-004	0.99986	0.99000
C-8	29571	113520	285540	559500	1120700	LINR	-0.3179999	1.787e-004	0.99998	0.99000
C-10	44616	119260	291320	572080	1153100	LINR	-0.9962156	1.747e-004	0.99981	0.99000
C-12	8727	118790	296890	573940	1155400	LINR	0.67416490	1.722e-004	0.99955	0.99000
C-14	30797	116970	289990	572110	1157900	LINR	-5.64e-002	1.731e-004	0.99996	0.99000
C-16	30385	117240	293420	575020	1165800	LINR	-3.37e-002	1.72e-004	0.99994	0.99000
C-18	29940	116910	292420	573010	1166600	LINR	8.384e-002	1.719e-004	0.99991	0.99000
C-28	29723	116310	294110	572040	1164400	LINR	3.314e-002	1.722e-004	0.99990	0.99000
C-20	29610	116560	293280	571720	1164600	LINR	6.577e-002	1.722e-004	0.99990	0.99000
C-22	29259	116660	293340	572810	1169300	LINR	0.16148628	1.715e-004	0.99989	0.99000
FL-PRO peaks C8-C40	491470	1955200	4966100	9706200	2.e+007	LINR	0.84359268	1.732e-004	0.99994	0.99000
C-26	29407	115890	294330	572720	1167500	LINR	0.11742793	1.717e-004	0.99989	0.99000
C-38	28905	107560	279190	558160	1129200	LINR	0.41790430	1.771e-004	0.99995	0.99000
C-40	23709	102680	285040	550470	1136800	LINR	1.00039501	1.758e-004	0.99970	0.99000
C-30	31378	117890	295870	573650	1161900	LINR	-0.2570571	1.727e-004	0.99992	0.99000
C-32	29450	114070	293980	572950	1156100	LINR	-4.48e-002	1.732e-004	0.99995	0.99000
C-34	29113	115760	300230	585980	1178500	LINR	-2.36e-002	1.698e-004	0.99995	0.99000
C-36	28271	114090	296030	583060	1159300	LINR	-0.1381361	1.723e-004	0.99995	0.99000
O-Terphenyl	6399.80	6360.20	6552.40	6396.50	6295.50	AVRG		6400.87200	1.477	40.000
n-Triacontane-D62	5100.80	5099.40	5229.10	5106.60	5062.00	AVRG		5119.58333	1.245	40.000

FORM VI FL-PRO

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code:

Project: CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GC12 Calibration Date: 02/26/04 Time: 1924

Lab File ID: CUB2050 Init. Calib. Date(s): 01/15/04 01/15/04

Init. Calib. Times: 0329 0809

GC Column: ZB-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
C-24	48.790000	50.000000	5809.3000	0.01	-2.42	25.00	LINR
C-8	49.052000	50.000000	5531.8000	0.01	-1.90	25.00	LINR
C-10	49.467000	50.000000	5595.0000	0.01	-1.07	25.00	LINR
C-12	50.798000	50.000000	5913.9000	0.01	1.60	25.00	LINR
C-14	49.983000	50.000000	5895.1000	0.01	-0.03	25.00	LINR
C-16	48.902000	50.000000	5915.8000	0.01	-2.20	25.00	LINR
C-18	49.250000	50.000000	5927.7000	0.01	-1.50	25.00	LINR
C-28	48.774000	50.000000	5856.8000	0.01	-2.45	25.00	LINR
C-20	49.036000	50.000000	5886.7000	0.01	-1.93	25.00	LINR
C-22	49.067000	50.000000	5900.2000	0.01	-1.87	25.00	LINR
FL-PRO peaks C8-C40	838.36000	850.00000	5777.4000	0.01	-1.37	25.00	LINR
C-26	48.741000	50.000000	5854.8000	0.01	-2.52	25.00	LINR
C-38	50.176000	50.000000	5558.5000	0.01	0.35	25.00	LINR
C-40	50.513000	50.000000	4903.0000	0.01	1.03	25.00	LINR
C-30	48.947000	50.000000	5893.2000	0.01	-2.11	25.00	LINR
C-32	48.923000	50.000000	5852.5000	0.01	-2.15	25.00	LINR
C-34	48.836000	50.000000	5999.3000	0.01	-2.33	25.00	LINR
C-36	49.105000	50.000000	5921.8000	0.01	-1.79	25.00	LINR
O-Terphenyl	6400.9000	6597.0000	6597.0000	0.01	3.06	25.00	AVRG
n-Triacontane-D62	5119.6000	5212.1000	5212.1000	0.01	1.81	25.00	AVRG

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code:

Project: CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GC12 Calibration Date: 02/27/04 Time: 0922

Lab File ID: CUB2062 Init. Calib. Date(s): 01/15/04 01/15/04

Init. Calib. Times: 0329 0809

GC Column: ZB-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
C-24	48.885000	50.000000	5630.2000	0.01	-2.23	25.00	LINR
C-8	48.707000	50.000000	5485.9000	0.01	-2.59	25.00	LINR
C-10	49.526000	50.000000	5782.8000	0.01	-0.95	25.00	LINR
C-12	50.229000	50.000000	5754.2000	0.01	0.46	25.00	LINR
C-14	49.978000	50.000000	5779.4000	0.01	-0.04	25.00	LINR
C-16	49.624000	50.000000	5775.5000	0.01	-0.75	25.00	LINR
C-18	49.642000	50.000000	5766.7000	0.01	-0.72	25.00	LINR
C-28	48.819000	50.000000	5666.3000	0.01	-2.36	25.00	LINR
C-20	49.248000	50.000000	5713.2000	0.01	-1.50	25.00	LINR
C-22	49.216000	50.000000	5721.8000	0.01	-1.57	25.00	LINR
FL-PRO peaks C8-C40	839.61000	850.00000	5698.6000	0.01	-1.22	25.00	LINR
C-26	48.786000	50.000000	5668.8000	0.01	-2.43	25.00	LINR
C-38	50.399000	50.000000	5643.7000	0.01	0.80	25.00	LINR
C-40	48.973000	50.000000	5456.9000	0.01	-2.05	25.00	LINR
C-30	48.976000	50.000000	5702.5000	0.01	-2.05	25.00	LINR
C-32	49.052000	50.000000	5669.0000	0.01	-1.90	25.00	LINR
C-34	49.981000	50.000000	5890.6000	0.01	-0.04	25.00	LINR
C-36	49.566000	50.000000	5768.2000	0.01	-0.87	25.00	LINR
O-Terphenyl	6400.9000	6434.6000	6434.6000	0.01	0.53	25.00	AVRG
n-Triacontane-D62	5119.6000	5046.4000	5046.4000	0.01	-1.43	25.00	AVRG

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code:

Project: CTO297 NAS KEY WEST SDG No.: WU0359

Instrument ID: GC12 Calibration Date: 02/28/04 Time: 0032

Lab File ID: CUB2075 Init. Calib. Date(s): 01/15/04 01/15/04

Init. Calib. Times: 0329 0809

GC Column: ZB-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
C-24	50.433000	50.000000	5809.3000	0.01	0.87	25.00	LINR
C-8	49.117000	50.000000	5531.8000	0.01	-1.77	25.00	LINR
C-10	47.885000	50.000000	5595.0000	0.01	-4.23	25.00	LINR
C-12	51.605000	50.000000	5913.9000	0.01	3.21	25.00	LINR
C-14	50.979000	50.000000	5895.1000	0.01	1.96	25.00	LINR
C-16	50.831000	50.000000	5915.8000	0.01	1.66	25.00	LINR
C-18	51.026000	50.000000	5927.7000	0.01	2.05	25.00	LINR
C-28	50.460000	50.000000	5856.8000	0.01	0.92	25.00	LINR
C-20	50.741000	50.000000	5886.7000	0.01	1.48	25.00	LINR
C-22	50.745000	50.000000	5900.2000	0.01	1.49	25.00	LINR
FL-PRO peaks C8-C40	851.01000	850.00000	5777.4000	0.01	0.12	25.00	LINR
C-26	50.383000	50.000000	5854.8000	0.01	0.77	25.00	LINR
C-38	49.645000	50.000000	5558.5000	0.01	-0.71	25.00	LINR
C-40	44.103000	50.000000	4903.0000	0.01	-11.79	25.00	LINR
C-30	50.623000	50.000000	5893.2000	0.01	1.25	25.00	LINR
C-32	50.641000	50.000000	5852.5000	0.01	1.28	25.00	LINR
C-34	50.904000	50.000000	5999.3000	0.01	1.81	25.00	LINR
C-36	50.890000	50.000000	5921.8000	0.01	1.78	25.00	LINR
O-Terphenyl	6400.9000	6597.0000	6597.0000	0.01	3.06	25.00	AVRG
n-Triacontane-D62	5119.6000	5212.1000	5212.1000	0.01	1.81	25.00	AVRG

KATAHDIN ANALYTICAL SERVICES
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Client: Tetra Tech NUS, Inc
Project: CTO297 NAS KEY WEST
PO No:
Sample Date: 02/07/04
Received Date: 02/10/04
Extraction Date: 02/11/04
Analysis Date: 02/27/04
Report Date: 03/01/2004
Matrix: WATER

Lab ID: WG5979-3 & WG5979-4
Client ID: FC-MW-22-0204MS & FC-MW-22-0204MSD
SDG: WU0359
Extracted by: JP
Extraction Method: SW846 3510
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG5979
Units: ug/L

COMPOUND	MS SPIKE	MSD SPIKE	SAMPLE CONC.	MS CONC.	MSD CONC.	MS %REC.		MSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
Petroleum Range Organics	1700	1700	2700	3800	4600	65	*	112	19	30	41-101

FORM III SV-1

CUB2071.d & CUB2072.d

FORM 2
WATER FL-PRO SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code:

Project: CTO297 NAS KEY WEST SDG No.: WU0359

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 OTP#	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	WG5979-BLANK	WG5979-1	104	119							0
02	WG5979-LCS	WG5979-2	76	93							0
03	FC-MW-22-0204	WU0359-2	90	94							0
04	FC-MW-06-0204	WU0359-3	77	86							0
05	KW-DUP-03-0204	WU0359-4	81	90							0
06	FC-MW-05-0204	WU0359-5	70	75*							1
07	RR-MW-06-0204	WU0359-6	80	89							0
08	A824-MW-01-0204	WU0359-7	93	101							0
09	A824-MW-02-0204	WU0359-8	77	84							0
10	A824-MW-03-0204	WU0359-9	68	79*							1
11	FC-MW-22-0204MS	WG5979-3	68	80*							1
12	FC-MW-22-0204MSD	WG5979-4	88	99							0
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											

		QC LIMITS
S1	= n-Triacontane-D62	(42-193)
S2 (OTP)	= O-Terphenyl	(82-142)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0402235

Work Order Summary

CLIENT:	Ms. Andrea Colby Katahdin Laboratory 340 County Road, #5 West Brook, ME 04092	**BILL TO:**	Ms. Andrea Colby Katahdin Laboratory 340 County Road, #5 West Brook, ME 04092
PHONE:	207-874-2400	**P.O. #**	
FAX:	207-775-4029	**PROJECT #**	WU0359 Keywest
DATE RECEIVED:	2/13/2004	**CONTACT:**	Betty Chu
DATE COMPLETED:	2/25/2004		

FRACTION #	NAME	TEST
01A	RR-MW-06-0204	Mod RSK-175
02A	A824-MW-01-0204	Mod RSK-175
03A	A824-MW-02-0204	Mod RSK-175
04A	A824-MW-03-0204	Mod RSK-175
05A	Lab Blank	Mod RSK-175
06A	LCS	Mod RSK-175

CERTIFIED BY: Linda D. Truman DATE: 02/26/04

Laboratory Director

Certfication numbers: AR DEQ - 03-084-0, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/03, Expiration date: 06/30/04
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified RSK 175
Katahdin Laboratory
Workorder# 0402235

Four VOA Vial-40 mL samples were received on February 13, 2004. The laboratory performed analysis via Modified RSK 175 for Methane, Ethane and Ethene using GC/FID. The method involves placing an aliquot of the sample in a headspace vial. The vial is then placed into HP7694 Headspace Autosampler equipped with oven, shaker and 1 mL sample loop. Sample is incubated and then equilibrated at 40°C for 15 minutes with high agitation. Finally, a direct injection of the headspace is performed. See the data sheets for the reporting limits for each compound.

Requirement	*RSK 175*	*ATL Modifications*
Sample Collection	Collect sample in 60 mL crimp-top vial.	Collect sample in 40 mL VOA vial.
Headspace Generation	Headspace is generated in 60 mL sample vial by displacing volume of liquid with Helium. The amount of liquid should be 10% of sample volume in bottle, up to 10 mL.	5.0 mL of sample is displaced with 5.0 mL Nitrogen and transferred to a Nitrogen purged and capped autosampler vial. Headspace is then generated in the autosampler vial.
Sample Preparation	Sample is shaken 5 min. to equilibrate analyte between headspace and liquid phase.	Prior to injection, autosampler shakes sample for 15 min. while heating to 40°C.
Headspace Injection	Syringe injection of 300 mL headspace into GC.	Autosampler pressurizes sample to fill 1.0 mL loop with headspace sample.
Calibration and Quantitation	Direct injections of gas phase standards are used to obtain a Calibration Curve. Henry's Law is used to calculate mg of gas per Liter of water. Calculation requires recording total volume of serum bottle and headspace, and sample temperature.	Calibration standards are prepared by addition of a gaseous spike solution to clean water. Response factors are calculated for each level of a multi point calibration, and the mean is used to calculate quantitation for each target analyte.
Initial Calibration Curve (ICAL)	Linear regression	% RSD </= 30%, use average RF to quantify results
Lab Blanks	Blank subtraction is performed.	No blank subtraction; Lab Blank must be less than the Reporting Limit.
Specified Detectors	FID or ECD	FID or TCD

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

0002

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
RR-MW-06-0204	0402235-01A	2/ 9/2004	2/13/2004	NA	10	2/19/2004	NA	Good
A824-MW-01-0204	0402235-02A	2/ 9/2004	2/13/2004	NA	10	2/19/2004	NA	Good
A824-MW-02-0204	0402235-03A	2/ 9/2004	2/13/2004	NA	10	2/19/2004	NA	Good
A824-MW-03-0204	0402235-04A	2/ 9/2004	2/13/2004	NA	10	2/19/2004	NA	Good
Lab Blank	0402235-05A	NA	NA	NA	NA	2/19/2004	NA	Good
LCS	0402235-06A	NA	NA	NA	NA	2/19/2004	NA	Good

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0402235-05A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7021903	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	2/19/04 10:32 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Ethane	0.010	Not Detected
Ethene	0.010	Not Detected

Container Type: NA - Not Applicable

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 11-APR-2003 11:42
End Cal Date : 11-APR-2003 14:02
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/gc7.i/16Jul2003.b/38100411m5a.m
Cal Date : 17-Jul-2003 10:52 atoyama
Curve Type : Average

Calibration File Names:
Level 1: /chem/gc7.i/11Apr2003.b/7041103.d
Level 2: /chem/gc7.i/11Apr2003.b/7041104.d
Level 3: /chem/gc7.i/11Apr2003.b/7041105.d
Level 4: /chem/gc7.i/11Apr2003.b/7041106.d
Level 5: /chem/gc7.i/11Apr2003.b/7041107.d
Level 6: /chem/gc7.i/11Apr2003.b/7041108.d

Compound	0.00500 Level 1	0.02700 Level 2	0.06700 Level 3	1.330 Level 4	6.651 Level 5	133.028 Level 6	___ RRF	% RSD
1 Methane	23473600	20391519	18145642	19641331	15588518	18737320	19329655	13.519
2 Ethylene	22286222	21228170	19317603	20626919	16449448	+++++	19981673	11.246
3 Ethane	23052444	20508100	18422992	19735760	15755809	+++++	19495021	13.781
4 Propene	23241100	22213288	19741557	20499315	15275004	23483000	20742211	14.761
5 Propane	24163100	21716018	19656431	20275345	15092413	22819091	20620400	15.365

Report Date: 19-Feb-2004 10:28

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc7.i Injection Date: 19-FEB-2004 09:50
Lab File ID: 7021901.d Init. Cal. Date(s): 11-APR-2003 11-APR-2003
Analysis Type: AIR Init. Cal. Times: 11:42 14:02
Lab Sample ID: ccv Quant Type: ESTD
Method: /chem/gc7.i/19Feb2004.b/38100411m5a.m

COMPOUND	RRF / AMOUNT	RF0.000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Methane	19329655	21171226	0.100	-9.52718	30.00000	Averaged
2 Ethylene	19981673	22566754	0.010	-12.93726	30.00000	Averaged
3 Ethane	19495021	21389114	0.010	-9.71578	30.00000	Averaged

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0402235-06A

MODIFIED METHOD RSK-175 GC/FID

File Name:	702902	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 2/9/04 10:11 AM	

Compound	%Recovery
Methane	92
Ethane	96
Ethene	97

Container Type: NA - Not Applicable

Field Duplicates - WU0359

	Sample		Duplicate		RPD %	Difference
	FC-MW-06-0204		KW-DUP-03-0204			
	UG/L		UG/L			
Benzene	0.3	J	0.3	J	0.0	0
Ethylbenzene	0.4	J	0.4	J	0.0	0
m+p-xylenes	0.4	J	0.4	J	0.0	0
total xylenes	0.4	J	0.4	J	0.0	0
1-Methylnaphthalene	0.098	J	0.091	J	7.4	0
Naphthalene	0.099	J	0.088	J	11.8	0

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **C. BRYAN** **DATE:** **MARCH 18, 2004**

FROM: **ETHAN G. LEE** **COPIES:** **DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – LEAD AND MISCELLANEOUS PARAMETERS**
NAS KEY WEST – CTOs 301/318
SAMPLE DELIVERY GROUP (SDG) – WU0359

SAMPLES: 8/AQUEOUS/

FC-MW-05-0204	FC-MW-06-0204	FC-MW-22-0204
KW-DUP-03-0204	A824-MW-01-0204	A824-MW-02-0204
A824-MW-03-0204	RR-MW-06-0204	

Overview

The sample set for NAS Key West, CTOs 301/318, SDG WU0359, consists of eight (8) aqueous environmental samples. One (1) field duplicate pair (KW-DUP-03-0204 / FC-MW-06-0204) was included in this SDG.

The samples were analyzed for lead, nitrate, and sulfate. The samples were collected by Tetra Tech NUS on February 7 and 9, 2004 and analyzed by Katahdin Analytical Services. Lead analyses were conducted using SW846 method 6010B. Nitrate analyses were conducted using EPA method 353.2. Sulfate analyses were conducted using EPA method 375.4.

Metals analyses were conducted using Inductively Coupled Plasma (ICP) methodologies.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Recoveries
* • Laboratory Blank Analyses
* • Field Duplicate Results
  • Detection Limits

Detection Limits

The positive results reported for nitrate between the laboratory's practical quantitation limit (PQL) and the method detection limit (MDL) were qualified as estimated (J) due to uncertainty near the detection limit.

Executive Summary

Laboratory Performance: No laboratory quality control issues were noted for this SDG.

Other Factors Affecting Data Quality: Nitrate was qualified due to uncertainty near the detection limit.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", July 2002 and the NFESC document entitled "Navy IRCDQM" (September 1999).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Ethan G. Lee
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 - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % 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 (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.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 less than sample activity

PROJ_NO: 5658

SDG: WU0359 MEDIA: WATER DATA FRACTION: M

nsample	FC-MW-05-0204
samp_date	2/7/2004
lab_id	WU0359-005
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	1.56	U	

nsample	FC-MW-06-0204
samp_date	2/7/2004
lab_id	WU0359-003
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	1.56	U	

nsample	FC-MW-22-0204
samp_date	2/7/2004
lab_id	WU0359-002
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	42		

PROJ_NO: 5658

SDG: WU0359 MEDIA: WATER DATA FRACTION: M

nsample	KW-DUP-03-0204
samp_date	2/7/2004
lab_id	WU0359-004
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	FC-MW-06-0204

Parameter	Result	Val Qual	Qual Code
LEAD	1.56	U	

PROJ_NO: 4779

SDG: WU0359 MEDIA: WATER DATA FRACTION: M

nsample	A824-MW-01-0204	nsample	A824-MW-02-0204	nsample	A824-MW-03-0204
samp_date	2/9/2004	samp_date	2/9/2004	samp_date	2/9/2004
lab_id	WU0359-007	lab_id	WU0359-008	lab_id	WU0359-009
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	1.56	U	

Parameter	Result	Val Qual	Qual Code
LEAD	1.56	U	

Parameter	Result	Val Qual	Qual Code
LEAD	1.56	U	

PROJ_NO: 4779

SDG: WU0359 MEDIA: WATER DATA FRACTION: M

nsample	RR-MW-06-0204
samp_date	2/9/2004
lab_id	WU0359-006
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	1.56	U	

PROJ_NO: 4779

SDG: WU0359 MEDIA: WATER DATA FRACTION: MISC

nsample	A824-MW-01-0204	nsample	A824-MW-02-0204	nsample	A824-MW-03-0204
samp_date	2/9/2004	samp_date	2/9/2004	samp_date	2/9/2004
lab_id	WU0359-7	lab_id	WU0359-8	lab_id	WU0359-9
qc_type	NM	qc_type	NM	qc_type	NM
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.59		
SULFATE	MG/L	88		

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.078		
SULFATE	MG/L	450		

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.018	J	P
SULFATE	MG/L	100		

PROJ_NO: 4779

SDG: WU0359 MEDIA: WATER DATA FRACTION: MISC

nsample	RR-MW-06-0204
samp_date	2/9/2004
lab_id	WU0359-6
qc_type	NM
Pct_Solids	
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.032	J	P
SULFATE	MG/L	200		

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** A824-MW-01-0204

Matrix: WATER **SDG Name:** WU0359

Percent Solids: 0.00 **Lab Sample ID:** WU0359-007

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.56	U		P	1	5.0	1.56

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** A824-MW-02-0204

Matrix: WATER **SDG Name:** WU0359

Percent Solids: 0.00 **Lab Sample ID:** WU0359-008

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.56	U		P	1	5.0	1.56

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** A824-MW-03-0204

Matrix: WATER **SDG Name:** WU0359

Percent Solids: 0.00 **Lab Sample ID:** WU0359-009

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.56	U		P	1	5.0	1.56

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** RR-MW-06-0204

Matrix: WATER **SDG Name:** WU0359

Percent Solids: 0.00 **Lab Sample ID:** WU0359-006

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.56	U		P	1	5.0	1.56

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** FC-MW-05-0204

Matrix: WATER **SDG Name:** WU0359

Percent Solids: 0.00 **Lab Sample ID:** WU0359-005

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.56	U		P	1	5.0	1.56

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** FC-MW-06-0204

Matrix: WATER **SDG Name:** WU0359

Percent Solids: 0.00 **Lab Sample ID:** WU0359-003

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.56	U		P	1	5.0	1.56

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** FC-MW-22-0204

Matrix: WATER **SDG Name:** WU0359

Percent Solids: 0.00 **Lab Sample ID:** WU0359-002

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	42.0			P	1	5.0	1.56

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** KW-DUP-03-0204

Matrix: WATER **SDG Name:** WU0359

Percent Solids: 0.00 **Lab Sample ID:** WU0359-004

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.56	U		P	1	5.0	1.56

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU0359-7
Report Date: 01-MAR-04
Client PO: MSA-0402-N4113-05 N5079
Project: CTO297 NAS KEY WEST
SDG: WU0359

Sample Description	Matrix	Date Sampled	Date Received
A824-MW-01-0204	AQ	09-FEB-04	10-FEB-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	0.59 mg/L	.05	EPA 353.2	WG5970	10-FEB-04	PAG	N/A	N/A	N/A	
Sulfate-Turbidimetric	88. mg/L	10	EPA 375.4	WG6264	27-FEB-04	KGT	N/A	N/A	N/A	

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU0359-8
Report Date: 01-MAR-04
Client PO: MSA-0402-N4113-05 N5079
Project: CTO297 NAS KEY WEST
SDG: WU0359

Sample Description	Matrix	Date Sampled	Date Received
A824-MW-02-0204	AQ	09-FEB-04	10-FEB-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	0.078 mg/L	.05	EPA 353.2	WG5970	10-FEB-04	PAG	N/A	N/A	N/A	
Sulfate-Turbidimetric	450 mg/L	20	EPA 375.4	WG6264	27-FEB-04	KGT	N/A	N/A	N/A	

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU0359-9
Report Date: 01-MAR-04
Client PO: MSA-0402-N4113-05 N5079
Project: CTO297 NAS KEY WEST
SDG: WU0359

Sample Description	Matrix	Date Sampled	Date Received
A824-MW-03-0204	AQ	09-FEB-04	10-FEB-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	J0.018 mg/L	.05	EPA 353.2	WG5970	10-FEB-04	PAG	N/A	N/A	N/A	
Sulfate-Turbidimetric	100 mg/L	10	EPA 375.4	WG6264	27-FEB-04	KGT	N/A	N/A	N/A	

Katahdin
ANALYTICAL SERVICES

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Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU0359-6
Report Date: 01-MAR-04
Client PO: MSA-0402-N4113-05 N5079
Project: CTO297 NAS KEY WEST
SDG: WU0359

Sample Description	Matrix	Date Sampled	Date Received
RR-MW-06-0204	AQ	09-FEB-04	10-FEB-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	J0.032 mg/L	.05	EPA 353.2	WG5970	10-FEB-04	PAG	N/A	N/A	N/A	
Sulfate-Turbidimetric	200 mg/L	10	EPA 375.4	WG6264	27-FEB-04	KGT	N/A	N/A	N/A	

APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG 0402235

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	A824-MW-01-0204	WU0359-007	NM	02/09/2004	02/20/2004	02/25/2004	11	5	16
M	UG/L	A824-MW-02-0204	WU0359-008	NM	02/09/2004	02/20/2004	02/25/2004	11	5	16
M	UG/L	A824-MW-03-0204	WU0359-009	NM	02/09/2004	02/20/2004	02/25/2004	11	5	16
M	UG/L	FC-MW-05-0204	WU0359-005	NM	02/07/2004	02/20/2004	02/25/2004	13	5	18
M	UG/L	FC-MW-06-0204	WU0359-003	NM	02/07/2004	02/20/2004	02/25/2004	13	5	18
M	UG/L	FC-MW-22-0204	WU0359-002	NM	02/07/2004	02/20/2004	02/25/2004	13	5	18
M	UG/L	KW-DUP-03-0204	WU0359-004	NM	02/07/2004	02/20/2004	02/25/2004	13	5	18
M	UG/L	RR-MW-06-0204	WU0359-006	NM	02/09/2004	02/20/2004	02/25/2004	11	5	16
NTA	MG/L	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/10/2004	02/10/2004	1	0	1
NTA	MG/L	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/10/2004	02/10/2004	1	0	1
NTA	MG/L	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/10/2004	02/10/2004	1	0	1
NTA	MG/L	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/10/2004	02/10/2004	1	0	1
SO4	MG/L	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/27/2004	02/27/2004	18	0	18
SO4	MG/L	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/27/2004	02/27/2004	18	0	18
SO4	MG/L	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/27/2004	02/27/2004	18	0	18

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SO4	MG/L	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/27/2004	02/27/2004	18	0	18
OS	%	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25
OS	%	KW-DUP-03-0204RA	WU0359-4RA	NM	02/07/2004	02/13/2004	03/05/2004	6	21	27
OS	%	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25
OS	%	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25
OS	%	FC-MW-05-0204RA	WU0359-5RA	NM	02/07/2004	02/13/2004	03/05/2004	6	21	27
OS	%	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/13/2004	03/04/2004	6	20	26
OS	%	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/13/2004	03/03/2004	6	19	25
OS	%	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25
OS	%	FC-MW-22-0204	WU0359-2DL3	NM	02/07/2004	02/13/2004	03/07/2004	6	23	29
OS	UG/L	FC-MW-22-0204	WU0359-2DL3	NM	02/07/2004	02/13/2004	03/07/2004	6	23	29
OS	UG/L	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25
OS	UG/L	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25
OS	UG/L	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25
OS	UG/L	FC-MW-05-0204RA	WU0359-5RA	NM	02/07/2004	02/13/2004	03/05/2004	6	21	27
OS	UG/L	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/13/2004	03/03/2004	6	19	25
OS	UG/L	KW-DUP-03-0204RA	WU0359-4RA	NM	02/07/2004	02/13/2004	03/05/2004	6	21	27
OS	UG/L	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/13/2004	03/05/2004	4	21	25

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OS	UG/L	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/13/2004	03/04/2004	6	20	26
EDB	%	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	%	KW-DUP-03-0204	WU0359-4	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
EDB	%	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
EDB	%	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
EDB	%	FC-MW-05-0204	WU0359-5	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
EDB	%	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	%	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	%	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	UG/L	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	UG/L	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	UG/L	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	UG/L	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/18/2004	02/18/2004	9	0	9
EDB	UG/L	FC-MW-05-0204	WU0359-5	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
EDB	UG/L	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
EDB	UG/L	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
EDB	UG/L	KW-DUP-03-0204	WU0359-4	NM	02/07/2004	02/18/2004	02/18/2004	11	0	11
OV	%	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	%	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
OV	%	KWTB-020904	WU0359-1	NM	01/26/2004	02/13/2004	02/13/2004	18	0	18
OV	%	KW-DUP-03-0204	WU0359-4	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6
OV	%	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6
OV	%	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
OV	%	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
OV	%	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
OV	%	FC-MW-05-0204	WU0359-5	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6
OV	UG/L	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
OV	UG/L	KWTB-020904	WU0359-1	NM	01/26/2004	02/13/2004	02/13/2004	18	0	18
OV	UG/L	FC-MW-05-0204	WU0359-5	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6
OV	UG/L	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6
OV	UG/L	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
OV	UG/L	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
OV	UG/L	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6
OV	UG/L	KW-DUP-03-0204	WU0359-4	NM	02/07/2004	02/13/2004	02/13/2004	6	0	6
OV	UG/L	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/13/2004	02/13/2004	4	0	4
ETHA	UG/ML	RR-MW-06-0204	0402235-01A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
ETHA	UG/ML	A824-MW-02-0204	0402235-03A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
ETHA	UG/ML	A824-MW-03-0204	0402235-04A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
ETHA	UG/ML	A824-MW-01-0204	0402235-02A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
ETHE	UG/ML	RR-MW-06-0204	0402235-01A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
ETHE	UG/ML	A824-MW-03-0204	0402235-04A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
ETHE	UG/ML	A824-MW-02-0204	0402235-03A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
ETHE	UG/ML	A824-MW-01-0204	0402235-02A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
METH	UG/ML	RR-MW-06-0204	0402235-01A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
METH	UG/ML	A824-MW-01-0204	0402235-02A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
METH	UG/ML	A824-MW-02-0204	0402235-03A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
METH	UG/ML	A824-MW-03-0204	0402235-04A	NM	02/09/2004	02/19/2004	02/19/2004	10	0	10
TPH	%	KW-DUP-03-0204	WU0359-4	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20
TPH	%	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	%	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	%	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	%	FC-MW-05-0204	WU0359-5	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20
TPH	%	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20
TPH	%	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TPH	%	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	UG/L	FC-MW-06-0204	WU0359-3	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20
TPH	UG/L	KW-DUP-03-0204	WU0359-4	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20
TPH	UG/L	A824-MW-01-0204	WU0359-7	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	UG/L	A824-MW-02-0204	WU0359-8	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	UG/L	A824-MW-03-0204	WU0359-9	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	UG/L	FC-MW-05-0204	WU0359-5	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20
TPH	UG/L	RR-MW-06-0204	WU0359-6	NM	02/09/2004	02/11/2004	02/27/2004	2	16	18
TPH	UG/L	FC-MW-22-0204	WU0359-2	NM	02/07/2004	02/11/2004	02/27/2004	4	16	20

WUC358

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 3832 | PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
CTO 301/318	NAS Key West	Chuck Bryan	803-649-7963x345	Katahdin - Andrea Colby
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
Emily McRee [signature]		Emily McRee	786-295-7331	340 County Rd. No.5
		CARRIER/WAYBILL NUMBER		CITY, STATE
		834182781646		Westbrook, ME 04092

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G, G, G, G, P, G, P

PRESERVATIVE USED: HCl, —, HCl, HCl, HNO3, HCl, —

TYPE OF ANALYSIS

DATE YEAR 2004	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	PPL VOHs + BTEX MTBE	PAH + 1-2-methyl-naphthalene	TRPH	EDB	Lead	Methane	Nitrate+Sulfate	COMMENTS
1/26	0950	KWTB-020904	—	—	—	QC	G	2	2							
2/7	1025	FC-MW-22-0204	FC-MW-22	—	—	GW	G	30	9	6	6	6	3✓			MS/MSD
2/7	1020	FC-MW-06-0204	FC-MW-06			GW	G	10	3	2	2	2	1✓			
2/7	0000	KW-DUP-03-0204	—	—	—	GW	G	10	3	2	2	2	1✓			
2/7	1220	FC-MW-05-0204	FC-MW-05	—	—	GW	G	10	3	2	2	2	1✓			
2/9	0925	RR-MW-06-0204	RR-MW-06	—	—	GW	G	13	3	2	2	2	1✓	2	1✓	
2/9	0830	A824-MW-01-0204	A824-MW-01	—	—	GW	G	13	3	2	2	2	1✓	2	1✓	
2/9	1130	A824-MW-02-0204	A824-MW-02	—	—	GW	G	13	3	2	2	2	1✓	2	1✓	
2/9	1105	A824-MW-03-0204	A824-MW-03	—	—	GW	G	13	3	2	2	2	1✓	2	1✓	

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY: Emily McRee	2/9/04	1600	1. RECEIVED BY: [signature]	2/10/04	0900
2. RELINQUISHED BY			2. RECEIVED BY		
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

1100000

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE NAS KEY WEST CTO 297
TASK ORDER MANAGER: CHARLES BRYAN
WU0359

Sample Receipt

The following samples were received on February 10, 2004 and were logged in under Katahdin Analytical Services work order number WU0359 for a hardcopy due date of March 5, 2004.

KATAHDIN Sample No.	TTNUS Sample Identification
WU0359-1	KWTB-020904
WU0359-2	FC-MW-22-0204
WU0359-3	FC-MW-06-0204
WU0359-4	KW-DUP-03-0204
WU0359-5	FC-MW-05-0204
WU0359-6	RR-MW-06-0204
WU0359-7	A824-MW-01-0204
WU0359-8	A824-MW-02-0204
WU0359-9	A824-MW-03-0204

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.

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, **Andrea J. Colby**. This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order WU0359 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, Office of Solid Waste and Emergency Response, U.S. EPA and/or Method for Determination of Petroleum Range Organics (Method #FL-PRO), Florida Department of Environmental Protection, November 1, 1995, and/or "Methods for the Determination of Organic Compounds in Drinking Water", U.S. EPA, Environmental Monitoring and Support Laboratory - Cincinnati (September 1995), and/or for the specific methods listed below or on the Report of Analysis. A matrix spike and matrix spike duplicate sample analysis was performed on sample WU0359-2, as per client request. Some manual integrations may have been performed due to split peaks and/or corrected baselines. All have been flagged with a "M" (software-generated) on the pertinent quantitation report.

FL-PRO Analysis

Samples WU0359-5 and 9 and the matrix spike sample, WG5979-3, had recoveries for the surrogate, o-terphenyl that were low and outside of the method acceptance limits. Since the recoveries for the second surrogate were acceptable, the samples were not reextracted.

The matrix spike duplicate sample, WG5979-4, had a PRO recovery of 112%, which is above the method acceptance limit of 101% and is likely due to matrix interference. Since the matrix spike sample, WG5979-3, and the laboratory control sample, WG5979-2, had acceptable recoveries, the associated samples were not reextracted.

8260B Analysis

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived for the full list of spiked compounds. The acceptance limits for the MS/MSD are for a short list of the spiked compounds. Katahdin standard operating procedure is not to take corrective action until greater than ten percent of the spiked analytes (with the exception of the common laboratory contaminants acetone and methylene chloride) in the LCS are outside of the QC limits.

8270C SIM Analysis

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived for the full list of spiked compounds. The acceptance limits for the MS/MSD are for a short list of the spiked compounds. Katahdin standard operating procedure is not to take corrective action until greater than ten percent of the spiked analytes (with the exception of the common laboratory phthalate ester contaminants) in the LCS are outside of the QC limits.

The initial calibration analyzed on the X instrument 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 surrogate 2-methylnaphthalene-d10 failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient being less than the method acceptance criteria of 0.990. This compound was calibrated using the average model.

504 Analysis

The opening and closing CV's (files 3UB1202 and 3UB1219) had high responses for the surrogate TCMX on Channel A, which resulted in %D's that were outside of the method acceptance limit. Since the surrogate on the B channel was acceptable, the associated samples were not reanalyzed. The surrogate recoveries may be biased high on channel A.

Samples WU0359-2, 4, 6, 8, the laboratory control duplicate sample (WG6101-3) and the matrix spike samples (WG6101-4 and 5) have high recoveries for the surrogate TCMX on channel A that are outside of laboratory established acceptance limits. Since the surrogate on the second channel was acceptable, the samples were not reextracted.

Sample WU0359-9 and the laboratory method blank WG6101-1 had a high recovery for the surrogate TCMX on both channels that is outside of laboratory established acceptance limits. Since a high recovery

would indicate a high bias and the samples did not detect any target analytes above the MDL, the samples were not reanalyzed.

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

Metals Analysis

The samples of Katahdin SDG WU0359 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Waste", SW-846, November 1986, Third Edition.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Aqueous-matrix Katahdin Sample Nos. WU0359-(2-9) were digested for ICP analysis on 02/20/04 (QC Batch UB20ICW0) in accordance with USEPA Method 3050B. Katahdin Sample No. WU0359-2 was prepared with duplicate matrix-spiked aliquots.

ICP analyses of the Katahdin SDG WU0359 sample digestates were performed in accordance with USEPA Method 6010B, using a Thermo Jarrell Ash (TJA) Trace ICP. All samples were analyzed within holding times and all QC criteria were met with the following comments or exceptions:

Some of the results for run QC samples (ICV, ICB, CCV, CCB, ICSA, and ICSAB) included in the accompanying data package may have exceeded acceptance limits for some elements. Please note that all client samples and batch QC samples associated with out-of-control results for run QC samples were subsequently reanalyzed for the analytes in question.

Matrix QC Summary

The matrix-spiked aliquots of Katahdin Sample No. WU0359-2 was within the laboratory's acceptance criteria (75% - 125% recovery of the added element, if the native concentration is less than four times the amount added) for lead.

The matrix spike duplicate analysis of Katahdin Sample No. WU0359-2 was within the laboratory's acceptance limit (<20% relative difference between duplicate matrix spiked aliquots) for lead.

The serial dilution analyses of Katahdin Sample No. WU0359-2 was within the laboratory's ICP serial dilution acceptance limit (<10% difference between the original sample result and the result for a 5-fold dilution of the sample, if the result for the dilution is at least ten times the instrument detection limit) for lead.

Wet Chemistry Analysis

The samples of Work Order WU0359 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for nitrate and sulfate were performed according to "Methods for Chemical Analysis of Water and Wastes", EPA 600/4-79-020, 1979 Revised 1983, U.S. EPA.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Practical Quantitation Limit (PQL) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U PQL", where "PQL" is the numerical value of the Practical Quantitation Limit.

All analyses were performed within analytical hold times, and all quality control criteria were met. No deviations were noted by the Wet Chemistry group.

Subcontracted Analysis

Analyses for Methane were performed by a subcontract laboratory. Please refer to the subcontracted section of the data package.

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 Laboratory Manager, Quality Assurance Officer, or the Data Management Supervisor as verified by the following signature.

Maria Crouch
03.09.04
Maria Crouch
Quality Assurance Officer

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: WU0359 **SOW No.** SW846

Client Field ID	Lab Sample ID
A824-MW-01-0204	WU0359-007
A824-MW-02-0204	WU0359-008
A824-MW-03-0204	WU0359-009
FC-MW-05-0204	WU0359-005
FC-MW-06-0204	WU0359-003
FC-MW-22-0204	WU0359-002
FC-MW-22-0204	WU0359-002P
FC-MW-22-0204	WU0359-002S
KW-DUP-03-0204	WU0359-004
RR-MW-06-0204	WU0359-006

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: Molly Fabbricank Name: Molly Fabbricank

Date: 3.2.04 Title: Chemist

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Concentration Units: ug/L

SAMPLE: ICV

File: AUB23A Feb 23, 2004 16:50

Analyte	True	Found	%R (1)
ALUMINUM	20000.0	18181.91	90.9
CALCIUM	20000.0	19726.77	98.6
IRON	20000.0	19915.08	99.6
LEAD	550.0	544.60	99.0
MAGNESIUM	20000.0	20044.40	100.2

SAMPLE: CCV

File: AUB23A Feb 23, 2004 17:47

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	47794.26	95.6
CALCIUM	50000.0	50742.88	101.5
IRON	20000.0	19889.19	99.4
LEAD	1000.0	999.69	100.0
MAGNESIUM	50000.0	50473.20	100.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Concentration Units: ug/L

SAMPLE: CCV

File: AUB23A Feb 23, 2004 19:12

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	46979.94	94.0
CALCIUM	50000.0	50879.40	101.8
IRON	20000.0	19846.03	99.2
LEAD	1000.0	1009.60	101.0
MAGNESIUM	50000.0	50024.96	100.0

SAMPLE: CCV

File: AUB23A Feb 23, 2004 20:26

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	47947.86	95.9
CALCIUM	50000.0	51481.39	103.0
IRON	20000.0	19995.89	100.0
LEAD	1000.0	1033.74	103.4
MAGNESIUM	50000.0	50699.19	101.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Concentration Units: ug/L

SAMPLE: CCV

File: AUB23A Feb 23, 2004 20:59

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	46440.58	92.9
CALCIUM	50000.0	51504.66	103.0
IRON	20000.0	19996.48	100.0
LEAD	1000.0	1040.87	104.1
MAGNESIUM	50000.0	50045.42	100.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Concentration Units: ug/L

SAMPLE: ICV

File: AUB25A Feb 25, 2004 10:46

Analyte	True	Found	%R (1)
ALUMINUM	20000.0	18410.40	92.1
CALCIUM	20000.0	20016.84	100.1
IRON	20000.0	20143.76	100.7
LEAD	550.0	550.82	100.1
MAGNESIUM	20000.0	20308.35	101.5

SAMPLE: ICV

File: AUB25A Feb 25, 2004 10:54

Analyte	True	Found	%R (1)
ALUMINUM	20000.0	18655.13	93.3
CALCIUM	20000.0	20274.67	101.4
IRON	20000.0	20417.06	102.1
LEAD	550.0	557.74	101.4
MAGNESIUM	20000.0	20542.34	102.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Concentration Units: ug/L

SAMPLE: CCV

File: AUB25A Feb 25, 2004 11:38

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	47915.06	95.8
CALCIUM	50000.0	50512.04	101.0
IRON	20000.0	19817.83	99.1
LEAD	1000.0	992.86	99.3
MAGNESIUM	50000.0	50557.57	101.1

SAMPLE: CCV

File: AUB25A Feb 25, 2004 12:59

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	48832.92	97.7
CALCIUM	50000.0	51387.33	102.8
IRON	20000.0	20096.64	100.5
LEAD	1000.0	1003.26	100.3
MAGNESIUM	50000.0	51213.65	102.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Concentration Units: ug/L

SAMPLE: CCV

File: AUB25A Feb 25, 2004 14:19

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	48750.12	97.5
CALCIUM	50000.0	51670.25	103.3
IRON	20000.0	20125.99	100.6
LEAD	1000.0	1001.42	100.1
MAGNESIUM	50000.0	51057.62	102.1

SAMPLE: CCV

File: AUB25A Feb 25, 2004 15:40

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	48755.66	97.5
CALCIUM	50000.0	52800.69	105.6
IRON	20000.0	20503.54	102.5
LEAD	1000.0	1028.27	102.8
MAGNESIUM	50000.0	51698.47	103.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Concentration Units: ug/L

SAMPLE: CCV

File: AUB25A Feb 25, 2004 17:02

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	47575.19	95.2
CALCIUM	50000.0	52226.97	104.5
IRON	20000.0	20164.93	100.8
LEAD	1000.0	1021.34	102.1
MAGNESIUM	50000.0	50720.66	101.4

SAMPLE: CCV

File: AUB25A Feb 25, 2004 18:22

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	47939.40	95.9
CALCIUM	50000.0	53501.94	107.0
IRON	20000.0	20606.79	103.0
LEAD	1000.0	1055.33	105.5
MAGNESIUM	50000.0	51490.83	103.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Concentration Units: ug/L

SAMPLE: CCV

File: AUB25A Feb 25, 2004 19:23

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	47056.90	94.1
CALCIUM	50000.0	53468.96	106.9
IRON	20000.0	20630.88	103.2
LEAD	1000.0	1074.42	107.4
MAGNESIUM	50000.0	51146.42	102.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWUB20ICW0

Matrix: WATER **SDG Name:** WU0359

QC Batch ID: UB20ICW0

Concentration Units : ug/L

Analyte	RESULT	C
LEAD	1.560	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Concentration Units: ug/L

SAMPLE: ICB

File: AUB23A Feb 23, 2004 16:56

Analyte	Result	C
ALUMINUM	29.20	U
CALCIUM	12.40	U
IRON	13.90	U
LEAD	1.56	U
MAGNESIUM	5.65	U

SAMPLE: CCB

File: AUB23A Feb 23, 2004 17:54

Analyte	Result	C
ALUMINUM	29.20	U
CALCIUM	12.40	U
IRON	13.90	U
LEAD	1.56	U
MAGNESIUM	5.65	U

SAMPLE: CCB

File: AUB23A Feb 23, 2004 19:19

Analyte	Result	C
ALUMINUM	50.37	B
CALCIUM	12.40	U
IRON	13.90	U
LEAD	1.56	U
MAGNESIUM	5.65	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Concentration Units: ug/L

SAMPLE: CCB

File: AUB23A Feb 23, 2004 20:33

Analyte	Result	C
ALUMINUM	90.62	B
CALCIUM	12.40	U
IRON	13.90	U
LEAD	1.56	U
MAGNESIUM	5.65	U

SAMPLE: CCB

File: AUB23A Feb 23, 2004 21:06

Analyte	Result	C
ALUMINUM	107.53	B
CALCIUM	12.40	U
IRON	13.90	U
LEAD	1.56	U
MAGNESIUM	5.65	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Concentration Units: ug/L

SAMPLE: ICB

File: AUB25A Feb 25, 2004 11:01

Analyte	Result	C
ALUMINUM	29.20	U
CALCIUM	12.40	U
IRON	13.90	U
LEAD	1.56	U
MAGNESIUM	5.65	U

SAMPLE: CCB

File: AUB25A Feb 25, 2004 11:45

Analyte	Result	C
ALUMINUM	29.20	U
CALCIUM	12.40	U
IRON	13.90	U
LEAD	1.56	U
MAGNESIUM	5.65	U

SAMPLE: CCB

File: AUB25A Feb 25, 2004 13:05

Analyte	Result	C
ALUMINUM	29.20	U
CALCIUM	12.40	U
IRON	13.90	U
LEAD	1.56	U
MAGNESIUM	5.65	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Concentration Units: ug/L

SAMPLE: CCB

File: AUB25A Feb 25, 2004 14:26

Analyte	Result	C
ALUMINUM	29.20	U
CALCIUM	12.40	U
IRON	13.90	U
LEAD	1.56	U
MAGNESIUM	5.65	U

SAMPLE: CCB

File: AUB25A Feb 25, 2004 15:48

Analyte	Result	C
ALUMINUM	29.20	U
CALCIUM	12.40	U
IRON	13.90	U
LEAD	1.56	U
MAGNESIUM	5.65	U

SAMPLE: CCB

File: AUB25A Feb 25, 2004 17:09

Analyte	Result	C
ALUMINUM	33.89	B
CALCIUM	12.40	U
IRON	13.90	U
LEAD	1.56	U
MAGNESIUM	5.65	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Concentration Units: ug/L

SAMPLE: CCB

File: AUB25A Feb 25, 2004 18:29

Analyte	Result	C
ALUMINUM	65.63	B
CALCIUM	12.40	U
IRON	13.90	U
LEAD	1.56	U
MAGNESIUM	5.65	U

SAMPLE: CCB

File: AUB25A Feb 25, 2004 19:29

Analyte	Result	C
ALUMINUM	101.60	B
CALCIUM	-13.50	B
IRON	13.90	U
LEAD	1.56	U
MAGNESIUM	5.65	U

Quality Control Report

Blank Sample Summary Report

Nitrate As N

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG5970	EPA 353.2	10-FEB-04	N/A	U 0.050 mg/L	.05 mg/L

Sulfate-Turbidimetric

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG6264	EPA 375.4	27-FEB-04	N/A	U 1.0 mg/L	1 mg/L

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** A

Instrument Name: TJA TRACE ICP **Date:** 7/23/03

Concentration Units: ug/L

Analyte	CRDL	IDL	M
LEAD	5.0	1.56	P

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** UB20ICW0

Matrix: WATER **SDG Name:** WU0359

Method: P **Prep Date:** 02/20/2004

Client ID	Lab Sample ID	Initial (L)	Final (L)
LCSWUB20ICW0	LCSWUB20ICW0	0.05	0.05
PBWUB20ICW0	PBWUB20ICW0	0.05	0.05
FC-MW-22-0204	WU0359-002	0.05	0.05
FC-MW-22-0204P	WU0359-002P	0.05	0.05
FC-MW-22-0204S	WU0359-002S	0.05	0.05
FC-MW-06-0204	WU0359-003	0.05	0.05
KW-DUP-03-0204	WU0359-004	0.05	0.05
FC-MW-05-0204	WU0359-005	0.05	0.05
RR-MW-06-0204	WU0359-006	0.05	0.05
A824-MW-01-0204	WU0359-007	0.05	0.05
A824-MW-02-0204	WU0359-008	0.05	0.05
A824-MW-03-0204	WU0359-009	0.05	0.05

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Instrument ID: TJA TRACE ICP **File Name:** AUB23A

Date: 2/23/04 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
S0		1	16:06	Al Ca Fe Pb Mg
S1		1	16:13	Al Ca Fe Pb Mg
AL_IEC		1	16:23	Al Ca Fe Pb Mg
FE_IEC		1	16:30	Al Ca Fe Pb Mg
MN_IEC		1	16:36	Al Ca Fe Pb Mg
IEC		1	16:43	Al Ca Fe Pb Mg
ICV		1	16:50	Al Ca Fe Pb Mg
ICB		1	16:56	Al Ca Fe Pb Mg
ZZZZZZ		1	17:03	
CRI		1	17:10	Al Ca Fe Pb Mg
ICSA		1	17:17	Al Ca Fe Pb Mg
ICSAB		1	17:23	Al Ca Fe Pb Mg
PQL		1	17:31	Al Ca Fe Pb Mg
CRI		1	17:37	Al Ca Fe Pb Mg
CCV		1	17:47	Al Ca Fe Pb Mg
CCB		1	17:54	Al Ca Fe Pb Mg
ZZZZZZ		1	18:05	
ZZZZZZ		1	18:12	
ZZZZZZ		1	18:19	
ZZZZZZ		1	18:25	
ZZZZZZ		1	18:32	
ZZZZZZ		5	18:39	
ZZZZZZ		1	18:45	
ZZZZZZ		1	18:52	
ZZZZZZ		1	18:59	
ZZZZZZ		1	19:05	
CCV		1	19:12	Al Ca Fe Pb Mg
CCB		1	19:19	Al Ca Fe Pb Mg
ZZZZZZ		1	19:26	
ZZZZZZ		1	19:32	
ZZZZZZ		1	19:39	
ZZZZZZ		1	19:46	
ZZZZZZ		1	19:52	
PBWUB20ICW0		1	19:59	Pb
LCSWUB20ICW0		1	20:06	Pb
ZZZZZZ		1	20:12	
ZZZZZZ		1	20:19	
CCV		1	20:26	Al Ca Fe Pb Mg
CCB		1	20:33	Al Ca Fe Pb Mg
CRI		1	20:39	Al Ca Fe Pb Mg
ICSA		1	20:46	Al Ca Fe Pb Mg
ICSAB		1	20:53	Al Ca Fe Pb Mg
CCV		1	20:59	Al Ca Fe Pb Mg
CCB		1	21:06	Al Ca Fe Pb Mg

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Instrument ID: TJA TRACE ICP **File Name:** AUB25A

Date: 2/25/04 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
S0		1	10:03 Al	Ca Fe Pb Mg
S1		1	10:09 Al	Ca Fe Pb Mg
AL_IEC		1	10:19 Al	Ca Fe Pb Mg
FE_IEC		1	10:26 Al	Ca Fe Pb Mg
MN_IEC		1	10:33 Al	Ca Fe Pb Mg
IEC		1	10:39 Al	Ca Fe Pb Mg
ICV		1	10:46 Al	Ca Fe Pb Mg
ICV		1	10:54 Al	Ca Fe Pb Mg
ICB		1	11:01 Al	Ca Fe Pb Mg
PQL		1	11:08 Al	Ca Fe Pb Mg
CRI		1	11:18 Al	Ca Fe Pb Mg
ICSA		1	11:25 Al	Ca Fe Pb Mg
ICSAB		1	11:32 Al	Ca Fe Pb Mg
CCV		1	11:38 Al	Ca Fe Pb Mg
CCB		1	11:45 Al	Ca Fe Pb Mg
ZZZZZZ		1	11:52	
ZZZZZZ		1	11:58	
ZZZZZZ		1	12:05	
ZZZZZZ		1	12:12	
ZZZZZZ		5	12:19	
ZZZZZZ		5	12:25	
ZZZZZZ		5	12:32	
ZZZZZZ		5	12:39	
ZZZZZZ		5	12:45	
ZZZZZZ		25	12:52	
CCV		1	12:59 Al	Ca Fe Pb Mg
CCB		1	13:05 Al	Ca Fe Pb Mg
ZZZZZZ		5	13:12	
ZZZZZZ		5	13:19	
ZZZZZZ		2	13:26	
ZZZZZZ		2	13:32	
ZZZZZZ		2	13:39	
ZZZZZZ		2	13:46	
ZZZZZZ		2	13:52	
ZZZZZZ		2	13:59	
ZZZZZZ		1	14:06	
ZZZZZZ		1	14:12	
CCV		1	14:19 Al	Ca Fe Pb Mg
CCB		1	14:26 Al	Ca Fe Pb Mg
ZZZZZZ		5	14:33	
ZZZZZZ		1	14:39	
ZZZZZZ		1	14:46	
ZZZZZZ		1	14:53	
ZZZZZZ		1	14:59	
ZZZZZZ		1	15:06	
ZZZZZZ		1	15:13	
CRI		1	15:19 Al	Ca Fe Pb Mg
ICSA		1	15:26 Al	Ca Fe Pb Mg
ICSAB		1	15:33 Al	Ca Fe Pb Mg
CCV		1	15:40 Al	Ca Fe Pb Mg

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WU0359

Instrument ID: TJA TRACE ICP **File Name:** AUB25A

Date: 2/25/04 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
CCB		1	15:48	Al Ca Fe Pb Mg
ZZZZZZ		1	15:55	
ZZZZZZ		1	16:02	
ZZZZZZ		5	16:08	
ZZZZZZ		1	16:15	
ZZZZZZ		1	16:22	
ZZZZZZ		1	16:28	
ZZZZZZ		1	16:35	
ZZZZZZ		1	16:42	
ZZZZZZ		1	16:48	
ZZZZZZ		1	16:55	
CCV		1	17:02	Al Ca Fe Pb Mg
CCB		1	17:09	Al Ca Fe Pb Mg
ZZZZZZ		1	17:15	
ZZZZZZ		1	17:22	
ZZZZZZ		1	17:29	
WU0359-002	FC-MW-22-0204	1	17:35	Pb
WU0359-002L	FC-MW-22-0204L	5	17:42	Pb
WU0359-002P	FC-MW-22-0204P	1	17:49	Pb
WU0359-002S	FC-MW-22-0204S	1	17:55	Pb
WU0359-003	FC-MW-06-0204	1	18:02	Pb
WU0359-004	KW-DUP-03-0204	1	18:09	Pb
WU0359-005	FC-MW-05-0204	1	18:16	Pb
CCV		1	18:22	Al Ca Fe Pb Mg
CCB		1	18:29	Al Ca Fe Pb Mg
WU0359-006	RR-MW-06-0204	1	18:36	Pb
WU0359-007	A824-MW-01-0204	1	18:42	Pb
WU0359-008	A824-MW-02-0204	1	18:49	Pb
WU0359-009	A824-MW-03-0204	1	18:56	Pb
CRI		1	19:03	Al Ca Fe Pb Mg
ICSA		1	19:09	Al Ca Fe Pb Mg
ICSAB		1	19:16	Al Ca Fe Pb Mg
CCV		1	19:23	Al Ca Fe Pb Mg
CCB		1	19:29	Al Ca Fe Pb Mg

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **C. BRYAN** **DATE:** **JULY 18, 2004**

FROM: **EDWARD SEDLMYER** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION- VOA/PAH/TPH/METHANE**
CTO 318, NAS KEY WEST
SDG 3181

SAMPLES: 20/Aqueous

A824-MW-01-0504	A824-MW-02-0504	A824-MW-03-0504
G01-MW02-0504	G01-MW-03-0504	G01-MW04-0504
G01-MW05-0504	G01-MW-10-0504	G01-MW11-0504
G01-MW-12-0504	KW-DUP-01-0504	KW-DUP-03-0504
KWTB-052104	KWTB-052404	RR-MW-06-0504
B01-MW-01-0504	B01-MW-03-0504	FC-MW-05-0504
FC-MW-06-0504	FC-MW-22-0504	

OVERVIEW

The sample set for CTO 318 NAS Key West, SDG 3181 consists of two (2) trip blanks, and eighteen (18) aqueous environmental samples. All samples were analyzed for volatile organic compounds (VOA) including 1,2-dibromoethane (EDB), polynuclear aromatic hydrocarbons (PAHs), methane, and total petroleum hydrocarbons. The trip blanks were analyzed for VOAs only. Two field duplicates were associated with this SDG: KW-DUP-01-0504 / FC-MW-22-0504 and KW-DUP-03-0504 / A824-MW-01-0504.

The samples were collected by TetraTech NUS on May 20, 21, and 24, 2004 and analyzed by Katahdin Analytical Services and Air Toxics Incorporated. All analyses were conducted in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria using SW-846 Method 8260B, 8270C selective ion monitoring (SIM), Florida PRO, Modified RSK-175, and EPA method 504 analysis and reporting protocols. 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
• Surrogate Recoveries
* • Field Duplicates
• Detection Limits

The symbol (*) indicates that quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A.

Volatiles

The following compound was detected in the method blanks:

Compound	Maximum Concentration	Blank Action Level
Methylene chloride	1.0 ug/L	10.0 ug/L

- Value < Reporting Limit (RL); report RL followed by a U.
- Value > RL and < Action level; report value followed by a U.

Sample aliquot and dilution factors were taken into consideration when applying the blank action levels. Because methylene chloride was not detected in any associated samples, no qualification of the data was necessary. Field quality control blanks were not qualified based on laboratory method blank contamination.

1,2-Dibromoethane (EDB)

The surrogate recoveries for samples G01-MW-12-0504 and G01-MW02-0504 were less than the lower quality control criterion for surrogate tetrachloro-m-xylene on both columns. The samples were re-analyzed with similar results. No action was taken on this basis because 1,2-dibromoethane was not detected in the samples.

The surrogate recoveries for samples G01-MW-10-0504, A824-MW-02-0504, and KW-DUP-03-0504 were less than the lower quality control criterion for surrogate tetrachloro-m-xylene on one column. No action was taken on this basis because 1,2-dibromoethane was not detected in the samples and the surrogate recoveries were acceptable on one column.

Polynuclear Aromatic Hydrocarbons

A surrogate recovery for sample G01-MW-03-0504 was less than the lower quality control criteria for surrogate fluorene-d10. No action was taken on this basis because no semivolatiles were detected and only surrogate was out of the criteria limit.

Sample G01-MW05-0504 had a concentration for 1-methylnaphthalene greater than the calibration range of the instrument. The diluted analysis (40X) diluted out the presence of this analyte. Therefore, the original result was used and was qualified as estimated (J).

Samples G01-MW-10-0504 (5X), G01-MW-12-0504 (10X), FC-MW-22-0504 (100X), KW-DUP-01-0504 (200X), G01-MW05-0504 (40X), and G01-MW11-0504 (20X) analyzed for PAHs required dilutions due to high concentrations of target compounds. The diluted results for these compounds have been transposed to the initial analysis and were used for validation. The initial analysis provides the lowest valid detection limit for the non-detected PAHs.

Total Petroleum Hydrocarbon

The surrogate recoveries for samples FC-MW-22-0504, G01-MW02-0504, and G01-MW05-0504 were less than the lower quality control criteria for surrogate O-terphenyl. No action was taken on this basis because the other surrogate had acceptable recoveries.

Additional Comments:

Positive results less than the reporting limit (RL) were qualified as estimated "J", due to uncertainty near the detection limit.

The detection limits for bromodichloromethane, dibromochloromethane, cis-1,3-dichloropropene, trans-

1,3-dichloropropene, 1,1,2,2-tetrachloroethane, and vinyl chloride were greater than the detection limits stated in the laboratory specification. No action was taken on this basis.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Detection limits for bromodichloromethane, dibromochloromethane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, 1,1,2,2-tetrachloroethane, vinyl chloride, and methane were greater than defined in the laboratory specification. Methylene chloride was detected in the laboratory blanks.

Other Factors Affecting Data Quality: Several fractions had surrogates recoveries outside of the criteria limits.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (10/99), and the NFESC guidelines IRCDQM (Sept., 1999). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS

Edward Sedlmyer
Chemist/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 – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % 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 (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.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 less than sample activity

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: OV

nsample	A824-MW-01-0504	nsample	A824-MW-01-0504	nsample	A824-MW-02-0504
samp_date	5/21/2004	samp_date	5/21/2004	samp_date	5/21/2004
lab_id	WU1519-2	lab_id	WU1519-2	lab_id	WU1519-3
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	0.2	J	P
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	0.5	J	P
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: OV

nsample	A824-MW-02-0504
samp_date	5/21/2004
lab_id	WU1519-3
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

nsample	A824-MW-03-0504
samp_date	5/21/2004
lab_id	WU1519-4
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

nsample	A824-MW-03-0504
samp_date	5/21/2004
lab_id	WU1519-4
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: OV

nsample	G01-MW-02-0504
samp_date	5/24/2004
lab_id	WU1529-5
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	0.2	J	P
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

nsample	G01-MW-02-0504
samp_date	5/24/2004
lab_id	WU1529-5
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

nsample	G01-MW-03-0504
samp_date	5/20/2004
lab_id	WU1503-3
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: OV

nsample	G01-MW-03-0504
samp_date	5/20/2004
lab_id	WU1503-3
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

nsample	G01-MW-04-0504
samp_date	5/24/2004
lab_id	WU1529-6
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

nsample	G01-MW-04-0504
samp_date	5/24/2004
lab_id	WU1529-6
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: OV

nsample	G01-MW-05-0504	nsample	G01-MW-05-0504	nsample	G01-MW-10-0504
samp_date	5/24/2004	samp_date	5/24/2004	samp_date	5/20/2004
lab_id	WU1529-7	lab_id	WU1529-7	lab_id	WU1503-4
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	0.4	J	P
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	0.2	J	P
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	2		
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: OV

nsample	G01-MW-10-0504
samp_date	5/20/2004
lab_id	WU1503-4
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

nsample	G01-MW-11-0504
samp_date	5/24/2004
lab_id	WU1529-8
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1		
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1		
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	0.6	J	P
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	6		
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

nsample	G01-MW-11-0504
samp_date	5/24/2004
lab_id	WU1529-8
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: OV

nsample	G01-MW-12-0504
samp_date	5/20/2004
lab_id	WU1503-5
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	2		
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

nsample	G01-MW-12-0504
samp_date	5/20/2004
lab_id	WU1503-5
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

nsample	KW-DUP-03-0504
samp_date	5/21/2004
lab_id	WU1519-5
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	A824-MW-01-0504

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: OV

nsample	KW-DUP-03-0504
samp_date	5/21/2004
lab_id	WU1519-5
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	A824-MW-01-0504

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

nsample	KWTB-052104
samp_date	5/21/2004
lab_id	WU1519-6
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
VINYL CHLORIDE	2	U	

nsample	KWTB-052404
samp_date	5/22/2004
lab_id	WU1529-9
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
VINYL CHLORIDE	2	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: OV

nsample	RR-MW-06-0504
samp_date	5/21/2004
lab_id	WU1519-1
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

nsample	RR-MW-06-0504
samp_date	5/21/2004
lab_id	WU1519-1
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

PROJ_NO: 5658

SDG: 3181 MEDIA: WATER DATA FRACTION: OV

nsample	FC-MW-05-0504
samp_date	5/22/2004
lab_id	WU1529-1
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	1	U	
M+P-XYLENES	2	U	
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	3	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

nsample	FC-MW-05-0504
samp_date	5/22/2004
lab_id	WU1529-1
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

nsample	FC-MW-06-0504
samp_date	5/22/2004
lab_id	WU1529-2
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	0.1	J	P
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	0.5	J	P
M+P-XYLENES	0.3	J	P
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	0.3	J	P
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

PROJ_NO: 5658

SDG: 3181 MEDIA: WATER DATA FRACTION: OV

nsample	FC-MW-06-0504
samp_date	5/22/2004
lab_id	WU1529-2
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

nsample	FC-MW-22-0504
samp_date	5/22/2004
lab_id	WU1529-3
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	39		
M+P-XYLENES	6		
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	0.6	J	P
TETRACHLOROETHENE	1	U	
TOLUENE	0.6	J	P
TOTAL XYLENES	6.6		
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

nsample	FC-MW-22-0504
samp_date	5/22/2004
lab_id	WU1529-3
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

PROJ_NO: 5658

SDG: 3181 MEDIA: WATER DATA FRACTION: OV

nsample	KW-DUP-01-0504
samp_date	5/22/2004
lab_id	WU1529-4
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	FC-MW-22-0504

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
2-CHLOROETHYL VINYL ETHER	1	U	
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	2	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	2	U	
CHLOROFORM	1	U	
CHLOROMETHANE	2	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
ETHYLBENZENE	39		
M+P-XYLENES	6		
METHYL TERT-BUTYL ETHER	2	U	
METHYLENE CHLORIDE	2	U	
O-XYLENE	0.6	J	P
TETRACHLOROETHENE	1	U	
TOLUENE	0.7	J	P
TOTAL XYLENES	6.		
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	

nsample	KW-DUP-01-0504
samp_date	5/22/2004
lab_id	WU1529-4
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	FC-MW-22-0504

Parameter	Result	Val Qual	Qual Code
VINYL CHLORIDE	2	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: PAH

nsample	A824-MW-01-0504	nsample	A824-MW-02-0504	nsample	A824-MW-03-0504
samp_date	5/21/2004	samp_date	5/21/2004	samp_date	5/21/2004
lab_id	WU1519-2	lab_id	WU1519-3	lab_id	WU1519-4
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

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SDG: 3181 MEDIA: WATER DATA FRACTION: PAH

nsample	B01-MW-01-0504	nsample	B01-MW-03-0504	nsample	G01-MW-02-0504
samp_date	5/20/2004	samp_date	5/20/2004	samp_date	5/24/2004
lab_id	WU1503-1	lab_id	WU1503-2	lab_id	WU1529-5
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

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SDG: 3181 MEDIA: WATER DATA FRACTION: PAH

nsample	G01-MW-03-0504	nsample	G01-MW-04-0504	nsample	G01-MW-05-0504
samp_date	5/20/2004	samp_date	5/24/2004	samp_date	5/24/2004
lab_id	WU1503-3	lab_id	WU1529-6	lab_id	WU1529-7
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.19	J	P
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	3.8	J	L
2-METHYLNAPHTHALENE	0.2		
ACENAPHTHENE	92		
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	3.6	J	P
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	2.4		
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	11		
PHENANTHRENE	2.5		
PYRENE	0.74		

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SDG: 3181 MEDIA: WATER DATA FRACTION: PAH

nsample	G01-MW-10-0504
samp_date	5/20/2004
lab_id	WU1503-4
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	9.6		
2-METHYLNAPHTHALENE	0.77		
ACENAPHTHENE	0.25		
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.11	J	P
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.07	J	P
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	5.9		
PHENANTHRENE	0.87		
PYRENE	0.2	U	

nsample	G01-MW-11-0504
samp_date	5/24/2004
lab_id	WU1529-8
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	40		
2-METHYLNAPHTHALENE	43		
ACENAPHTHENE	2.6		
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.28		
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	2.8		
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	16		
PHENANTHRENE	3.6	J	P
PYRENE	0.2	U	

nsample	G01-MW-12-0504
samp_date	5/20/2004
lab_id	WU1503-5
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	16		
2-METHYLNAPHTHALENE	6.9		
ACENAPHTHENE	2.2		
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.16	J	P
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	1.3		
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	5.0		
PHENANTHRENE	2		
PYRENE	0.2	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: PAH

nsample	KW-DUP-03-0504	nsample	RR-MW-06-0504
samp_date	5/21/2004	samp_date	5/21/2004
lab_id	WU1519-5	lab_id	WU1519-1RA
qc_type	NM	qc_type	NM
units	UG/L	units	UG/L
Pct_Solids		Pct_Solids	
DUP_OF:	A824-MW-01-0504	DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

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SDG: 3181 MEDIA: WATER DATA FRACTION: PAH

nsample	FC-MW-05-0504
samp_date	5/22/2004
lab_id	WU1529-1
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	
2-METHYLNAPHTHALENE	0.2	U	
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2	U	
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

nsample	FC-MW-06-0504
samp_date	5/22/2004
lab_id	WU1529-2
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.21		
2-METHYLNAPHTHALENE	0.34		
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	0.2		
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

nsample	FC-MW-22-0504
samp_date	5/22/2004
lab_id	WU1529-3
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	28		
2-METHYLNAPHTHALENE	50		
ACENAPHTHENE	0.2	U	
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	190		
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

PROJ_NO: 5658

SDG: 3181 MEDIA: WATER DATA FRACTION: PAH

nsample	KW-DUP-01-0504
samp_date	5/22/2004
lab_id	WU1529-4
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	FC-MW-22-0504

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	32	J	P
2-METHYLNAPHTHALENE	67		
ACENAPHTHENE	0.079	J	P
ACENAPHTHYLENE	0.2	U	
ANTHRACENE	0.2	U	
BENZO(A)ANTHRACENE	0.2	U	
BENZO(A)PYRENE	0.2	U	
BENZO(B)FLUORANTHENE	0.2	U	
BENZO(G,H,I)PERYLENE	0.2	U	
BENZO(K)FLUORANTHENE	0.2	U	
CHRYSENE	0.2	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	
FLUORANTHENE	0.2	U	
FLUORENE	0.2	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	
NAPHTHALENE	220		
PHENANTHRENE	0.2	U	
PYRENE	0.2	U	

PROJ_NO: 5658

SDG: 3181 MEDIA: WATER DATA FRACTION: PET

nsample	FC-MW-05-0504
samp_date	5/22/2004
lab_id	WU1529-1
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	

nsample	FC-MW-06-0504
samp_date	5/22/2004
lab_id	WU1529-2
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	

nsample	FC-MW-22-0504
samp_date	5/22/2004
lab_id	WU1529-3
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1800		

PROJ_NO: 5658

SDG: 3181 MEDIA: WATER DATA FRACTION: PET

nsample	KW-DUP-01-0504
samp_date	5/22/2004
lab_id	WU1529-4
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	FC-MW-22-0504

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	2200		

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: PET

nsample	A824-MW-01-0504
samp_date	5/21/2004
lab_id	WU1519-2
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	

nsample	A824-MW-02-0504
samp_date	5/21/2004
lab_id	WU1519-3
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	

nsample	A824-MW-03-0504
samp_date	5/21/2004
lab_id	WU1519-4
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: PET

nsample	G01-MW-02-0504
samp_date	5/24/2004
lab_id	WU1529-5
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	440	J	P

nsample	G01-MW-03-0504
samp_date	5/20/2004
lab_id	WU1503-3
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	

nsample	G01-MW-04-0504
samp_date	5/24/2004
lab_id	WU1529-6
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	810		

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: PET

nsample	G01-MW-05-0504
samp_date	5/24/2004
lab_id	WU1529-7
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1000		

nsample	G01-MW-10-0504
samp_date	5/20/2004
lab_id	WU1503-4
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1900		

nsample	G01-MW-11-0504
samp_date	5/24/2004
lab_id	WU1529-8
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	2000		

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: PET

nsample	G01-MW-12-0504
samp_date	5/20/2004
lab_id	WU1503-5
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	2700		

nsample	KW-DUP-03-0504
samp_date	5/21/2004
lab_id	WU1519-5
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	A824-MW-01-0504

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	

nsample	RR-MW-06-0504
samp_date	5/21/2004
lab_id	WU1519-1
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: OVG

nsample	A824-MW-01-0504
samp_date	5/21/2004
lab_id	0405424B-05A
qc_type	NM
units	MG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
METHANE	0.21		

nsample	A824-MW-02-0504
samp_date	5/21/2004
lab_id	0405424B-06A
qc_type	NM
units	MG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
METHANE	0.03		

nsample	A824-MW-03-0504
samp_date	5/21/2004
lab_id	0405424B-07A
qc_type	NM
units	MG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
METHANE	0.01	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: OVG

nsample	G01-MW02-0504	nsample	G01-MW-03-0504	nsample	G01-MW04-0504
samp_date	5/24/2004	samp_date	5/20/2004	samp_date	5/24/2004
lab_id	0405496-01A	lab_id	0405424A-01A	lab_id	0405496-02A
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/L	units	MG/L	units	MG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
METHANE	0.38		

Parameter	Result	Val Qual	Qual Code
METHANE	0.69		

Parameter	Result	Val Qual	Qual Code
METHANE	0.87		

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: OVG

nsample	G01-MW05-0504
samp_date	5/24/2004
lab_id	0405496-03A
qc_type	NM
units	MG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
METHANE	3.7		

nsample	G01-MW-10-0504
samp_date	5/20/2004
lab_id	0405424A-02A
qc_type	NM
units	MG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
METHANE	2.6		

nsample	G01-MW11-0504
samp_date	5/24/2004
lab_id	0405496-04A
qc_type	NM
units	MG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
METHANE	7.8		

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: OVG

nsample	G01-MW-12-0504	nsample	KW-DUP-03-0504	nsample	RR-MW-06-0504
samp_date	5/20/2004	samp_date	5/21/2004	samp_date	5/21/2004
lab_id	0405424A-03A	lab_id	0405424B-08A	lab_id	0405424B-04A
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/L	units	MG/L	units	MG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:	A824-MW-01-0504	DUP_OF:	

Parameter	Result	Val Qual	Qual Code
METHANE	5.6		

Parameter	Result	Val Qual	Qual Code
METHANE	0.21		

Parameter	Result	Val Qual	Qual Code
METHANE	0.17		

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date:
Analysis Date: 05/28/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-2
Client ID: A824-MW-01-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7858
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.9
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		94%				
17060-07-0	1,2-Dichloroethane-D4		106%				
2037-26-5	Toluene-D8		97%				
460-00-4	P-Bromofluorobenzene		97%				

Katahdin Analytical Services 1000046

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date:
Analysis Date: 05/28/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-3
Client ID: A824-MW-02-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7858
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.9
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	J	0.2	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	J	0.5	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		105%				
17060-07-0	1,2-Dichloroethane-D4		116%				
2037-26-5	Toluene-D8		96%				
460-00-4	P-Bromofluorobenzene		98%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date:
Analysis Date: 05/28/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-4
Client ID: A824-MW-03-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7858
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.9
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		104%				
17060-07-0	1,2-Dichloroethane-D4		118%				
2037-26-5	Toluene-D8		96%				
460-00-4	P-Bromofluorobenzene		99%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date:
Analysis Date: 05/28/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-5
Client ID: G01-MW02-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7857
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	J	0.2	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		101%				
17060-07-0	1,2-Dichloroethane-D4		98%				
2037-26-5	Toluene-D8		100%				
460-00-4	P-Bromofluorobenzene		93%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date:
Analysis Date: 05/24/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-3
Client ID: G01-MW-03-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7754
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		110%				
17060-07-0	1,2-Dichloroethane-D4		103%				
2037-26-5	Toluene-D8		102%				
460-00-4	P-Bromofluorobenzene		89%				

Katahdin Analytical Services 1000042

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date:
Analysis Date: 06/01/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-6
Client ID: G01-MW04-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7892
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		104%				
17060-07-0	1,2-Dichloroethane-D4		105%				
2037-26-5	Toluene-D8		104%				
460-00-4	P-Bromofluorobenzene		98%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date:
Analysis Date: 06/01/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-7
Client ID: G01-MW05-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7892
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	J	0.4	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	J	0.2	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		105%				
17060-07-0	1,2-Dichloroethane-D4		105%				
2037-26-5	Toluene-D8		104%				
460-00-4	P-Bromofluorobenzene		97%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date:
Analysis Date: 05/24/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-4
Client ID: G01-MW-10-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7754
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene		2	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		107%				
17060-07-0	1,2-Dichloroethane-D4		103%				
2037-26-5	Toluene-D8		104%				
460-00-4	P-Bromofluorobenzene		90%				

Katahdin Analytical Services 1000043

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date:
Analysis Date: 06/01/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-8
Client ID: G01-MW11-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7892
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane		1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	J	0.6	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene		1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene		6	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		106%				
17060-07-0	1,2-Dichloroethane-D4		104%				
2037-26-5	Toluene-D8		104%				
460-00-4	P-Bromofluorobenzene		99%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date:
Analysis Date: 05/24/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-5
Client ID: G01-MW-12-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7754
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene		2	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		109%				
17060-07-0	1,2-Dichloroethane-D4		103%				
2037-26-5	Toluene-D8		105%				
460-00-4	P-Bromofluorobenzene		98%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date:
Analysis Date: 05/28/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-4
Client ID: KW-DUP-01-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7857
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	J	0.7	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene		39	1.0	1	1	0.2
1330-20-7	Xylenes (total)		6	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes		6	1.0	2	2	0.3
95-47-6	o-Xylene	J	0.6	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		100%				
17060-07-0	1,2-Dichloroethane-D4		101%				
2037-26-5	Toluene-D8		106%				
460-00-4	P-Bromofluorobenzene		98%				

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KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date:
Analysis Date: 05/28/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-5
Client ID: KW-DUP-03-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7858
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.9
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		104%				
17060-07-0	1,2-Dichloroethane-D4		116%				
2037-26-5	Toluene-D8		97%				
460-00-4	P-Bromofluorobenzene		101%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date:
Analysis Date: 05/28/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-6
Client ID: KWTB-052104
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7858
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.9
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		98%				
17060-07-0	1,2-Dichloroethane-D4		105%				
2037-26-5	Toluene-D8		97%				
460-00-4	P-Bromofluorobenzene		99%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date:
Analysis Date: 06/01/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-9
Client ID: KWTB-052404
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7892
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		102%				
17060-07-0	1,2-Dichloroethane-D4		101%				
2037-26-5	Toluene-D8		104%				
460-00-4	P-Bromofluorobenzene		99%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date:
Analysis Date: 05/28/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-1
Client ID: RR-MW-06-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7858
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.9
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		96%				
17060-07-0	1,2-Dichloroethane-D4		108%				
2037-26-5	Toluene-D8		95%				
460-00-4	P-Bromofluorobenzene		98%				

Katahdin Analytical Services 1000045

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date:
Analysis Date: 05/28/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-1
Client ID: FC-MW-05-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7857
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		104%				
17060-07-0	1,2-Dichloroethane-D4		103%				
2037-26-5	Toluene-D8		103%				
460-00-4	P-Bromofluorobenzene		96%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date:
Analysis Date: 05/28/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-2
Client ID: FC-MW-06-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7857
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	J	0.1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	J	0.5	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	J	0.3	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		104%				
17060-07-0	1,2-Dichloroethane-D4		105%				
2037-26-5	Toluene-D8		104%				
460-00-4	P-Bromofluorobenzene		98%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date:
Analysis Date: 05/28/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-3
Client ID: FC-MW-22-0504
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7857
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	J	0.6	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene		39	1.0	1	1	0.2
1330-20-7	Xylenes (total)		6	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes		6	1.0	2	2	0.3
95-47-6	o-Xylene	J	0.6	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		99%				
17060-07-0	1,2-Dichloroethane-D4		106%				
2037-26-5	Toluene-D8		108%				
460-00-4	P-Bromofluorobenzene		102%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date: 06/03/04
Analysis Date: 06/03/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-2RE
Client ID: A824-MW-01-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7969
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		88%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date: 06/02/04
Analysis Date: 06/02/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-3
Client ID: A824-MW-02-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7920
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		57%				

Katahdin Analytical Services 6000029

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date: 06/02/04
Analysis Date: 06/02/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-4
Client ID: A824-MW-03-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7920
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		78%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date: 06/02/04
Analysis Date: 06/02/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-5
Client ID: G01-MW02-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7920
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		* 55%				

Katahdin Analytical Services 6000036

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date: 06/17/04
Analysis Date: 06/17/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-5RE
Client ID: G01-MW02-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG8161
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		* 34%				

Katahdin Analytical Services 6000037

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date: 06/02/04
Analysis Date: 06/02/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-3
Client ID: G01-MW-03-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7920
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		80%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date: 06/03/04
Analysis Date: 06/03/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-6RE
Client ID: G01-MW04-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7969
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		74%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date: 06/02/04
Analysis Date: 06/03/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-7
Client ID: G01-MW05-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7920
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		74%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date: 06/02/04
Analysis Date: 06/02/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-4
Client ID: G01-MW-10-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7920
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		58%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date: 06/02/04
Analysis Date: 06/03/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-8
Client ID: G01-MW11-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7920
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		64%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date: 06/02/04
Analysis Date: 06/02/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-5
Client ID: G01-MW-12-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7920
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		* 54%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date: 06/03/04
Analysis Date: 06/03/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-5RE
Client ID: G01-MW-12-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7969
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		* 56%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date: 06/02/04
Analysis Date: 06/02/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-4
Client ID: KW-DUP-01-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7920
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		71%				

Katahdin Analytical Services 6000035

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date: 06/02/04
Analysis Date: 06/02/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-5
Client ID: KW-DUP-03-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7920
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		61%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date: 06/03/04
Analysis Date: 06/03/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-1RE
Client ID: RR-MW-06-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7969
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		76%				

Katahdin Analytical Services 6000027

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date: 06/03/04
Analysis Date: 06/03/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-1RE
Client ID: FC-MW-05-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7969
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		64%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date: 06/03/04
Analysis Date: 06/04/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-2RE
Client ID: FC-MW-06-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7969
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		86%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date: 06/02/04
Analysis Date: 06/02/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-3
Client ID: FC-MW-22-0504
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7920
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		71%				

AIR TOXICS LTD.

SAMPLE NAME: A824-MW-01-0504

ID#: 0405424B-05A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7052814	Date of Collection:	5/21/04
Dil. Factor:	1.00	Date of Analysis:	5/28/04 12:41 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.21

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: A824-MW-02-0504

ID#: 0405424B-06A

MODIFIED METHOD RSK-175 GC/FID

File Name:	70528r15	Date of Collection:	5/21/04
Dil. Factor:	1.00	Date of Analysis:	5/28/04 01:02 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.030

Container Type: VOA Vial-40 mL

0012

AIR TOXICS LTD.

SAMPLE NAME: A824-MW-03-0504

ID#: 0405424B-07A

MODIFIED METHOD RSK-175 GC/FID

File Name:	052816	Date of Collection:	5/21/04
Dil. Factor:	1.00	Date of Analysis:	5/28/04 01:23 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: G01-MW02-0504

ID#: 0405496-01A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7060104	Date of Collection:	5/24/04
Dil. Factor:	1.00	Date of Analysis:	6/1/04 08:22 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.38

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: G01-MW-03-0504

ID#: 0405424A-01A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7052818	Date of Collection:	5/20/04
Dil. Factor:	1.00	Date of Analysis:	5/28/04 02:06 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.69

Container Type: VOA Vial-40 mL

0006

AIR TOXICS LTD.

SAMPLE NAME: G01-MW-03-0504 Duplicate

ID#: 0405424A-01AA

MODIFIED METHOD RSK-175 GC/FID

File Name:	7052819	Date of Collection:	5/20/04
Dil. Factor:	1.00	Date of Analysis:	5/28/04 02:27 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.74

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: G01-MW04-0504

ID#: 0405496-02A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7060105	Date of Collection: 5/24/04
Dil. Factor:	1.00	Date of Analysis: 6/1/04 08:43 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.87

Container Type: VOA Vial-40 mL

0009

AIR TOXICS LTD.

SAMPLE NAME: G01-MW05-0504

ID#: 0405496-03A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7060106	Date of Collection:	5/24/04
Dil. Factor:	1.00	Date of Analysis:	6/1/04 09:05 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	3.7

Container Type: VOA Vial-40 mL

0012

AIR TOXICS LTD.

SAMPLE NAME: G01-MW-10-0504

ID#: 0405424A-02A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7052820	Date of Collection:	5/20/04
Dil. Factor:	1.00	Date of Analysis:	5/28/04 02:48 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	2.6

Container Type: VOA Vial-40 mL

0012

AIR TOXICS LTD.

SAMPLE NAME: G01-MW11-0504

ID#: 0405496-04A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7060107	Date of Collection:	5/24/04
Dil. Factor:	1.00	Date of Analysis:	6/1/04 09:26 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	7.8

Container Type: VOA Vial-40 mL

0015

AIR TOXICS LTD.

SAMPLE NAME: G01-MW-12-0504

ID#: 0405424A-03A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7052821	Date of Collection:	5/20/04
Dil. Factor:	1.00	Date of Analysis:	5/28/04 03:10 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	5.6

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: KW-DUP-03-0504

ID#: 0405424B-08A

MODIFIED METHOD RSK-175 GC/FID

File Name:	70528r7	Date of Collection:	5/21/04
Dil. Factor:	1.00	Date of Analysis:	5/28/04 01:45 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.21

Container Type: VOA Vial-40 mL

0018

AIR TOXICS LTD.

SAMPLE NAME: RR-MW-06-0504

ID#: 0405424B-04A

MODIFIED METHOD RSK-175 GC/FID

File Name:	70528r11	Date of Collection:	5/21/04
Dil. Factor:	1.00	Date of Analysis:	5/28/04 11:37 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.17

Container Type: VOA Vial-40 mL

0006

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date: 05/25/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-2
Client ID: A824-MW-01-0504
SDG: CTO301318-1
Extracted by: KM
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7768
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.076
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.076
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.057
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.076
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.076
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.11
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.076
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.095
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.076
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.076
7297-45-2	2-Methylnaphthalene-d10		77%				
81103-79-9	Fluorene-d10		80%				
1718-52-1	Pyrene-d10		79%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date: 05/25/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-3
Client ID: A824-MW-02-0504
SDG: CTO301318-1
Extracted by: KM
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7768
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.076
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.076
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.057
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.076
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.076
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.11
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.076
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.095
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.076
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.076
7297-45-2	2-Methylnaphthalene-d10		76%				
81103-79-9	Fluorene-d10		65%				
1718-52-1	Pyrene-d10		46%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date: 05/25/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-4
Client ID: A824-MW-03-0504
SDG: CTO301318-1
Extracted by: KM
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7768
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.076
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.076
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.057
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.076
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.076
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.11
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.076
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.095
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.076
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.076
7297-45-2	2-Methylnaphthalene-d10		88%				
81103-79-9	Fluorene-d10		37%				
1718-52-1	Pyrene-d10		60%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date: 05/24/04
Analysis Date: 06/15/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-1
Client ID: B01-MW-01-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7760
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.077
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.058
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.077
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.077
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.077
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.096
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.077
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
7297-45-2	2-Methylnaphthalene-d10		94%				
81103-79-9	Fluorene-d10		57%				
1718-52-1	Pyrene-d10		105%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date: 05/24/04
Analysis Date: 06/15/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-2
Client ID: B01-MW-03-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7760
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.077
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.058
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.077
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.077
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.077
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.096
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.077
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
7297-45-2	2-Methylnaphthalene-d10		79%				
81103-79-9	Fluorene-d10		50%				
1718-52-1	Pyrene-d10		77%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-5
Client ID: G01-MW02-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7805
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.076
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.076
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.057
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.076
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.076
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.11
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.076
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.095
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.076
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.076
7297-45-2	2-Methylnaphthalene-d10		43%				
81103-79-9	Fluorene-d10		30%				
1718-52-1	Pyrene-d10		56%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date: 05/24/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-3
Client ID: G01-MW-03-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7760
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.077
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.058
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.077
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.077
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.077
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.096
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.077
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
7297-45-2	2-Methylnaphthalene-d10		37%				
81103-79-9	Fluorene-d10		* 24%				
1718-52-1	Pyrene-d10		33%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-6
Client ID: G01-MW04-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7805
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.076
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene		0.19	1.0	0.20	0.20	0.076
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.057
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.076
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.076
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.11
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.076
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.095
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.076
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.076
7297-45-2	2-Methylnaphthalene-d10		45%				
81103-79-9	Fluorene-d10		52%				
1718-52-1	Pyrene-d10		52%				

Katahdin Analytical Services 2000055

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-7
Client ID: G01-MW05-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7805
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	E	8.4	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene		0.20	1.0	0.20	0.20	0.076
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	E	82	1.0	0.20	0.20	0.076
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.057
85-01-8	Phenanthrene		2.5	1.0	0.20	0.20	0.076
120-12-7	Anthracene	E	4.2	1.0	0.20	0.20	0.076
206-44-0	Fluoranthene		2.4	1.0	0.20	0.20	0.10
129-00-0	Pyrene		0.74	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.11
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.076
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.095
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.076
90-12-0	1-Methylnaphthalene	E	3.8	1.0	0.20	0.20	0.076
7297-45-2	2-Methylnaphthalene-d10		75%				
81103-79-9	Fluorene-d10		79%				
1718-52-1	Pyrene-d10		67%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/18/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-7DL2
Client ID: G01-MW05-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7805
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene		11	40	0.20	7.6	1.9
91-57-6	2-Methylnaphthalene	U	7.6	40	0.20	7.6	3.0
208-96-8	Acenaphthylene	U	7.6	40	0.20	7.6	1.9
83-32-9	Acenaphthene		92	40	0.20	7.6	3.0
86-73-7	Fluorene	U	7.6	40	0.20	7.6	2.3
85-01-8	Phenanthrene	J	2.9	40	0.20	7.6	3.0
120-12-7	Anthracene	J	3.6	40	0.20	7.6	3.0
206-44-0	Fluoranthene	J	2.0	40	0.20	7.6	4.2
129-00-0	Pyrene	U	7.6	40	0.20	7.6	3.4
56-55-3	Benzo(a)anthracene	U	7.6	40	0.20	7.6	4.6
218-01-9	Chrysene	U	7.6	40	0.20	7.6	2.7
205-99-2	Benzo(b)fluoranthene	U	7.6	40	0.20	7.6	3.4
207-08-9	Benzo(k)fluoranthene	U	7.6	40	0.20	7.6	3.0
50-32-8	Benzo(a)pyrene	U	7.6	40	0.20	7.6	3.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	7.6	40	0.20	7.6	3.8
53-70-3	Dibenzo(a,h)anthracene	U	7.6	40	0.20	7.6	5.7
191-24-2	Benzo(g,h,i)perylene	U	7.6	40	0.20	7.6	3.0
90-12-0	1-Methylnaphthalene	U	7.6	40	0.20	7.6	3.0
7297-45-2	2-Methylnaphthalene-d10		D				
81103-79-9	Fluorene-d10		D				
1718-52-1	Pyrene-d10		D				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date: 05/24/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-4
Client ID: G01-MW-10-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7760
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	E	6.4	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene		0.77	1.0	0.20	0.20	0.077
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene		0.25	1.0	0.20	0.20	0.077
86-73-7	Fluorene	J	0.070	1.0	0.20	0.20	0.058
85-01-8	Phenanthrene		0.87	1.0	0.20	0.20	0.077
120-12-7	Anthracene	J	0.11	1.0	0.20	0.20	0.077
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.077
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.096
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.077
90-12-0	1-Methylnaphthalene	E	11	1.0	0.20	0.20	0.077
7297-45-2	2-Methylnaphthalene-d10		33%				
81103-79-9	Fluorene-d10		41%				
1718-52-1	Pyrene-d10		34%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date: 05/24/04
Analysis Date: 06/18/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-4DL2
Client ID: G01-MW-10-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7760
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene		5.9	5.0	0.20	0.96	0.24
91-57-6	2-Methylnaphthalene	J	0.84	5.0	0.20	0.96	0.38
208-96-8	Acenaphthylene	U	0.96	5.0	0.20	0.96	0.24
83-32-9	Acenaphthene	J	0.44	5.0	0.20	0.96	0.38
86-73-7	Fluorene	U	0.96	5.0	0.20	0.96	0.29
85-01-8	Phenanthrene	J	0.87	5.0	0.20	0.96	0.38
120-12-7	Anthracene	U	0.96	5.0	0.20	0.96	0.38
206-44-0	Fluoranthene	U	0.96	5.0	0.20	0.96	0.53
129-00-0	Pyrene	U	0.96	5.0	0.20	0.96	0.43
56-55-3	Benzo(a)anthracene	U	0.96	5.0	0.20	0.96	0.58
218-01-9	Chrysene	U	0.96	5.0	0.20	0.96	0.34
205-99-2	Benzo(b)fluoranthene	U	0.96	5.0	0.20	0.96	0.43
207-08-9	Benzo(k)fluoranthene	U	0.96	5.0	0.20	0.96	0.38
50-32-8	Benzo(a)pyrene	U	0.96	5.0	0.20	0.96	0.43
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.96	5.0	0.20	0.96	0.48
53-70-3	Dibenzo(a,h)anthracene	U	0.96	5.0	0.20	0.96	0.72
191-24-2	Benzo(g,h,i)perylene	U	0.96	5.0	0.20	0.96	0.38
90-12-0	1-Methylnaphthalene		9.6	5.0	0.20	0.96	0.38
7297-45-2	2-Methylnaphthalene-d10		36%				
81103-79-9	Fluorene-d10		43%				
1718-52-1	Pyrene-d10		32%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-8
Client ID: G01-MW11-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7805
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	E	14	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	E	38	1.0	0.20	0.20	0.077
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene		2.6	1.0	0.20	0.20	0.077
86-73-7	Fluorene		2.8	1.0	0.20	0.20	0.058
85-01-8	Phenanthrene	E	3.2	1.0	0.20	0.20	0.077
120-12-7	Anthracene		0.28	1.0	0.20	0.20	0.077
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.077
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.096
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.077
90-12-0	1-Methylnaphthalene	E	34	1.0	0.20	0.20	0.077
7297-45-2	2-Methylnaphthalene-d10		68%				
81103-79-9	Fluorene-d10		80%				
1718-52-1	Pyrene-d10		71%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/18/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-8DL2
Client ID: G01-MW11-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7805
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene		16	20	0.20	3.8	0.96
91-57-6	2-Methylnaphthalene		43	20	0.20	3.8	1.5
208-96-8	Acenaphthylene	U	3.8	20	0.20	3.8	0.96
83-32-9	Acenaphthene	U	3.8	20	0.20	3.8	1.5
86-73-7	Fluorene	J	1.5	20	0.20	3.8	1.2
85-01-8	Phenanthrene	J	3.6	20	0.20	3.8	1.5
120-12-7	Anthracene	U	3.8	20	0.20	3.8	1.5
206-44-0	Fluoranthene	U	3.8	20	0.20	3.8	2.1
129-00-0	Pyrene	U	3.8	20	0.20	3.8	1.7
56-55-3	Benzo(a)anthracene	U	3.8	20	0.20	3.8	2.3
218-01-9	Chrysene	U	3.8	20	0.20	3.8	1.3
205-99-2	Benzo(b)fluoranthene	U	3.8	20	0.20	3.8	1.7
207-08-9	Benzo(k)fluoranthene	U	3.8	20	0.20	3.8	1.5
50-32-8	Benzo(a)pyrene	U	3.8	20	0.20	3.8	1.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	3.8	20	0.20	3.8	1.9
53-70-3	Dibenzo(a,h)anthracene	U	3.8	20	0.20	3.8	2.9
191-24-2	Benzo(g,h,i)perylene	U	3.8	20	0.20	3.8	1.5
90-12-0	1-Methylnaphthalene		40	20	0.20	3.8	1.5
7297-45-2	2-Methylnaphthalene-d10		D				
81103-79-9	Fluorene-d10		D				
1718-52-1	Pyrene-d10		D				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date: 05/24/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-5
Client ID: G01-MW-12-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7760
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	E	6.2	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	E	9.3	1.0	0.20	0.20	0.077
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene		2.2	1.0	0.20	0.20	0.077
86-73-7	Fluorene		1.3	1.0	0.20	0.20	0.058
85-01-8	Phenanthrene		2.0	1.0	0.20	0.20	0.077
120-12-7	Anthracene	J	0.16	1.0	0.20	0.20	0.077
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.077
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.096
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.077
90-12-0	1-Methylnaphthalene	E	19	1.0	0.20	0.20	0.077
7297-45-2	2-Methylnaphthalene-d10		51%				
81103-79-9	Fluorene-d10		51%				
1718-52-1	Pyrene-d10		55%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date: 05/24/04
Analysis Date: 06/17/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-5DL2
Client ID: G01-MW-12-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7760
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene		5.0	10	0.20	1.9	0.48
91-57-6	2-Methylnaphthalene		6.9	10	0.20	1.9	0.77
208-96-8	Acenaphthylene	U	1.9	10	0.20	1.9	0.48
83-32-9	Acenaphthene	J	1.8	10	0.20	1.9	0.77
86-73-7	Fluorene	U	1.9	10	0.20	1.9	0.58
85-01-8	Phenanthrene		2.3	10	0.20	1.9	0.77
120-12-7	Anthracene	U	1.9	10	0.20	1.9	0.77
206-44-0	Fluoranthene	U	1.9	10	0.20	1.9	1.0
129-00-0	Pyrene	U	1.9	10	0.20	1.9	0.86
56-55-3	Benzo(a)anthracene	U	1.9	10	0.20	1.9	1.2
218-01-9	Chrysene	U	1.9	10	0.20	1.9	0.67
205-99-2	Benzo(b)fluoranthene	U	1.9	10	0.20	1.9	0.86
207-08-9	Benzo(k)fluoranthene	U	1.9	10	0.20	1.9	0.77
50-32-8	Benzo(a)pyrene	U	1.9	10	0.20	1.9	0.86
193-39-5	Indeno(1,2,3-cd)pyrene	U	1.9	10	0.20	1.9	0.96
53-70-3	Dibenzo(a,h)anthracene	U	1.9	10	0.20	1.9	1.4
191-24-2	Benzo(g,h,i)perylene	U	1.9	10	0.20	1.9	0.77
90-12-0	1-Methylnaphthalene		16	10	0.20	1.9	0.77
7297-45-2	2-Methylnaphthalene-d10		D				
81103-79-9	Fluorene-d10		D				
1718-52-1	Pyrene-d10		D				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-4
Client ID: KW-DUP-01-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7805
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	E	180	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	E	67	1.0	0.20	0.20	0.076
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	J	0.079	1.0	0.20	0.20	0.076
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.057
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.076
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.076
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.11
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.076
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.095
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.076
90-12-0	1-Methylnaphthalene	E	35	1.0	0.20	0.20	0.076
7297-45-2	2-Methylnaphthalene-d10		85%				
81103-79-9	Fluorene-d10		108%				
1718-52-1	Pyrene-d10		119%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/18/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-4DL2
Client ID: KW-DUP-01-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7805
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene		220	200	0.20	38	9.5
91-57-6	2-Methylnaphthalene		67	200	0.20	38	15
208-96-8	Acenaphthylene	U	38	200	0.20	38	9.5
83-32-9	Acenaphthene	U	38	200	0.20	38	15
86-73-7	Fluorene	U	38	200	0.20	38	11
85-01-8	Phenanthrene	U	38	200	0.20	38	15
120-12-7	Anthracene	U	38	200	0.20	38	15
206-44-0	Fluoranthene	U	38	200	0.20	38	21
129-00-0	Pyrene	U	38	200	0.20	38	17
56-55-3	Benzo(a)anthracene	U	38	200	0.20	38	23
218-01-9	Chrysene	U	38	200	0.20	38	13
205-99-2	Benzo(b)fluoranthene	U	38	200	0.20	38	17
207-08-9	Benzo(k)fluoranthene	U	38	200	0.20	38	15
50-32-8	Benzo(a)pyrene	U	38	200	0.20	38	17
193-39-5	Indeno(1,2,3-cd)pyrene	U	38	200	0.20	38	19
53-70-3	Dibenzo(a,h)anthracene	U	38	200	0.20	38	28
191-24-2	Benzo(g,h,i)perylene	U	38	200	0.20	38	15
90-12-0	1-Methylnaphthalene	J	32	200	0.20	38	15
7297-45-2	2-Methylnaphthalene-d10		D				
81103-79-9	Fluorene-d10		D				
1718-52-1	Pyrene-d10		D				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date: 05/25/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-5
Client ID: KW-DUP-03-0504
SDG: CTO301318-1
Extracted by: KM
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7768
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.077
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.058
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.077
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.077
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.077
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.096
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.077
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
7297-45-2	2-Methylnaphthalene-d10		80%				
81103-79-9	Fluorene-d10		83%				
1718-52-1	Pyrene-d10		107%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date: 05/25/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-1RA
Client ID: RR-MW-06-0504
SDG: CTO301318-1
Extracted by: KM
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7768
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.047
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.075
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.047
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.075
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.057
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.075
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.075
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.085
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.11
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.066
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.085
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.075
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.085
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.094
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.075
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.075
7297-45-2	2-Methylnaphthalene-d10		56%				
81103-79-9	Fluorene-d10		53%				
1718-52-1	Pyrene-d10		50%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-1
Client ID: FC-MW-05-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7805
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.047
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.075
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.047
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.075
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.057
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.075
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.075
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.085
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.11
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.066
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.085
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.075
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.085
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.094
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.075
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.075
7297-45-2	2-Methylnaphthalene-d10		78%				
81103-79-9	Fluorene-d10		48%				
1718-52-1	Pyrene-d10		136%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-2
Client ID: FC-MW-06-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7805
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene		0.20	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene		0.34	1.0	0.20	0.20	0.077
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.077
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.058
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.077
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.077
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.077
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.096
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.077
90-12-0	1-Methylnaphthalene		0.21	1.0	0.20	0.20	0.077
7297-45-2	2-Methylnaphthalene-d10		89%				
81103-79-9	Fluorene-d10		69%				
1718-52-1	Pyrene-d10		86%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/16/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-3
Client ID: FC-MW-22-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7805
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	E	160	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	E	57	1.0	0.20	0.20	0.077
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.077
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.058
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.077
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.077
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.077
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.096
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.077
90-12-0	1-Methylnaphthalene	E	33	1.0	0.20	0.20	0.077
7297-45-2	2-Methylnaphthalene-d10		79%				
81103-79-9	Fluorene-d10		84%				
1718-52-1	Pyrene-d10		112%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/18/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-3DL2
Client ID: FC-MW-22-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7805
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene		190	100	0.20	19	4.8
91-57-6	2-Methylnaphthalene		50	100	0.20	19	7.7
208-96-8	Acenaphthylene	U	19	100	0.20	19	4.8
83-32-9	Acenaphthene	U	19	100	0.20	19	7.7
86-73-7	Fluorene	U	19	100	0.20	19	5.8
85-01-8	Phenanthrene	U	19	100	0.20	19	7.7
120-12-7	Anthracene	U	19	100	0.20	19	7.7
206-44-0	Fluoranthene	U	19	100	0.20	19	10
129-00-0	Pyrene	U	19	100	0.20	19	8.6
56-55-3	Benzo(a)anthracene	U	19	100	0.20	19	12
218-01-9	Chrysene	U	19	100	0.20	19	6.7
205-99-2	Benzo(b)fluoranthene	U	19	100	0.20	19	8.6
207-08-9	Benzo(k)fluoranthene	U	19	100	0.20	19	7.7
50-32-8	Benzo(a)pyrene	U	19	100	0.20	19	8.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	19	100	0.20	19	9.6
53-70-3	Dibenzo(a,h)anthracene	U	19	100	0.20	19	14
191-24-2	Benzo(g,h,i)perylene	U	19	100	0.20	19	7.7
90-12-0	1-Methylnaphthalene		28	100	0.20	19	7.7
7297-45-2	2-Methylnaphthalene-d10		D				
81103-79-9	Fluorene-d10		D				
1718-52-1	Pyrene-d10		D				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date: 05/25/04
Analysis Date: 06/19/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-2
Client ID: A824-MW-01-0504
SDG: CTO301318-1
Extracted by: MC
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7769
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	270
	n-Triacontane-D62		104%				
	O-Terphenyl		98%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date: 05/25/04
Analysis Date: 06/19/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-3
Client ID: A824-MW-02-0504
SDG: CTO301318-1
Extracted by: MC
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7769
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	270
	n-Triacontane-D62		95%				
	O-Terphenyl		91%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date: 05/25/04
Analysis Date: 06/19/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-4
Client ID: A824-MW-03-0504
SDG: CTO301318-1
Extracted by: MC
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7769
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	270
	n-Triacontane-D62		100%				
	O-Terphenyl		92%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/19/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-5
Client ID: G01-MW02-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7803
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	J	440	1.0	500	500	270
	n-Triacontane-D62		87%				
	O-Terphenyl		* 81%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date: 05/25/04
Analysis Date: 06/19/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-3
Client ID: G01-MW-03-0504
SDG: CTO301318-1
Extracted by: MC
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7769
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	270
	n-Triacontane-D62		92%				
	O-Terphenyl		91%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/20/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-6
Client ID: G01-MW04-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7803
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics		810	1.0	500	500	270
	n-Triacontane-D62		113%				
	O-Terphenyl		102%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/20/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-7
Client ID: G01-MW05-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7803
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics		1000	1.0	500	500	270
	n-Triacontane-D62		86%				
	O-Terphenyl		* 78%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date: 05/25/04
Analysis Date: 06/19/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-4
Client ID: G01-MW-10-0504
SDG: CTO301318-1
Extracted by: MC
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7769
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics		1900	1.0	500	500	270
	n-Triacontane-D62		111%				
	O-Terphenyl		101%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/24/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/20/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-8
Client ID: G01-MW11-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7803
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics		2000	1.0	500	500	270
	n-Triacontane-D62		111%				
	O-Terphenyl		100%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/20/04
Received Date: 05/21/04
Extraction Date: 05/25/04
Analysis Date: 06/19/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1503-5
Client ID: G01-MW-12-0504
SDG: CTO301318-1
Extracted by: MC
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7769
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics		2700	1.0	500	500	270
	n-Triacontane-D62		92%				
	O-Terphenyl		85%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/19/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-4
Client ID: KW-DUP-01-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7803
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics		2200	1.0	500	500	270
	n-Triacontane-D62		94%				
	O-Terphenyl		84%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date: 05/25/04
Analysis Date: 06/19/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-5
Client ID: KW-DUP-03-0504
SDG: CTO301318-1
Extracted by: MC
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7769
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	270
	n-Triacontane-D62		96%				
	O-Terphenyl		92%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/21/04
Received Date: 05/22/04
Extraction Date: 05/25/04
Analysis Date: 06/19/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1519-1
Client ID: RR-MW-06-0504
SDG: CTO301318-1
Extracted by: MC
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7769
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	270
	n-Triacontane-D62		99%				
	O-Terphenyl		94%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/19/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-1
Client ID: FC-MW-05-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7803
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	270
	n-Triacontane-D62		96%				
	O-Terphenyl		93%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/19/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-2
Client ID: FC-MW-06-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7803
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	270
	n-Triacontane-D62		90%				
	O-Terphenyl		86%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date: 05/22/04
Received Date: 05/25/04
Extraction Date: 05/26/04
Analysis Date: 06/19/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WU1529-3
Client ID: FC-MW-22-0504
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7803
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics		1800	1.0	500	500	270
	n-Triacontane-D62		77%				
	O-Terphenyl		* 72%				

APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG CTO301/318-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	G01-MW05-0504	WU1529-007	NM	05/24/2004	06/11/2004	06/15/2004	18	4	22
M	UG/L	A824-MW-01-0504	WU1519-002	NM	05/21/2004	06/11/2004	06/15/2004	21	4	25
M	UG/L	RR-MW-06-0504	WU1519-001	NM	05/21/2004	06/11/2004	06/15/2004	21	4	25
M	UG/L	KW-DUP-03-0504	WU1519-005	NM	05/21/2004	06/11/2004	06/15/2004	21	4	25
M	UG/L	KW-DUP-01-0504	WU1529-004	NM	05/22/2004	06/11/2004	06/15/2004	20	4	24
M	UG/L	G01-MW-12-0504	WU1503-005	NM	05/20/2004	06/11/2004	06/15/2004	22	4	26
M	UG/L	G01-MW-10-0504	WU1503-004	NM	05/20/2004	06/11/2004	06/15/2004	22	4	26
M	UG/L	G01-MW04-0504	WU1529-006	NM	05/24/2004	06/11/2004	06/15/2004	18	4	22
M	UG/L	G01-MW-03-0504	WU1503-003	NM	05/20/2004	06/11/2004	06/15/2004	22	4	26
M	UG/L	G01-MW02-0504	WU1529-005	NM	05/24/2004	06/11/2004	06/15/2004	18	4	22
M	UG/L	FC-MW-22-0504	WU1529-003	NM	05/22/2004	06/11/2004	06/15/2004	20	4	24
M	UG/L	FC-MW-06-0504	WU1529-002	NM	05/22/2004	06/11/2004	06/15/2004	20	4	24
M	UG/L	FC-MW-05-0504	WU1529-001	NM	05/22/2004	06/11/2004	06/15/2004	20	4	24
M	UG/L	A824-MW-03-0504	WU1519-004	NM	05/21/2004	06/11/2004	06/15/2004	21	4	25
M	UG/L	A824-MW-02-0504	WU1519-003	NM	05/21/2004	06/11/2004	06/15/2004	21	4	25

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	G01-MW11-0504	WU1529-008	NM	05/24/2004	06/11/2004	06/15/2004	18	4	22
NTA	MG/L	G01-MW-12-0504	WU1503-5	NM	05/20/2004	05/21/2004	05/21/2004	1	0	1
NTA	MG/L	G01-MW05-0504	WU1529-7	NM	05/24/2004	05/26/2004	05/26/2004	2	0	2
NTA	MG/L	KW-DUP-03-0504	WU1519-5	NM	05/21/2004	05/22/2004	05/22/2004	1	0	1
NTA	MG/L	G01-MW11-0504	WU1529-8	NM	05/24/2004	05/26/2004	05/26/2004	2	0	2
NTA	MG/L	G01-MW-10-0504	WU1503-4	NM	05/20/2004	05/21/2004	05/21/2004	1	0	1
NTA	MG/L	G01-MW-03-0504	WU1503-3	NM	05/20/2004	05/21/2004	05/21/2004	1	0	1
NTA	MG/L	G01-MW02-0504	WU1529-5	NM	05/24/2004	05/26/2004	05/26/2004	2	0	2
NTA	MG/L	A824-MW-03-0504	WU1519-4	NM	05/21/2004	05/22/2004	05/22/2004	1	0	1
NTA	MG/L	A824-MW-02-0504	WU1519-3	NM	05/21/2004	05/22/2004	05/22/2004	1	0	1
NTA	MG/L	A824-MW-01-0504	WU1519-2	NM	05/21/2004	05/22/2004	05/22/2004	1	0	1
NTA	MG/L	RR-MW-06-0504	WU1519-1	NM	05/21/2004	05/22/2004	05/22/2004	1	0	1
NTA	MG/L	G01-MW04-0504	WU1529-6	NM	05/24/2004	05/26/2004	05/26/2004	2	0	2
SO4	MG/L	G01-MW11-0504	WU1529-8	NM	05/24/2004	06/17/2004	06/17/2004	24	0	24
SO4	MG/L	A824-MW-01-0504	WU1519-2	NM	05/21/2004	06/03/2004	06/03/2004	13	0	13
SO4	MG/L	A824-MW-02-0504	WU1519-3	NM	05/21/2004	06/03/2004	06/03/2004	13	0	13
SO4	MG/L	A824-MW-03-0504	WU1519-4	NM	05/21/2004	06/03/2004	06/03/2004	13	0	13
SO4	MG/L	G01-MW02-0504	WU1529-5	NM	05/24/2004	06/17/2004	06/17/2004	24	0	24

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SO4	MG/L	G01-MW-03-0504	WU1503-3	NM	05/20/2004	06/03/2004	06/03/2004	14	0	14
SO4	MG/L	G01-MW04-0504	WU1529-6	NM	05/24/2004	06/17/2004	06/17/2004	24	0	24
SO4	MG/L	G01-MW-10-0504	WU1503-4	NM	05/20/2004	06/03/2004	06/03/2004	14	0	14
SO4	MG/L	KW-DUP-03-0504	WU1519-5	NM	05/21/2004	06/03/2004	06/03/2004	13	0	13
SO4	MG/L	RR-MW-06-0504	WU1519-1	NM	05/21/2004	06/03/2004	06/03/2004	13	0	13
SO4	MG/L	G01-MW-12-0504	WU1503-5	NM	05/20/2004	06/07/2004	06/07/2004	18	0	18
SO4	MG/L	G01-MW05-0504	WU1529-7	NM	05/24/2004	06/17/2004	06/17/2004	24	0	24
OS	%	G01-MW-03-0504	WU1503-3	NM	05/20/2004	05/24/2004	06/16/2004	4	23	27
OS	%	G01-MW-10-0504	WU1503-4	NM	05/20/2004	05/24/2004	06/16/2004	4	23	27
OS	%	G01-MW-10-0504DL2	WU1503-4DL2	NM	05/20/2004	05/24/2004	06/18/2004	4	25	29
OS	%	G01-MW11-0504	WU1529-8	NM	05/24/2004	05/26/2004	06/16/2004	2	21	23
OS	%	G01-MW11-0504DL2	WU1529-8DL2	NM	05/24/2004	05/26/2004	06/18/2004	2	23	25
OS	%	G01-MW-12-0504	WU1503-5	NM	05/20/2004	05/24/2004	06/16/2004	4	23	27
OS	%	KW-DUP-01-0504	WU1529-4	NM	05/22/2004	05/26/2004	06/16/2004	4	21	25
OS	%	G01-MW05-0504DL2	WU1529-7DL2	NM	05/24/2004	05/26/2004	06/18/2004	2	23	25
OS	%	RR-MW-06-0504RA	WU1519-1RA	NM	05/21/2004	05/25/2004	06/16/2004	4	22	26
OS	%	KW-DUP-03-0504	WU1519-5	NM	05/21/2004	05/25/2004	06/16/2004	4	22	26
OS	%	KW-DUP-01-0504DL2	WU1529-4DL2	NM	05/22/2004	05/26/2004	06/18/2004	4	23	27

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OS	%	G01-MW-12-0504DL2	WU1503-5DL2	NM	05/20/2004	05/24/2004	06/17/2004	4	24	28
OS	%	A824-MW-03-0504	WU1519-4	NM	05/21/2004	05/25/2004	06/16/2004	4	22	26
OS	%	G01-MW05-0504	WU1529-7	NM	05/24/2004	05/26/2004	06/16/2004	2	21	23
OS	%	A824-MW-02-0504	WU1519-3	NM	05/21/2004	05/25/2004	06/16/2004	4	22	26
OS	%	B01-MW-01-0504	WU1503-1	NM	05/20/2004	05/24/2004	06/15/2004	4	22	26
OS	%	B01-MW-03-0504	WU1503-2	NM	05/20/2004	05/24/2004	06/15/2004	4	22	26
OS	%	FC-MW-05-0504	WU1529-1	NM	05/22/2004	05/26/2004	06/16/2004	4	21	25
OS	%	FC-MW-22-0504	WU1529-3	NM	05/22/2004	05/26/2004	06/16/2004	4	21	25
OS	%	FC-MW-22-0504DL2	WU1529-3DL2	NM	05/22/2004	05/26/2004	06/18/2004	4	23	27
OS	%	G01-MW02-0504	WU1529-5	NM	05/24/2004	05/26/2004	06/16/2004	2	21	23
OS	%	G01-MW04-0504	WU1529-6	NM	05/24/2004	05/26/2004	06/16/2004	2	21	23
OS	%	A824-MW-01-0504	WU1519-2	NM	05/21/2004	05/25/2004	06/16/2004	4	22	26
OS	%	FC-MW-06-0504	WU1529-2	NM	05/22/2004	05/26/2004	06/16/2004	4	21	25
OS	UG/L	KW-DUP-03-0504	WU1519-5	NM	05/21/2004	05/25/2004	06/16/2004	4	22	26
OS	UG/L	G01-MW-10-0504DL2	WU1503-4DL2	NM	05/20/2004	05/24/2004	06/18/2004	4	25	29
OS	UG/L	G01-MW11-0504	WU1529-8	NM	05/24/2004	05/26/2004	06/16/2004	2	21	23
OS	UG/L	G01-MW11-0504DL2	WU1529-8DL2	NM	05/24/2004	05/26/2004	06/18/2004	2	23	25
OS	UG/L	G01-MW-12-0504	WU1503-5	NM	05/20/2004	05/24/2004	06/16/2004	4	23	27

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OS	UG/L	G01-MW-12-0504DL2	WU1503-5DL2	NM	05/20/2004	05/24/2004	06/17/2004	4	24	28
OS	UG/L	RR-MW-06-0504RA	WU1519-1RA	NM	05/21/2004	05/25/2004	06/16/2004	4	22	26
OS	UG/L	KW-DUP-01-0504DL2	WU1529-4DL2	NM	05/22/2004	05/26/2004	06/18/2004	4	23	27
OS	UG/L	G01-MW05-0504DL2	WU1529-7DL2	NM	05/24/2004	05/26/2004	06/18/2004	2	23	25
OS	UG/L	G01-MW05-0504	WU1529-7	NM	05/24/2004	05/26/2004	06/16/2004	2	21	23
OS	UG/L	KW-DUP-01-0504	WU1529-4	NM	05/22/2004	05/26/2004	06/16/2004	4	21	25
OS	UG/L	B01-MW-03-0504	WU1503-2	NM	05/20/2004	05/24/2004	06/15/2004	4	22	26
OS	UG/L	G01-MW-10-0504	WU1503-4	NM	05/20/2004	05/24/2004	06/16/2004	4	23	27
OS	UG/L	G01-MW04-0504	WU1529-6	NM	05/24/2004	05/26/2004	06/16/2004	2	21	23
OS	UG/L	A824-MW-02-0504	WU1519-3	NM	05/21/2004	05/25/2004	06/16/2004	4	22	26
OS	UG/L	B01-MW-01-0504	WU1503-1	NM	05/20/2004	05/24/2004	06/15/2004	4	22	26
OS	UG/L	A824-MW-01-0504	WU1519-2	NM	05/21/2004	05/25/2004	06/16/2004	4	22	26
OS	UG/L	FC-MW-05-0504	WU1529-1	NM	05/22/2004	05/26/2004	06/16/2004	4	21	25
OS	UG/L	FC-MW-06-0504	WU1529-2	NM	05/22/2004	05/26/2004	06/16/2004	4	21	25
OS	UG/L	FC-MW-22-0504	WU1529-3	NM	05/22/2004	05/26/2004	06/16/2004	4	21	25
OS	UG/L	FC-MW-22-0504DL2	WU1529-3DL2	NM	05/22/2004	05/26/2004	06/18/2004	4	23	27
OS	UG/L	G01-MW02-0504	WU1529-5	NM	05/24/2004	05/26/2004	06/16/2004	2	21	23
OS	UG/L	G01-MW-03-0504	WU1503-3	NM	05/20/2004	05/24/2004	06/16/2004	4	23	27

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OS	UG/L	A824-MW-03-0504	WU1519-4	NM	05/21/2004	05/25/2004	06/16/2004	4	22	26
OV	%	FC-MW-05-0504	WU1529-1RE	NM	05/22/2004	06/03/2004	06/03/2004	12	0	12
OV	%	FC-MW-22-0504	WU1529-3	NM	05/22/2004	06/02/2004	06/02/2004	11	0	11
OV	%	G01-MW02-0504	WU1529-5RE	NM	05/24/2004	06/17/2004	06/17/2004	24	0	24
OV	%	FC-MW-22-0504	WU1529-3	NM	05/22/2004	05/28/2004	05/28/2004	6	0	6
OV	%	FC-MW-06-0504	WU1529-2RE	NM	05/22/2004	06/03/2004	06/04/2004	12	1	13
OV	%	FC-MW-06-0504	WU1529-2	NM	05/22/2004	05/28/2004	05/28/2004	6	0	6
OV	%	FC-MW-05-0504	WU1529-1	NM	05/22/2004	05/28/2004	05/28/2004	6	0	6
OV	%	A824-MW-03-0504	WU1519-4	NM	05/21/2004	06/02/2004	06/02/2004	12	0	12
OV	%	A824-MW-03-0504	WU1519-4	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
OV	%	A824-MW-02-0504	WU1519-3	NM	05/21/2004	06/02/2004	06/02/2004	12	0	12
OV	%	A824-MW-02-0504	WU1519-3	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
OV	%	A824-MW-01-0504	WU1519-2	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
OV	%	G01-MW02-0504	WU1529-5	NM	05/24/2004	06/02/2004	06/02/2004	9	0	9
OV	%	A824-MW-01-0504	WU1519-2RE	NM	05/21/2004	06/03/2004	06/03/2004	13	0	13
OV	%	KWTB-052104	WU1519-6	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
OV	%	G01-MW02-0504	WU1529-5	NM	05/24/2004	05/28/2004	05/28/2004	4	0	4
OV	%	RR-MW-06-0504	WU1519-1RE	NM	05/21/2004	06/03/2004	06/03/2004	13	0	13

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	%	KWTB-052404	WU1529-9	NM	05/22/2004	06/01/2004	06/01/2004	10	0	10
OV	%	KW-DUP-03-0504	WU1519-5	NM	05/21/2004	06/02/2004	06/02/2004	12	0	12
OV	%	KW-DUP-03-0504	WU1519-5	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
OV	%	KW-DUP-01-0504	WU1529-4	NM	05/22/2004	06/02/2004	06/02/2004	11	0	11
OV	%	KW-DUP-01-0504	WU1529-4	NM	05/22/2004	05/28/2004	05/28/2004	6	0	6
OV	%	G01-MW-12-0504	WU1503-5RE	NM	05/20/2004	06/03/2004	06/03/2004	14	0	14
OV	%	G01-MW-12-0504	WU1503-5	NM	05/20/2004	06/02/2004	06/02/2004	13	0	13
OV	%	G01-MW-12-0504	WU1503-5	NM	05/20/2004	05/24/2004	05/24/2004	4	0	4
OV	%	G01-MW04-0504	WU1529-6	NM	05/24/2004	06/01/2004	06/01/2004	8	0	8
OV	%	G01-MW-03-0504	WU1503-3	NM	05/20/2004	05/24/2004	05/24/2004	4	0	4
OV	%	RR-MW-06-0504	WU1519-1	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
OV	%	G01-MW11-0504	WU1529-8	NM	05/24/2004	06/02/2004	06/03/2004	9	1	10
OV	%	G01-MW-03-0504	WU1503-3	NM	05/20/2004	06/02/2004	06/02/2004	13	0	13
OV	%	G01-MW04-0504	WU1529-6RE	NM	05/24/2004	06/03/2004	06/03/2004	10	0	10
OV	%	G01-MW05-0504	WU1529-7	NM	05/24/2004	06/01/2004	06/01/2004	8	0	8
OV	%	G01-MW05-0504	WU1529-7	NM	05/24/2004	06/02/2004	06/03/2004	9	1	10
OV	%	G01-MW-10-0504	WU1503-4	NM	05/20/2004	05/24/2004	05/24/2004	4	0	4
OV	%	G01-MW-10-0504	WU1503-4	NM	05/20/2004	06/02/2004	06/02/2004	13	0	13

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	%	G01-MW11-0504	WU1529-8	NM	05/24/2004	06/01/2004	06/01/2004	8	0	8
OV	UG/L	G01-MW05-0504	WU1529-7	NM	05/24/2004	06/01/2004	06/01/2004	8	0	8
OV	UG/L	KWTB-052404	WU1529-9	NM	05/22/2004	06/01/2004	06/01/2004	10	0	10
OV	UG/L	G01-MW-12-0504	WU1503-5	NM	05/20/2004	05/24/2004	05/24/2004	4	0	4
OV	UG/L	G01-MW-10-0504	WU1503-4	NM	05/20/2004	05/24/2004	05/24/2004	4	0	4
OV	UG/L	G01-MW-10-0504	WU1503-4	NM	05/20/2004	06/02/2004	06/02/2004	13	0	13
OV	UG/L	G01-MW11-0504	WU1529-8	NM	05/24/2004	06/01/2004	06/01/2004	8	0	8
OV	UG/L	G01-MW11-0504	WU1529-8	NM	05/24/2004	06/02/2004	06/03/2004	9	1	10
OV	UG/L	G01-MW05-0504	WU1529-7	NM	05/24/2004	06/02/2004	06/03/2004	9	1	10
OV	UG/L	G01-MW-12-0504	WU1503-5	NM	05/20/2004	06/02/2004	06/02/2004	13	0	13
OV	UG/L	G01-MW-12-0504	WU1503-5RE	NM	05/20/2004	06/03/2004	06/03/2004	14	0	14
OV	UG/L	KW-DUP-01-0504	WU1529-4	NM	05/22/2004	06/02/2004	06/02/2004	11	0	11
OV	UG/L	KWTB-052104	WU1519-6	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
OV	UG/L	RR-MW-06-0504	WU1519-1	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
OV	UG/L	RR-MW-06-0504	WU1519-1RE	NM	05/21/2004	06/03/2004	06/03/2004	13	0	13
OV	UG/L	G01-MW04-0504	WU1529-6RE	NM	05/24/2004	06/03/2004	06/03/2004	10	0	10
OV	UG/L	KW-DUP-01-0504	WU1529-4	NM	05/22/2004	05/28/2004	05/28/2004	6	0	6
OV	UG/L	KW-DUP-03-0504	WU1519-5	NM	05/21/2004	06/02/2004	06/02/2004	12	0	12

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	A824-MW-02-0504	WU1519-3	NM	05/21/2004	06/02/2004	06/02/2004	12	0	12
OV	UG/L	G01-MW04-0504	WU1529-6	NM	05/24/2004	06/01/2004	06/01/2004	8	0	8
OV	UG/L	A824-MW-01-0504	WU1519-2	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
OV	UG/L	KW-DUP-03-0504	WU1519-5	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
OV	UG/L	A824-MW-02-0504	WU1519-3	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
OV	UG/L	A824-MW-03-0504	WU1519-4	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
OV	UG/L	A824-MW-03-0504	WU1519-4	NM	05/21/2004	06/02/2004	06/02/2004	12	0	12
OV	UG/L	FC-MW-05-0504	WU1529-1	NM	05/22/2004	05/28/2004	05/28/2004	6	0	6
OV	UG/L	FC-MW-05-0504	WU1529-1RE	NM	05/22/2004	06/03/2004	06/03/2004	12	0	12
OV	UG/L	G01-MW02-0504	WU1529-5	NM	05/24/2004	06/02/2004	06/02/2004	9	0	9
OV	UG/L	A824-MW-01-0504	WU1519-2RE	NM	05/21/2004	06/03/2004	06/03/2004	13	0	13
OV	UG/L	FC-MW-06-0504	WU1529-2	NM	05/22/2004	05/28/2004	05/28/2004	6	0	6
OV	UG/L	G01-MW02-0504	WU1529-5RE	NM	05/24/2004	06/17/2004	06/17/2004	24	0	24
OV	UG/L	G01-MW02-0504	WU1529-5	NM	05/24/2004	05/28/2004	05/28/2004	4	0	4
OV	UG/L	FC-MW-22-0504	WU1529-3	NM	05/22/2004	06/02/2004	06/02/2004	11	0	11
OV	UG/L	FC-MW-22-0504	WU1529-3	NM	05/22/2004	05/28/2004	05/28/2004	6	0	6
OV	UG/L	G01-MW-03-0504	WU1503-3	NM	05/20/2004	06/02/2004	06/02/2004	13	0	13
OV	UG/L	FC-MW-06-0504	WU1529-2RE	NM	05/22/2004	06/03/2004	06/04/2004	12	1	13

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	G01-MW-03-0504	WU1503-3	NM	05/20/2004	05/24/2004	05/24/2004	4	0	4
METH	UG/ML	RR-MW-06-0504	0405424B-04A	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
METH	UG/ML	A824-MW-03-0504	0405424B-07A	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
METH	UG/ML	G01-MW-10-0504	0405424A-02A	NM	05/20/2004	05/28/2004	05/28/2004	8	0	8
METH	UG/ML	KW-DUP-03-0504	0405424B-08A	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
METH	UG/ML	G01-MW-12-0504	0405424A-03A	NM	05/20/2004	05/28/2004	05/28/2004	8	0	8
METH	UG/ML	G01-MW11-0504	0405496-04A	NM	05/24/2004	06/01/2004	06/01/2004	8	0	8
METH	UG/ML	G01-MW05-0504	0405496-03A	NM	05/24/2004	06/01/2004	06/01/2004	8	0	8
METH	UG/ML	G01-MW04-0504	0405496-02A	NM	05/24/2004	06/01/2004	06/01/2004	8	0	8
METH	UG/ML	G01-MW02-0504	0405496-01A	NM	05/24/2004	06/01/2004	06/01/2004	8	0	8
METH	UG/ML	A824-MW-02-0504	0405424B-06A	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
METH	UG/ML	A824-MW-01-0504	0405424B-05A	NM	05/21/2004	05/28/2004	05/28/2004	7	0	7
METH	UG/ML	G01-MW-03-0504	0405424A-01A	NM	05/20/2004	05/28/2004	05/28/2004	8	0	8
TPH	%	G01-MW11-0504	WU1529-8	NM	05/24/2004	05/26/2004	06/20/2004	2	25	27
TPH	%	RR-MW-06-0504	WU1519-1	NM	05/21/2004	05/25/2004	06/19/2004	4	25	29
TPH	%	A824-MW-03-0504	WU1519-4	NM	05/21/2004	05/25/2004	06/19/2004	4	25	29
TPH	%	KW-DUP-01-0504	WU1529-4	NM	05/22/2004	05/26/2004	06/19/2004	4	24	28
TPH	%	KW-DUP-03-0504	WU1519-5	NM	05/21/2004	05/25/2004	06/19/2004	4	25	29

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TPH	%	A824-MW-02-0504	WU1519-3	NM	05/21/2004	05/25/2004	06/19/2004	4	25	29
TPH	%	FC-MW-05-0504	WU1529-1	NM	05/22/2004	05/26/2004	06/19/2004	4	24	28
TPH	%	FC-MW-06-0504	WU1529-2	NM	05/22/2004	05/26/2004	06/19/2004	4	24	28
TPH	%	FC-MW-22-0504	WU1529-3	NM	05/22/2004	05/26/2004	06/19/2004	4	24	28
TPH	%	G01-MW02-0504	WU1529-5	NM	05/24/2004	05/26/2004	06/19/2004	2	24	26
TPH	%	G01-MW-03-0504	WU1503-3	NM	05/20/2004	05/25/2004	06/19/2004	5	25	30
TPH	%	G01-MW04-0504	WU1529-6	NM	05/24/2004	05/26/2004	06/20/2004	2	25	27
TPH	%	G01-MW05-0504	WU1529-7	NM	05/24/2004	05/26/2004	06/20/2004	2	25	27
TPH	%	G01-MW-10-0504	WU1503-4	NM	05/20/2004	05/25/2004	06/19/2004	5	25	30
TPH	%	G01-MW-12-0504	WU1503-5	NM	05/20/2004	05/25/2004	06/19/2004	5	25	30
TPH	%	A824-MW-01-0504	WU1519-2	NM	05/21/2004	05/25/2004	06/19/2004	4	25	29
TPH	UG/L	A824-MW-01-0504	WU1519-2	NM	05/21/2004	05/25/2004	06/19/2004	4	25	29
TPH	UG/L	G01-MW04-0504	WU1529-6	NM	05/24/2004	05/26/2004	06/20/2004	2	25	27
TPH	UG/L	KW-DUP-03-0504	WU1519-5	NM	05/21/2004	05/25/2004	06/19/2004	4	25	29
TPH	UG/L	KW-DUP-01-0504	WU1529-4	NM	05/22/2004	05/26/2004	06/19/2004	4	24	28
TPH	UG/L	G01-MW-12-0504	WU1503-5	NM	05/20/2004	05/25/2004	06/19/2004	5	25	30
TPH	UG/L	G01-MW11-0504	WU1529-8	NM	05/24/2004	05/26/2004	06/20/2004	2	25	27
TPH	UG/L	G01-MW-10-0504	WU1503-4	NM	05/20/2004	05/25/2004	06/19/2004	5	25	30

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TPH	UG/L	G01-MW05-0504	WU1529-7	NM	05/24/2004	05/26/2004	06/20/2004	2	25	27
TPH	UG/L	G01-MW-03-0504	WU1503-3	NM	05/20/2004	05/25/2004	06/19/2004	5	25	30
TPH	UG/L	G01-MW02-0504	WU1529-5	NM	05/24/2004	05/26/2004	06/19/2004	2	24	26
TPH	UG/L	FC-MW-22-0504	WU1529-3	NM	05/22/2004	05/26/2004	06/19/2004	4	24	28
TPH	UG/L	FC-MW-06-0504	WU1529-2	NM	05/22/2004	05/26/2004	06/19/2004	4	24	28
TPH	UG/L	FC-MW-05-0504	WU1529-1	NM	05/22/2004	05/26/2004	06/19/2004	4	24	28
TPH	UG/L	A824-MW-02-0504	WU1519-3	NM	05/21/2004	05/25/2004	06/19/2004	4	25	29
TPH	UG/L	RR-MW-06-0504	WU1519-1	NM	05/21/2004	05/25/2004	06/19/2004	4	25	29
TPH	UG/L	A824-MW-03-0504	WU1519-4	NM	05/21/2004	05/25/2004	06/19/2004	4	25	29

FIELD DUPLICATE PRECISION

ANALYTE	KW-DUP-01-0504	QUAL	FC-MW-22-0504	QUAL	RPD	DIFFERENCE
Toluene	0.7	J	0.6	J	15.38	0.1
Ethylbenzene	39		39		0.00	0
Total Xylenes	6		6		0.00	0
Naphthalene	220		190		14.63	30
2-Methylnaphthalene	67		50		29.06	17
1-Methylnaphthalene	32		28		13.33	4
Acenaphthene	0.2	U	0.079	J	86.74	0.121
TPH	2200		1800		20.00	400
ANALYTE	KW-DUP-03-0504	QUAL	A824-MW-01-0504	QUAL	RPD	DIFFERENCE
Methane	0.21		0.21		0.00	0

Katahdin
ANALYTICAL SERVICES

Cert. No. E87604

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE NAS KEY WEST; SDG: CTO301/318-1
WU1503, WU1519, WU1529
TASK ORDER MANAGER: EMILY MCREE

Sample Receipt

The following samples were received on May 21, 22 and 25, 2004 and were logged in under Katahdin Analytical Services work order numbers WU1503, WU1519 and WU1529 for a hardcopy due date of June 18, 2004.

KATAHDIN Sample No.	TTNUS Sample Identification
WU1503-1	B01-MW-01-0504
WU1503-2	B01-MW-03-0504
WU1503-3	G01-MW-03-0504
WU1503-4	G01-MW-10-0504
WU1503-5	G01-MW-12-0504
WU1519-1	RR-MW-06-0504
WU1519-2	A824-MW-01-0504
WU1519-3	A824-MW-02-0504
WU1519-4	A824-MW-03-0504
WU1519-5	KW-DUP-03-0504
WU1519-6	KWTB-052104
WU1529-1	FC-MW-05-0504
WU1529-2	FC-MW-06-0504
WU1529-3	FC-MW-22-0504
WU1529-4	KW-DUP-01-0504
WU1529-5	G01-MW02-0504
WU1529-6	G01-MW04-0504
WU1529-7	G01-MW05-0504
WU1529-8	G01-MW11-0504
WU1529-9	KWTB-052404

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.

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, **Andrea J. Colby**. This narrative is an integral part of the Report of Analysis.

Organics Laboratory

The samples of SDG CTO301/318-1 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, Office of Solid Waste and Emergency Response, U.S. EPA, and/or Method for Determination of Petroleum Range Organics (Method #FL-PRO), Florida Department of Environmental Protection, November 1, 1995, for the specific methods listed below or on the Report of Analysis. Sample WU1519-1 was used for a matrix spike (MS) and matrix spike duplicate (MSD) sample per client's request. Some manual integrations may have been performed due to split peaks and/or corrected baselines. All have been flagged with a "M" (software-generated) on the pertinent quantitation report.

8260B Analysis

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived for the full list of spiked compounds. The acceptance limits for the MS/MSD are for a short list of the spiked compounds. Katahdin standard operating procedure is not to take corrective action until greater than ten percent of the spiked analytes (with the exception of the common laboratory contaminants acetone and methylene chloride) in the LCS are outside of the QC limits.

One or more target analytes may have been detected above the MDL in some method blanks. Any of these analytes that were also detected in any of the associated samples were flagged with a "B" qualifier indicating that the analyte was detected in the method blank analyzed and/or extracted concurrently with the sample.

504 Analysis

Samples WU1503-5 and WU1529-5 had low recoveries for the surrogate TCX on both channels that were outside of the laboratory established acceptance limits. Samples WU1503-5 and WU1529-5 were reextracted with similar results. Sample WU1529-5RE was reextracted 9 days out of hold time. The results from both analyses are reported.

Samples WU1503-4 and WU1519-3 and 5 had low recoveries for the surrogate TCX on one channel. These recoveries were outside of the laboratory established acceptance limits. Since the recoveries on the confirmation channel were within the acceptance limits, the samples were not reanalyzed.

8100M-FLPRO Analysis

The laboratory control sample duplicate (LCSD) WG7803-3 and samples WU1529-3, 5 and 7 had low recoveries for the surrogate o-terphenyl, which were outside of the method acceptance limits. Since the recoveries for the second surrogate n-triacontane-D_{62} were within the method acceptance limits, the samples were not reanalyzed.

The calibration verification standards (CV) (files CUF2117, CUF2130 and CUF2136) had low responses for the hydrocarbon C-40, which resulted in %D's that were greater than 20%. Since the method requirement applies to only the PRO range responses, which were acceptable, the associated samples were not reanalyzed.

8270 SIM Analysis

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are nominal limits for the full list of spiked compounds. Katahdin standard operating procedure is not to take corrective action until greater than ten percent of the spiked analytes (with the exception of the common laboratory phthalate ester contaminants) in the LCS are outside of the QC limits.

The laboratory method blank WG7760-1RA had a high recovery for one surrogate which was outside the laboratory established acceptance limits. Since a high recovery indicates a high bias and there were no target analytes detected, the sample was not reanalyzed.

The laboratory method blank WG7805-1RA had a low recovery for one surrogate which was outside the laboratory established acceptance limits.

Sample WU1503-3 had a low recovery for one surrogate which was outside the laboratory established acceptance limits.

Samples WU1529-3DL2, 4DL2 and 8DL2 had responses for one or more internal standards which were low and outside the method acceptance limit of -50% to 100% of the response of the internal standard of the daily continuing calibration standard. Since the analyses of the undiluted samples had acceptable internal standard responses, the samples were not reanalyzed.

The initial calibration analyzed on the X instrument on 05/27/04 had %RSD values for several analytes that exceeded the method acceptance limit of 15%. For these analytes, a linear model was used for quantitation instead of an average response factor. The target analytes acenaphthylene, chrysene, indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene failed the linear model in the initial calibration curve due to the correlation coefficient being less than the method acceptance criteria of 0.990. These compounds were calibrated using the average model.

The initial calibration analyzed on the X instrument on 06/15/04 had %RSD values for four analytes that exceeded the method acceptance limit of 15%. The target analytes benzo(b)fluoranthene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene and benzo(g,h,i)perylene also failed the linear model in the initial calibration curve due to the correlation coefficient being less than the method acceptance criteria of 0.990. These compounds were calibrated using the average model.

The laboratory control sample duplicate (WG7760-3RA) had several analytes with recoveries that were high and outside of the nominal laboratory acceptance limits. Since the associated LCS (WG7760-2RA) was acceptable, the LCSD was not reanalyzed.

The MS and MSD (WG7768-3RA and 4RA) had had several analytes with recoveries that were low and outside of the nominal laboratory acceptance limits. Since the associated LCS (WG7768-2) was acceptable, the MS/MSD were not reanalyzed.

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

Metals Analysis

The samples of Katahdin SDG CTO301/318-1 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Aqueous Waste", SW-846, November 1986, Third Edition.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Aqueous-matrix Katahdin Sample Nos. WU1503-(3-5), WU1519-(1-5), and WU1529-(1-8) were digested for ICP analysis on 06/11/04 (QC Batch UF11ICW1) in accordance with USEPA Method 3010A. Katahdin Sample No. WU1519-1 was prepared with duplicate matrix-spiked aliquots.

ICP analyses of SDG CTO301/318-1 sample digestates were performed using a Thermo Jarrell Ash (TJA) Trace ICP spectrometer. All samples were analyzed within holding times and all analytical run QC criteria were met, with the following comments or exceptions:

Some of the results for run QC samples (ICV, ICB, CCV, CCB, ICSA, and ICSAB) included in the accompanying data package may have exceeded acceptance limits for some elements. Please note that all client samples and batch QC samples associated with out-of-control results for run QC samples were subsequently reanalyzed for the analytes in question with the following exception:

Matrix QC Summary

One or both of the matrix-spiked aliquots of Katahdin Sample No. WU1519-1 was within the laboratory's acceptance criteria (75% - 125% recovery of the added element, if the native concentration is less than four times the amount added) for lead.

The matrix spike duplicate analysis of Katahdin Sample No. WU1519-1 was within the laboratory's acceptance limit (<20% relative difference between duplicate matrix spiked aliquots) for lead.

The serial dilution analyses of Katahdin Sample No. WU1519-1 was within the laboratory's ICP serial dilution acceptance limit (<10% difference between the original sample result and the result for a 5-fold dilution of the sample, if the result for the dilution is at least ten times the instrument detection limit) for lead.

Wet Chemistry Analysis

The samples of SDG CTO301/318-1 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for nitrate and sulfate were performed according "Methods for Chemical Analysis of Water and Wastes", EPA 600/4-79-020, 1979 Revised 1983, U.S. EPA.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Practical Quantitation Limit (PQL) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U PQL", where "PQL" is the numerical value of the Practical Quantitation Limit.

All analyses were performed within analytical hold time. All quality control criteria were met with the following exceptions:

For Katahdin Sample Numbers WU1503-5 and WU1519-1, the matrix spike recovery (0%) for sulfate is outside the laboratory's acceptance criteria. In each of these cases, the sample concentration is more than ten times the amount of spike added.

No other deviations were noted by the Wet Chemistry group.

Subcontracted Analysis

Analyses for Methane/Ethane/Ethene were performed by a subcontract laboratory. Please refer to the section of the data package titled Subcontracted Data.

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.

Deborah J. Nadeau 6.25.04

Deborah Nadeau
Operations Manager

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 3833 | PAGE 1 OF 1

PROJECT NO:	FACILITY: NAS KEY WEST	PROJECT MANAGER EMILY McREE	PHONE NUMBER (803)649-7963	LABORATORY NAME AND CONTACT: KATHADIN - ANDREA COLBY
SAMPLERS (SIGNATURE) Gary Bragan Jr		FIELD OPERATIONS LEADER GARY BRAGANZA	PHONE NUMBER (561)302-4437	ADDRESS 340 COUNTY ROAD NO.5
		CARRIER/WAYBILL NUMBER FED EX / 8425 8908 8781		CITY, STATE WESTBROOK, ME

STANDARD TAT ☑
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2004	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	PPL VOH's, BTEX, MTBE	TRPH	EDB	NITRATE + SULFATE	METHANE	LEAD	COMMENTS
5/20	9:20	B01-MW-01-0504	MW-01			GW	G	2			X							
	9:30	B01-MW-03-0504	MW-03	~~9.90~~				2			X							
	13:45	G01-MW-03-0504	G01-MW03					13			X	X	X	X	X	X	X	
	15:25	G01-MW-10-0504	G01-MW10					13			X	X	X	X	X	X	X	
	14:40	G01-MW-12-0504	G01-MW12					13			X	X	X	X	X	X	X	

1. RELINQUISHED BY Gary Bragan Jr	DATE 5/20/04	TIME 17:30	1. RECEIVED BY	DATE 5/20/04	TIME 0905
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

900003

WW1514

TETRA TECH NUS, INC. | **CHAIN OF CUSTODY** | **NUMBER** 3834 | **PAGE** 1 **OF** 1

PROJECT NO: N4779	**FACILITY:** NAS KEY WEST	**PROJECT MANAGER** EMILY McREE	**PHONE NUMBER** (803) 649-7963	**LABORATORY NAME AND CONTACT:** KATHADIN - ANDREA COLBY
SAMPLERS (SIGNATURE) Gary Braganza		**FIELD OPERATIONS LEADER** GARY BRAGANZA	**PHONE NUMBER** (561) 302-4137	**ADDRESS** 340 COUNTY ROAD No. 5
		CARRIER/WAYBILL NUMBER FEDEX / 8425 8908 8792		**CITY, STATE** WESTBROOK, ME

STANDARD TAT ☑
RUSH TAT ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2004	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: PPL VOHs, BTEX, MTBE	PAH's	TRPH	EDB	LEAD	NITRATE + SULFATE	METHANE		COMMENTS
5/21	10:35	RR-MW-06-0504	RR-MW-06			GW	G	37			X	X	X	X	X	X	X		MS/MSD
	10:50	A824-MW-01-0504	A824-MW-01					13			X	X	X	X	X	X	X		
	13:20	A824-MW-02-0504	A824-MW-02					13			X	X	X	X	X	X	X		
	13:05	A824-MW-03-0504	A824-MW-03					13			X	X	X	X	X	X	X		
↓		KW-DUP-03-0504				↓		13			X	X	X	X	X	X	X		
		KWTB-052104						2											TRIP BLANK

1. RELINQUISHED BY Gary Braganza	DATE 5/21/04	TIME	1. RECEIVED BY Fed Ex	DATE	TIME	
2. RELINQUISHED BY Fed Ex	DATE	TIME	2. RECEIVED BY G. Brewer	DATE 05 22 04	TIME 10:20	
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME	

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

010017

WW1529

TETRA TECH NUS, INC. | **CHAIN OF CUSTODY** | **NUMBER** 3706 | **PAGE** 1 **OF** 1

PROJECT NO: N4779	**FACILITY:** NAS KEY WEST	**PROJECT MANAGER** EMILY McKEE	**PHONE NUMBER** (803) 649-7963	**LABORATORY NAME AND CONTACT:** KATHADIN - ANDREA COLBY
SAMPLERS (SIGNATURE) Gary Braganza		**FIELD OPERATIONS LEADER** GARY BRAGANZA	**PHONE NUMBER** (561) 302-4137	**ADDRESS** 340 COUNTY ROAD No. 5
		CARRIER/WAYBILL NUMBER FEDEX / 8425 8908 8807		**CITY, STATE** WESTBROOK, ME

STANDARD TAT ☑
RUSH TAT ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2004)	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: PPL VOA's + BTEX + MTBE	PAHs	TRPH	EDB	LEAD	NITRATE + SULFATE	METHANE	COMMENTS
									G	G	G	G	P	P	G			
5/22	10:15	FC-MW-05-0504	FC-MW-05			GW	G	10	X	X	X	X	X					
	12:15	FC-MW-06-0504	FC-MW-06					10	X	X	X	X	X					
	10:30	FC-MW-22-0504	FCMW-22					10	X	X	X	X	X					
		KW-DUP-01-0504						10	X	X	X	X	X					
5/24	14:00	G01-MW02-0504	G01-MW-02					13	X	X	X	X	X	X	X			
	09:40	G01-MW04-0504	G01-MW-04					13	X	X	X	X	X	X	X			
	13:35	G01-MW05-0504	G01-MW-05					13	X	X	X	X	X	X	X			
	9:15	G01-MW11-0504	G01-MW-11					13	X	X	X	X	X	X	X			
		KWTB-052404						2										

1. RELINQUISHED BY Gary Braganza	DATE 5/24/04	TIME	1. RECEIVED BY	DATE 5/25/04	TIME 0910
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

810000

KATAHDIN ANALYTICAL SERVICES, INC.
SAMPLE RECEIPT CONDITION REPORT
Tel. (207) 874-2400
Fax (207) 775-4029

LAB (WORK ORDER) # WU1503

PAGE: 1 OF 2

COOLER: 1 OF 2

CLIENT: Tetra tech

PROJECT:

COC#
SDG#
DATE / TIME RECEIVED: 5/21/04 0915
DELIVERED BY: Fedex
RECEIVED BY: [illegible]
LIMS ENTRY BY: KJC
LIMS REVIEW BY / PM: KJC

	YES	NO	EXCEPTIONS	COMMENTS	RESOLUTION
1. CUSTODY SEALS PRESENT / INTACT?	☑	☐	☐		
2. CHAIN OF CUSTODY PRESENT IN THIS COOLER?	☑	☐	☐		
3. CHAIN OF CUSTODY SIGNED BY CLIENT?	☑	☐	☐		
4. CHAIN OF CUSTODY MATCHES SAMPLES?	☑	☐	☐		
5. TEMPERATURE BLANKS PRESENT?	☑	☐	☐	TEMP BLANK TEMP (°C)= 7.7	
6. SAMPLES RECEIVED AT 4°C +/- 2? ICE / ICE PACKS PRESENT Y or N?	☐	☑	☐	COOLER TEMP (°C)= 5.3 ~~7.5~~ NA (RECORD COOLER TEMP ONLY IF TEMP BLANK IS NOT PRESENT)	
7. VOLATILES FREE OF HEADSPACE?	☑	☐	☐		
8. TRIP BLANK PRESENT IN THIS COOLER	☑	☐	☐		
9. PROPER SAMPLE CONTAINERS AND VOLUME?	☑	☐	☐		
10. SAMPLES WITHIN HOLD TIME UPON RECEIPT?	☑	☐	☐		
11. SAMPLES PROPERLY PRESERVED(1)?	☑	☐	☐		
12. CORRECTIVE ACTION REPORT FILED?	☐	☑	N/A		

13. ANALYTICAL PROGRAMS (CIRCLE ONE) COMMERCIAL CLP HAZWRAP NFESC ACOE AFCEE OTHER (STATE OF ORIGIN):

LOG - IN NOTES(1): Affects Samples

MW01 MW12 ~~MW06~~ ~~824-MW03~~ 7-16-04
MW03 ~~824-MW03~~
MW10 ~~824-MW01~~ ~~824-MW~~ JAJ

(1) Use this space (and additional sheets if necessary) to document samples that are received broken or compromised, C-O-C discrepancies, radiation checks, residual chlorine check, results of pH check if required. If samples required pH adjustment, record volume and type of preservative added.

KATAHDIN ANALYTICAL SERVICES, INC.
SAMPLE RECEIPT CONDITION REPORT
Tel. (207) 874-2400
Fax (207) 775-4029

LAB (WORK ORDER) # W41503

PAGE: 2 OF 2

COOLER: 2 OF 2

CLIENT: Tetra tech

PROJECT:

COC#
SDG#
DATE / TIME RECEIVED: 5/21/04 0915
DELIVERED BY: Fedex
RECEIVED BY: AM
LIMS ENTRY BY: KC
LIMS REVIEW BY / PM: KC

	YES	NO	EXCEPTIONS
1. CUSTODY SEALS PRESENT / INTACT?	☑	☐	☐
2.CHAIN OF CUSTODY PRESENT IN THIS COOLER?	☑	☐	☐
3. CHAIN OF CUSTODY SIGNED BY CLIENT?	☑	☐	☐
4. CHAIN OF CUSTODY MATCHES SAMPLES?	☑	☐	☐
5. TEMPERATURE BLANKS PRESENT?	☑	☐	☐
6. SAMPLES RECEIVED AT 4°C +/- 2? ICE/ ICE PACKS PRESENT (Y or N)?	☑	☐	☐
7. VOLATILES FREE OF HEADSPACE?	☐	☐	☑
8. TRIP BLANK PRESENT IN THIS COOLER	☐	☑	☐
9. PROPER SAMPLE CONTAINERS AND VOLUME?	☑	☐	☐
10. SAMPLES WITHIN HOLD TIME UPON RECEIPT?	☑	☐	☐
11. SAMPLES PROPERLY PRESERVED(1)?	☑	☐	☐
12. CORRECTIVE ACTION REPORT FILED?	☐	☑	N/A

COMMENTS	RESOLUTION
TEMP BLANK TEMP (°C)= 12.5	
COOLER TEMP (°C)= 4.1 NA	
(RECORD COOLER TEMP ONLY IF TEMP BLANK IS NOT PRESENT)	

13. ANALYTICAL PROGRAMS (CIRCLE ONE) COMMERCIAL CLP HAZWRAP NFESC ACOE AFCEE OTHER (STATE OF ORIGIN):

LOG - IN NOTES(1):

(1) **Use this space (and additional sheets if necessary) to document samples that are received broken or compromised, C-O-C discrepancies, radiation checks, residual chlorine check, results of pH check if required. If samples required pH adjustment, record volume and type of preservative added.**

KATAHDIN ANALYTICAL SERVICES, INC.
SAMPLE RECEIPT CONDITION REPORT
Tel. (207) 874-2400
Fax (207) 775-4029

Cooler #1

LAB (WORK ORDER) # WU1519

PAGE: 1 OF 3

COOLER: 1 OF 3

COC#

SDG#

DATE / TIME RECEIVED: 05/22/04 11:20

DELIVERED BY: Fed Ex (pick up)

RECEIVED BY: George Brewer

LIMS ENTRY BY: [illegible]

LIMS REVIEW BY / PM: KC

CLIENT: Tetra Tech

PROJECT:

	YES	NO	EXCEPTIONS
1. CUSTODY SEALS PRESENT / INTACT?	☒	☐	☐
2. CHAIN OF CUSTODY PRESENT IN THIS COOLER?	☒	☐	☐
3. CHAIN OF CUSTODY SIGNED BY CLIENT?	☒	☐	☐
4. CHAIN OF CUSTODY MATCHES SAMPLES?	☒	☐	☐
5. TEMPERATURE BLANKS PRESENT?	☒	☐	☐
6. SAMPLES RECEIVED AT 4°C +/- 2? ICE / ICE PACKS PRESENT (Y) or N?	☐	☒	☐
7. VOLATILES FREE OF HEADSPACE?	☐	☐	☑
8. TRIP BLANK PRESENT IN THIS COOLER	☐	☑	☐
9. PROPER SAMPLE CONTAINERS AND VOLUME?	☑	☐	☐
10. SAMPLES WITHIN HOLD TIME UPON RECEIPT?	☑	☐	☐
11. SAMPLES PROPERLY PRESERVED[1]?	☑	☐	☐
12. CORRECTIVE ACTION REPORT FILED?	☐	☑	N/A

COMMENTS	RESOLUTION

TEMP BLANK TEMP (°C)= 1.8°

COOLER TEMP (°C)= ~~1.8~~ 052204 NA

(RECORD COOLER TEMP ONLY IF TEMP BLANK IS NOT PRESENT)

13. ANALYTICAL PROGRAMS (CIRCLE ONE) COMMERCIAL CLP HAZWRAP (NFESC) ACOE AFCEE OTHER (STATE OF ORIGIN):

LOG - IN NOTES[1]: Received 1 of 2 bottles for PAH of sample RR-MW-06 broken

(1) Use this space (and additional sheets if necessary) to document samples that are received broken or compromised, C-O-C discrepancies, radiation checks, residual chlorine check, results of pH check if required. If samples required pH adjustment, record volume and type of preservative added.

FORM 4

VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG7858-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: S1408 Lab Sample ID: WG7858-2

Date Analyzed: 05/28/04 Time Analyzed: 1037

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: GCMS-S

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	WG7858-LCS	WG7858-1	S1406	05/28/04	0919
02	KWTB-052104	WU1519-6	S1410	05/28/04	1153
03	RR-MW-06-0504	WU1519-1	S1411	05/28/04	1228
04	A824-MW-01-0504	WU1519-2	S1412	05/28/04	1303
05	A824-MW-02-0504	WU1519-3	S1413	05/28/04	1338
06	A824-MW-03-0504	WU1519-4	S1414	05/28/04	1413
07	KW-DUP-03-0504	WU1519-5	S1415	05/28/04	1448
08	RR-MW-06-0504MS	WG7858-3	S1421	05/28/04	1819
09	RR-MW-06-0504MSD	WG7858-4	S1422	05/28/04	1854
10					
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30					

COMMENTS:

Katahdin Analytical Services 1000004

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG7754-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: Z1632 Lab Sample ID: WG7754-2

Date Analyzed: 05/24/04 Time Analyzed: 1058

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: GCMS-Z

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	WG7754-LCS	WG7754-1	Z1630	05/24/04	0939
02	G01-MW-03-0504	WU1503-3	Z1641	05/24/04	1632
03	G01-MW-10-0504	WU1503-4	Z1642	05/24/04	1710
04	G01-MW-12-0504	WU1503-5	Z1643	05/24/04	1747
05					
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30					

COMMENTS:

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG7857-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: Z1709 Lab Sample ID: WG7857-2

Date Analyzed: 05/28/04 Time Analyzed: 0931

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: GCMS-Z

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	WG7857-LCS	WG7857-1	Z1707	05/28/04	0815
02	FC-MW-05-0504	WU1529-1	Z1718	05/28/04	1510
03	FC-MW-06-0504	WU1529-2	Z1719	05/28/04	1548
04	FC-MW-22-0504	WU1529-3	Z1720	05/28/04	1625
05	KW-DUP-01-0504	WU1529-4	Z1721	05/28/04	1703
06	G01-MW02-0504	WU1529-5	Z1722	05/28/04	1739
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09					
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COMMENTS:

Katahdin Analytical Services 1000006

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG7892-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: Z1730 Lab Sample ID: WG7892-2

Date Analyzed: 06/01/04 Time Analyzed: 1024

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: GCMS-Z

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	WG7892-LCS	WG7892-1	Z1728	06/01/04	0909
02	KWTB-052404	WU1529-9	Z1731	06/01/04	1104
03	G01-MW04-0504	WU1529-6	Z1734	06/01/04	1255
04	G01-MW05-0504	WU1529-7	Z1735	06/01/04	1410
05	G01-MW11-0504	WU1529-8	Z1736	06/01/04	1446
06					
07					
08					
09					
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COMMENTS:

Katahdin Analytical Services 1000007

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 05/28/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WG7858-2
Client ID: WG7858-Blank
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7858
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	1	1.0	1	1	0.6
75-01-4	Vinyl chloride	U	1	1.0	1	1	0.2
74-83-9	Bromomethane	U	1	1.0	1	1	0.6
75-00-3	Chloroethane	U	1	1.0	1	1	0.9
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	J	1	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		104%				
17060-07-0	1,2-Dichloroethane-D4		113%				
2037-26-5	Toluene-D8		96%				
460-00-4	P-Bromofluorobenzene		97%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 05/24/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WG7754-2
Client ID: WG7754-Blank
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7754
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	1	1.0	1	1	0.6
75-01-4	Vinyl chloride	U	1	1.0	1	1	0.2
74-83-9	Bromomethane	U	1	1.0	1	1	0.6
75-00-3	Chloroethane	U	1	1.0	1	1	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.?
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		109%				
17060-07-0	1,2-Dichloroethane-D4		102%				
2037-26-5	Toluene-D8		101%				
460-00-4	P-Bromofluorobenzene		94%				

Katahdin Analytical Services 1000009

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 05/28/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WG7857-2
Client ID: WG7857-Blank
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7857
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	1	1.0	1	1	0.6
75-01-4	Vinyl chloride	U	1	1.0	1	1	0.2
74-83-9	Bromomethane	U	1	1.0	1	1	0.6
75-00-3	Chloroethane	U	1	1.0	1	1	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	J	1	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		104%				
17060-07-0	1,2-Dichloroethane-D4		97%				
2037-26-5	Toluene-D8		103%				
460-00-4	P-Bromofluorobenzene		96%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 06/01/04
Report Date: 06/10/2004
Matrix: WATER
% Solids: NA

Lab ID: WG7892-2
Client ID: WG7892-Blank
SDG: CTO301318-1
Extracted by:
Extraction Method: SW846 5030
Analyst: AZ
Analysis Method: SW846 8260B
Lab Prep Batch: WG7892
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	1	1.0	1	1	0.6
75-01-4	Vinyl chloride	U	1	1.0	1	1	0.2
74-83-9	Bromomethane	U	1	1.0	1	1	0.6
75-00-3	Chloroethane	U	1	1.0	1	1	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		102%				
17060-07-0	1,2-Dichloroethane-D4		99%				
2037-26-5	Toluene-D8		101%				
460-00-4	P-Bromofluorobenzene		94%				

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES, Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

	CLIENT SAMPLE ID	LAB SAMPLE ID	SMC1 DBF#	SMC2 DCA#	SMC3 TOL#	SMC4 BFB#	TOT OUT
01	WG7754-LCS	WG7754-1	100	92	98	92	0
02	WG7754-BLANK	WG7754-2	109	102	101	94	0
03	G01-MW-03-0504	WU1503-3	110	103	102	89	0
04	G01-MW-10-0504	WU1503-4	107	103	104	90	0
05	G01-MW-12-0504	WU1503-5	109	103	105	98	0
06	WG7857-LCS	WG7857-1	98	93	100	98	0
07	WG7858-LCS	WG7858-1	102	107	100	99	0
08	WG7857-BLANK	WG7857-2	104	97	103	96	0
09	WG7858-BLANK	WG7858-2	104	113	96	97	0
10	KWTB-052104	WU1519-6	98	105	97	99	0
11	RR-MW-06-0504	WU1519-1	96	108	95	98	0
12	A824-MW-01-0504	WU1519-2	94	106	97	97	0
13	A824-MW-02-0504	WU1519-3	105	116	96	98	0
14	A824-MW-03-0504	WU1519-4	104	118	96	99	0
15	KW-DUP-03-0504	WU1519-5	104	116	97	101	0
16	FC-MW-05-0504	WU1529-1	104	103	103	96	0
17	FC-MW-06-0504	WU1529-2	104	105	104	98	0
18	FC-MW-22-0504	WU1529-3	99	106	108	102	0
19	KW-DUP-01-0504	WU1529-4	100	101	106	98	0
20	G01-MW02-0504	WU1529-5	101	98	100	93	0
21	RR-MW-06-0504MS	WG7858-3	103	108	96	102	0
22	RR-MW-06-0504MSD	WG7858-4	98	106	97	102	0
23	WG7892-LCS	WG7892-1	99	95	101	96	0
24	WG7892-BLANK	WG7892-2	102	99	101	94	0
25	KWTB-052404	WU1529-9	102	101	104	99	0
26	G01-MW04-0504	WU1529-6	104	105	104	98	0
27	G01-MW05-0504	WU1529-7	105	105	104	97	0
28	G01-MW11-0504	WU1529-8	106	104	104	99	0

		QC LIMITS
SMC1 (DBF)	= Dibromofluoromethane	(76-118)
SMC2 (DCA)	= 1,2-Dichloroethane-D4	(76-119)
SMC3 (TOL)	= Toluene-D8	(68-122)
SMC4 (BFB)	= P-Bromofluorobenzene	(56-119)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

Katahdin Analytical Services 1000003

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: SB676 BFB Injection Date: 05/11/04

Instrument ID: GCMS-S BFB Injection Time: 1005

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.0
75	30.0 - 60.0% of mass 95	51.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	66.3
175	5.0 - 9.0% of mass 174	5.7 (8.6)1
176	95.0 - 101.0% of mass 174	64.4 (97.2)1
177	5.0 - 9.0% of mass 176	4.5 (7.0)2

1-Value is % mass 174 2-Value is % mass 176

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		VSTD050S11A	S1134	05/11/04	1031
02		VSTD020S11A	S1135	05/11/04	1120
03		VSTD005S11A	S1136	05/11/04	1155
04		VSTD001S11A	S1137	05/11/04	1230
05		VSTD200S11A	S1138	05/11/04	1305
06		VSTD100S11A	S1139	05/11/04	1340
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FORM 6

VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-S Calibration Date(s): 05/11/04 05/11/04

Column: RTX-VMS ID: 0.18 (mm) Calibration Time(s): 1031 1340

LAB FILE ID: RF1: S1137 RF5: S1136 RF20: S1135

RF50: S1134 RF100: S1139 RF200: S1138

COMPOUND	RF1	RF5	RF20	RF50	RF100	RF200	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2	MAX %RSD OR R^2
Chloromethane	0.319	0.304	0.276	0.306	0.330	0.363	AVRG		0.31660626	9.218	15.000
Vinyl chloride	0.272	0.360	0.342	0.370	0.353	0.363	AVRG		0.34347716	10.527	15.000
Bromomethane	1471	8681	50007	178830	333980	662290	LINR	3.094e-002	4.43222728	0.99894	0.99000
Chloroethane	0.150	0.226	0.222	0.234	0.227	0.227	AVRG		0.21425936	14.712	15.000
1,1-Dichloroethene	2411	27824	98830	278820	566930	1078200	LINR	7.568e-003	2.72728969	0.99984	0.99000
Methylene Chloride	39519	65098	157370	351980	690220	1297600	LINR	-7.12e-002	2.31236392	0.99946	0.99000
trans-1,2-Dichloroethene	0.379	0.439	0.403	0.411	0.421	0.427	AVRG		0.41337103	5.072	15.000
Methyl tert-butyl ether	0.880	1.009	1.033	0.994	1.001	1.094	AVRG		1.00206838	6.967	15.000
1,1-Dichloroethane	0.610	0.662	0.654	0.681	0.696	0.674	AVRG		0.66306531	4.453	15.000
cis-1,2-Dichloroethene	0.409	0.449	0.442	0.460	0.477	0.471	AVRG		0.45159431	5.441	15.000
Chloroform	4758	58157	225000	607430	1227800	2335400	LINR	3.962e-003	1.26004467	0.99991	0.99000
Carbon Tetrachloride	0.285	0.352	0.342	0.378	0.375	0.361	AVRG		0.34877493	9.804	15.000
1,1,1-Trichloroethane	0.551	0.631	0.618	0.670	0.661	0.674	AVRG		0.63407105	7.316	15.000
Benzene	1.039	1.145	1.077	1.092	1.107	1.058	AVRG		1.08640571	3.442	15.000
1,2-Dichloroethane	0.419	0.415	0.418	0.418	0.408	0.424	AVRG		0.41719749	1.232	15.000
Trichloroethene	0.272	0.319	0.300	0.312	0.313	0.303	AVRG		0.30335346	5.497	15.000
1,2-Dichloropropane	0.263	0.247	0.248	0.250	0.256	0.247	AVRG		0.25173746	2.494	15.000
Bromodichloromethane	0.366	0.410	0.420	0.431	0.424	0.418	AVRG		0.41160719	5.653	15.000
cis-1,3-dichloropropene	0.430	0.444	0.474	0.475	0.472	0.464	AVRG		0.45975114	4.017	15.000
2-Chloroethylvinylether	1765	11350	49941	129430	266220	567680	LINR	4.482e-002	7.37766139	0.99801	0.99000
Toluene	0.675	0.768	0.706	0.719	0.713	0.690	AVRG		0.71183667	4.475	15.000
Tetrachloroethene	0.330	0.306	0.299	0.308	0.308	0.298	AVRG		0.30816056	3.769	15.000
trans-1,3-Dichloropropene	0.318	0.365	0.399	0.407	0.401	0.407	AVRG		0.38285163	9.268	15.000
1,1,2-Trichloroethane	0.196	0.208	0.211	0.196	0.201	0.205	AVRG		0.20270783	3.115	15.000
Dibromochloromethane	0.268	0.327	0.347	0.351	0.358	0.380	AVRG		0.33861160	11.348	15.000
Chlorobenzene	0.930	0.935	0.918	0.928	0.906	0.888	AVRG		0.91739603	1.904	15.000
Ethylbenzene	1.494	1.633	1.554	1.588	1.585	1.511	AVRG		1.56085522	3.332	15.000
Xylenes (total)	1.641	1.793	1.734	1.730	1.706	1.638	AVRG		1.70704942	3.478	15.000
m+p-Xylenes	0.556	0.602	0.580	0.580	0.574	0.545	AVRG		0.57304926	3.552	15.000
o-Xylene	0.529	0.587	0.573	0.569	0.558	0.548	AVRG		0.56095089	3.625	15.000
Bromoform	0.193	0.218	0.240	0.231	0.238	0.263	AVRG		0.23065882	10.237	15.000
1,1,2,2-Tetrachloroethane	0.575	0.611	0.644	0.581	0.597	0.652	AVRG		0.61005466	5.266	15.000
Dibromofluoromethane	0.447	0.427	0.420	0.432	0.442	0.446	AVRG		0.43579493	2.530	15.000
1,2-Dichloroethane-D4	0.540	0.495	0.478	0.508	0.515	0.534	AVRG		0.51153891	4.595	15.000
Toluene-D8	1.172	1.078	1.044	1.026	1.032	0.993	AVRG		1.05766351	5.895	15.000
P-Bromofluorobenzene	0.490	0.455	0.429	0.405	0.406	0.399	AVRG		0.43065567	8.364	15.000

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-S Calibration Date(s): 05/11/04 05/11/04

Column: RTX-VMS ID: 0.18 (mm) Calibration Time(s): 1031 1340

Average %RSD test result.

Calculate Average %RSD: 11.31039810
Maximum Average %RSD: 15.00000000

Note: Passes Average %RSD Test.

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: ZB809 BFB Injection Date: 05/11/04

Instrument ID: GCMS-Z BFB Injection Time: 0903

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.4
75	30.0 - 60.0% of mass 95	46.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	58.2
175	5.0 - 9.0% of mass 174	4.1 (7.0)1
176	95.0 - 101.0% of mass 174	55.9 (96.0)1
177	5.0 - 9.0% of mass 176	4.2 (7.6)2

1-Value is % mass 174 2-Value is % mass 176

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		VSTD050Z11A	Z1451	05/11/04	0927
02		VSTD020Z11A	Z1452	05/11/04	1018
03		VSTD005Z11A	Z1453	05/11/04	1055
04		VSTD200Z11A	Z1456	05/11/04	1247
05		VSTD100Z11A	Z1457	05/11/04	1324
06		VSTD001Z11F	Z1461	05/11/04	1647
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FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-Z Calibration Date(s): 05/11/04 05/11/04

Column: RTX-VMS ID: 0.18 (mm) Calibration Time(s): 0927 1647

LAB FILE ID: RF1: Z1461 RF5: Z1453 RF20: Z1452
RF50: Z1451 RF100: Z1457 RF200: Z1456

COMPOUND	RF1	RF5	RF20	RF50	RF100	RF200	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2	MAX %RSD OR R^2
Chloromethane	0.745	0.807	0.803	0.781	0.834	0.701	AVRG		0.77870977	6.186	15.000
Vinyl chloride	0.667	0.739	0.764	0.737	0.761	0.645	AVRG		0.71871448	7.000	15.000
Bromomethane	0.707	0.625	0.610	0.587	0.664	0.534	AVRG		0.62112284	9.714	15.000
Chloroethane	0.439	0.513	0.509	0.517	0.538	0.441	AVRG		0.49272426	8.552	15.000
1,1-Dichloroethene	0.482	0.507	0.603	0.550	0.617	0.529	AVRG		0.54788523	9.762	15.000
Methylene Chloride	13382	19760	59781	124540	252840	447260	LINR	-9.14e-002	1.44042200	0.99501	0.99000
trans-1,2-Dichloroethene	0.625	0.632	0.679	0.622	0.705	0.606	AVRG		0.64482227	5.928	15.000
Methyl tert-butyl ether	1.540	1.658	1.527	1.537	1.815	1.655	AVRG		1.62203940	6.900	15.000
1,1-Dichloroethane	1.041	1.175	1.121	1.107	1.234	1.144	AVRG		1.13709444	5.739	15.000
cis-1,2-Dichloroethene	0.530	0.565	0.597	0.564	0.604	0.576	AVRG		0.57273041	4.660	15.000
Chloroform	0.824	0.902	0.884	0.856	0.928	0.906	AVRG		0.88341283	4.272	15.000
Carbon Tetrachloride	0.273	0.258	0.300	0.306	0.303	0.305	AVRG		0.29065728	6.953	15.000
1,1,1-Trichloroethane	0.645	0.646	0.657	0.647	0.704	0.695	AVRG		0.66586224	3.992	15.000
Benzene	1.200	1.261	1.321	1.236	1.302	1.304	AVRG		1.27067823	3.687	15.000
1,2-Dichloroethane	0.376	0.424	0.393	0.397	0.413	0.436	AVRG		0.40664111	5.456	15.000
Trichloroethene	0.321	0.299	0.320	0.314	0.327	0.341	AVRG		0.32033480	4.383	15.000
1,2-Dichloropropane	0.363	0.358	0.350	0.359	0.376	0.373	AVRG		0.36314975	2.647	15.000
Bromodichloromethane	0.387	0.393	0.415	0.425	0.426	0.442	AVRG		0.41457386	5.078	15.000
cis-1,3-dichloropropene	0.394	0.478	0.523	0.537	0.556	0.574	AVRG		0.51039502	12.830	15.000
2-Chloroethylvinylether	794	5716	24250	64527	137640	298400	LINR	5.457e-002	3.64856107	0.99788	0.99000
Toluene	0.706	0.754	0.796	0.775	0.810	0.834	AVRG		0.77920593	5.783	15.000
Tetrachloroethene	0.271	0.231	0.251	0.258	0.259	0.265	AVRG		0.25593462	5.485	15.000
trans-1,3-Dichloropropene	1535	10376	46539	120450	252030	548280	LINR	5.014e-002	1.98834108	0.99796	0.99000
1,1,2-Trichloroethane	0.245	0.263	0.261	0.273	0.286	0.317	AVRG		0.27434475	9.142	15.000
Dibromochloromethane	0.252	0.338	0.338	0.372	0.378	0.374	AVRG		0.34199873	13.982	15.000
Chlorobenzene	0.977	0.936	0.966	0.953	0.989	1.025	AVRG		0.97440423	3.179	15.000
Ethylbenzene	1.737	1.571	1.650	1.684	1.794	1.839	AVRG		1.71234454	5.729	15.000
Xylenes (total)							AVRG				0.000
Bromoform	638	4555	20631	56701	123540	272640	LINR	4.592e-002	3.55793470	0.99901	0.99000
1,1,2,2-Tetrachloroethane	1.067	1.183	1.058	1.018	1.087	1.163	AVRG		1.09611600	5.857	15.000
m+p-Xylenes	0.602	0.571	0.594	0.610	0.668	0.709	AVRG		0.62582575	8.321	15.000
o-Xylene	0.540	0.535	0.544	0.580	0.608	0.620	AVRG		0.57134222	6.487	15.000
Dibromofluoromethane	0.580	0.611	0.552	0.499	0.564	0.539	AVRG		0.55750756	6.817	15.000
1,2-Dichloroethane-D4	0.700	0.702	0.567	0.512	0.620	0.630	AVRG		0.62182569	11.968	15.000
Toluene-D8	1.092	1.169	1.119	1.050	1.148	1.161	AVRG		1.12323215	4.086	15.000
P-Bromofluorobenzene	0.451	0.429	0.392	0.392	0.449	0.481	AVRG		0.43237064	8.131	15.000

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-Z Calibration Date(s): 05/11/04 05/11/04

Column: RTX-VMS ID: 0.18 (mm) Calibration Time(s): 0927 1647

Average %RSD test result.

Calculate Average %RSD: 10.27576160
Maximum Average %RSD: 15.00000000

Note: Passes Average %RSD Test.

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: ZB820 BFB Injection Date: 05/26/04

Instrument ID: GCMS-Z BFB Injection Time: 0814

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.7
75	30.0 - 60.0% of mass 95	40.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	74.5
175	5.0 - 9.0% of mass 174	5.7 (7.7)1
176	95.0 - 101.0% of mass 174	71.4 (95.9)1
177	5.0 - 9.0% of mass 176	4.6 (6.4)2

1-Value is % mass 174 2-Value is % mass 176

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		VSTD200Z26A	Z1677	05/26/04	1242
02		VSTD050Z26A	Z1679	05/26/04	1358
03		VSTD020Z26A	Z1680	05/26/04	1435
04		VSTD005Z26A	Z1681	05/26/04	1512
05		VSTD001Z26A	Z1682	05/26/04	1550
06		VSTD100Z26A	Z1685	05/26/04	1742
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FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-Z Calibration Date(s): 05/26/04 05/26/04

Column: RTX-VMS ID: 0.18 (mm) Calibration Time(s): 0937 1742

LAB FILE ID: RF1: Z1682 RF5: Z1681 RF20: Z1680
RF50: Z1679 RF100: Z1685 RF200: Z1677

								COEFFICENTS			%RSD	MAX %RSD
COMPOUND	RF1	RF5	RF20	RF50	RF100	RF200	CURVE	A0	A1	A2	OR R^2	OR R^2
Chloromethane	0.477	0.418	0.457	0.460	0.482	0.485	AVRG		0.46311278		5.394	15.000
Vinyl chloride	0.439	0.398	0.447	0.484	0.475	0.486	AVRG		0.45488987		7.505	15.000
Bromomethane	0.210	0.212	0.257	0.272	0.297	0.269	AVRG		0.25299352		13.836	15.000
Chloroethane	2744	11974	50442	115500	213580	345280	2ORDR	3.079e-002	2.44789556	4.31158491	0.99848	0.99000
1,1-Dichloroethene	0.368	0.321	0.358	0.384	0.392	0.384	AVRG		0.36787155		7.026	15.000
Methylene Chloride	32429	41288	107890	231860	451840	910160	LINR	-8.9e-002	2.16168840		0.99903	0.99000
trans-1,2-Dichloroethene	0.403	0.378	0.438	0.466	0.457	0.442	AVRG		0.43071507		7.763	15.000
Methyl tert-butyl ether	1.097	0.976	1.172	1.220	1.198	1.119	AVRG		1.13035738		7.860	15.000
1,1-Dichloroethane	0.627	0.624	0.742	0.752	0.742	0.746	AVRG		0.70531902		8.800	15.000
cis-1,2-Dichloroethene	0.484	0.421	0.488	0.492	0.525	0.524	AVRG		0.48883790		7.739	15.000
Chloroform	0.686	0.622	0.733	0.757	0.783	0.746	AVRG		0.72129946		8.038	15.000
Carbon Tetrachloride	0.233	0.229	0.271	0.301	0.308	0.313	AVRG		0.27586335		13.626	15.000
1,1,1-Trichloroethane	0.477	0.444	0.534	0.568	0.583	0.561	AVRG		0.52789688		10.554	15.000
Benzene	1.085	1.001	1.148	1.215	1.199	1.192	AVRG		1.13992317		7.243	15.000
1,2-Dichloroethane	0.335	0.300	0.350	0.352	0.362	0.363	AVRG		0.34377280		6.827	15.000
Trichloroethene	0.257	0.237	0.269	0.286	0.280	0.280	AVRG		0.26816078		6.882	15.000
1,2-Dichloropropane	2847	18705	87990	216360	434660	902810	LINR	6.857e-003	3.27226982		0.99988	0.99000
Bromodichloromethane	0.301	0.280	0.346	0.358	0.370	0.362	AVRG		0.33620153		10.968	15.000
cis-1,3-dichloropropene	0.385	0.357	0.454	0.465	0.491	0.485	AVRG		0.43931393		12.606	15.000
2-Chloroethylvinylether	0.152	0.148	0.198	0.203	0.208	0.201	AVRG		0.18496729		14.925	15.000
Toluene	0.644	0.596	0.695	0.718	0.693	0.711	AVRG		0.67604963		6.977	15.000
Tetrachloroethene	0.264	0.239	0.252	0.276	0.275	0.292	AVRG		0.26633261		7.071	15.000
trans-1,3-Dichloropropene	0.306	0.295	0.382	0.399	0.409	0.403	AVRG		0.36567128		14.021	15.000
1,1,2-Trichloroethane	0.222	0.196	0.243	0.247	0.245	0.232	AVRG		0.23102947		8.417	15.000
Dibromochloromethane	3327	16831	88684	230360	476290	979990	LINR	2.905e-002	2.41730802		0.99963	0.99000
Chlorobenzene	0.908	0.798	0.925	0.930	0.931	0.924	AVRG		0.90277880		5.753	15.000
Ethylbenzene	1.401	1.248	1.445	1.490	1.467	1.443	AVRG		1.41558272		6.171	15.000
Xylenes (total)							AVRG					0.000
Bromoform	2444	11262	62471	169120	356740	738890	LINR	4.033e-002	3.20184981		0.99937	0.99000
1,1,2,2-Tetrachloroethane	1.026	0.808	0.994	1.018	0.986	0.946	AVRG		0.96320889		8.427	15.000
m+p-Xylenes	0.623	0.498	0.545	0.570	0.562	0.513	AVRG		0.55160504		8.083	15.000
o-Xylene	0.552	0.472	0.542	0.569	0.553	0.572	AVRG		0.54344391		6.744	15.000
Dibromofluoromethane	0.458	0.447	0.514	0.487	0.491	0.482	AVRG		0.47976998		5.027	15.000
1,2-Dichloroethane-D4	0.498	0.457	0.482	0.456	0.472	0.449	AVRG		0.46922069		3.925	15.000
Toluene-D8	0.989	0.950	1.060	1.009	1.001	0.996	AVRG		1.00067766		3.554	15.000
P-Bromofluorobenzene	0.432	0.351	0.394	0.379	0.371	0.368	AVRG		0.38250394		7.341	15.000

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: SB690 BFB Injection Date: 05/28/04

Instrument ID: GCMS-S BFB Injection Time: 0729

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.3
75	30.0 - 60.0% of mass 95	49.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	63.5
175	5.0 - 9.0% of mass 174	4.9 (7.7)1
176	95.0 - 101.0% of mass 174	60.9 (95.8)1
177	5.0 - 9.0% of mass 176	3.9 (6.4)2

1-Value is % mass 174 2-Value is % mass 176

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		VSTD050S28B	S1405	05/28/04	0840
02	WG7858-LCS	WG7858-1	S1406	05/28/04	0919
03	WG7858-BLANK	WG7858-2	S1408	05/28/04	1037
04	KWTB-052104	WU1519-6	S1410	05/28/04	1153
05	RR-MW-06-0504	WU1519-1	S1411	05/28/04	1228
06	A824-MW-01-0504	WU1519-2	S1412	05/28/04	1303
07	A824-MW-02-0504	WU1519-3	S1413	05/28/04	1338
08	A824-MW-03-0504	WU1519-4	S1414	05/28/04	1413
09	KW-DUP-03-0504	WU1519-5	S1415	05/28/04	1448
10	RR-MW-06-0504MS	WG7858-3	S1421	05/28/04	1819
11	RR-MW-06-0504MSD	WG7858-4	S1422	05/28/04	1854
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FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-S Calibration Date: 05/28/04 Time: 0840

Lab File ID: S1405 Init. Calib. Date(s): 05/11/04 05/11/04

Init. Calib. Times: 1031 1340

GC Column: RTX-VMS ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Chloromethane	0.3160000	0.2911800	0.2911800	0.1	-7.85		AVRG
Vinyl chloride	0.3430000	0.3187600	0.3187600	0.01	-7.07	20.00	AVRG
Bromomethane	54.312000	50.000000	0.2381000	0.01	8.62		LINR
Chloroethane	0.2140000	0.1926200	0.1926200	0.01	-9.99		AVRG
1,1-Dichloroethene	43.264000	50.000000	0.3145000	0.01	-13.47	20.00	LINR
Methylene Chloride	46.287000	50.000000	0.4311500	0.01	-7.43		LINR
trans-1,2-Dichloroethene	0.4130000	0.3736500	0.3736500	0.01	-9.53		AVRG
Methyl tert-butyl ether	1.0020000	1.1158000	1.1158000	0.01	11.36		AVRG
1,1-Dichloroethane	0.6630000	0.5984000	0.5984000	0.3	-9.74		AVRG
cis-1,2-Dichloroethene	0.4510000	0.4284400	0.4284400	0.01	-5.00		AVRG
Chloroform	50.152000	50.000000	0.7928900	0.01	0.30	20.00	LINR
Carbon Tetrachloride	0.3490000	0.4150300	0.4150300	0.01	18.92		AVRG
1,1,1-Trichloroethane	0.6340000	0.6645500	0.6645500	0.01	4.82		AVRG
Benzene	1.0860000	1.0463000	1.0463000	0.01	-3.66		AVRG
1,2-Dichloroethane	0.4170000	0.4903800	0.4903800	0.01	17.60		AVRG
Trichloroethene	0.3030000	0.3045000	0.3045000	0.01	0.50		AVRG
1,2-Dichloropropane	0.2520000	0.2369300	0.2369300	0.01	-5.98	20.00	AVRG
Bromodichloromethane	0.4120000	0.4639300	0.4639300	0.01	12.60		AVRG
cis-1,3-dichloropropene	0.4600000	0.4880700	0.4880700	0.01	6.10		AVRG
2-Chloroethylvinylether	44.426000	50.000000	0.1143600	0.01	-11.15		LINR
Toluene	0.7120000	0.6853600	0.6853600	0.01	-3.74	20.00	AVRG
Tetrachloroethene	0.3080000	0.2997900	0.2997900	0.01	-2.66		AVRG
trans-1,3-Dichloropropene	0.3830000	0.4413900	0.4413900	0.01	15.24		AVRG
1,1,2-Trichloroethane	0.2030000	0.2225000	0.2225000	0.01	9.60		AVRG
Dibromochloromethane	0.3380000	0.3840100	0.3840100	0.01	13.61		AVRG
Chlorobenzene	0.9180000	0.8729100	0.8729100	0.3	-4.91		AVRG
Ethylbenzene	1.5610000	1.5076000	1.5076000	0.01	-3.42	20.00	AVRG
Xylenes (total)	1.7070000	1.6205000	1.6205000	0.01	-5.07		AVRG
m+p-Xylenes	0.5730000	0.5405900	0.5405900	0.01	-5.66		AVRG

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FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-S Calibration Date: 05/28/04 Time: 0840

Lab File ID: S1405 Init. Calib. Date(s): 05/11/04 05/11/04

Init. Calib. Times: 1031 1340

GC Column: RTX-VMS ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
o-Xylene	0.5610000	0.5393600	0.5393600	0.01	-3.86		AVRG
Bromoform	0.2300000	0.2834700	0.2834700	0.1	23.25		AVRG
1,1,2,2-Tetrachloroethane	0.6100000	0.6543100	0.6543100	0.3	7.26		AVRG
Dibromofluoromethane	0.4360000	0.4476600	0.4476600	0.01	2.67		AVRG
1,2-Dichloroethane-D4	0.5120000	0.5740600	0.5740600	0.01	12.12		AVRG
Toluene-D8	1.0580000	1.0318000	1.0318000	0.01	-2.48		AVRG
P-Bromofluorobenzene	0.4310000	0.4426500	0.4426500	0.01	2.70		AVRG

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: ZB818 BFB Injection Date: 05/24/04

Instrument ID: GCMS-Z BFB Injection Time: 0833

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.0
75	30.0 - 60.0% of mass 95	39.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	81.7
175	5.0 - 9.0% of mass 174	6.8 (8.3)1
176	95.0 - 101.0% of mass 174	77.9 (95.3)1
177	5.0 - 9.0% of mass 176	5.4 (7.0)2

1-Value is % mass 174 2-Value is % mass 176

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		VSTD050Z24A	Z1629	05/24/04	0900
02	WG7754-LCS	WG7754-1	Z1630	05/24/04	0939
03	WG7754-BLANK	WG7754-2	Z1632	05/24/04	1058
04	G01-MW-03-0504	WU1503-3	Z1641	05/24/04	1632
05	G01-MW-10-0504	WU1503-4	Z1642	05/24/04	1710
06	G01-MW-12-0504	WU1503-5	Z1643	05/24/04	1747
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FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-Z Calibration Date: 05/24/04 Time: 0900

Lab File ID: Z1629 Init. Calib. Date(s): 05/11/04 05/11/04

Init. Calib. Times: 0927 1647

GC Column: RTX-VMS ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Chloromethane	0.7780000	0.9432700	0.9432700	0.1	21.24		AVRG	
Vinyl chloride	0.7190000	0.7954300	0.7954300	0.01	10.63	20.00	AVRG	
Bromomethane	0.6210000	0.5648900	0.5648900	0.01	-9.04		AVRG	
Chloroethane	0.4930000	0.5512500	0.5512500	0.01	11.82		AVRG	
1,1-Dichloroethene	0.5480000	0.5064200	0.5064200	0.1	-7.59	20.00	AVRG	
Methylene Chloride	47.403000	50.000000	0.7216100	0.01	-5.19		LINR	
trans-1,2-Dichloroethene	0.6450000	0.5964100	0.5964100	0.01	-7.53		AVRG	
Methyl tert-butyl ether	1.6220000	1.5376000	1.5376000	0.01	-5.20		AVRG	
1,1-Dichloroethane	1.1370000	1.0732000	1.0732000	0.3	-5.61		AVRG	
cis-1,2-Dichloroethene	0.5730000	0.5674300	0.5674300	0.01	-0.97		AVRG	
Chloroform	0.8830000	0.8427400	0.8427400	0.01	-4.56	20.00	AVRG	
Carbon Tetrachloride	0.2910000	0.2745500	0.2745500	0.01	-5.65		AVRG	
1,1,1-Trichloroethane	0.6660000	0.6250600	0.6250600	0.01	-6.15		AVRG	
Benzene	1.2710000	1.1869000	1.1869000	0.01	-6.62		AVRG	
1,2-Dichloroethane	0.4060000	0.3339200	0.3339200	0.01	-17.75		AVRG	
Trichloroethene	0.3200000	0.3079800	0.3079800	0.01	-3.76		AVRG	
1,2-Dichloropropane	0.3630000	0.3295100	0.3295100	0.01	-9.22	20.00	AVRG	
Bromodichloromethane	0.4150000	0.3759200	0.3759200	0.01	-9.42		AVRG	
cis-1,3-dichloropropene	0.5100000	0.4832800	0.4832800	0.01	-5.24		AVRG	
2-Chloroethylvinylether	35.558000	50.000000	0.1799600	0.01	-28.88		LINR	
Toluene	0.7790000	0.7213800	0.7213800	0.01	-7.40	20.00	AVRG	
Tetrachloroethene	0.2560000	0.2392700	0.2392700	0.01	-6.54		AVRG	
trans-1,3-Dichloropropene	43.027000	50.000000	0.4075800	0.01	-13.95		LINR	
1,1,2-Trichloroethane	0.2740000	0.2514600	0.2514600	0.01	-8.23		AVRG	
Dibromochloromethane	0.3420000	0.3192400	0.3192400	0.01	-6.66		AVRG	
Chlorobenzene	0.9740000	0.8383000	0.8383000	0.3	-13.93		AVRG	
Ethylbenzene	1.7120000	1.4803000	1.4803000	0.01	-13.53	20.00	AVRG	
Xylenes (total)	0.0000000	0.5296200	0.5296200	0.01	0.00		AVRG	<-
Bromoform	43.009000	50.000000	0.2288600	0.1	-13.98		LINR	

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-Z Calibration Date: 05/24/04 Time: 0900

Lab File ID: Z1629 Init. Calib. Date(s): 05/11/04 05/11/04

Init. Calib. Times: 0927 1647

GC Column: RTX-VMS ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1,1,2,2-Tetrachloroethane	1.0960000	0.7563700	0.7563700	0.3	-30.99		AVRG
m+p-Xylenes	0.6260000	0.5331200	0.5331200	0.01	-14.84		AVRG
o-Xylene	0.5710000	0.5226400	0.5226400	0.01	-8.47		AVRG
Dibromofluoromethane	0.5580000	0.5559700	0.5559700	0.01	-0.36		AVRG
1,2-Dichloroethane-D4	0.6220000	0.5261400	0.5261400	0.01	-15.41		AVRG
Toluene-D8	1.1230000	1.0622000	1.0622000	0.01	-5.41		AVRG
P-Bromofluorobenzene	0.4320000	0.4354100	0.4354100	0.01	0.79		AVRG

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: ZB822 BFB Injection Date: 05/28/04

Instrument ID: GCMS-Z BFB Injection Time: 0708

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.9
75	30.0 - 60.0% of mass 95	44.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	9.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	51.8
175	5.0 - 9.0% of mass 174	3.8 (7.4)1
176	95.0 - 101.0% of mass 174	49.3 (95.3)1
177	5.0 - 9.0% of mass 176	3.5 (7.1)2

1-Value is % mass 174 2-Value is % mass 176

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		VSTD050Z28A	Z1706	05/28/04	0736
02	WG7857-LCS	WG7857-1	Z1707	05/28/04	0815
03	WG7857-BLANK	WG7857-2	Z1709	05/28/04	0931
04	FC-MW-05-0504	WU1529-1	Z1718	05/28/04	1510
05	FC-MW-06-0504	WU1529-2	Z1719	05/28/04	1548
06	FC-MW-22-0504	WU1529-3	Z1720	05/28/04	1625
07	KW-DUP-01-0504	WU1529-4	Z1721	05/28/04	1703
08	G01-MW02-0504	WU1529-5	Z1722	05/28/04	1739
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FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-Z Calibration Date: 05/28/04 Time: 0736

Lab File ID: Z1706 Init. Calib. Date(s): 05/26/04 05/26/04

Init. Calib. Times: 0937 1742

GC Column: RTX-VMS ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Chloromethane	0.4630000	0.4402600	0.4402600	0.1	-4.91		AVRG	
Vinyl chloride	0.4550000	0.4205700	0.4205700	0.01	-7.57	20.00	AVRG	
Bromomethane	0.2530000	0.2415600	0.2415600	0.01	-4.52		AVRG	
Chloroethane	43.212000	50.000000	0.2394700	0.01	-13.58		2RDR	
1,1-Dichloroethene	0.3680000	0.3420200	0.3420200	0.1	-7.06	20.00	AVRG	
Methylene Chloride	50.885000	50.000000	0.5119800	0.01	1.77		LINR	
trans-1,2-Dichloroethene	0.4310000	0.4184800	0.4184800	0.01	-2.90		AVRG	
Methyl tert-butyl ether	1.1300000	1.1725000	1.1725000	0.01	3.76		AVRG	
1,1-Dichloroethane	0.7060000	0.7144500	0.7144500	0.3	1.20		AVRG	
cis-1,2-Dichloroethene	0.4890000	0.4859800	0.4859800	0.01	-0.62		AVRG	
Chloroform	0.7210000	0.7107200	0.7107200	0.01	-1.42	20.00	AVRG	
Carbon Tetrachloride	0.2760000	0.2718200	0.2718200	0.01	-1.51		AVRG	
1,1,1-Trichloroethane	0.5280000	0.5076200	0.5076200	0.01	-3.86		AVRG	
Benzene	1.1400000	1.1127000	1.1127000	0.01	-2.39		AVRG	
1,2-Dichloroethane	0.3440000	0.3377100	0.3377100	0.01	-1.83		AVRG	
Trichloroethene	0.2680000	0.2640300	0.2640300	0.01	-1.48		AVRG	
1,2-Dichloropropane	47.624000	50.000000	0.2889800	0.01	-4.75	20.00	LINR	
Bromodichloromethane	0.3360000	0.3554300	0.3554300	0.01	5.78		AVRG	
cis-1,3-dichloropropene	0.4400000	0.4557600	0.4557600	0.01	3.58		AVRG	
2-Chloroethylvinylether	0.1850000	0.1727900	0.1727900	0.01	-6.60		AVRG	
Toluene	0.6760000	0.6915400	0.6915400	0.01	2.30	20.00	AVRG	
Tetrachloroethene	0.2660000	0.2578800	0.2578800	0.01	-3.05		AVRG	
trans-1,3-Dichloropropene	0.3660000	0.3809000	0.3809000	0.01	4.07		AVRG	
1,1,2-Trichloroethane	0.2310000	0.2215200	0.2215200	0.01	-4.10		AVRG	
Dibromochloromethane	45.403000	50.000000	0.3636300	0.01	-9.19		LINR	
Chlorobenzene	0.9030000	0.8936900	0.8936900	0.3	-1.03		AVRG	
Ethylbenzene	1.4160000	1.3982000	1.3982000	0.01	-1.26	20.00	AVRG	
Xylenes (total)	0.0000000	0.5334100	0.5334100	0.01	0.00		AVRG	<-
Bromoform	42.382000	50.000000	0.2521400	0.1	-15.24		LINR	

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-Z Calibration Date: 05/28/04 Time: 0736

Lab File ID: Z1706 Init. Calib. Date(s): 05/26/04 05/26/04

Init. Calib. Times: 0937 1742

GC Column: RTX-VMS ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1,1,2,2-Tetrachloroethane	0.9630000	0.7998700	0.7998700	0.3	-16.94		AVRG
m+p-Xylenes	0.5520000	0.5318100	0.5318100	0.01	-3.66		AVRG
o-Xylene	0.5430000	0.5366200	0.5366200	0.01	-1.18		AVRG
Dibromofluoromethane	0.4800000	0.4712800	0.4712800	0.01	-1.82		AVRG
1,2-Dichloroethane-D4	0.4690000	0.4297400	0.4297400	0.01	-8.37		AVRG
Toluene-D8	1.0010000	1.0222000	1.0222000	0.01	2.12		AVRG
P-Bromofluorobenzene	0.3820000	0.3780500	0.3780500	0.01	-1.03		AVRG

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FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: ZB823 BFB Injection Date: 06/01/04

Instrument ID: GCMS-Z BFB Injection Time: 0804

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.8
75	30.0 - 60.0% of mass 95	39.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	92.0
175	5.0 - 9.0% of mass 174	6.5 (7.1)1
176	95.0 - 101.0% of mass 174	91.1 (99.1)1
177	5.0 - 9.0% of mass 176	6.0 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

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		VSTD050Z01A	Z1727	06/01/04	0828
02	WG7892-LCS	WG7892-1	Z1728	06/01/04	0909
03	WG7892-BLANK	WG7892-2	Z1730	06/01/04	1024
04	KWTB-052404	WU1529-9	Z1731	06/01/04	1104
05	G01-MW04-0504	WU1529-6	Z1734	06/01/04	1255
06	G01-MW05-0504	WU1529-7	Z1735	06/01/04	1410
07	G01-MW11-0504	WU1529-8	Z1736	06/01/04	1446
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Katahdin Analytical Services 1000031

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-Z Calibration Date: 06/01/04 Time: 0828

Lab File ID: Z1727 Init. Calib. Date(s): 05/26/04 05/26/04

Init. Calib. Times: 0937 1742

GC Column: RTX-VMS ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Chloromethane	0.4630000	0.4585500	0.4585500	0.1	-0.96		AVRG	
Vinyl chloride	0.4550000	0.4320900	0.4320900	0.01	-5.04	20.00	AVRG	
Bromomethane	0.2530000	0.1916300	0.1916300	0.01	-24.26		AVRG	
Chloroethane	40.729000	50.000000	0.2283500	0.01	-18.54		2RDR	
1,1-Dichloroethene	0.3680000	0.3447400	0.3447400	0.1	-6.32	20.00	AVRG	
Methylene Chloride	48.867000	50.000000	0.4933100	0.01	-2.27		LINR	
trans-1,2-Dichloroethene	0.4310000	0.4131400	0.4131400	0.01	-4.14		AVRG	
Methyl tert-butyl ether	1.1300000	1.2062000	1.2062000	0.01	6.74		AVRG	
1,1-Dichloroethane	0.7060000	0.6949200	0.6949200	0.3	-1.57		AVRG	
cis-1,2-Dichloroethene	0.4890000	0.5164400	0.5164400	0.01	5.61		AVRG	
Chloroform	0.7210000	0.7357600	0.7357600	0.01	2.05	20.00	AVRG	
Carbon Tetrachloride	0.2760000	0.2921700	0.2921700	0.01	5.86		AVRG	
1,1,1-Trichloroethane	0.5280000	0.5424100	0.5424100	0.01	2.73		AVRG	
Benzene	1.1400000	1.1744000	1.1744000	0.01	3.02		AVRG	
1,2-Dichloroethane	0.3440000	0.3584600	0.3584600	0.01	4.20		AVRG	
Trichloroethene	0.2680000	0.2647300	0.2647300	0.01	-1.22		AVRG	
1,2-Dichloropropane	51.770000	50.000000	0.3143200	0.01	3.54	20.00	LINR	
Bromodichloromethane	0.3360000	0.3463800	0.3463800	0.01	3.09		AVRG	
cis-1,3-dichloropropene	0.4400000	0.4877400	0.4877400	0.01	10.85		AVRG	
2-Chloroethylvinylether	0.1850000	0.2337900	0.2337900	0.01	26.37		AVRG	
Toluene	0.6760000	0.6855900	0.6855900	0.01	1.42	20.00	AVRG	
Tetrachloroethene	0.2660000	0.2663300	0.2663300	0.01	0.12		AVRG	
trans-1,3-Dichloropropene	0.3660000	0.4067800	0.4067800	0.01	11.14		AVRG	
1,1,2-Trichloroethane	0.2310000	0.2278000	0.2278000	0.01	-1.38		AVRG	
Dibromochloromethane	46.052000	50.000000	0.3690000	0.01	-7.90		LINR	
Chlorobenzene	0.9030000	0.8529600	0.8529600	0.3	-5.54		AVRG	
Ethylbenzene	1.4160000	1.3465000	1.3465000	0.01	-4.91	20.00	AVRG	
Xylenes (total)	0.0000000	0.5236800	0.5236800	0.01	0.00		AVRG	<-
Bromoform	44.979000	50.000000	0.2683600	0.1	-10.04		LINR	

Katahdin Analytical Services 1000073

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-Z Calibration Date: 06/01/04 Time: 0828

Lab File ID: Z1727 Init. Calib. Date(s): 05/26/04 05/26/04

Init. Calib. Times: 0937 1742

GC Column: RTX-VMS ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1,1,2,2-Tetrachloroethane	0.9630000	0.7896200	0.7896200	0.3	-18.00		AVRG
m+p-Xylenes	0.5520000	0.5308700	0.5308700	0.01	-3.83		AVRG
o-Xylene	0.5430000	0.5092900	0.5092900	0.01	-6.21		AVRG
Dibromofluoromethane	0.4800000	0.4909900	0.4909900	0.01	2.29		AVRG
1,2-Dichloroethane-D4	0.4690000	0.4492600	0.4492600	0.01	-4.21		AVRG
Toluene-D8	1.0010000	1.0578000	1.0578000	0.01	5.67		AVRG
P-Bromofluorobenzene	0.3820000	0.4026000	0.4026000	0.01	5.39		AVRG

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

GC Column(1): SPB 608 ID: 0.53 (mm) GC Column(2): RTX-CLP IIID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	SMC1 TCX#	SMC2 TCX#			TOT OUT
01	WG7920-BLANK	WG7920-1	86	82			0
02	WG7920-LCS	WG7920-2	91	87			0
03	WG7920-LCSD	WG7920-3	86	82			0
04	G01-MW-03-0504	WU1503-3	80	76			0
05	G01-MW-10-0504	WU1503-4	58	54*			1
06	G01-MW-12-0504	WU1503-5	50*	54*			2
07	A824-MW-02-0504	WU1519-3	53*	57			1
08	A824-MW-03-0504	WU1519-4	78	72			0
09	KW-DUP-03-0504	WU1519-5	61	56*			1
10	FC-MW-22-0504	WU1529-3	71	71			0
11	KW-DUP-01-0504	WU1529-4	71	65			0
12	G01-MW02-0504	WU1529-5	55*	49*			2
13	G01-MW05-0504	WU1529-7	74	66			0
14	G01-MW11-0504	WU1529-8	62	64			0
15	WG7969-BLANK	WG7969-1	111	111			0
16	WG7969-LCS	WG7969-2	124	119			0
17	WG7969-LCSD	WG7969-3	126	102			0
18	G01-MW-12-0504	WU1503-5RE	56*	54*			2
19	RR-MW-06-0504	WU1519-1RE	73	76			0
20	RR-MW-06-0504MS	WG7969-4	66	61			0
21	RR-MW-06-0504MSD	WG7969-5	76	78			0
22	A824-MW-01-0504	WU1519-2RE	88	83			0
23	G01-MW04-0504	WU1529-6RE	74	72			0
24	FC-MW-05-0504	WU1529-1RE	64	60			0
25	FC-MW-06-0504	WU1529-2RE	86	81			0
26	WG8161-BLANK	WG8161-1	107	110			0
27	WG8161-LCS	WG8161-2	90	95			0
28	WG8161-LCSD	WG8161-3	84	86			0

SMC1 (TCX) = Tetrachloro-M-Xylene QC LIMITS (57-128)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

Katahdin Analytical Services 6000003

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

GC Column(1): SPB 608 ID: 0.53 (mm)GC Column(2): RTX-CLP IIID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	SMC1 TCX#	SMC2 TCX#			TOT OUT
01	G01-MW02-0504	WU1529-5RE	31*	34*			2
02							
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
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16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							

SMC1 (TCX) = Tetrachloro-M-Xylene QC LIMITS (57-128)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

Katahdin Analytical Services 6000004

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG7920-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab Sample ID: WG7920-1 Lab File ID: 3UF1010

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) 504.1

Sulfur Cleanup: (Y/N) N Date Extracted: 06/02/04

Date Analyzed (1): 06/02/04 Date Analyzed (2): 06/02/04

Time Analyzed (1): 1748 Time Analyzed (2): 1748

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column (1): SPB 608 ID: 0.53(mm) GC Column (2): RTX-CLP II 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	WG7920-LCS	WG7920-2	3UF1011	06/02/04	06/02/04
02	WG7920-LCSD	WG7920-3	3UF1012	06/02/04	06/02/04
03	G01-MW-03-0504	WU1503-3	3UF1016	06/02/04	06/02/04
04	G01-MW-10-0504	WU1503-4	3UF1017	06/02/04	06/02/04
05	G01-MW-12-0504	WU1503-5	3UF1018	06/02/04	06/02/04
06	A824-MW-02-0504	WU1519-3	3UF1023	06/02/04	06/02/04
07	A824-MW-03-0504	WU1519-4	3UF1024	06/02/04	06/02/04
08	KW-DUP-03-0504	WU1519-5	3UF1025	06/02/04	06/02/04
09	FC-MW-22-0504	WU1529-3	3UF1028	06/02/04	06/02/04
10	KW-DUP-01-0504	WU1529-4	3UF1029	06/02/04	06/02/04
11	G01-MW02-0504	WU1529-5	3UF1030	06/02/04	06/02/04
12	G01-MW05-0504	WU1529-7	3UF1032	06/03/04	06/03/04
13	G01-MW11-0504	WU1529-8	3UF1033	06/03/04	06/03/04
14					
15					
16					
17					
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22					
23					
24					

COMMENTS: _____

FORM IV PEST

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG7969-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab Sample ID: WG7969-1 Lab File ID: 3UF1042

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) 504.1

Sulfur Cleanup: (Y/N) N Date Extracted: 06/03/04

Date Analyzed (1): 06/03/04 Date Analyzed (2): 06/03/04

Time Analyzed (1): 1507 Time Analyzed (2): 1507

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column (1): SPB 608 ID: 0.53(mm) GC Column (2): RTX-CLP II 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	WG7969-LCS	WG7969-2	3UF1043	06/03/04	06/03/04
02	WG7969-LCSD	WG7969-3	3UF1044	06/03/04	06/03/04
03	G01-MW-12-0504	WU1503-5RE	3UF1045	06/03/04	06/03/04
04	RR-MW-06-0504	WU1519-1RE	3UF1046	06/03/04	06/03/04
05	RR-MW-06-0504MS	WG7969-4	3UF1047	06/03/04	06/03/04
06	RR-MW-06-0504MSD	WG7969-5	3UF1048	06/03/04	06/03/04
07	A824-MW-01-0504	WU1519-2RE	3UF1049	06/03/04	06/03/04
08	G01-MW04-0504	WU1529-6RE	3UF1050	06/03/04	06/03/04
09	FC-MW-05-0504	WU1529-1RE	3UF1052	06/03/04	06/03/04
10	FC-MW-06-0504	WU1529-2RE	3UF1054	06/04/04	06/04/04
11					
12					
13					
14					
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22					
23					
24					

COMMENTS: _____

Katahdin Analytical Services 6000006

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG8161-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab Sample ID: WG8161-1 Lab File ID: 3UF1152

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) 504.1

Sulfur Cleanup: (Y/N) N Date Extracted: 06/17/04

Date Analyzed (1): 06/17/04 Date Analyzed (2): 06/17/04

Time Analyzed (1): 1115 Time Analyzed (2): 1115

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column (1): SPB 608 ID: 0.53(mm) GC Column (2): RTX-CLP II 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	WG8161-LCS	WG8161-2	3UF1153	06/17/04	06/17/04
02	WG8161-LCSD	WG8161-3	3UF1154	06/17/04	06/17/04
03	G01-MW02-0504	WU1529-5RE	3UF1158	06/17/04	06/17/04
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
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18					
19					
20					
21					
22					
23					
24					

COMMENTS: _____

Katahdin Analytical Services 6000007

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 06/02/04
Analysis Date: 06/02/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WG7920-1
Client ID: WG7920-Blank
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7920
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		86%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 06/03/04
Analysis Date: 06/03/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WG7969-1
Client ID: WG7969-Blank
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG7969
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		111%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 06/17/04
Analysis Date: 06/17/04
Report Date: 06/25/2004
Matrix: WATER
% Solids: NA

Lab ID: WG8161-1
Client ID: WG8161-Blank
SDG: CTO301318-1
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG8161
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		110%				

FORM 8
VOLATILE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

GC Column: SPB 608 ID: 0.53 (mm) Init. Calib. Date(s): 06/02/04 06/02/04

Instrument ID: GC03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 12.03

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	RT	#
01	ICAL	0.02	06/02/04	1540	12.04			
02	ICAL	0.05	06/02/04	1558	12.04			
03	ICAL	0.10	06/02/04	1617	12.03			
04	ICAL	0.25	06/02/04	1635	12.04			
05	ICAL	0.50	06/02/04	1653	12.04			
06	ICAL	1.0	06/02/04	1711	12.04			
07	ICAL	2.5	06/02/04	1730	12.04			
08	WG7920-BLANK	WG7920-1	06/02/04	1748	12.04			
09	WG7920-LCS	WG7920-2	06/02/04	1806	12.04			
10	WG7920-LCSD	WG7920-3	06/02/04	1824	12.04			
11	G01-MW-03-05	WU1503-3	06/02/04	1937	12.04			
12	G01-MW-10-05	WU1503-4	06/02/04	1956	12.03			
13	G01-MW-12-05	WU1503-5	06/02/04	2014	12.03			
14	A824-MW-02-0	WU1519-3	06/02/04	2145	12.04			
15	A824-MW-03-0	WU1519-4	06/02/04	2203	12.04			
16	KW-DUP-03-05	WU1519-5	06/02/04	2222	12.04			
17	FC-MW-22-050	WU1529-3	06/02/04	2316	12.04			
18	KW-DUP-01-05	WU1529-4	06/02/04	2334	12.03			
19	G01-MW02-050	WU1529-5	06/02/04	2353	12.04			
20	G01-MW05-050	WU1529-7	06/03/04	0029	12.03			

QC LIMITS
TCX = Tetrachloro-M-Xylene (+/- 0.24 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

GC Column: SPB 608 ID: 0.53 (mm) Init. Calib. Date(s): 06/02/04 06/02/04

Instrument ID: GC03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 12.03

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	RT #
01	G01-MW11-050	WU1529-8	06/03/04	0047	12.03	
02	CV	CV	06/03/04	0219	12.04	
03	CV	CV	06/03/04	1332	12.07	
04	WG7969-BLANK	WG7969-1	06/03/04	1507	12.07	
05	WG7969-LCS	WG7969-2	06/03/04	1525	12.05	
06	WG7969-LCSD	WG7969-3	06/03/04	1543	12.04	
07	G01-MW-12-05	WU1503-5RE	06/03/04	1601	12.03	
08	RR-MW-06-050	WU1519-1RE	06/03/04	1620	12.04	
09	RR-MW-06-050	WG7969-4	06/03/04	1638	12.04	
10	RR-MW-06-050	WG7969-5	06/03/04	1656	12.04	
11	A824-MW-01-0	WU1519-2RE	06/03/04	1714	12.04	
12	G01-MW04-050	WU1529-6RE	06/03/04	1733	12.04	
13	FC-MW-05-050	WU1529-1RE	06/03/04	1809	12.05	
14	CV	CV	06/04/04	0733	12.08	
15	FC-MW-06-050	WU1529-2RE	06/04/04	0758	12.05	
16	CV	CV	06/04/04	0947	12.04	
17						
18						
19						
20						

QC LIMITS

TCX = Tetrachloro-M-Xylene (+/- 0.24 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

GC Column: RTX-CLP II ID: 0.53 (mm) Init. Calib. Date(s): 06/02/04 06/02/04

Instrument ID: GC03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 11.33

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	RT #
01	ICAL	0.02	06/02/04	1540	11.35	
02	ICAL	0.05	06/02/04	1558	11.35	
03	ICAL	0.10	06/02/04	1617	11.33	
04	ICAL	0.25	06/02/04	1635	11.35	
05	ICAL	0.50	06/02/04	1653	11.35	
06	ICAL	1.0	06/02/04	1711	11.35	
07	ICAL	2.5	06/02/04	1730	11.35	
08	WG7920-BLANK	WG7920-1	06/02/04	1748	11.35	
09	WG7920-LCS	WG7920-2	06/02/04	1806	11.35	
10	WG7920-LCSD	WG7920-3	06/02/04	1824	11.35	
11	G01-MW-03-05	WU1503-3	06/02/04	1937	11.35	
12	G01-MW-10-05	WU1503-4	06/02/04	1956	11.33	
13	G01-MW-12-05	WU1503-5	06/02/04	2014	11.35	
14	A824-MW-02-0	WU1519-3	06/02/04	2145	11.35	
15	A824-MW-03-0	WU1519-4	06/02/04	2203	11.35	
16	KW-DUP-03-05	WU1519-5	06/02/04	2222	11.35	
17	FC-MW-22-050	WU1529-3	06/02/04	2316	11.35	
18	KW-DUP-01-05	WU1529-4	06/02/04	2334	11.35	
19	G01-MW02-050	WU1529-5	06/02/04	2353	11.35	
20	G01-MW05-050	WU1529-7	06/03/04	0029	11.35	

QC LIMITS
TCX = Tetrachloro-M-Xylene (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

GC Column: RTX-CLP II ID: 0.53 (mm) Init. Calib. Date(s): 06/02/04 06/02/04

Instrument ID: GC03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 11.33

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	RT #
01	G01-MW11-050	WU1529-8	06/03/04	0047	11.35	
02	CV	CV	06/03/04	0219	11.35	
03	CV	CV	06/03/04	1332	11.37	
04	WG7969-BLANK	WG7969-1	06/03/04	1507	11.37	
05	WG7969-LCS	WG7969-2	06/03/04	1525	11.36	
06	WG7969-LCSD	WG7969-3	06/03/04	1543	11.35	
07	G01-MW-12-05	WU1503-5RE	06/03/04	1601	11.35	
08	RR-MW-06-050	WU1519-1RE	06/03/04	1620	11.35	
09	RR-MW-06-050	WG7969-4	06/03/04	1638	11.36	
10	RR-MW-06-050	WG7969-5	06/03/04	1656	11.35	
11	A824-MW-01-0	WU1519-2RE	06/03/04	1714	11.35	
12	G01-MW04-050	WU1529-6RE	06/03/04	1733	11.35	
13	FC-MW-05-050	WU1529-1RE	06/03/04	1809	11.36	
14	CV	CV	06/04/04	0733	11.37	
15	FC-MW-06-050	WU1529-2RE	06/04/04	0758	11.36	
16	CV	CV	06/04/04	0947	11.36	
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-M-Xylene (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

GC Column: SPB 608 ID: 0.53 (mm) Init. Calib. Date(s): 06/17/04 06/17/04

Instrument ID: GC03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 12.03

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	RT #
01	ICAL	0.02	06/17/04	0908	12.05	
02	ICAL	0.05	06/17/04	0926	12.05	
03	ICAL	0.10	06/17/04	0944	12.04	
04	ICAL	0.25	06/17/04	1003	12.04	
05	ICAL	0.50	06/17/04	1021	12.04	
06	ICAL	1.0	06/17/04	1039	12.04	
07	ICAL	2.5	06/17/04	1057	12.04	
08	WG8161-BLANK	WG8161-1	06/17/04	1115	12.04	
09	WG8161-LCS	WG8161-2	06/17/04	1134	12.04	
10	WG8161-LCSD	WG8161-3	06/17/04	1152	12.04	
11	G01-MW02-050	WU1529-5RE	06/17/04	1305	12.04	
12	CV	CV	06/17/04	1721	12.04	
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-M-Xylene (+/- 0.24 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

GC Column: RTX-CLP II ID: 0.53 (mm) Init. Calib. Date(s): 06/17/04 06/17/04

Instrument ID: GC03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 11.33

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	RT #
01	ICAL	0.02	06/17/04	0908	11.37	
02	ICAL	0.05	06/17/04	0926	11.36	
03	ICAL	0.10	06/17/04	0944	11.36	
04	ICAL	0.25	06/17/04	1003	11.36	
05	ICAL	0.50	06/17/04	1021	11.36	
06	ICAL	1.0	06/17/04	1039	11.35	
07	ICAL	2.5	06/17/04	1057	11.35	
08	WG8161-BLANK	WG8161-1	06/17/04	1115	11.35	
09	WG8161-LCS	WG8161-2	06/17/04	1134	11.35	
10	WG8161-LCSD	WG8161-3	06/17/04	1152	11.35	
11	G01-MW02-050	WU1529-5RE	06/17/04	1305	11.35	
12	CV	CV	06/17/04	1721	11.35	
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-M-Xylene (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date(s): 06/02/04 06/02/04

Column: SPB 608 ID: 0.53 (mm) Calibration Time(s): 1540 1730

LAB FILE ID: RF0.02: 3UF1003 RF0.05: 3UF1004 RF0.1: 3UF1005
RF0.25: 3UF1006 RF0.5: 3UF1007 RF1: 3UF1008

								COEFFICENTS			%RSD	MAX %RSD	
COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	A0	A1	A2	OR R^2	OR R^2	
1,2-Dibromoethane	1888	4657	9189	20346	35226	61414	2ORDR	-1.06e-002	1.244e-005	6.149e-011	0.99984	0.99000	
Tetrachloro-M-Xylene	14432	32267	58550	67797	82368	160610	2ORDR	1.776e-002	1.358e-005	1.131e-011	0.99924	0.99000	

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date(s): 06/02/04 06/02/04

Column: SPB 608 ID: 0.53 (mm) Calibration Time(s): 1540 1730

RF2.5: 3UF1009

			COEFFICENTS			%RSD	MAX %RSD
COMPOUND	RF2.5	CURVE	A0	A1	A2	OR R^2	OR R^2
1,2-Dibromoethane	124920	2ORDR	-1.06e-002	1.244e-005	6.149e-011	0.99984	0.99000
Tetrachloro-M-Xylene	294730	2ORDR	1.776e-002	1.358e-005	1.131e-011	0.99924	0.99000

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date(s): 06/02/04 06/02/04

Column: RTX-CLP II ID: 0.53 (mm) Calibration Time(s): 1540 1730

LAB FILE ID: RF0.02: 3UF2003 RF0.05: 3UF2004 RF0.1: 3UF2005
RF0.25: 3UF2006 RF0.5: 3UF2007 RF1: 3UF2008

								COEFFICENTS			%RSD	MAX %RSD	
COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	A0	A1	A2	OR R^2	OR R^2	
1,2-Dibromoethane	245	545	1030	2376	4595	8515	2ORDR	-6.76e-003	1.055e-004	1.399e-009	0.99997	0.99000	
Tetrachloro-M-Xylene	2132	4433	8465	9840	12086	24520	2ORDR	8.842e-003	1.004e-004	9.231e-012	0.99914	0.99000	

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date(s): 06/02/04 06/02/04

Column: RTX-CLP II ID: 0.53 (mm) Calibration Time(s): 1540 1730

RF2.5: 3UF2009

			COEFFICENTS			%RSD	MAX %RSD	
COMPOUND	RF2.5	CURVE	A0	A1	A2	OR R^2	OR R^2	
1,2-Dibromoethane	18990	2ORDR	-6.76e-003	1.055e-004	1.399e-009	0.99997	0.99000	
Tetrachloro-M-Xylene	49508	2ORDR	8.842e-003	1.004e-004	9.231e-012	0.99914	0.99000	

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date(s): 06/17/04 06/17/04

Column: SPB 608 ID: 0.53 (mm) Calibration Time(s): 0908 1057

LAB FILE ID: RF0.02: 3UF1145 RF0.05: 3UF1146 RF0.1: 3UF1147
RF0.25: 3UF1148 RF0.5: 3UF1149 RF1: 3UF1150

COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	COEFFICENTS A0	COEFFICENTS A1	COEFFICENTS A2	%RSD OR R^2	MAX %RSD OR R^2
1,2-Dibromoethane	1734	4829	9243	20928	36459	61063	2ORDR	-1.35e-002	1.257e-005	5.723e-011	0.99951	0.99000
Tetrachloro-M-Xylene	27516	43113	73767	81701	94331	180720	2ORDR	-9.52e-002	1.366e-005	8.999e-013	0.99730	0.99000

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date(s): 06/17/04 06/17/04

Column: SPB 608 ID: 0.53 (mm) Calibration Time(s): 0908 1057

RF2.5: 3UF1151

			COEFFICENTS			%RSD	MAX %RSD	
COMPOUND	RF2.5	CURVE	A0	A1	A2	OR R^2	OR R^2	
1,2-Dibromoethane	126940	2ORDR	-1.35e-002	1.257e-005	5.723e-011	0.99951	0.99000	
Tetrachloro-M-Xylene	365490	2ORDR	-9.52e-002	1.366e-005	8.999e-013	0.99730	0.99000	

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date(s): 06/17/04 06/17/04

Column: RTX-CLP II ID: 0.53 (mm) Calibration Time(s): 0908 1057

LAB FILE ID: RF0.02: 3UF2145 RF0.05: 3UF2146 RF0.1: 3UF2147
RF0.25: 3UF2148 RF0.5: 3UF2149 RF1: 3UF2150

COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	COEFFICENTS A0	COEFFICENTS A1	COEFFICENTS A2	%RSD OR R^2	MAX %RSD OR R^2
1,2-Dibromoethane	249	546	1040	2378	4402	7912	2ORDR	-1.63e-002	1.178e-004	9.492e-010	0.99965	0.99000
Tetrachloro-M-Xylene	2701	4878		9953	12241	25324	2ORDR	-2.72e-002	1.099e-004	-4.3e-010	0.99989	0.99000

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date(s): 06/17/04 06/17/04

Column: RTX-CLP II ID: 0.53 (mm) Calibration Time(s): 0908 1057

RF2.5: 3UF2151

			COEFFICENTS			%RSD	MAX %RSD	
COMPOUND	RF2.5	CURVE	A0	A1	A2	OR R^2	OR R^2	
1,2-Dibromoethane	18600	2ORDR	-1.63e-002	1.178e-004	9.492e-010	0.99965	0.99000	
Tetrachloro-M-Xylene	59680	2ORDR	-2.72e-002	1.099e-004	-4.3e-010	0.99989	0.99000	

FORM VI VOA

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date: 06/03/04 Time: 0219

Lab File ID: 3UF1038 Init. Calib. Date(s): 06/02/04 06/02/04

Init. Calib. Times: 1540 1730

GC Column: SPB 608 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.5000 or AMOUNT	CCAL RRF0.5000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1,2-Dibromoethane	0.5070200	0.5000000	70450.000	0.01	1.40	30.00	2RDR
Tetrachloro-M-Xylene	1.1010000	1.2500000	65890.000	0.01	-11.92	30.00	2RDR

FORM VII PEST

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date: 06/03/04 Time: 0219

Lab File ID: 3UF2038 Init. Calib. Date(s): 06/02/04 06/02/04

Init. Calib. Times: 1540 1730

GC Column: RTX-CLP II ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.5000 or AMOUNT	CCAL RRF0.5000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1,2-Dibromoethane	0.5019200	0.5000000	9096.0000	0.01	0.38	30.00	2RDR
Tetrachloro-M-Xylene	1.0158000	1.2500000	8012.8000	0.01	-18.74	30.00	2RDR

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date: 06/03/04 Time: 1332

Lab File ID: 3UF1041A Init. Calib. Date(s): 06/02/04 06/02/04

Init. Calib. Times: 1540 1730

GC Column: SPB 608 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.5000 or AMOUNT	CCAL RRF0.5000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1,2-Dibromoethane	0.4402400	0.5000000	62754.000	0.01	-11.95	30.00	2RDR
Tetrachloro-M-Xylene	1.5688000	1.2500000	84021.000	0.01	25.50	30.00	2RDR

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date: 06/03/04 Time: 1332

Lab File ID: 3UF2041A Init. Calib. Date(s): 06/02/04 06/02/04

Init. Calib. Times: 1540 1730

GC Column: RTX-CLP II ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.5000 or AMOUNT	CCAL RRF0.5000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1,2-Dibromoethane	0.4865800	0.5000000	9222.0000	0.01	-2.68	30.00	2RDR
Tetrachloro-M-Xylene	1.3417000	1.2500000	10602.000	0.01	7.34	30.00	2RDR

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date: 06/04/04 Time: 0733

Lab File ID: 3UF1053 Init. Calib. Date(s): 06/02/04 06/02/04

Init. Calib. Times: 1540 1730

GC Column: SPB 608 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.5000 or AMOUNT	CCAL RRF0.5000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1,2-Dibromoethane	0.4308600	0.5000000	61600.000	0.01	-13.83	30.00	2RDR
Tetrachloro-M-Xylene	1.5675000	1.2500000	83955.000	0.01	25.40	30.00	2RDR

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date: 06/04/04 Time: 0733

Lab File ID: 3UF2053 Init. Calib. Date(s): 06/02/04 06/02/04

Init. Calib. Times: 1540 1730

GC Column: RTX-CLP II ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.5000 or AMOUNT	CCAL RRF0.5000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1,2-Dibromoethane	0.4992000	0.5000000	9050.0000	0.01	-0.16	30.00	2RDR
Tetrachloro-M-Xylene	1.5689000	1.2500000	12407.000	0.01	25.51	30.00	2RDR

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date: 06/04/04 Time: 0947

Lab File ID: 3UF1060 Init. Calib. Date(s): 06/02/04 06/02/04

Init. Calib. Times: 1540 1730

GC Column: SPB 608 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.5000 or AMOUNT	CCAL RRF0.5000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1,2-Dibromoethane	0.4739100	0.5000000	66854.000	0.01	-5.22	30.00	2RDR
Tetrachloro-M-Xylene	1.4784000	1.2500000	79471.000	0.01	18.27	30.00	2RDR

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date: 06/04/04 Time: 0947

Lab File ID: 3UF2060 Init. Calib. Date(s): 06/02/04 06/02/04

Init. Calib. Times: 1540 1730

GC Column: RTX-CLP II ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.5000 or AMOUNT	CCAL RRF0.5000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1,2-Dibromoethane	0.4957800	0.5000000	8992.0000	0.01	-0.84	30.00	2RDR
Tetrachloro-M-Xylene	1.4515000	1.2500000	11475.000	0.01	16.12	30.00	2RDR

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date: 06/17/04 Time: 1721

Lab File ID: 3UF1172 Init. Calib. Date(s): 06/17/04 06/17/04

Init. Calib. Times: 0908 1057

GC Column: SPB 608 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.5000 or AMOUNT	CCAL RRF0.5000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1,2-Dibromoethane	0.4786300	0.5000000	67804.000	0.01	-4.27	30.00	2RDR
Tetrachloro-M-Xylene	1.2125000	1.2500000	76093.000	0.01	-3.00	30.00	2RDR

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC03 Calibration Date: 06/17/04 Time: 1721

Lab File ID: 3UF2172 Init. Calib. Date(s): 06/17/04 06/17/04

Init. Calib. Times: 0908 1057

GC Column: RTX-CLP II ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.5000 or AMOUNT	CCAL RRF0.5000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
1,2-Dibromoethane	0.4918700	0.5000000	8348.0000	0.01	-1.63	30.00	2RDR
Tetrachloro-M-Xylene	1.4173000	1.2500000	11117.000	0.01	13.38	30.00	2RDR

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0405424A

Work Order Summary

CLIENT:	Ms. Andrea Colby Katahdin Laboratory 340 County Road, #5 West Brook, ME 04092	**BILL TO:**	Ms. Andrea Colby Katahdin Laboratory 340 County Road, #5 West Brook, ME 04092
PHONE:	207-874-2400	**P.O. #**	
FAX:	207-775-4029	**PROJECT #**	WU1503 TTNLS/ Keywest
DATE RECEIVED:	5/25/2004	**CONTACT:**	Betty Chu
DATE COMPLETED:	6/1/2004		

FRACTION #	NAME	TEST
01A	G01-MW-03-0504	Mod. RSK-175
01AA	G01-MW-03-0504 Duplicate	Mod. RSK-175
02A	G01-MW-10-0504	Mod. RSK-175
03A	G01-MW-12-0504	Mod. RSK-175
04A	Lab Blank	Mod. RSK-175
05A	LCS	Mod. RSK-175

CERTIFIED BY: Linda S. Frumarx DATE: 06/07/04

Laboratory Director

Certfication numbers: AR DEQ - 03-084-0, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/04, Expiration date: 06/30/05
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified RSK 175
Katahdin Laboratory
Workorder# 0405424A

Three VOA Vial-40 mL samples were received on May 25, 2004. The laboratory performed analysis via Modified RSK 175 for Methane using GC/FID. The method involves placing an aliquot of the sample in a headspace vial. The vial is then placed into HP7694 Headspace Autosampler equipped with oven, shaker and 1 mL sample loop. Sample is incubated and then equilibrated at 40°C for 15 minutes with high agitation. Finally, a direct injection of the headspace is performed. See the data sheets for the reporting limits for each compound.

Requirement	*RSK 175*	*ATL Modifications*
Sample Collection	Collect sample in 60 mL crimp-top vial.	Collect sample in 40 mL VOA vial.
Headspace Generation	Headspace is generated in 60 mL sample vial by displacing volume of liquid with Helium. The amount of liquid should be 10% of sample volume in bottle, up to 10 mL.	5.0 mL of sample is displaced with 5.0 mL Nitrogen and transferred to a Nitrogen purged and capped autosampler vial. Headspace is then generated in the autosampler vial.
Sample Preparation	Sample is shaken 5 min. to equilibrate analyte between headspace and liquid phase.	Prior to injection, autosampler shakes sample for 15 min. while heating to 40°C.
Headspace Injection	Syringe injection of 300 mL headspace into GC.	Autosampler pressurizes sample to fill 1.0 mL loop with headspace sample.
Calibration and Quantitation	Direct injections of gas phase standards are used to obtain a Calibration Curve. Henry's Law is used to calculate mg of gas per Liter of water. Calculation requires recording total volume of serum bottle and headspace, and sample temperature.	Calibration standards are prepared by addition of a gaseous spike solution to clean water. Response factors are calculated for each level of a multi point calibration, and the mean is used to calculate quantitation for each target analyte.
Initial Calibration Curve (ICAL)	Linear regression	% RSD </= 30%, use average RF to quantify results
Lab Blanks	Blank subtraction is performed.	No blank subtraction; Lab Blank must be less than the Reporting Limit.
Specified Detectors	FID or ECD	FID or TCD

Receiving Notes

NELAC Chapter 5 specifies that a legal Chain of Custody must accompany samples when they arrive at the laboratory. In this case a chain of custody was not received with the samples. The discrepancy was noted in the Sample Receipt Confirmation email/fax.

Water samples G01-MW-10-0504 and G01-MW-12-0504 were received with a significant amount of

headspace. (i.e., the diameter of the bubble was greater than 5 mm). The discrepancy was noted in the Sample Receipt Confirmation email/fax.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
G01-MW-03-0504	0405424A-01A	5/20/2004	5/25/2004	NA	8	5/28/2004	NA	Good
G01-MW-03-0504 Dupli	0405424A-01AA	5/20/2004	5/25/2004	NA	8	5/28/2004	NA	Good
G01-MW-10-0504	0405424A-02A	5/20/2004	5/25/2004	NA	8	5/28/2004	NA	Good
G01-MW-12-0504	0405424A-03A	5/20/2004	5/25/2004	NA	8	5/28/2004	NA	Good
Lab Blank	0405424A-04A	NA	NA	NA	NA	5/28/2004	NA	Good
LCS	0405424A-05A	NA	NA	NA	NA	5/28/2004	NA	Good

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SAMPLE NAME: Lab Blank

ID#: 0405424A-04A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7052804	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/28/04 08:45 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected

Container Type: NA - Not Applicable

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.
Lab File ID: 7052819.d & 7052818.d
Lab Sample ID: 01A & 01AA
Dilution: 1.00 & 1.00
Client Sample ID: &
Date Analyzed: 5/28/04 & 5/28/04

		Original		Duplicate		
CAS Number	Compound	Amount	Flags	Amount	Flags	RPD
74-82-8	Methane	0.6918		0.7382		6.5

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 11-APR-2003 11:42
End Cal Date : 11-APR-2003 14:02
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/gc7.i/16Jul2003.b/38100411m5a.m
Cal Date : 17-Jul-2003 10:52 atoyama
Curve Type : Average

Calibration File Names:
Level 1: /chem/gc7.i/11Apr2003.b/7041103.d
Level 2: /chem/gc7.i/11Apr2003.b/7041104.d
Level 3: /chem/gc7.i/11Apr2003.b/7041105.d
Level 4: /chem/gc7.i/11Apr2003.b/7041106.d
Level 5: /chem/gc7.i/11Apr2003.b/7041107.d
Level 6: /chem/gc7.i/11Apr2003.b/7041108.d

Compound	0.00500 Level 1	0.02700 Level 2	0.06700 Level 3	1.330 Level 4	6.651 Level 5	133.028 Level 6	___ RRF	% RSD
1 Methane	23473600	20391519	18145642	19641331	15588518	18737320	19329655	13.519
2 Ethylene	22286222	21228170	19317603	20626919	16449448	+++++	19981673	11.246
3 Ethane	23052444	20508100	18422992	19735760	15755809	+++++	19495021	13.781
4 Propene	23241100	22213288	19741557	20499315	15275004	23483000	20742211	14.761
5 Propane	24163100	21716018	19656431	20275345	15092413	22819091	20620400	15.365

Report Date: 28-May-2004 07:49

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc7.i Injection Date: 28-MAY-2004 07:11
Lab File ID: 7052801.d Init. Cal. Date(s): 11-APR-2003 11-APR-2003
Analysis Type: AIR Init. Cal. Times: 11:42 14:02
Lab Sample ID: 1068-2Q-01 Quant Type: ESTD
Method: /chem/gc7.i/28May2004.b/38100411m5a.m

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF0.000	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
1 Methane	19329655	22183665	0.100	-14.76493	30.00000	Averaged
2 Ethylene	19981673	23620614	0.010	-18.21140	30.00000	Averaged
3 Ethane	19495021	22416703	0.010	-14.98681	30.00000	Averaged

Report Date: 28-May-2004 16:21

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 28May2004
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1068-2Q-02 Client Smp ID: CCV
Level: LOW Operator: ACT
Data Type: GC DATA SampleType: METHSPIKE
SpikeList File: 1-3ccv.spk Quant Type: ESTD
Sublist File: 1-3.sub
Method File: /chem/gc7.i/28May2004.b/38100411m5a.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug/mL	CONC RECOVERED ug/mL	% RECOVERED	LIMITS
1 Methane	1.330	1.466	110.20	70-130
2 Ethylene	2.305	2.573	111.62	70-130
3 Ethane	2.494	2.693	107.97	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0405424B

Work Order Summary

CLIENT:	Ms. Andrea Colby Katahdin Laboratory 340 County Road, #5 West Brook, ME 04092	**BILL TO:**	Ms. Andrea Colby Katahdin Laboratory 340 County Road, #5 West Brook, ME 04092
PHONE:	207-874-2400	**P.O. #**	
FAX:	207-775-4029	**PROJECT #**	WU1519 Keywest
DATE RECEIVED:	5/25/2004	**CONTACT:**	Betty Chu
DATE COMPLETED:	6/1/2004		

FRACTION #	NAME	TEST
04A	RR-MW-06-0504	Mod. RSK-175
04AMS	RR-MW-06-0504 MS	Mod. RSK-175
04AMSD	RR-MW-06-0504 MSD	Mod. RSK-175
05A	A824-MW-01-0504	Mod. RSK-175
06A	A824-MW-02-0504	Mod. RSK-175
07A	A824-MW-03-0504	Mod. RSK-175
08A	KW-DUP-03-0504	Mod. RSK-175
09A	Lab Blank	Mod. RSK-175
10A	LCS	Mod. RSK-175

CERTIFIED BY: Linda A. Truman DATE: 06/07/04

Laboratory Director

Certfication numbers: AR DEQ - 03-084-0, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/04, Expiration date: 06/30/05
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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0001

LABORATORY NARRATIVE
Modified RSK 175
Katahdin Laboratory
Workorder# 0405424B

Five VOA Vial-40 mL samples were received on May 25, 2004. The laboratory performed analysis via Modified RSK 175 for Methane using GC/FID. The method involves placing an aliquot of the sample in a headspace vial. The vial is then placed into HP7694 Headspace Autosampler equipped with oven, shaker and 1 mL sample loop. Sample is incubated and then equilibrated at 40°C for 15 minutes with high agitation. Finally, a direct injection of the headspace is performed. See the data sheets for the reporting limits for each compound.

Requirement	*RSK 175*	*ATL Modifications*
Sample Collection	Collect sample in 60 mL crimp-top vial.	Collect sample in 40 mL VOA vial.
Headspace Generation	Headspace is generated in 60 mL sample vial by displacing volume of liquid with Helium. The amount of liquid should be 10% of sample volume in bottle, up to 10 mL.	5.0 mL of sample is displaced with 5.0 mL Nitrogen and transferred to a Nitrogen purged and capped autosampler vial. Headspace is then generated in the autosampler vial.
Sample Preparation	Sample is shaken 5 min. to equilibrate analyte between headspace and liquid phase.	Prior to injection, autosampler shakes sample for 15 min. while heating to 40°C.
Headspace Injection	Syringe injection of 300 mL headspace into GC.	Autosampler pressurizes sample to fill 1.0 mL loop with headspace sample.
Calibration and Quantitation	Direct injections of gas phase standards are used to obtain a Calibration Curve. Henry's Law is used to calculate mg of gas per Liter of water. Calculation requires recording total volume of serum bottle and headspace, and sample temperature.	Calibration standards are prepared by addition of a gaseous spike solution to clean water. Response factors are calculated for each level of a multi point calibration, and the mean is used to calculate quantitation for each target analyte.
Initial Calibration Curve (ICAL)	Linear regression	% RSD </= 30%, use average RF to quantify results
Lab Blanks	Blank subtraction is performed.	No blank subtraction; Lab Blank must be less than the Reporting Limit.
Specified Detectors	FID or ECD	FID or TCD

Receiving Notes

Water samples RR-MW-06-0504 MS, RR-MW-06-0504 MSD and A824-MW-02-0504 were received with a significant amount of headspace. (i.e., the diameter of the bubble was greater than 5 mm). The discrepancy was noted in the Sample Receipt Confirmation email/fax.

0002

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
RR-MW-06-0504	0405424B-04A	5/21/2004	5/25/2004	NA	7	5/28/2004	NA	Good
RR-MW-06-0504 MS	0405424B-04AM	5/21/2004	NA	NA	7	5/28/2004	NA	Good
RR-MW-06-0504 MSD	0405424B-04AM	5/21/2004	NA	NA	7	5/28/2004	NA	Good
A824-MW-01-0504	0405424B-05A	5/21/2004	5/25/2004	NA	7	5/28/2004	NA	Good
A824-MW-02-0504	0405424B-06A	5/21/2004	5/25/2004	NA	7	5/28/2004	NA	Good
A824-MW-03-0504	0405424B-07A	5/21/2004	5/25/2004	NA	7	5/28/2004	NA	Good
KW-DUP-03-0504	0405424B-08A	5/21/2004	5/25/2004	NA	7	5/28/2004	NA	Good
Lab Blank	0405424B-09A	NA	NA	NA	NA	5/28/2004	NA	Good
LCS	0405424B-10A	NA	NA	NA	NA	5/28/2004	NA	Good

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SAMPLE NAME: Lab Blank

ID#: 0405424B-09A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7052804	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/28/04 08:45 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected

Container Type: NA - Not Applicable

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: 7052812.d & 7052813.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: &

Date Analyzed: 5/28/04 & 5/28/04

		Original		Duplicate		
CAS Number	Compound	Amount	Flags	Amount	Flags	RPD
74-82-8	Methane	127		125		1.6

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 11-APR-2003 11:42
End Cal Date : 11-APR-2003 14:02
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/gc7.i/16Jul2003.b/38100411m5a.m
Cal Date : 17-Jul-2003 10:52 atoyama
Curve Type : Average

Calibration File Names:
Level 1: /chem/gc7.i/11Apr2003.b/7041103.d
Level 2: /chem/gc7.i/11Apr2003.b/7041104.d
Level 3: /chem/gc7.i/11Apr2003.b/7041105.d
Level 4: /chem/gc7.i/11Apr2003.b/7041106.d
Level 5: /chem/gc7.i/11Apr2003.b/7041107.d
Level 6: /chem/gc7.i/11Apr2003.b/7041108.d

Compound	0.00500 Level 1	0.02700 Level 2	0.06700 Level 3	1.330 Level 4	6.651 Level 5	133.028 Level 6	___ RRF	% RSD
1 Methane	23473600	20391519	18145642	19641331	15588518	18737320	19329655	13.519
2 Ethylene	22286222	21228170	19317603	20626919	16449448	+++++	19981673	11.246
3 Ethane	23052444	20508100	18422992	19735760	15755809	+++++	19495021	13.781
4 Propene	23241100	22213288	19741557	20499315	15275004	23483000	20742211	14.761
5 Propane	24163100	21716018	19656431	20275345	15092413	22819091	20620400	15.365

Data File: /chem/gc7.i/28May2004.b/7052801.d
Report Date: 28-May-2004 07:49

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc7.i
Lab File ID: 7052801.d
Analysis Type: AIR
Lab Sample ID: 1068-2Q-01
Method: /chem/gc7.i/28May2004.b/38100411m5a.m

Injection Date: 28-MAY-2004 07:11
Init. Cal. Date(s): 11-APR-2003 11-APR-2003
Init. Cal. Times: 11:42 14:02
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.000	MIN RRF	MIN %D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Methane	19329655	22183665	0.100	-14.76493	30.00000	Averaged
2 Ethylene	19981673	23620614	0.010	-18.21140	30.00000	Averaged
3 Ethane	19495021	22416703	0.010	-14.98681	30.00000	Averaged

Report Date: 28-May-2004 16:21

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 28May2004
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1068-2Q-02 Client Smp ID: CCV
Level: LOW Operator: ACT
Data Type: GC DATA SampleType: METHSPIKE
SpikeList File: 1-3ccv.spk Quant Type: ESTD
Sublist File: 1-3.sub
Method File: /chem/gc7.i/28May2004.b/38100411m5a.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug/mL	CONC RECOVERED ug/mL	% RECOVERED	LIMITS
1 Methane	1.330	1.466	110.20	70-130
2 Ethylene	2.305	2.573	111.62	70-130
3 Ethane	2.494	2.693	107.97	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0405496

Work Order Summary

CLIENT:	Ms. Andrea Colby Katahdin Laboratory 340 County Road, #5 West Brook, ME 04092	**BILL TO:**	Ms. Andrea Colby Katahdin Laboratory 340 County Road, #5 West Brook, ME 04092
PHONE:	207-874-2400	**P.O. #**	
FAX:	207-775-4029	**PROJECT #**	WU1529 TT NUS/Key West
DATE RECEIVED:	5/28/2004	**CONTACT:**	Betty Chu
DATE COMPLETED:	6/10/2004		

FRACTION #	NAME	TEST
01A	G01-MW02-0504	Mod. RSK-175
02A	G01-MW04-0504	Mod. RSK-175
03A	G01-MW05-0504	Mod. RSK-175
04A	G01-MW11-0504	Mod. RSK-175
05A	Lab Blank	Mod. RSK-175
06A	LCS	Mod. RSK-175

CERTIFIED BY: Linda D. Truman DATE: 06/10/04

Laboratory Director

Certfication numbers: AR DEQ - 03-084-0, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/04, Expiration date: 06/30/05
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
G01-MW02-0504	0405496-01A	5/24/2004	5/28/2004	NA	8	6/ 1/2004	NA	Good
G01-MW04-0504	0405496-02A	5/24/2004	5/28/2004	NA	8	6/ 1/2004	NA	Good
G01-MW05-0504	0405496-03A	5/24/2004	5/28/2004	NA	8	6/ 1/2004	NA	Good
G01-MW11-0504	0405496-04A	5/24/2004	5/28/2004	NA	8	6/ 1/2004	NA	Good
Lab Blank	0405496-05A	NA	NA	NA	NA	6/ 1/2004	NA	Good
LCS	0405496-06A	NA	NA	NA	NA	6/ 1/2004	NA	Good

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0405496-05A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7060103	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/1/04 08:01 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected

Container Type: NA - Not Applicable

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 11-APR-2003 11:42
End Cal Date : 11-APR-2003 14:02
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/gc7.i/16Jul2003.b/38100411m5a.m
Cal Date : 17-Jul-2003 10:52 atoyama
Curve Type : Average

Calibration File Names:
Level 1: /chem/gc7.i/11Apr2003.b/7041103.d
Level 2: /chem/gc7.i/11Apr2003.b/7041104.d
Level 3: /chem/gc7.i/11Apr2003.b/7041105.d
Level 4: /chem/gc7.i/11Apr2003.b/7041106.d
Level 5: /chem/gc7.i/11Apr2003.b/7041107.d
Level 6: /chem/gc7.i/11Apr2003.b/7041108.d

Compound	0.00500 Level 1	0.02700 Level 2	0.06700 Level 3	1.330 Level 4	6.651 Level 5	133.028 Level 6	___ RRF	% RSD
1 Methane	23473600	20391519	18145642	19641331	15588518	18737320	19329655	13.519
2 Ethylene	22286222	21228170	19317603	20626919	16449448	+++++	19981673	11.246
3 Ethane	23052444	20508100	18422992	19735760	15755809	+++++	19495021	13.781
4 Propene	23241100	22213288	19741557	20499315	15275004	23483000	20742211	14.761
5 Propane	24163100	21716018	19656431	20275345	15092413	22819091	20620400	15.365

Report Date: 01-Jun-2004 07:35

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc7.i Injection Date: 01-JUN-2004 07:18
Lab File ID: 7060101.d Init. Cal. Date(s): 11-APR-2003 11-APR-2003
Analysis Type: AIR Init. Cal. Times: 11:42 14:02
Lab Sample ID: 1068-2R-01 Quant Type: ESTD
Method: /chem/gc7.i/01Jun2004.b/38100411m5a.m

COMPOUND	RRF / AMOUNT	RF0.000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Methane	19329655	21678629	0.100	-12.15218	30.00000	Averaged
2 Ethylene	19981673	23080564	0.010	-15.50867	30.00000	Averaged
3 Ethane	19495021	21909995	0.010	-12.38764	30.00000	Averaged

Report Date: 01-Jun-2004 15:14

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 01Jun2004
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1068-2R-02 Client Smp ID: CCV
Level: LOW Operator: ACT
Data Type: GC DATA SampleType: METHSPIKE
SpikeList File: 1-3ccv.spk Quant Type: ESTD
Sublist File: 1-3.sub
Method File: /chem/gc7.i/01Jun2004.b/38100411m5a.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug/mL	CONC RECOVERED ug/mL	% RECOVERED	LIMITS
1 Methane	1.330	1.449	108.98	70-130
2 Ethylene	2.305	2.563	111.20	70-130
3 Ethane	2.494	2.686	107.72	70-130

FORM 2
WATER SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	WG7760-LCSD	WG7760-3	72	87	92						0
02	WG7760-BLANK	WG7760-1RA	91	86	155*						1
03	WG7760-LCS	WG7760-2RA	87	108	120						0
04	B01-MW-01-0504	WU1503-1	94	57	105						0
05	B01-MW-03-0504	WU1503-2	79	50	77						0
06	G01-MW-03-0504	WU1503-3	37	24*	33						1
07	G01-MW-10-0504	WU1503-4	33	41	34						0
08	G01-MW-12-0504	WU1503-5	51	51	55						0
09	A824-MW-01-0504	WU1519-2	77	80	79						0
10	RR-MW-06-0504	WU1519-1RA	56	53	50						0
11	A824-MW-02-0504	WU1519-3	76	65	46						0
12	A824-MW-03-0504	WU1519-4	88	37	60						0
13	KW-DUP-03-0504	WU1519-5	80	83	107						0
14	FC-MW-05-0504	WU1529-1	78	48	136						0
15	FC-MW-06-0504	WU1529-2	89	69	86						0
16	FC-MW-22-0504	WU1529-3	79	84	112						0
17	KW-DUP-01-0504	WU1529-4	85	108	119						0
18	G01-MW02-0504	WU1529-5	43	30	56						0
19	G01-MW04-0504	WU1529-6	45	52	52						0
20	G01-MW05-0504	WU1529-7	75	79	67						0
21	G01-MW11-0504	WU1529-8	68	80	71						0
22	G01-MW-12-0504	WU1503-5DL2	D	D	D						0
23	WG7768-BLANK	WG7768-1	61	86	90						0
24	WG7768-LCS	WG7768-2	73	57	68						0
25	WG7805-LCS	WG7805-2	81	55	106						0
26	WG7805-LCSD	WG7805-3	58	51	122						0
27	G01-MW-10-0504	WU1503-4DL2	36	43	32						0
28	FC-MW-22-0504	WU1529-3DL2	D	D	D						0

		QC LIMITS
S1	= 2-Methylnaphthalene-d1	(30-150)
S2	= Fluorene-d10	(30-150)
S3	= Pyrene-d10	(30-150)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

Katahdin Analytical Services 2000003

FORM 2

WATER SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	KW-DUP-01-0504	WU1529-4DL2	D	D	D						0
02	G01-MW05-0504	WU1529-7DL2	D	D	D						0
03	G01-MW11-0504	WU1529-8DL2	D	D	D						0
04	WG7805-BLANK	WG7805-1RA	28*	50	32						1
05	RR-MW-06-0504MS	WG7768-3RA	54	56	36						0
06	RR-MW-06-0504MSD	WG7768-4RA	44	49	33						0
07											
08											
09											
10											
11											
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28											

		QC LIMITS
S1	= 2-Methylnaphthalene-d1	(30-150)
S2	= Fluorene-d10	(30-150)
S3	= Pyrene-d10	(30-150)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

Katahdin Analytical Services 2000004

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG7760-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: X5454 Lab Sample ID: WG7760-1RA

Instrument ID: GCMS-X Date Extracted: 05/24/04

Matrix: (soil/water) WATER Date Analyzed: 06/03/04

Level: (low/med) LOW Time Analyzed: 1832

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	WG7760-LCSD	WG7760-3	X5436	06/02/04	1721
02	WG7760-LCS	WG7760-2RA	X5455	06/03/04	1916
03	B01-MW-01-0504	WU1503-1	X5471	06/15/04	2258
04	B01-MW-03-0504	WU1503-2	X5472	06/15/04	2343
05	G01-MW-03-0504	WU1503-3	X5473	06/16/04	0027
06	G01-MW-10-0504	WU1503-4	X5474	06/16/04	0112
07	G01-MW-12-0504	WU1503-5	X5475	06/16/04	0156
08	G01-MW-12-0504	WU1503-5DL2	X5496	06/17/04	1519
09	G01-MW-10-0504	WU1503-4DL2	X5510	06/18/04	1309
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COMMENTS:

FORM IV SV

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG7768-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: X5501 Lab Sample ID: WG7768-1

Instrument ID: GCMS-X Date Extracted: 05/25/04

Matrix: (soil/water) WATER Date Analyzed: 06/17/04

Level: (low/med) LOW Time Analyzed: 1903

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	A824-MW-01-0504	WU1519-2	X5477	06/16/04	0325
02	RR-MW-06-0504	WU1519-1RA	X5479	06/16/04	1255
03	A824-MW-02-0504	WU1519-3	X5480	06/16/04	1340
04	A824-MW-03-0504	WU1519-4	X5481	06/16/04	1424
05	KW-DUP-03-0504	WU1519-5	X5482	06/16/04	1509
06	WG7768-LCS	WG7768-2	X5502	06/17/04	1947
07	RR-MW-06-0504MS	WG7768-3RA	X5516	06/18/04	1737
08	RR-MW-06-0504MSD	WG7768-4RA	X5517	06/18/04	1821
09					
10					
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12					
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COMMENTS:

Katahdin Analytical Services 2000006

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG7805-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: X5515 Lab Sample ID: WG7805-1RA

Instrument ID: GCMS-X Date Extracted: 05/26/04

Matrix: (soil/water) WATER Date Analyzed: 06/18/04

Level: (low/med) LOW Time Analyzed: 1652

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	FC-MW-05-0504	WU1529-1	X5483	06/16/04	1554
02	FC-MW-06-0504	WU1529-2	X5484	06/16/04	1639
03	FC-MW-22-0504	WU1529-3	X5485	06/16/04	1724
04	KW-DUP-01-0504	WU1529-4	X5486	06/16/04	1809
05	G01-MW02-0504	WU1529-5	X5487	06/16/04	1854
06	G01-MW04-0504	WU1529-6	X5488	06/16/04	1938
07	G01-MW05-0504	WU1529-7	X5489	06/16/04	2022
08	G01-MW11-0504	WU1529-8	X5490	06/16/04	2106
09	WG7805-LCS	WG7805-2	X5506	06/17/04	2245
10	WG7805-LCSD	WG7805-3	X5507	06/17/04	2330
11	FC-MW-22-0504	WU1529-3DL2	X5511	06/18/04	1354
12	KW-DUP-01-0504	WU1529-4DL2	X5512	06/18/04	1439
13	G01-MW05-0504	WU1529-7DL2	X5513	06/18/04	1524
14	G01-MW11-0504	WU1529-8DL2	X5514	06/18/04	1608
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COMMENTS:

Katahdin Analytical Services 2000007

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 05/24/04
Analysis Date: 06/03/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WG7760-1RA
Client ID: WG7760-Blank
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7760
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.050
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.080
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.050
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.080
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.060
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.080
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.080
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.11
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.090
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.070
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.090
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.080
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.090
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.10
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.15
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.080
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.080
7297-45-2	2-Methylnaphthalene-d10		91%				
81103-79-9	Fluorene-d10		86%				
1718-52-1	Pyrene-d10		*155%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 05/25/04
Analysis Date: 06/17/04
Report Date: 06/24/2004
Matrix: WATER
% Solids: NA

Lab ID: WG7768-1
Client ID: WG7768-Blank
SDG: CTO301318-1
Extracted by: KM
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7768
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.050
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.080
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.050
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.080
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.060
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.080
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.080
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.11
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.090
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.070
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.090
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.080
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.090
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.10
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.15
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.080
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.080
7297-45-2	2-Methylnaphthalene-d10		61%				
81103-79-9	Fluorene-d10		86%				
1718-52-1	Pyrene-d10		90%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 301,318 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 05/26/04
Analysis Date: 06/18/04
Report Date: 06/23/2004
Matrix: WATER
% Solids: NA

Lab ID: WG7805-1RA
Client ID: WG7805-Blank
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG7805
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.050
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.080
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.050
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.080
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.060
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.080
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.080
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.11
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.090
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.070
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.090
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.080
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.090
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.10
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.15
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.080
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.080
7297-45-2	2-Methylnaphthalene-d10		* 28%				
81103-79-9	Fluorene-d10		50%				
1718-52-1	Pyrene-d10		32%				

FORM 5

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: XD270 DFTPP Injection Date: 05/27/04

Instrument ID: GCMS-X DFTPP Injection Time: 1036

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	55.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Less than 100.0% of mass 198	62.7
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	40.3
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	20.3
365	1.0 - 100.0% of mass 198	2.5
441	0.0 - 100.0% of mass 443	6.7 (43.7)2
442	40.0 - 100.0% of mass 198	75.3
443	17.0 - 23.0% of mass 442	15.2 (20.2)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		SSTD1.00X0527	X5395	05/27/04	1106
02		SSTD3.00X0527	X5396	05/27/04	1150
03		SSTD2.00X0527	X5397	05/27/04	1235
04		SSTD0.50X0527	X5398	05/27/04	1320
05		SSTD0.20X0527	X5400	05/27/04	1456
06					
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Katahdin Analytical Services 2000015

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: XD272 DFTPP Injection Date: 06/02/04

Instrument ID: GCMS-X DFTPP Injection Time: 1318

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	59.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Less than 100.0% of mass 198	74.7
70	Less than 2.0% of mass 69	0.4 (0.5)1
127	40.0 - 60.0% of mass 198	40.4
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	6.5
275	10.0 - 30.0% of mass 198	23.4
365	1.0 - 100.0% of mass 198	3.0
441	0.0 - 100.0% of mass 443	15.1 (80.2)2
442	40.0 - 100.0% of mass 198	90.6
443	17.0 - 23.0% of mass 442	18.8 (20.7)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		SSTD1.00X0602	X5433	06/02/04	1345
02	WG7760-LCSD	WG7760-3	X5436	06/02/04	1721
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
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FORM V SV

Katahdin Analytical Services 2000016

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: XD273 DFTPP Injection Date: 06/03/04

Instrument ID: GCMS-X DFTPP Injection Time: 1334

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	59.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Less than 100.0% of mass 198	66.6
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	41.9
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	6.8
275	10.0 - 30.0% of mass 198	22.9
365	1.0 - 100.0% of mass 198	2.8
441	0.0 - 100.0% of mass 443	14.2 (86.0)2
442	40.0 - 100.0% of mass 198	89.1
443	17.0 - 23.0% of mass 442	16.5 (18.5)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		SSTD1.00X0603	X5449	06/03/04	1448
02		SSTD3.00X0603	X5450	06/03/04	1534
03		SSTD2.00X0603	X5451	06/03/04	1618
04		SSTD0.50X0603	X5452	06/03/04	1703
05		SSTD0.20X0603	X5453	06/03/04	1747
06	WG7760-BLANK	WG7760-1RA	X5454	06/03/04	1832
07	WG7760-LCS	WG7760-2RA	X5455	06/03/04	1916
08					
09					
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17					
18					
19					
20					

FORM V SV

Katahdin Analytical Services 2000017

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: XD278 DFTPP Injection Date: 06/15/04

Instrument ID: GCMS-X DFTPP Injection Time: 1632

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	58.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Less than 100.0% of mass 198	70.6
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	40.0 - 60.0% of mass 198	42.3
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	6.6
275	10.0 - 30.0% of mass 198	22.0
365	1.0 - 100.0% of mass 198	2.4
441	0.0 - 100.0% of mass 443	12.7 (89.9)2
442	40.0 - 100.0% of mass 198	76.5
443	17.0 - 23.0% of mass 442	14.1 (18.4)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		SSTD1.00X0615	X5463	06/15/04	1652
02		SSTD3.00X0615	X5464	06/15/04	1747
03		SSTD2.00X0615	X5465	06/15/04	1832
04		SSTD0.50X0615	X5466	06/15/04	1916
05		SSTD0.20X0615	X5467	06/15/04	2001
06	B01-MW-01-0504	WU1503-1	X5471	06/15/04	2258
07	B01-MW-03-0504	WU1503-2	X5472	06/15/04	2343
08	G01-MW-03-0504	WU1503-3	X5473	06/16/04	0027
09	G01-MW-10-0504	WU1503-4	X5474	06/16/04	0112
10	G01-MW-12-0504	WU1503-5	X5475	06/16/04	0156
11	A824-MW-01-0504	WU1519-2	X5477	06/16/04	0325
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FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: XD279 DFTPP Injection Date: 06/16/04

Instrument ID: GCMS-X DFTPP Injection Time: 1141

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	58.6
68	Less than 2.0% of mass 69	0.2 (0.3)1
69	Less than 100.0% of mass 198	67.3
70	Less than 2.0% of mass 69	0.3 (0.4)1
127	40.0 - 60.0% of mass 198	40.6
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	6.5
275	10.0 - 30.0% of mass 198	21.4
365	1.0 - 100.0% of mass 198	2.4
441	0.0 - 100.0% of mass 443	13.0 (89.5)2
442	40.0 - 100.0% of mass 198	78.1
443	17.0 - 23.0% of mass 442	14.5 (18.6)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		SSTD1.00X0616	X5478	06/16/04	1203
02	RR-MW-06-0504	WU1519-1RA	X5479	06/16/04	1255
03	A824-MW-02-0504	WU1519-3	X5480	06/16/04	1340
04	A824-MW-03-0504	WU1519-4	X5481	06/16/04	1424
05	KW-DUP-03-0504	WU1519-5	X5482	06/16/04	1509
06	FC-MW-05-0504	WU1529-1	X5483	06/16/04	1554
07	FC-MW-06-0504	WU1529-2	X5484	06/16/04	1639
08	FC-MW-22-0504	WU1529-3	X5485	06/16/04	1724
09	KW-DUP-01-0504	WU1529-4	X5486	06/16/04	1809
10	G01-MW02-0504	WU1529-5	X5487	06/16/04	1854
11	G01-MW04-0504	WU1529-6	X5488	06/16/04	1938
12	G01-MW05-0504	WU1529-7	X5489	06/16/04	2022
13	G01-MW11-0504	WU1529-8	X5490	06/16/04	2106
14					
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20					

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: XD280 DFTPP Injection Date: 06/17/04

Instrument ID: GCMS-X DFTPP Injection Time: 1316

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	59.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Less than 100.0% of mass 198	68.3
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	40.0 - 60.0% of mass 198	43.1
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	6.3
275	10.0 - 30.0% of mass 198	21.2
365	1.0 - 100.0% of mass 198	2.0
441	0.0 - 100.0% of mass 443	11.4 (88.3)2
442	40.0 - 100.0% of mass 198	69.2
443	17.0 - 23.0% of mass 442	13.0 (18.7)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		SSTD1.00X0617	X5494	06/17/04	1349
02	G01-MW-12-0504	WU1503-5DL2	X5496	06/17/04	1519
03	WG7768-BLANK	WG7768-1	X5501	06/17/04	1903
04	WG7768-LCS	WG7768-2	X5502	06/17/04	1947
05	WG7805-LCS	WG7805-2	X5506	06/17/04	2245
06	WG7805-LCSD	WG7805-3	X5507	06/17/04	2330
07					
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FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: XD281 DFTPP Injection Date: 06/18/04

Instrument ID: GCMS-X DFTPP Injection Time: 1154

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Less than 100.0% of mass 198	66.5
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	42.7
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	6.3
275	10.0 - 30.0% of mass 198	20.6
365	1.0 - 100.0% of mass 198	2.6
441	0.0 - 100.0% of mass 443	11.0 (82.5)2
442	40.0 - 100.0% of mass 198	69.5
443	17.0 - 23.0% of mass 442	13.4 (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		SSTD1.00X0618	X5509	06/18/04	1219
02	G01-MW-10-0504	WU1503-4DL2	X5510	06/18/04	1309
03	FC-MW-22-0504	WU1529-3DL2	X5511	06/18/04	1354
04	KW-DUP-01-0504	WU1529-4DL2	X5512	06/18/04	1439
05	G01-MW05-0504	WU1529-7DL2	X5513	06/18/04	1524
06	G01-MW11-0504	WU1529-8DL2	X5514	06/18/04	1608
07	WG7805-BLANK	WG7805-1RA	X5515	06/18/04	1652
08	RR-MW-06-0504MS	WG7768-3RA	X5516	06/18/04	1737
09	RR-MW-06-0504MSD	WG7768-4RA	X5517	06/18/04	1821
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FORM V SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID (Standard): X5433 Date Analyzed: 06/02/04

Instrument ID: GCMS-X Time Analyzed: 1345

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
12 HOUR STD		23658		7.58		88977		10.41		45309		14.50	
UPPER LIMIT		47316		8.08		177954		10.91		90618		15.00	
LOWER LIMIT		11829		7.08		44489		9.91		22655		14.00	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	WG7760-LCSD	WG7760-3		23660		7.58		83315		10.41		40522	14.51
02													
03													
04													
05													
06													
07													
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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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-1

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID (Standard): X5433 Date Analyzed: 06/02/04

Instrument ID: GCMS-X Time Analyzed: 1345

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
12 HOUR STD		66995		17.88		41663		24.10		21999		27.21	
UPPER LIMIT		133990		18.38		83326		24.60		43998		27.71	
LOWER LIMIT		33498		17.38		20832		23.60		11000		26.71	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	WG7760-LCSD	WG7760-3		72146		17.88		56932		24.11		28446		27.21	
02													
03													
04													
05													
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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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-2

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID (Standard): X5449 Date Analyzed: 06/03/04

Instrument ID: GCMS-X Time Analyzed: 1448

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
12 HOUR STD		20605		7.54		75989		10.36		37217		14.45	
UPPER LIMIT		41210		8.04		151978		10.86		74434		14.95	
LOWER LIMIT		10303		7.04		37995		9.86		18609		13.95	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	WG7760-BLANK	WG7760-1RA		17764		7.54		64698		10.36		39189		14.45	
02	WG7760-LCS	WG7760-2RA		17999		7.54		66042		10.36		29720		14.45	
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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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-1

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID (Standard): X5449 Date Analyzed: 06/03/04

Instrument ID: GCMS-X Time Analyzed: 1448

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
12 HOUR STD		53810		17.82		52502		24.05		47246		27.15	
UPPER LIMIT		107620		18.32		105004		24.55		94492		27.65	
LOWER LIMIT		26905		17.32		26251		23.55		23623		26.65	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	WG7760-BLANK	WG7760-1RA		49374		17.82		33630		24.06		27327		27.15	
02	WG7760-LCS	WG7760-2RA		46691		17.82		41156		24.05		28546		27.15	
03													
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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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-2

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID (Standard): X5463 Date Analyzed: 06/15/04

Instrument ID: GCMS-X Time Analyzed: 1652

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
12 HOUR STD		12631		7.54		40459		10.37		19258		14.45	
UPPER LIMIT		25262		8.04		80918		10.87		38516		14.95	
LOWER LIMIT		6316		7.04		20230		9.87		9629		13.95	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	B01-MW-01-0504	WU1503-1		12549		7.54		35588		10.37		26236		14.45	
02	B01-MW-03-0504	WU1503-2		11540		7.54		32987		10.37		24734		14.45	
03	G01-MW-03-0504	WU1503-3		12526		7.53		43795		10.36		23413		14.45	
04	G01-MW-10-0504	WU1503-4		10882		7.53		31788		10.36		17203		14.45	
05	G01-MW-12-0504	WU1503-5		12517		7.53		36660		10.36		17317		14.45	
06	A824-MW-01-0504	WU1519-2		13301		7.53		39006		10.36		20180		14.45	
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08															
09															
10															
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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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-1

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID (Standard): X5463 Date Analyzed: 06/15/04

Instrument ID: GCMS-X Time Analyzed: 1652

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
12 HOUR STD		23921		17.85		12666		24.06		6940		27.16	
UPPER LIMIT		47842		18.35		25332		24.56		13880		27.66	
LOWER LIMIT		11961		17.35		6333		23.56		3470		26.66	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	B01-MW-01-0504	WU1503-1		21823		17.85		9377		24.07		4477		27.16	
02	B01-MW-03-0504	WU1503-2		18973		17.85		10666		24.07		3924		27.16	
03	G01-MW-03-0504	WU1503-3		26395		17.85		10478		24.06		4539		27.17	
04	G01-MW-10-0504	WU1503-4		22892		17.82		12900		24.06		4625		27.17	
05	G01-MW-12-0504	WU1503-5		22883		17.85		9552		24.06		3545		27.17	
06	A824-MW-01-0504	WU1519-2		29125		17.85		13079		24.06		4421		27.17	
07													
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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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services 2000027

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID (Standard): X5478 Date Analyzed: 06/16/04

Instrument ID: GCMS-X Time Analyzed: 1203

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
12 HOUR STD		11267		7.53		39128		10.36		25035		14.45	
UPPER LIMIT		22534		8.03		78256		10.86		50070		14.95	
LOWER LIMIT		5634		7.03		19564		9.86		12518		13.95	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	RR-MW-06-0504	WU1519-1RA		11097		7.54		35109		10.36		16793		14.45	
02	A824-MW-02-0504	WU1519-3		11385		7.53		36734		10.36		14777		14.45	
03	A824-MW-03-0504	WU1519-4		9781		7.53		28710		10.36		22319		14.45	
04	KW-DUP-03-0504	WU1519-5		11118		7.54		34511		10.36		16387		14.45	
05	FC-MW-05-0504	WU1529-1		12135		7.53		37022		10.36		26932		14.45	
06	FC-MW-06-0504	WU1529-2		13164		7.53		37067		10.36		19459		14.45	
07	FC-MW-22-0504	WU1529-3		13375		7.53		39755		10.36		18527		14.45	
08	KW-DUP-01-0504	WU1529-4		14282		7.53		47616		10.37		20518		14.45	
09	G01-MW02-0504	WU1529-5		12640		7.54		35334		10.36		27530		14.45	
10	G01-MW04-0504	WU1529-6		11999		7.53		37146		10.36		18907		14.45	
11	G01-MW05-0504	WU1529-7		13594		7.53		33279		10.35		15726		14.45	
12	G01-MW11-0504	WU1529-8		13877		7.53		41693		10.36		19800		14.45	
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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-1

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID (Standard): X5478 Date Analyzed: 06/16/04

Instrument ID: GCMS-X Time Analyzed: 1203

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD		19698	17.85	8966	24.06	3797	27.17
UPPER LIMIT		39396	18.35	17932	24.56	7594	27.67
LOWER LIMIT		9849	17.35	4483	23.56	1899	26.67
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01	RR-MW-06-0504	WU1519-1RA	18984	17.85	9485	24.07	2363	27.17
02	A824-MW-02-0504	WU1519-3	19804	17.85	11607	24.07	4300	27.17
03	A824-MW-03-0504	WU1519-4	16086	17.85	9110	24.07	2167	27.18
04	KW-DUP-03-0504	WU1519-5	23544	17.85	10904	24.07	3844	27.17
05	FC-MW-05-0504	WU1529-1	24589	17.85	9217	24.07	3666	27.18
06	FC-MW-06-0504	WU1529-2	25577	17.85	13842	24.07	3979	27.17
07	FC-MW-22-0504	WU1529-3	24008	17.85	10258	24.06	4824	27.17
08	KW-DUP-01-0504	WU1529-4	26027	17.85	11368	24.06	4912	27.16
09	G01-MW02-0504	WU1529-5	23373	17.85	10707	24.07	4790	27.18
10	G01-MW04-0504	WU1529-6	29209	17.82	13836	24.06	4505	27.17
11	G01-MW05-0504	WU1529-7	23123	17.82	13424	24.06	4169	27.17
12	G01-MW11-0504	WU1529-8	24346	17.82	13563	24.06	4138	27.17
13								
14								
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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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 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 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID (Standard): X5494 Date Analyzed: 06/17/04

Instrument ID: GCMS-X Time Analyzed: 1349

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
12 HOUR STD		12735		7.54		40579		10.36		24754		14.45	
UPPER LIMIT		25470		8.04		81158		10.86		49508		14.95	
LOWER LIMIT		6368		7.04		20290		9.86		12377		13.95	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	G01-MW-12-0504	WU1503-5DL2		10392		7.54		29801		10.36		14295		14.45	
02	WG7768-BLANK	WG7768-1		12368		7.54		35283		10.37		14086		14.45	
03	WG7768-LCS	WG7768-2		13571		7.54		35940		10.36		16970		14.45	
04	WG7805-LCS	WG7805-2		12919		7.53		43897		10.36		26669		14.45	
05	WG7805-LCSD	WG7805-3		10446		7.54		29701		10.37		15070		14.45	
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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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-1

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID (Standard): X5494 Date Analyzed: 06/17/04

Instrument ID: GCMS-X Time Analyzed: 1349

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
12 HOUR STD		18979		17.85		7991		24.07		3491		27.18	
UPPER LIMIT		37958		18.35		15982		24.57		6982		27.68	
LOWER LIMIT		9490		17.35		3996		23.57		1746		26.68	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	G01-MW-12-0504	WU1503-5DL2		19189		17.85		8322		24.10		1753	27.19
02	WG7768-BLANK	WG7768-1		21639		17.85		11616		24.09		4008	27.19
03	WG7768-LCS	WG7768-2		18755		17.85		10131		24.07		2768	27.18
04	WG7805-LCS	WG7805-2		22967		17.85		9932		24.07		2619	27.18
05	WG7805-LCSD	WG7805-3		18047		17.85		6167		24.07		2349	27.19
06													
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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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-2

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID (Standard): X5509 Date Analyzed: 06/18/04

Instrument ID: GCMS-X Time Analyzed: 1219

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD		14490	7.44	47317	10.27	19120	14.34
UPPER LIMIT		28980	7.94	94634	10.77	38240	14.84
LOWER LIMIT		7245	6.94	23659	9.77	9560	13.84
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01	G01-MW-10-0504	WU1503-4DL2	12548	7.44	37625	10.27	19092	14.34
02	FC-MW-22-0504	WU1529-3DL2	11520	7.44	36011	10.27	17950	14.34
03	KW-DUP-01-0504	WU1529-4DL2	11840	7.44	33572	10.27	16162	14.34
04	G01-MW05-0504	WU1529-7DL2	11337	7.44	32448	10.27	15348	14.34
05	G01-MW11-0504	WU1529-8DL2	9836	7.44	27110	10.27	22622	14.34
06	WG7805-BLANK	WG7805-1RA	12983	7.44	38564	10.27	15548	14.34
07	RR-MW-06-0504MS	WG7768-3RA	14224	7.44	41090	10.26	17115	14.34
08	RR-MW-06-0504MSD	WG7768-4RA	15531	7.44	51041	10.27	20585	14.34
09								
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15								
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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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-1

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID (Standard): X5509 Date Analyzed: 06/18/04

Instrument ID: GCMS-X Time Analyzed: 1219

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
12 HOUR STD		23528		17.72		19648		23.94		10922		27.03	
UPPER LIMIT		47056		18.22		39296		24.44		21844		27.53	
LOWER LIMIT		11764		17.22		9824		23.44		5461		26.53	
	CLIENT SAMPLE ID	LAB SAMPLE ID											
01	G01-MW-10-0504	WU1503-4DL2		25966		17.71		18892		23.94		10081		27.03	
02	FC-MW-22-0504	WU1529-3DL2		18550		17.72		9240*		23.94		5329*		27.03	
03	KW-DUP-01-0504	WU1529-4DL2		14864		17.72		11710		23.94		4685*		27.04	
04	G01-MW05-0504	WU1529-7DL2		19974		17.72		13175		23.94		6184		27.03	
05	G01-MW11-0504	WU1529-8DL2		15767		17.72		5412*		23.94		3279*		27.03	
06	WG7805-BLANK	WG7805-1RA		17670		17.71		13182		23.94		6083		27.03	
07	RR-MW-06-0504MS	WG7768-3RA		21018		17.72		17760		23.94		7856		27.03	
08	RR-MW-06-0504MSD	WG7768-4RA		28023		17.71		21882		23.94		11940		27.03	
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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 = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-X Calibration Date(s): 05/27/04 05/27/04

Column: DB5-MS ID: 0.25 (mm) Calibration Time(s): 1106 1456

LAB FILE ID: RF0.2: X5400 RF0.5: X5398 RF1: X5395
RF2: X5397 RF3: X5396

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF3	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2	MAX %RSD OR R^2	
Naphthalene	0.538	0.642	0.697	0.656	0.637	AVRG		0.63409812	9.201	15.000	
2-Methylnaphthalene	0.323	0.352	0.368	0.371	0.373	AVRG		0.35725725	5.797	15.000	
Acenaphthylene	0.526	0.565	0.356	0.567	0.549	AVRG		0.51265572	17.368	15.000	<-
Acenaphthene	0.613	0.746	0.813	0.802	0.920	AVRG		0.77884976	14.394	30.000	
Fluorene	3435	10015	31253	55099	73649	LINR	0.13465640	1.14975559	0.99509	0.99000	
Phenanthrene	0.645	0.734	0.758	0.804	0.798	AVRG		0.74794754	8.585	15.000	
Anthracene	4246	10908	31842	70114	97173	LINR	0.11927160	1.24893263	0.99583	0.99000	
Fluoranthene	0.540	0.507	0.471	0.605	0.595	AVRG		0.54363522	10.544	15.000	
Pyrene	0.927	1.026	1.332	1.119	1.048	AVRG		1.09052138	13.872	15.000	
Benzo(a)anthracene	0.324	0.307	0.395	0.364	0.403	AVRG		0.35861210	11.846	15.000	
Chrysene	0.875	1.174	1.120	0.842	0.831	AVRG		0.96836048	17.033	15.000	<-
Benzo(b)fluoranthene	0.522	0.435	0.595	0.515	0.592	AVRG		0.53200853	12.379	15.000	
Benzo(k)fluoranthene	1.220	0.922	1.303	1.256	1.337	AVRG		1.20756523	13.707	15.000	
Benzo(a)pyrene	1052	4328	18537	30825	43968	LINR	3.849e-002	1.32321095	0.99350	0.99000	
Indeno(1,2,3-cd)pyrene	0.831	0.365	0.401	0.354	0.432	AVRG		0.47662227	42.030	15.000	<-
Dibenzo(a,h)anthracene	0.522	0.411	0.581	0.545	0.644	AVRG		0.54064531	15.881	15.000	<-
Benzo(g,h,i)perylene	1943	4239	18750	33400	54539	LINR	0.10326700	1.09682586	0.99170	0.99000	
1-Methylnaphthalene	0.296	0.350	0.378	0.369	0.362	AVRG		0.35101150	9.210	15.000	
2-Methylnaphthalene-d10	0.262	0.268	0.279	0.266	0.283	AVRG		0.27159347	3.341	15.000	
Fluorene-d10	3681	10298	30602	51582	71903	LINR	0.12851820	1.19193689	0.99375	0.99000	
Pyrene-d10	0.615	0.715	0.914	0.799	0.758	AVRG		0.76040505	14.428	15.000	

Average %RSD test result.

Calculate Average %RSD: 16.17730713
Maximum Average %RSD: 30.00000000

Note: Passes Average %RSD Test.

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-X Calibration Date(s): 06/03/04 06/03/04

Column: DB5-MS ID: 0.25 (mm) Calibration Time(s): 1448 1747

LAB FILE ID: RF0.2: X5453 RF0.5: X5452 RF1: X5449
RF2: X5451 RF3: X5450

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF3	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2	MAX %RSD OR R^2	
Naphthalene	0.669	0.773	0.696	0.684	0.703	AVRG		0.70502017	5.679	15.000	
2-Methylnaphthalene	0.379	0.384	0.385	0.399	0.429	AVRG		0.39550340	5.125	15.000	
Acenaphthylene	1.005	1.112	1.144	1.153	1.306	AVRG		1.14396432	9.428	15.000	
Acenaphthene	0.710	0.758	0.796	0.766	0.847	AVRG		0.77541379	6.524	30.000	
Fluorene	0.642	0.755	0.751	0.775	0.886	AVRG		0.76196138	11.371	15.000	
Phenanthrene	0.738	0.789	0.749	0.774	0.830	AVRG		0.77615235	4.690	15.000	
Anthracene	0.703	0.727	0.793	0.852	0.784	AVRG		0.77193243	7.622	15.000	
Fluoranthene	0.724	0.676	0.695	0.735	0.814	AVRG		0.72882637	7.319	15.000	
Pyrene	0.834	0.837	0.798	0.947	0.851	AVRG		0.85372802	6.539	15.000	
Benzo(a)anthracene	4753	11810	39977	62480	139610	LINR	9.459e-002	1.42320639	0.99790	0.99000	
Chrysene	0.939	0.951	0.828	0.849	0.800	AVRG		0.87358772	7.772	15.000	
Benzo(b)fluoranthene	4679	12182	43926	69339	155710	LINR	0.12447400	1.05733861	0.99594	0.99000	
Benzo(k)fluoranthene	1.138	1.230	0.934	1.222	1.085	AVRG		1.12201493	10.792	15.000	
Benzo(a)pyrene	4224	11321	38920	59455	141440	LINR	0.13181560	1.18068072	0.99556	0.99000	
Indeno(1,2,3-cd)pyrene	0.462	0.597	0.660	0.639	0.685	AVRG		0.60881098	14.487	15.000	
Dibenzo(a,h)anthracene	0.654	0.682	0.728	0.714	0.752	AVRG		0.70607302	5.461	15.000	
Benzo(g,h,i)perylene	0.824	0.881	0.897	0.857	0.807	AVRG		0.85336176	4.408	15.000	
1-Methylnaphthalene	0.348	0.374	0.373	0.385	0.412	AVRG		0.37842216	6.098	15.000	
2-Methylnaphthalene-d10	0.300	0.284	0.291	0.297	0.325	AVRG		0.29935635	5.201	15.000	
Fluorene-d10	0.658	0.694	0.754	0.777	0.962	AVRG		0.76899749	15.275	15.000	<-
Pyrene-d10	0.608	0.612	0.637	0.706	0.686	AVRG		0.64969572	6.808	15.000	

Average %RSD test result.

Calculate Average %RSD: 11.00811291
Maximum Average %RSD: 30.00000000

Note: Passes Average %RSD Test.

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-X Calibration Date(s): 06/15/04 06/15/04

Column: DB5-MS ID: 0.25 (mm) Calibration Time(s): 1652 2001

LAB FILE ID: RF0.2: X5467 RF0.5: X5466 RF1: X5463
RF2: X5465 RF3: X5464

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF3	CURVE	COEFF. A1	%RSD OR R^2	MAX %RSD OR R^2	
Naphthalene	0.875	0.903	0.767	0.799	0.800	AVRG	0.82900838	6.926	15.000	
2-Methylnaphthalene	0.389	0.464	0.423	0.417	0.443	AVRG	0.42731149	6.573	15.000	
Acenaphthylene	1.244	1.232	1.272	1.564	1.528	AVRG	1.36797005	11.951	15.000	
Acenaphthene	0.915	0.830	0.820	1.035	0.992	AVRG	0.91840620	10.367	30.000	
Fluorene	0.835	0.838	0.842	1.121	1.053	AVRG	0.93775281	14.783	15.000	
Phenanthrene	0.716	0.797	0.802	0.890	0.894	AVRG	0.81986027	9.091	15.000	
Anthracene	0.876	0.920	0.852	0.995	0.989	AVRG	0.92673284	6.980	15.000	
Fluoranthene	0.664	0.838	0.722	0.824	0.816	AVRG	0.77273098	9.870	15.000	
Pyrene	1.796	1.858	1.453	1.541	1.952	AVRG	1.72008170	12.386	15.000	
Benzo(a)anthracene	0.751	0.946	0.924	0.886	1.028	AVRG	0.90711359	11.197	15.000	
Chrysene	1.047	1.308	1.097	1.270	1.239	AVRG	1.19212945	9.550	15.000	
Benzo(b)fluoranthene	1.090	1.180	1.361	1.372	1.632	AVRG	1.32695753	15.724	15.000	<-
Benzo(k)fluoranthene	1.577	1.916	1.744	1.912	2.075	AVRG	1.84450529	10.305	15.000	
Benzo(a)pyrene	0.936	1.067	1.029	1.188	1.280	AVRG	1.09976062	12.292	30.000	
Indeno(1,2,3-cd)pyrene	0.940	0.782	0.648	0.733	0.679	AVRG	0.75611678	15.162	15.000	<-
Dibenzo(a,h)anthracene	0.821	0.490	0.579	0.736	0.649	AVRG	0.65520202	19.754	15.000	<-
Benzo(g,h,i)perylene	0.867	0.580	0.677	0.902	0.759	AVRG	0.75696308	17.568	15.000	<-
1-Methylnaphthalene	0.412	0.449	0.411	0.425	0.441	AVRG	0.42760457	3.984	15.000	
2-Methylnaphthalene-d10	0.283	0.304	0.264	0.272	0.308	AVRG	0.28604624	6.797	15.000	
Fluorene-d10	0.712	0.671	0.738	0.833	0.870	AVRG	0.76471426	10.973	15.000	
Pyrene-d10	1.348	1.223	0.993	0.998	1.271	AVRG	1.16669212	13.910	15.000	

Average %RSD test result.

Calculate Average %RSD: 11.49244118
Maximum Average %RSD: 30.00000000

Note: Passes Average %RSD Test.

FORM VI SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-X Calibration Date: 06/02/04 Time: 1345

Lab File ID: X5433 Init. Calib. Date(s): 05/27/04 05/27/04

Init. Calib. Times: 1106 1456

GC Column: DB5-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
Naphthalene	0.6340000	0.6845600	0.6845600	0.01	7.97	100.00	AVRG
2-Methylnaphthalene	0.3570000	0.3959800	0.3959800	0.01	10.92	100.00	AVRG
Acenaphthylene	0.5130000	0.3284300	0.3284300	0.01	-35.98	100.00	AVRG
Acenaphthene	0.7790000	0.7261400	0.7261400	0.01	-6.78	20.00	AVRG
Fluorene	1.0221000	1.0000000	0.7952800	0.01	2.21	100.00	LINR
Phenanthrene	0.7480000	0.7058300	0.7058300	0.01	-5.64	100.00	AVRG
Anthracene	0.7802600	1.0000000	0.5483400	0.01	-21.97	100.00	LINR
Fluoranthene	0.5440000	0.5548000	0.5548000	0.01	1.98	20.00	AVRG
Pyrene	1.0900000	1.1084000	1.1084000	0.01	1.69	100.00	AVRG
Benzo(a)anthracene	0.3590000	0.5260300	0.5260300	0.01	46.53	100.00	AVRG
Chrysene	0.9680000	0.9039600	0.9039600	0.01	-6.62	100.00	AVRG
Benzo(b)fluoranthene	0.5320000	0.6653000	0.6653000	0.01	25.06	100.00	AVRG
Benzo(k)fluoranthene	1.2080000	1.3219000	1.3219000	0.01	9.43	100.00	AVRG
Benzo(a)pyrene	0.8492500	1.0000000	0.6185400	0.01	-15.08	20.00	LINR
Indeno(1,2,3-cd)pyrene	0.4770000	0.4871100	0.4871100	0.01	2.12	100.00	AVRG
Dibenzo(a,h)anthracene	0.5410000	0.2824500	0.2824500	0.01	-47.79	100.00	AVRG
Benzo(g,h,i)perylene	0.7041200	1.0000000	0.5666400	0.01	-29.59	100.00	LINR
1-Methylnaphthalene	0.3510000	0.3767300	0.3767300	0.01	7.33	100.00	AVRG
2-Methylnaphthalene-d10	0.2720000	0.2940100	0.2940100	0.01	8.09	100.00	AVRG
Fluorene-d10	0.9817200	1.0000000	0.7373700	0.01	-1.83	100.00	LINR
Pyrene-d10	0.7600000	0.8729500	0.8729500	0.01	14.86	100.00	AVRG

FORM VII PEST

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-X Calibration Date: 06/16/04 Time: 1203

Lab File ID: X5478 Init. Calib. Date(s): 06/15/04 06/15/04

Init. Calib. Times: 1652 2001

GC Column: DB5-MS ID: 0.25 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Naphthalene	0.8290000	0.7303600	0.01	-11.90	100.00	AVRG
2-Methylnaphthalene	0.4270000	0.3707600	0.01	-13.17	100.00	AVRG
Acenaphthylene	1.3680000	0.7425800	0.01	-45.72	100.00	AVRG
Acenaphthene	0.9180000	0.8619000	0.01	-6.11	20.00	AVRG
Fluorene	0.9380000	0.6947700	0.01	-25.93	100.00	AVRG
Phenanthrene	0.8200000	0.7738000	0.01	-5.63	100.00	AVRG
Anthracene	0.9260000	0.9054700	0.01	-2.22	100.00	AVRG
Fluoranthene	0.7730000	0.6842100	0.01	-11.49	20.00	AVRG
Pyrene	1.7200000	1.7894000	0.01	4.03	100.00	AVRG
Benzo(a)anthracene	0.9070000	0.6195800	0.01	-31.69	100.00	AVRG
Chrysene	1.1920000	1.3965000	0.01	17.16	100.00	AVRG
Benzo(b)fluoranthene	1.3270000	1.0002000	0.01	-24.63	100.00	AVRG
Benzo(k)fluoranthene	1.8450000	2.0140000	0.01	9.16	100.00	AVRG
Benzo(a)pyrene	1.1000000	1.0396000	0.01	-5.49	20.00	AVRG
Indeno(1,2,3-cd)pyrene	0.7560000	0.7353200	0.01	-2.74	100.00	AVRG
Dibenzo(a,h)anthracene	0.6550000	0.5773000	0.01	-11.86	100.00	AVRG
Benzo(g,h,i)perylene	0.7570000	0.6927600	0.01	-8.49	100.00	AVRG
1-Methylnaphthalene	0.4280000	0.3788000	0.01	-11.50	100.00	AVRG
2-Methylnaphthalene-d10	0.2860000	0.3414200	0.01	19.38	100.00	AVRG
Fluorene-d10	0.7650000	0.4567000	0.01	-40.30	100.00	AVRG
Pyrene-d10	1.1670000	1.1405000	0.01	-2.27	100.00	AVRG

FORM VII PEST

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-X Calibration Date: 06/17/04 Time: 1349

Lab File ID: X5494 Init. Calib. Date(s): 06/15/04 06/15/04

Init. Calib. Times: 1652 2001

GC Column: DB5-MS ID: 0.25 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Naphthalene	0.8290000	0.7404000	0.01	-10.69	100.00	AVRG
2-Methylnaphthalene	0.4270000	0.3564400	0.01	-16.52	100.00	AVRG
Acenaphthylene	1.3680000	0.7343000	0.01	-46.32	100.00	AVRG
Acenaphthene	0.9180000	0.8856400	0.01	-3.52	20.00	AVRG
Fluorene	0.9380000	0.7004000	0.01	-25.33	100.00	AVRG
Phenanthrene	0.8200000	0.7318400	0.01	-10.75	100.00	AVRG
Anthracene	0.9260000	0.9256100	0.01	-0.04	100.00	AVRG
Fluoranthene	0.7730000	0.6630900	0.01	-14.22	20.00	AVRG
Pyrene	1.7200000	1.8697000	0.01	8.70	100.00	AVRG
Benzo(a)anthracene	0.9070000	0.6199000	0.01	-31.65	100.00	AVRG
Chrysene	1.1920000	1.7410000	0.01	46.06	100.00	AVRG
Benzo(b)fluoranthene	1.3270000	0.7775400	0.01	-41.41	100.00	AVRG
Benzo(k)fluoranthene	1.8450000	1.9357000	0.01	4.92	100.00	AVRG
Benzo(a)pyrene	1.1000000	1.0044000	0.01	-8.69	20.00	AVRG
Indeno(1,2,3-cd)pyrene	0.7560000	0.7676900	0.01	1.55	100.00	AVRG
Dibenzo(a,h)anthracene	0.6550000	0.5305100	0.01	-19.01	100.00	AVRG
Benzo(g,h,i)perylene	0.7570000	0.6049800	0.01	-20.08	100.00	AVRG
1-Methylnaphthalene	0.4280000	0.3891700	0.01	-9.07	100.00	AVRG
2-Methylnaphthalene-d10	0.2860000	0.3268500	0.01	14.28	100.00	AVRG
Fluorene-d10	0.7650000	0.4749800	0.01	-37.91	100.00	AVRG
Pyrene-d10	1.1670000	1.1313000	0.01	-3.06	100.00	AVRG

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GCMS-X Calibration Date: 06/18/04 Time: 1219

Lab File ID: X5509 Init. Calib. Date(s): 06/15/04 06/15/04

Init. Calib. Times: 1652 2001

GC Column: DB5-MS ID: 0.25 (mm)

COMPOUND	RRF OR AMOUNT	RRF1.0000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Naphthalene	0.8290000	0.7590700	0.01	-8.44	100.00	AVRG
2-Methylnaphthalene	0.4270000	0.4228300	0.01	-0.98	100.00	AVRG
Acenaphthylene	1.3680000	1.2384000	0.01	-9.47	100.00	AVRG
Acenaphthene	0.9180000	0.9289100	0.01	1.19	20.00	AVRG
Fluorene	0.9380000	0.9353100	0.01	-0.29	100.00	AVRG
Phenanthrene	0.8200000	0.9365500	0.01	14.21	100.00	AVRG
Anthracene	0.9260000	0.8843200	0.01	-4.50	100.00	AVRG
Fluoranthene	0.7730000	0.7354600	0.01	-4.86	20.00	AVRG
Pyrene	1.7200000	1.0144000	0.01	-41.02	100.00	AVRG
Benzo(a)anthracene	0.9070000	0.7809400	0.01	-13.90	100.00	AVRG
Chrysene	1.1920000	0.9634400	0.01	-19.17	100.00	AVRG
Benzo(b)fluoranthene	1.3270000	1.0169000	0.01	-23.37	100.00	AVRG
Benzo(k)fluoranthene	1.8450000	1.7365000	0.01	-5.88	100.00	AVRG
Benzo(a)pyrene	1.1000000	0.9878800	0.01	-10.19	20.00	AVRG
Indeno(1,2,3-cd)pyrene	0.7560000	0.7058800	0.01	-6.63	100.00	AVRG
Dibenzo(a,h)anthracene	0.6550000	0.8614500	0.01	31.52	100.00	AVRG
Benzo(g,h,i)perylene	0.7570000	1.1684000	0.01	54.35	100.00	AVRG
1-Methylnaphthalene	0.4280000	0.4073300	0.01	-4.83	100.00	AVRG
2-Methylnaphthalene-d10	0.2860000	0.2451700	0.01	-14.28	100.00	AVRG
Fluorene-d10	0.7650000	0.7303800	0.01	-4.52	100.00	AVRG
Pyrene-d10	1.1670000	0.6116000	0.01	-47.59	100.00	AVRG

FORM 2
WATER FL-PRO SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO301,318 NAS KEY WEST SDG No.: CTO301318-1

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 OTP#	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	WG7769-BLANK	WG7769-1	90	88							0
02	WG7769-LCS	WG7769-2	97	94							0
03	WG7803-BLANK	WG7803-1	90	84							0
04	WG7803-LCS	WG7803-2	112	109							0
05	WG7803-LCSD	WG7803-3	82	77*							1
06	G01-MW-03-0504	WU1503-3	92	91							0
07	G01-MW-10-0504	WU1503-4	111	101							0
08	G01-MW-12-0504	WU1503-5	92	85							0
09	RR-MW-06-0504	WU1519-1	99	94							0
10	A824-MW-01-0504	WU1519-2	104	98							0
11	A824-MW-02-0504	WU1519-3	95	91							0
12	A824-MW-03-0504	WU1519-4	100	92							0
13	KW-DUP-03-0504	WU1519-5	96	92							0
14	FC-MW-05-0504	WU1529-1	96	93							0
15	FC-MW-06-0504	WU1529-2	90	86							0
16	FC-MW-22-0504	WU1529-3	77	72*							1
17	KW-DUP-01-0504	WU1529-4	94	84							0
18	G01-MW02-0504	WU1529-5	87	81*							1
19	RR-MW-06-0504MS	WG7769-3	100	100							0
20	RR-MW-06-0504MSD	WG7769-4	83	85							0
21	G01-MW04-0504	WU1529-6	113	102							0
22	G01-MW05-0504	WU1529-7	86	78*							1
23	G01-MW11-0504	WU1529-8	111	100							0
24											
25											
26											
27											
28											

		QC LIMITS
S1	= n-Triacontane-D62	(42-193)
S2 (OTP)	= O-Terphenyl	(82-142)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG7769-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: CUF2105 Lab Sample ID: WG7769-1

Instrument ID: GC12 Date Extracted: 05/25/04

Matrix: (soil/water) WATER Date Analyzed: 06/18/04

Level: (low/med) LOW Time Analyzed: 2313

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	WG7769-LCS	WG7769-2	CUF2106	06/19/04	0023
02	G01-MW-03-0504	WU1503-3	CUF2110	06/19/04	0503
03	G01-MW-10-0504	WU1503-4	CUF2111	06/19/04	0613
04	G01-MW-12-0504	WU1503-5	CUF2112	06/19/04	0723
05	RR-MW-06-0504	WU1519-1	CUF2113	06/19/04	0833
06	A824-MW-01-0504	WU1519-2	CUF2114	06/19/04	0943
07	A824-MW-02-0504	WU1519-3	CUF2118	06/19/04	1423
08	A824-MW-03-0504	WU1519-4	CUF2119	06/19/04	1533
09	KW-DUP-03-0504	WU1519-5	CUF2120	06/19/04	1643
10	RR-MW-06-0504MS	WG7769-3	CUF2126	06/19/04	2345
11	RR-MW-06-0504MSD	WG7769-4	CUF2127	06/20/04	0055
12					
13					
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COMMENTS:

Katahdin Analytical Services 3000004

FORM 4

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG7803-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO301,318 NAS KEY WEST SDG No.: CTO301318-1

Lab File ID: CUF2107 Lab Sample ID: WG7803-1

Instrument ID: GC12 Date Extracted: 05/26/04

Matrix: (soil/water) WATER Date Analyzed: 06/19/04

Level: (low/med) LOW Time Analyzed: 0133

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	WG7803-LCS	WG7803-2	CUF2108	06/19/04	0243
02	WG7803-LCSD	WG7803-3	CUF2109	06/19/04	0353
03	FC-MW-05-0504	WU1529-1	CUF2121	06/19/04	1754
04	FC-MW-06-0504	WU1529-2	CUF2122	06/19/04	1904
05	FC-MW-22-0504	WU1529-3	CUF2123	06/19/04	2014
06	KW-DUP-01-0504	WU1529-4	CUF2124	06/19/04	2124
07	G01-MW02-0504	WU1529-5	CUF2125	06/19/04	2234
08	G01-MW04-0504	WU1529-6	CUF2131	06/20/04	0536
09	G01-MW05-0504	WU1529-7	CUF2132	06/20/04	0646
10	G01-MW11-0504	WU1529-8	CUF2133	06/20/04	0757
11					
12					
13					
14					
15					
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28					
29					
30					

COMMENTS:

Katahdin Analytical Services 3000005

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 05/25/04
Analysis Date: 06/18/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WG7769-1
Client ID: WG7769-Blank
SDG: CTO301318-1
Extracted by: MC
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7769
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	280
	n-Triacontane-D62		90%				
	O-Terphenyl		88%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO301,318 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 05/26/04
Analysis Date: 06/19/04
Report Date: 06/20/2004
Matrix: WATER
% Solids: NA

Lab ID: WG7803-1
Client ID: WG7803-Blank
SDG: CTO301318-1
Extracted by: JP
Extraction Method: SW846 3510
Analyst: LRS
Analysis Method: SW846 M8100
Lab Prep Batch: WG7803
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	280
	n-Triacontane-D62		90%				
	O-Terphenyl		84%				

FORM 8
FL-PRO ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO301,318 NAS KEY WEST SDG No.: CTO301318-1

GC Column: ZB-1 ID: 0.53 (mm) Init. Calib. Date(s): 01/15/04 01/15/04

Instrument ID: GC12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 18.20 S2 : 24.42

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
01	ICAL	FLPRO 5 UG/M	01/15/04	0329	18.20	24.42
02	ICAL	FLPRO 20 UG/	01/15/04	0438	18.20	24.42
03	ICAL	FLPRO 50 UG/	01/15/04	0548	18.20	24.42
04	ICAL	FLPRO 100UG/	01/15/04	0658	18.20	24.42
05	ICAL	FLPRO 200UG/	01/15/04	0809	18.20	24.42
06	INDSOURCE	FLPRO IND	01/15/04	0919	18.20	24.42
07	CV	FLPRO 50UG/M	06/18/04	1723	18.18	24.37
08	WG7769-BLANK	WG7769-1	06/18/04	2313	18.18	24.38
09	WG7769-LCS	WG7769-2	06/19/04	0023	18.18	24.37
10	WG7803-BLANK	WG7803-1	06/19/04	0133	18.18	24.38
11	WG7803-LCS	WG7803-2	06/19/04	0243	18.18	24.38
12	WG7803-LCSD	WG7803-3	06/19/04	0353	18.17	24.37
13	G01-MW-03-05	WU1503-3	06/19/04	0503	18.17	24.38
14	G01-MW-10-05	WU1503-4	06/19/04	0613	18.17	24.37
15	G01-MW-12-05	WU1503-5	06/19/04	0723	18.17	24.37
16	RR-MW-06-050	WU1519-1	06/19/04	0833	18.18	24.37
17	A824-MW-01-0	WU1519-2	06/19/04	0943	18.18	24.38
18	CV	FLPRO 50UG/M	06/19/04	1313	18.18	24.37
19	A824-MW-02-0	WU1519-3	06/19/04	1423	18.18	24.37
20	A824-MW-03-0	WU1519-4	06/19/04	1533	18.18	24.38

QC LIMITS

S1 = O-Terphenyl (+/- 0.36 MINUTES)
S2 = n-Triacontane-D62 (+/- 0.49 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services 3000011

FORM 8
FL-PRO ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO301,318 NAS KEY WEST SDG No.: CTO301318-1

GC Column: ZB-1 ID: 0.53 (mm) Init. Calib. Date(s): 01/15/04 01/15/04

Instrument ID: GC12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 18.20 S2 : 24.42

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
01	KW-DUP-03-05	WU1519-5	06/19/04	1643	18.18	24.38
02	FC-MW-05-050	WU1529-1	06/19/04	1754	18.18	24.38
03	FC-MW-06-050	WU1529-2	06/19/04	1904	18.18	24.38
04	FC-MW-22-050	WU1529-3	06/19/04	2014	18.17	24.38
05	KW-DUP-01-05	WU1529-4	06/19/04	2124	18.17	24.38
06	G01-MW02-050	WU1529-5	06/19/04	2234	18.17	24.37
07	RR-MW-06-050	WG7769-3	06/19/04	2345	18.18	24.38
08	RR-MW-06-050	WG7769-4	06/20/04	0055	18.17	24.37
09	CV	FLPRO 50UG/M	06/20/04	0426	18.17	24.37
10	G01-MW04-050	WU1529-6	06/20/04	0536	18.17	24.37
11	G01-MW05-050	WU1529-7	06/20/04	0646	18.17	24.37
12	G01-MW11-050	WU1529-8	06/20/04	0757	18.17	24.38
13	CV	FLPRO 50UG/M	06/20/04	1127	18.18	24.38
14						
15						
16						
17						
18						
19						
20						

QC LIMITS

S1 = O-Terphenyl (+/- 0.36 MINUTES)
S2 = n-Triacontane-D62 (+/- 0.49 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Katahdin Analytical Services 3000012

FORM 6
FL-PRO INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC12 Calibration Date(s): 01/15/04 01/15/04

Column: ZB-1 ID: 0.53 (mm) Calibration Time(s): 0329 0809

LAB FILE ID: RF5: CUA2058 RF20: CUA2059 RF50: CUA2060
RF100: CUA2061 RF200: CUA2062

COMPOUND	RF5	RF20	RF50	RF100	RF200	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2	MAX %RSD OR R^2
C-24	28608	115080	291160	567020	1159700	LINR	0.21946184	1.729e-004	0.99986	0.99000
C-8	29571	113520	285540	559500	1120700	LINR	-0.3179999	1.787e-004	0.99998	0.99000
C-10	44616	119260	291320	572080	1153100	LINR	-0.9962156	1.747e-004	0.99981	0.99000
C-12	8727	118790	296890	573940	1155400	LINR	0.67416490	1.722e-004	0.99955	0.99000
C-14	30797	116970	289990	572110	1157900	LINR	-5.64e-002	1.731e-004	0.99996	0.99000
C-16	30385	117240	293420	575020	1165800	LINR	-3.37e-002	1.72e-004	0.99994	0.99000
C-18	29940	116910	292420	573010	1166600	LINR	8.384e-002	1.719e-004	0.99991	0.99000
C-28	29723	116310	294110	572040	1164400	LINR	3.314e-002	1.722e-004	0.99990	0.99000
C-20	29610	116560	293280	571720	1164600	LINR	6.577e-002	1.722e-004	0.99990	0.99000
C-22	29259	116660	293340	572810	1169300	LINR	0.16148628	1.715e-004	0.99989	0.99000
FL-PRO peaks C8-C40	491470	1955200	4966100	9706200	2.e+007	LINR	0.84359268	1.732e-004	0.99994	0.99000
C-26	29407	115890	294330	572720	1167500	LINR	0.11742793	1.717e-004	0.99989	0.99000
C-38	28905	107560	279190	558160	1129200	LINR	0.41790430	1.771e-004	0.99995	0.99000
C-40	23709	102680	285040	550470	1136800	LINR	1.00039501	1.758e-004	0.99970	0.99000
C-30	31378	117890	295870	573650	1161900	LINR	-0.2570571	1.727e-004	0.99992	0.99000
C-32	29450	114070	293980	572950	1156100	LINR	-4.48e-002	1.732e-004	0.99995	0.99000
C-34	29113	115760	300230	585980	1178500	LINR	-2.36e-002	1.698e-004	0.99995	0.99000
C-36	28271	114090	296030	583060	1159300	LINR	-0.1381361	1.723e-004	0.99995	0.99000
O-Terphenyl	6399.80	6360.20	6552.40	6396.50	6295.50	AVRG		6400.87200	1.477	40.000
n-Triacontane-D62	5100.80	5099.40	5229.10	5106.60	5062.00	AVRG		5119.58333	1.245	40.000

FORM VI FL-PRO

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC12 Calibration Date: 06/18/04 Time: 1723

Lab File ID: CUF2100 Init. Calib. Date(s): 01/15/04 01/15/04

Init. Calib. Times: 0329 0809

GC Column: ZB-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
C-24	44.919000	50.000000	5171.4000	0.01	-10.16	25.00	LINR
C-8	42.133000	50.000000	4750.3000	0.01	-15.73	25.00	LINR
C-10	40.770000	50.000000	4780.6000	0.01	-18.46	25.00	LINR
C-12	44.423000	50.000000	5080.0000	0.01	-11.15	25.00	LINR
C-14	43.534000	50.000000	5035.0000	0.01	-12.93	25.00	LINR
C-16	44.461000	50.000000	5175.0000	0.01	-11.08	25.00	LINR
C-18	44.789000	50.000000	5202.0000	0.01	-10.42	25.00	LINR
C-28	44.899000	50.000000	5210.9000	0.01	-10.20	25.00	LINR
C-20	45.001000	50.000000	5219.9000	0.01	-10.0	25.00	LINR
C-22	45.146000	50.000000	5247.1000	0.01	-9.71	25.00	LINR
FL-PRO peaks C8-C40	739.74000	850.00000	5021.9000	0.01	-12.97	25.00	LINR
C-26	44.837000	50.000000	5208.8000	0.01	-10.33	25.00	LINR
C-38	40.643000	50.000000	4542.1000	0.01	-18.71	25.00	LINR
C-40	38.346000	50.000000	4248.1000	0.01	-23.31	25.00	LINR
C-30	44.961000	50.000000	5237.5000	0.01	-10.08	25.00	LINR
C-32	44.541000	50.000000	5148.1000	0.01	-10.92	25.00	LINR
C-34	43.912000	50.000000	5175.6000	0.01	-12.18	25.00	LINR
C-36	42.428000	50.000000	4939.8000	0.01	-15.14	25.00	LINR
O-Terphenyl	6400.9000	5901.7000	5901.7000	0.01	-7.80	25.00	AVRG
n-Triacontane-D62	5119.6000	4760.0000	4760.0000	0.01	-7.02	25.00	AVRG

FORM VII PEST

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC12 Calibration Date: 06/19/04 Time: 1313

Lab File ID: CUF2117 Init. Calib. Date(s): 01/15/04 01/15/04

Init. Calib. Times: 0329 0809

GC Column: ZB-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
C-24	41.932000	50.000000	5225.4000	0.01	-16.14	25.00	LINR	
C-8	38.526000	50.000000	4632.9000	0.01	-22.95	25.00	LINR	
C-10	37.562000	50.000000	4793.8000	0.01	-24.88	25.00	LINR	
C-12	41.562000	50.000000	5157.3000	0.01	-16.88	25.00	LINR	
C-14	40.652000	50.000000	5105.4000	0.01	-18.70	25.00	LINR	
C-16	40.922000	50.000000	5165.5000	0.01	-18.16	25.00	LINR	
C-18	41.912000	50.000000	5261.8000	0.01	-16.18	25.00	LINR	
C-28	42.052000	50.000000	5288.2000	0.01	-15.90	25.00	LINR	
C-20	41.658000	50.000000	5275.1000	0.01	-16.68	25.00	LINR	
C-22	42.155000	50.000000	5301.9000	0.01	-15.69	25.00	LINR	
FL-PRO peaks C8-C40	686.41000	850.00000	5035.9000	0.01	-19.25	25.00	LINR	
C-26	41.978000	50.000000	5282.2000	0.01	-16.04	25.00	LINR	
C-38	37.741000	50.000000	4513.8000	0.01	-24.52	25.00	LINR	
C-40	32.382000	50.000000	3692.1000	0.01	-35.24	25.00	LINR	<-
C-30	42.190000	50.000000	5347.3000	0.01	-15.62	25.00	LINR	
C-32	41.892000	50.000000	5275.9000	0.01	-16.22	25.00	LINR	
C-34	41.282000	50.000000	5281.8000	0.01	-17.44	25.00	LINR	
C-36	40.012000	50.000000	5010.5000	0.01	-19.98	25.00	LINR	
O-Terphenyl	6400.9000	5957.3000	5957.3000	0.01	-6.93	25.00	AVRG	
n-Triacontane-D62	5119.6000	4837.8000	4837.8000	0.01	-5.50	25.00	AVRG	

FORM VII PEST

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC12 Calibration Date: 06/20/04 Time: 0426

Lab File ID: CUF2130 Init. Calib. Date(s): 01/15/04 01/15/04

Init. Calib. Times: 0329 0809

GC Column: ZB-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
C-24	45.386000	50.000000	5225.4000	0.01	-9.23	25.00	LINR	
C-8	41.084000	50.000000	4632.9000	0.01	-17.83	25.00	LINR	
C-10	40.885000	50.000000	4793.8000	0.01	-18.23	25.00	LINR	
C-12	45.089000	50.000000	5157.3000	0.01	-9.82	25.00	LINR	
C-14	44.143000	50.000000	5105.4000	0.01	-11.71	25.00	LINR	
C-16	44.380000	50.000000	5165.5000	0.01	-11.24	25.00	LINR	
C-18	45.303000	50.000000	5261.8000	0.01	-9.39	25.00	LINR	
C-28	45.564000	50.000000	5288.2000	0.01	-8.87	25.00	LINR	
C-20	45.477000	50.000000	5275.1000	0.01	-9.05	25.00	LINR	
C-22	45.616000	50.000000	5301.9000	0.01	-8.77	25.00	LINR	
FL-PRO peaks C8-C40	741.65000	850.00000	5035.9000	0.01	-12.75	25.00	LINR	
C-26	45.467000	50.000000	5282.2000	0.01	-9.07	25.00	LINR	
C-38	40.393000	50.000000	4513.8000	0.01	-19.21	25.00	LINR	
C-40	33.458000	50.000000	3692.1000	0.01	-33.08	25.00	LINR	<-
C-30	45.910000	50.000000	5347.3000	0.01	-8.18	25.00	LINR	
C-32	45.648000	50.000000	5275.9000	0.01	-8.70	25.00	LINR	
C-34	44.812000	50.000000	5281.8000	0.01	-10.38	25.00	LINR	
C-36	43.037000	50.000000	5010.5000	0.01	-13.93	25.00	LINR	
O-Terphenyl	6400.9000	5957.3000	5957.3000	0.01	-6.93	25.00	AVRG	
n-Triacontane-D62	5119.6000	4837.8000	4837.8000	0.01	-5.50	25.00	AVRG	

FORM VII PEST

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO301,318 NAS KEY WEST SDG No.: CTO301318-1

Instrument ID: GC12 Calibration Date: 06/20/04 Time: 1127

Lab File ID: CUF2136 Init. Calib. Date(s): 01/15/04 01/15/04

Init. Calib. Times: 0329 0809

GC Column: ZB-1 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
C-24	46.130000	50.000000	5311.4000	0.01	-7.74	25.00	LINR	
C-8	41.908000	50.000000	4725.1000	0.01	-16.18	25.00	LINR	
C-10	41.496000	50.000000	4863.7000	0.01	-17.01	25.00	LINR	
C-12	45.910000	50.000000	5252.6000	0.01	-8.18	25.00	LINR	
C-14	46.282000	50.000000	5352.4000	0.01	-7.44	25.00	LINR	
C-16	45.048000	50.000000	5243.3000	0.01	-9.90	25.00	LINR	
C-18	46.075000	50.000000	5351.6000	0.01	-7.85	25.00	LINR	
C-28	46.334000	50.000000	5377.6000	0.01	-7.33	25.00	LINR	
C-20	46.226000	50.000000	5362.2000	0.01	-7.55	25.00	LINR	
C-22	46.381000	50.000000	5391.2000	0.01	-7.24	25.00	LINR	
FL-PRO peaks C8-C40	754.88000	850.00000	5125.9000	0.01	-11.19	25.00	LINR	
C-26	46.195000	50.000000	5366.9000	0.01	-7.61	25.00	LINR	
C-38	40.996000	50.000000	4581.9000	0.01	-18.01	25.00	LINR	
C-40	33.183000	50.000000	3660.8000	0.01	-33.63	25.00	LINR	<-
C-30	46.642000	50.000000	5432.2000	0.01	-6.72	25.00	LINR	
C-32	46.378000	50.000000	5360.2000	0.01	-7.24	25.00	LINR	
C-34	45.652000	50.000000	5380.6000	0.01	-8.70	25.00	LINR	
C-36	44.041000	50.000000	5127.0000	0.01	-11.92	25.00	LINR	
O-Terphenyl	6400.9000	6024.6000	6024.6000	0.01	-5.88	25.00	AVRG	
n-Triacontane-D62	5119.6000	4918.7000	4918.7000	0.01	-3.92	25.00	AVRG	

FORM VII PEST

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **C. BRYAN** **DATE:** **JULY 14, 2004**

FROM: **ERIN M. FAUST** **COPIES:** **DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – LEAD, NITRATE AND SULFATE**
CTOs – 301 & 318 NAS KEY WEST
SAMPLE DELIVERY GROUP (SDG) – 3181

SAMPLES: 16/Aqueous/

A824-MW-01-0504	A824-MW-02-0504	A824-MW-03-0504
G01-MW-02-0504	G01-MW-03-0504	G01-MW-04-0504
G01-MW-05-0504	G01-MW-10-0504	G01-MW-11-0504
G01-MW-12-0504	KW-DUP-03-0504	RR-MW-06-0504
FC-MW-05-0504	FC-MW-06-0504	FC-MW-22-0504
KW-DUP-01-0504		

Overview

The sample set for CTOs 301 & 318, NAS Key West, SDG 3181, consists of sixteen (16) aqueous environmental samples. Two (2) field duplicate pairs (KW-DUP-03-0504 / A824-MW-01-0504 and KW-DUP-01-0504 / FC-MW-22-0504) are included within this SDG.

All samples were analyzed for lead, nitrate and sulfate, with the exception of samples , which were analyzed for lead only. The samples were collected by TetraTech NUS on May 20, 21, 22 and 24, 2004 and analyzed by Katahdin Analytical Services under Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. Lead analyses were conducted using SW-846 method 6010B. Analyses for nitrate and sulfate were conducted using EPA methods 353.2 and 375.4, respectively.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Recoveries
* • Laboratory Blank Analyses
• Field Duplicate Results
• Detection Limits

* - All quality control criteria were met for this parameter.

Field Duplicate Results

Field duplicate imprecision (RPD > 30%) was noted for sulfate. Positive results reported for sulfate were qualified as estimated, "J".

Detection Limits

Several results reported for nitrate were qualified by the laboratory as estimated, "J", because the reported result is greater than the laboratory method detection limit (MDL) but less than the reporting limit (RL). This qualifier was retained during data validation.

Notes

The matrix spike percent recovery for sulfate was 0%. No validation action was required because the native concentration of sulfate in the unspiked sample was greater than four times the concentration of sulfate added in the matrix spiking solution.

Executive Summary

Laboratory Performance: No laboratory performance issues affected data quality.

Other Factors Affecting Data Quality: Field duplicate imprecision was noted for sulfate. Several results for nitrate were qualified due to uncertainty near the detection limit.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", July 2002 and the NFESC document entitled "Navy IRCDQM" (September 1999).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Erin M. Faust
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 - Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % 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 (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.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 less than sample activity

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: M

nsample	A824-MW-01-0504
samp_date	5/21/2004
lab_id	WU1519-002
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	1.7	U	

nsample	A824-MW-02-0504
samp_date	5/21/2004
lab_id	WU1519-003
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	1.7	U	

nsample	A824-MW-03-0504
samp_date	5/21/2004
lab_id	WU1519-004
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	1.7	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: M

nsample	G01-MW-02-0504	nsample	G01-MW-03-0504	nsample	G01-MW-04-0504
samp_date	5/24/2004	samp_date	5/20/2004	samp_date	5/24/2004
lab_id	WU1529-005	lab_id	WU1503-003	lab_id	WU1529-006
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	1.7	U	

Parameter	Result	Val Qual	Qual Code
LEAD	1.7	U	

Parameter	Result	Val Qual	Qual Code
LEAD	1.7	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: M

nsample	G01-MW-05-0504	nsample	G01-MW-10-0504	nsample	G01-MW-11-0504
samp_date	5/24/2004	samp_date	5/20/2004	samp_date	5/24/2004
lab_id	WU1529-007	lab_id	WU1503-004	lab_id	WU1529-008
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	1.7	U	

Parameter	Result	Val Qual	Qual Code
LEAD	1.7	U	

Parameter	Result	Val Qual	Qual Code
LEAD	1.7	U	

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: M

nsample	G01-MW-12-0504	nsample	KW-DUP-03-0504	nsample	RR-MW-06-0504
samp_date	5/20/2004	samp_date	5/21/2004	samp_date	5/21/2004
lab_id	WU1503-005	lab_id	WU1519-005	lab_id	WU1519-001
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:	A824-MW-01-0504	DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	1.7	U	

Parameter	Result	Val Qual	Qual Code
LEAD	1.7	U	

Parameter	Result	Val Qual	Qual Code
LEAD	1.7	U	

PROJ_NO: 5658

SDG: 3181 MEDIA: WATER DATA FRACTION: M

nsample	FC-MW-05-0504	nsample	FC-MW-06-0504	nsample	FC-MW-22-0504
samp_date	5/22/2004	samp_date	5/22/2004	samp_date	5/22/2004
lab_id	WU1529-001	lab_id	WU1529-002	lab_id	WU1529-003
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	1.7	U	

Parameter	Result	Val Qual	Qual Code
LEAD	2.0		

Parameter	Result	Val Qual	Qual Code
LEAD	43.1		

PROJ_NO: 5658

SDG: 3181 MEDIA: WATER DATA FRACTION: M

nsample	KW-DUP-01-0504
samp_date	5/22/2004
lab_id	WU1529-004
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	FC-MW-22-0504

Parameter	Result	Val Qual	Qual Code
LEAD	42.9		

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: MISC

nsample	A824-MW-01-0504
samp_date	5/21/2004
lab_id	WU1519-2
qc_type	NM
Pct_Solids	
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.05	U	
SULFATE	MG/L	28	J	G

nsample	A824-MW-02-0504
samp_date	5/21/2004
lab_id	WU1519-3
qc_type	NM
Pct_Solids	
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.05	U	
SULFATE	MG/L	390	J	G

nsample	A824-MW-03-0504
samp_date	5/21/2004
lab_id	WU1519-4
qc_type	NM
Pct_Solids	
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.05	U	
SULFATE	MG/L	110	J	G

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: MISC

nsample	G01-MW-02-0504	nsample	G01-MW-03-0504	nsample	G01-MW-04-0504
samp_date	5/24/2004	samp_date	5/20/2004	samp_date	5/24/2004
lab_id	WU1529-5	lab_id	WU1503-3	lab_id	WU1529-6
qc_type	NM	qc_type	NM	qc_type	NM
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.034	J	P
SULFATE	MG/L	1200	J	G

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.22		
SULFATE	MG/L	3.4	J	G

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.25	U	
SULFATE	MG/L	1300	J	G

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: MISC

nsample	G01-MW-05-0504	nsample	G01-MW-10-0504	nsample	G01-MW-11-0504
samp_date	5/24/2004	samp_date	5/20/2004	samp_date	5/24/2004
lab_id	WU1529-7	lab_id	WU1503-4	lab_id	WU1529-8
qc_type	NM	qc_type	NM	qc_type	NM
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.019	J	P
SULFATE	MG/L	460	J	G

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.005	J	P
SULFATE	MG/L	24	J	G

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.05	U	
SULFATE	MG/L	140	J	G

PROJ_NO: 4779

SDG: 3181 MEDIA: WATER DATA FRACTION: MISC

nsample	G01-MW-12-0504	nsample	KW-DUP-03-0504	nsample	RR-MW-06-0504
samp_date	5/20/2004	samp_date	5/21/2004	samp_date	5/21/2004
lab_id	WU1503-5	lab_id	WU1519-5	lab_id	WU1519-1
qc_type	NM	qc_type	NM	qc_type	NM
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:	A824-MW-01-0504	DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.0094	J	P
SULFATE	MG/L	460	J	G

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.05	U	
SULFATE	MG/L	46	J	G

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.014	J	P
SULFATE	MG/L	230	J	G

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** A824-MW-01-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1519-002

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.70	U		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** A824-MW-02-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1519-003

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.70	U		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** A824-MW-03-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1519-004

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.70	U		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** G01-MW02-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1529-005

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.70	U		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** G01-MW-03-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1503-003

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.70	U		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** G01-MW04-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1529-006

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.70	U		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** G01-MW05-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1529-007

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.70	U		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** G01-MW-10-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1503-004

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.70	U		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** G01-MW11-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1529-008

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.70	U		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** G01-MW-12-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1503-005

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.70	U		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

Katahdin Analytical Services 4000007

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** KW-DUP-03-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1519-005

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.70	U		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** RR-MW-06-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1519-001

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.70	U		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** FC-MW-05-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1529-001

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.70	U		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** FC-MW-06-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1529-002

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	2.0	B		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** FC-MW-22-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1529-003

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	43.1			P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** KW-DUP-01-0504

Matrix: WATER **SDG Name:** CTO301318-1

Percent Solids: 0.00 **Lab Sample ID:** WU1529-004

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	42.9			P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU1519-2
Report Date: 21-JUN-04
Client PO: MSA-0402-N4113-05 N4779-
Project: CTO301,318 NAS KEY WEST
SDG: CTO301/318-1

Sample Description	Matrix	Date Sampled	Date Received
A824-MW-01-0504	AQ	21-MAY-04	22-MAY-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	U0.050 mg/L	.05	EPA 353.2	WG7736	22-MAY-04	KGT	N/A	N/A	N/A	
Sulfate-Turbidimetric	28. mg/L	1	EPA 375.4	WG7981	03-JUN-04	KGT	N/A	N/A	N/A	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU1519-3
Report Date: 21-JUN-04
Client PO: MSA-0402-N4113-05 N4779-
Project: CTO301,318 NAS KEY WEST
SDG: CTO301/318-1

Sample Description	Matrix	Date Sampled	Date Received
A824-MW-02-0504	AQ	21-MAY-04	22-MAY-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	U0.050 mg/L	.05	EPA 353.2	WG7736	22-MAY-04	KGT	N/A	N/A	N/A	
Sulfate-Turbidimetric	390 mg/L	20	EPA 375.4	WG7981	03-JUN-04	KGT	N/A	N/A	N/A	

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU1519-4
Report Date: 21-JUN-04
Client PO: MSA-0402-N4113-05 N4779-
Project: CTO301,318 NAS KEY WEST
SDG: CTO301/318-1

Sample Description	Matrix	Date Sampled	Date Received
A824-MW-03-0504	AQ	21-MAY-04	22-MAY-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	U0.050 mg/L	.05	EPA 353.2	WG7736	22-MAY-04	KGT	N/A	N/A	N/A	
Sulfate-Turbidimetric	110 mg/L	5	EPA 375.4	WG7981	03-JUN-04	KGT	N/A	N/A	N/A	

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU1529-5
Report Date: 21-JUN-04
Client PO: MSA-0402-N4113-05 N4779-
Project: CTO301,318 NAS KEY WEST
SDG: CTO301/318-1

Sample Description	Matrix	Date Sampled	Date Received
G01-MW02-0504	AQ	24-MAY-04	25-MAY-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	J0.034 mg/L	.05	EPA 353.2	WG7789	26-MAY-04	PAG	N/A	N/A	N/A	
Sulfate-Turbidimetric	1200 mg/L	50	EPA 375.4	WG8204	17-JUN-04	KGT	N/A	N/A	N/A	

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU1503-3
Report Date: 21-JUN-04
Client PO: MSA-0402-N4113-05 N4779-
Project: CTO 301,318 NAS KEY WEST
SDG: CTO301/318-1

Sample Description	Matrix	Date Sampled	Date Received
G01-MW-03-0504	AQ	20-MAY-04	21-MAY-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	0.22 mg/L	.05	EPA 353.2	WG7713	21-MAY-04	PAG	N/A	N/A	N/A	
Sulfate-Turbidimetric	3.4 mg/L	1	EPA 375.4	WG7981	03-JUN-04	KGT	N/A	N/A	N/A	

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU1529-6
Report Date: 21-JUN-04
Client PO: MSA-0402-N4113-05 N4779-
Project: CTO301,318 NAS KEY WEST
SDG: CTO301/318-1

Sample Description	Matrix	Date Sampled	Date Received
G01-MW04-0504	AQ	24-MAY-04	25-MAY-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	U0.25 mg/L	.25	EPA 353.2	WG7789	26-MAY-04	PAG	N/A	N/A	N/A	
Sulfate-Turbidimetric	1300 mg/L	50	EPA 375.4	WG8204	17-JUN-04	KGT	N/A	N/A	N/A	

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU1529-7
Report Date: 21-JUN-04
Client PO: MSA-0402-N4113-05 N4779-
Project: CTO301,318 NAS KEY WEST
SDG: CTO301/318-1

Sample Description	Matrix	Date Sampled	Date Received
G01-MW05-0504	AQ	24-MAY-04	25-MAY-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	J0.019 mg/L	.05	EPA 353.2	WG7789	26-MAY-04	PAG	N/A	N/A	N/A	
Sulfate-Turbidimetric	460 mg/L	20	EPA 375.4	WG8204	17-JUN-04	KGT	N/A	N/A	N/A	

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ANALYTICAL SERVICES

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Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU1503-4
Report Date: 21-JUN-04
Client PO: MSA-0402-N4113-05 N4779-
Project: CTO 301,318 NAS KEY WEST
SDG: CTO301/318-1

Sample Description	Matrix	Date Sampled	Date Received
G01-MW-10-0504	AQ	20-MAY-04	21-MAY-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	J0.0050 mg/L	.05	EPA 353.2	WG7713	21-MAY-04	PAG	N/A	N/A	N/A	
Sulfate-Turbidimetric	24. mg/L	1	EPA 375.4	WG7981	03-JUN-04	KGT	N/A	N/A	N/A	

Katahdin
ANALYTICAL SERVICES

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Cert No E87604

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU1529-8
Report Date: 21-JUN-04
Client PO: MSA-0402-N4113-05 N4779-
Project: CTO301,318 NAS KEY WEST
SDG: CTO301/318-1

Sample Description	Matrix	Date Sampled	Date Received
G01-MW11-0504	AQ	24-MAY-04	25-MAY-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	U0.050 mg/L	.05	EPA 353.2	WG7789	26-MAY-04	PAG	N/A	N/A	N/A	
Sulfate-Turbidimetric	140 mg/L	10	EPA 375.4	WG8204	17-JUN-04	KGT	N/A	N/A	N/A	

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU1503-5
Report Date: 21-JUN-04
Client PO: MSA-0402-N4113-05 N4779-
Project: CTO 301,318 NAS KEY WEST
SDG: CTO301/318-1

Sample Description	Matrix	Date Sampled	Date Received
G01-MW-12-0504	AQ	20-MAY-04	21-MAY-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	J0.0094 mg/L	.05	EPA 353.2	WG7713	21-MAY-04	PAG	N/A	N/A	N/A	
Sulfate-Turbidimetric	460 mg/L	20	EPA 375.4	WG8051	07-JUN-04	KGT	N/A	N/A	N/A	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU1519-5
Report Date: 21-JUN-04
Client PO: MSA-0402-N4113-05 N4779-
Project: CTO301,318 NAS KEY WEST
SDG: CTO301/318-1

Sample Description	Matrix	Date Sampled	Date Received
KW-DUP-03-0504	AQ	21-MAY-04	22-MAY-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	U0.050 mg/L	.05	EPA 353.2	WG7736	22-MAY-04	KGT	N/A	N/A	N/A	
Sulfate-Turbidimetric	46. mg/L	2	EPA 375.4	WG7981	03-JUN-04	KGT	N/A	N/A	N/A	

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU1519-1
Report Date: 21-JUN-04
Client PO: MSA-0402-N4113-05 N4779-
Project: CTO301,318 NAS KEY WEST
SDG: CTO301/318-1

Sample Description	Matrix	Date Sampled	Date Received
RR-MW-06-0504	AQ	21-MAY-04	22-MAY-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	J0.014 mg/L	.05	EPA 353.2	WG7736	22-MAY-04	KGT	N/A	N/A	N/A	
Sulfate-Turbidimetric	230 mg/L	10	EPA 375.4	WG7981	03-JUN-04	KGT	N/A	N/A	N/A	

APPENDIX C
SUPPORT DOCUMENTATION

WW1503

TETRA TECH NUS, INC. | **CHAIN OF CUSTODY** | **NUMBER** 3833 | **PAGE** 1 **OF** 1

PROJECT NO:	**FACILITY:** NAS KEY WEST	**PROJECT MANAGER** EMILY McREE	**PHONE NUMBER** (803)649-7963	**LABORATORY NAME AND CONTACT:** KATHADIN - ANDREA COLBY
SAMPLERS (SIGNATURE) Gary Bragan		**FIELD OPERATIONS LEADER** GARY BRAGANZA	**PHONE NUMBER** (561)302-4437	**ADDRESS** 340 COUNTY ROAD NO.5
		CARRIER/WAYBILL NUMBER FED EX / 8425 8908 8781		**CITY, STATE** WESTBROOK, ME

STANDARD TAT ☑
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2004	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	PPL VOH's, BTEX, MTBE	TRPH	EDB	NITRATE + SULFATE	METHANE	LEAD	COMMENTS
5/20	9:20	B01-MW-01-0504	MW-01			GW	G	2			X							
	9:30	B01-MW-03-0504	MW-03	~~9190~~				2			X							
	13:45	G01-MW-03-0504	G01-MW03					13			X	X	X	X	X	X	X	
	15:25	G01-MW-10-0504	G01-MW10					13			X	X	X	X	X	X	X	
	14:40	G01-MW-12-0504	G01-MW12					13			X	X	X	X	X	X	X	

1. RELINQUISHED BY Gary Bragan	DATE 5/20/04	TIME 17:30	1. RECEIVED BY	DATE 5/21/04	TIME 0915
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

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FORM NO. TtNUS-001

910003

WW1514

TETRA TECH NUS, INC. | **CHAIN OF CUSTODY** | **NUMBER** 3834 | **PAGE** 1 **OF** 1

PROJECT NO: N4779	**FACILITY:** NAS KEY WEST	**PROJECT MANAGER** EMILY McREE	**PHONE NUMBER** (803) 649-7963	**LABORATORY NAME AND CONTACT:** KATHADIN - ANDREA COLBY
SAMPLERS (SIGNATURE) Gary Braganza		**FIELD OPERATIONS LEADER** GARY BRAGANZA	**PHONE NUMBER** (561) 302-4137	**ADDRESS** 340 COUNTY ROAD No. 5
		CARRIER/WAYBILL NUMBER FEDEX / 8425 8908 8792		**CITY, STATE** WESTBROOK, ME

STANDARD TAT ☑
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2004)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS: PPL VOA's, BTEX, MTBE	PAH's	TRPH	EDB	LEAD	NITRATE + SULFATE	METHANE	COMMENTS
5/21	10:35	RR-MW-06-0504	RR-MW-06			GW	G	39			X	X	X	X	X	X	X	MS/MSD
	10:50	A824-MW-01-0504	A824-MW-01					13			X	X	X	X	X	X	X	
	13:20	A824-MW-02-0504	A824-MW-02					13			X	X	X	X	X	X	X	
	13:05	A824-MW-03-0504	A824-MW-03					13			X	X	X	X	X	X	X	
		KW-DUP-03-0504						13			X	X	X	X	X	X	X	
		KWTB-052104						2										TRIP BLANK

1. RELINQUISHED BY Gary Braganza	DATE 5/21/04	TIME	1. RECEIVED BY Fed Ex	DATE	TIME
2. RELINQUISHED BY Fed Ex	DATE	TIME	2. RECEIVED BY G. Brewer	DATE 05/22/04	TIME 10:20
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

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00017

WW1529

TETRA TECH NUS, INC. | **CHAIN OF CUSTODY** | **NUMBER** 3706 | **PAGE** 1 **OF** 1

PROJECT NO: N4779	**FACILITY:** NAS KEY WEST	**PROJECT MANAGER** EMILY McKEE	**PHONE NUMBER** (803) 649-7963	**LABORATORY NAME AND CONTACT:** KATHADIN - ANDREA COLBY
SAMPLERS (SIGNATURE) Gary Braganza		**FIELD OPERATIONS LEADER** GARY BRAGANZA	**PHONE NUMBER** (561) 302-4137	**ADDRESS** 340 COUNTY ROAD No. 5
		CARRIER/WAYBILL NUMBER FEDEX / 8425 8908 8807		**CITY, STATE** WESTBROOK, ME

STANDARD TAT ☑
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE (YEAR 2004)	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS: PPL VOH's + MTBE	PAHs	TRPH	EDB	LEAD	NITRATE + SULFATE	METHANE	COMMENTS
									G									
5/22	10:15	FC-MW-05-0504	FC-MW-05			GW	G	10			X	X	X	X	X			
↓	12:15	FC-MW-06-0504	FC-MW-06			↓	↓	10			X	X	X	X	X			
	10:30	FC-MW-22-0504	FC-MW-22					10			X	X	X	X	X			
↓		KW-DUP-01-0504						10			X	X	X	X	X			
5/24	14:00	G01-MW02-0504	G01-MW-02					13			X	X	X	X	X	X	X	
↓	09:40	G01-MW04-0504	G01-MW-04					13			X	X	X	X	X	X	X	
	13:35	G01-MW05-0504	G01-MW-05					13			X	X	X	X	X	X	X	
↓	9:15	G01-MW11-0504	G01-MW-11			↓	↓	13			X	X	X	X	X	X	X	
		KWTB-052404						2										

1. RELINQUISHED BY Gary Braganza	DATE 5/24/04	TIME	1. RECEIVED BY	DATE 5/25/04	TIME 0910
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

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FORM NO. TtNUS-001

810000

HOLDTIME

SDG CTO301/318-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	G01-MW05-0504	WU1529-007	NM	05/24/2004	06/11/2004	06/15/2004	18	4	22
M	UG/L	A824-MW-01-0504	WU1519-002	NM	05/21/2004	06/11/2004	06/15/2004	21	4	25
M	UG/L	RR-MW-06-0504	WU1519-001	NM	05/21/2004	06/11/2004	06/15/2004	21	4	25
M	UG/L	KW-DUP-03-0504	WU1519-005	NM	05/21/2004	06/11/2004	06/15/2004	21	4	25
M	UG/L	KW-DUP-01-0504	WU1529-004	NM	05/22/2004	06/11/2004	06/15/2004	20	4	24
M	UG/L	G01-MW-12-0504	WU1503-005	NM	05/20/2004	06/11/2004	06/15/2004	22	4	26
M	UG/L	G01-MW-10-0504	WU1503-004	NM	05/20/2004	06/11/2004	06/15/2004	22	4	26
M	UG/L	G01-MW04-0504	WU1529-006	NM	05/24/2004	06/11/2004	06/15/2004	18	4	22
M	UG/L	G01-MW-03-0504	WU1503-003	NM	05/20/2004	06/11/2004	06/15/2004	22	4	26
M	UG/L	G01-MW02-0504	WU1529-005	NM	05/24/2004	06/11/2004	06/15/2004	18	4	22
M	UG/L	FC-MW-22-0504	WU1529-003	NM	05/22/2004	06/11/2004	06/15/2004	20	4	24
M	UG/L	FC-MW-06-0504	WU1529-002	NM	05/22/2004	06/11/2004	06/15/2004	20	4	24
M	UG/L	FC-MW-05-0504	WU1529-001	NM	05/22/2004	06/11/2004	06/15/2004	20	4	24
M	UG/L	A824-MW-03-0504	WU1519-004	NM	05/21/2004	06/11/2004	06/15/2004	21	4	25
M	UG/L	A824-MW-02-0504	WU1519-003	NM	05/21/2004	06/11/2004	06/15/2004	21	4	25

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	G01-MW11-0504	WU1529-008	NM	05/24/2004	06/11/2004	06/15/2004	18	4	22
NTA	MG/L	G01-MW-12-0504	WU1503-5	NM	05/20/2004	05/21/2004	05/21/2004	1	0	1
NTA	MG/L	G01-MW05-0504	WU1529-7	NM	05/24/2004	05/26/2004	05/26/2004	2	0	2
NTA	MG/L	KW-DUP-03-0504	WU1519-5	NM	05/21/2004	05/22/2004	05/22/2004	1	0	1
NTA	MG/L	G01-MW11-0504	WU1529-8	NM	05/24/2004	05/26/2004	05/26/2004	2	0	2
NTA	MG/L	G01-MW-10-0504	WU1503-4	NM	05/20/2004	05/21/2004	05/21/2004	1	0	1
NTA	MG/L	G01-MW-03-0504	WU1503-3	NM	05/20/2004	05/21/2004	05/21/2004	1	0	1
NTA	MG/L	G01-MW02-0504	WU1529-5	NM	05/24/2004	05/26/2004	05/26/2004	2	0	2
NTA	MG/L	A824-MW-03-0504	WU1519-4	NM	05/21/2004	05/22/2004	05/22/2004	1	0	1
NTA	MG/L	A824-MW-02-0504	WU1519-3	NM	05/21/2004	05/22/2004	05/22/2004	1	0	1
NTA	MG/L	A824-MW-01-0504	WU1519-2	NM	05/21/2004	05/22/2004	05/22/2004	1	0	1
NTA	MG/L	RR-MW-06-0504	WU1519-1	NM	05/21/2004	05/22/2004	05/22/2004	1	0	1
NTA	MG/L	G01-MW04-0504	WU1529-6	NM	05/24/2004	05/26/2004	05/26/2004	2	0	2
SO4	MG/L	G01-MW11-0504	WU1529-8	NM	05/24/2004	06/17/2004	06/17/2004	24	0	24
SO4	MG/L	A824-MW-01-0504	WU1519-2	NM	05/21/2004	06/03/2004	06/03/2004	13	0	13
SO4	MG/L	A824-MW-02-0504	WU1519-3	NM	05/21/2004	06/03/2004	06/03/2004	13	0	13
SO4	MG/L	A824-MW-03-0504	WU1519-4	NM	05/21/2004	06/03/2004	06/03/2004	13	0	13
SO4	MG/L	G01-MW02-0504	WU1529-5	NM	05/24/2004	06/17/2004	06/17/2004	24	0	24

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SO4	MG/L	G01-MW-03-0504	WU1503-3	NM	05/20/2004	06/03/2004	06/03/2004	14	0	14
SO4	MG/L	G01-MW04-0504	WU1529-6	NM	05/24/2004	06/17/2004	06/17/2004	24	0	24
SO4	MG/L	G01-MW-10-0504	WU1503-4	NM	05/20/2004	06/03/2004	06/03/2004	14	0	14
SO4	MG/L	KW-DUP-03-0504	WU1519-5	NM	05/21/2004	06/03/2004	06/03/2004	13	0	13
SO4	MG/L	RR-MW-06-0504	WU1519-1	NM	05/21/2004	06/03/2004	06/03/2004	13	0	13
SO4	MG/L	G01-MW-12-0504	WU1503-5	NM	05/20/2004	06/07/2004	06/07/2004	18	0	18
SO4	MG/L	G01-MW05-0504	WU1529-7	NM	05/24/2004	06/17/2004	06/17/2004	24	0	24
OS	%	G01-MW-03-0504	WU1503-3	NM	05/20/2004	05/24/2004	06/16/2004	4	23	27
OS	%	G01-MW-10-0504	WU1503-4	NM	05/20/2004	05/24/2004	06/16/2004	4	23	27
OS	%	G01-MW-10-0504DL2	WU1503-4DL2	NM	05/20/2004	05/24/2004	06/18/2004	4	25	29
OS	%	G01-MW11-0504	WU1529-8	NM	05/24/2004	05/26/2004	06/16/2004	2	21	23
OS	%	G01-MW11-0504DL2	WU1529-8DL2	NM	05/24/2004	05/26/2004	06/18/2004	2	23	25
OS	%	G01-MW-12-0504	WU1503-5	NM	05/20/2004	05/24/2004	06/16/2004	4	23	27
OS	%	KW-DUP-01-0504	WU1529-4	NM	05/22/2004	05/26/2004	06/16/2004	4	21	25
OS	%	G01-MW05-0504DL2	WU1529-7DL2	NM	05/24/2004	05/26/2004	06/18/2004	2	23	25
OS	%	RR-MW-06-0504RA	WU1519-1RA	NM	05/21/2004	05/25/2004	06/16/2004	4	22	26
OS	%	KW-DUP-03-0504	WU1519-5	NM	05/21/2004	05/25/2004	06/16/2004	4	22	26
OS	%	KW-DUP-01-0504DL2	WU1529-4DL2	NM	05/22/2004	05/26/2004	06/18/2004	4	23	27

Katahdin
ANALYTICAL SERVICES

Cert. No. E87604

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE NAS KEY WEST; SDG: CTO301/318-1
WU1503, WU1519, WU1529
TASK ORDER MANAGER: EMILY MCREE

Sample Receipt

The following samples were received on May 21, 22 and 25, 2004 and were logged in under Katahdin Analytical Services work order numbers WU1503, WU1519 and WU1529 for a hardcopy due date of June 18, 2004.

KATAHDIN Sample No.	TTNUS Sample Identification
WU1503-1	B01-MW-01-0504
WU1503-2	B01-MW-03-0504
WU1503-3	G01-MW-03-0504
WU1503-4	G01-MW-10-0504
WU1503-5	G01-MW-12-0504
WU1519-1	RR-MW-06-0504
WU1519-2	A824-MW-01-0504
WU1519-3	A824-MW-02-0504
WU1519-4	A824-MW-03-0504
WU1519-5	KW-DUP-03-0504
WU1519-6	KWTB-052104
WU1529-1	FC-MW-05-0504
WU1529-2	FC-MW-06-0504
WU1529-3	FC-MW-22-0504
WU1529-4	KW-DUP-01-0504
WU1529-5	G01-MW02-0504
WU1529-6	G01-MW04-0504
WU1529-7	G01-MW05-0504
WU1529-8	G01-MW11-0504
WU1529-9	KWTB-052404

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.

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, **Andrea J. Colby**. This narrative is an integral part of the Report of Analysis.

Metals Analysis

The samples of Katahdin SDG CTO301/318-1 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Aqueous Waste", SW-846, November 1986, Third Edition.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Aqueous-matrix Katahdin Sample Nos. WU1503-(3-5), WU1519-(1-5), and WU1529-(1-8) were digested for ICP analysis on 06/11/04 (QC Batch UF11ICW1) in accordance with USEPA Method 3010A. Katahdin Sample No. WU1519-1 was prepared with duplicate matrix-spiked aliquots.

ICP analyses of SDG CTO301/318-1 sample digestates were performed using a Thermo Jarrell Ash (TJA) Trace ICP spectrometer. All samples were analyzed within holding times and all analytical run QC criteria were met, with the following comments or exceptions:

Some of the results for run QC samples (ICV, ICB, CCV, CCB, ICSA, and ICSAB) included in the accompanying data package may have exceeded acceptance limits for some elements. Please note that all client samples and batch QC samples associated with out-of-control results for run QC samples were subsequently reanalyzed for the analytes in question with the following exception:

Matrix QC Summary

One or both of the matrix-spiked aliquots of Katahdin Sample No. WU1519-1 was within the laboratory's acceptance criteria (75% - 125% recovery of the added element, if the native concentration is less than four times the amount added) for lead.

The matrix spike duplicate analysis of Katahdin Sample No. WU1519-1 was within the laboratory's acceptance limit (<20% relative difference between duplicate matrix spiked aliquots) for lead.

The serial dilution analyses of Katahdin Sample No. WU1519-1 was within the laboratory's ICP serial dilution acceptance limit (<10% difference between the original sample result and the result for a 5-fold dilution of the sample, if the result for the dilution is at least ten times the instrument detection limit) for lead.

Wet Chemistry Analysis

The samples of SDG CTO301/318-1 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for nitrate and sulfate were performed according "Methods for Chemical Analysis of Water and Wastes", EPA 600/4-79-020, 1979 Revised 1983, U.S. EPA.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Practical Quantitation Limit (PQL) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U PQL", where "PQL" is the numerical value of the Practical Quantitation Limit.

All analyses were performed within analytical hold time. All quality control criteria were met with the following exceptions:

For Katahdin Sample Numbers WU1503-5 and WU1519-1, the matrix spike recovery (0%) for sulfate is outside the laboratory's acceptance criteria. In each of these cases, the sample concentration is more than ten times the amount of spike added.

No other deviations were noted by the Wet Chemistry group.

Subcontracted Analysis

Analyses for Methane/Ethane/Ethene were performed by a subcontract laboratory. Please refer to the section of the data package titled Subcontracted Data.

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.

Deborah J. Nadeau 6.25.04

Deborah Nadeau
Operations Manager

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: CTO301/318-1 **SOW No.** SW846

Client Field ID	Lab Sample ID
A824-MW-01-0504	WU1519-002
A824-MW-02-0504	WU1519-003
A824-MW-03-0504	WU1519-004
FC-MW-05-0504	WU1529-001
FC-MW-06-0504	WU1529-002
FC-MW-22-0504	WU1529-003
G01-MW-03-0504	WU1503-003
G01-MW-10-0504	WU1503-004
G01-MW-12-0504	WU1503-005
G01-MW02-0504	WU1529-005
G01-MW04-0504	WU1529-006
G01-MW05-0504	WU1529-007
G01-MW11-0504	WU1529-008
KW-DUP-01-0504	WU1529-004
KW-DUP-03-0504	WU1519-005
RR-MW-06-0504	WU1519-001
RR-MW-06-0504	WU1519-001P
RR-MW-06-0504	WU1519-001S

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: Molly Fabbricante Name: Molly Fabbricante

Date: 10-Nov-04 Title: Chemist

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** CTO301318-1

Concentration Units: ug/L

SAMPLE: ICV

File: AUF15B Jun 15, 2004 10:41

Analyte	True	Found	%R (1)
ALUMINUM	20000.0	18810.68	94.1
CALCIUM	20000.0	20220.37	101.1
IRON	20000.0	19790.57	99.0
LEAD	550.0	524.17	95.3
MAGNESIUM	20000.0	21458.76	107.3

SAMPLE: CCV

File: AUF15B Jun 15, 2004 11:21

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	48672.85	97.3
CALCIUM	50000.0	50156.66	100.3
IRON	20000.0	19733.90	98.7
LEAD	1000.0	974.69	97.5
MAGNESIUM	50000.0	50312.59	100.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** CTO301318-1

Concentration Units: ug/L

SAMPLE: CCV

File: AUF15B Jun 15, 2004 12:42

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	48121.77	96.2
CALCIUM	50000.0	50715.56	101.4
IRON	20000.0	19933.94	99.7
LEAD	1000.0	1011.51	101.2
MAGNESIUM	50000.0	50560.96	101.1

SAMPLE: CCV

File: AUF15B Jun 15, 2004 14:03

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	48753.47	97.5
CALCIUM	50000.0	50891.66	101.8
IRON	20000.0	19973.92	99.9
LEAD	1000.0	999.32	99.9
MAGNESIUM	50000.0	50992.88	102.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** CTO301318-1

Concentration Units: ug/L

SAMPLE: CCV

File: AUF15B Jun 15, 2004 15:23

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	48256.58	96.5
CALCIUM	50000.0	51430.64	102.9
IRON	20000.0	20246.37	101.2
LEAD	1000.0	1030.03	103.0
MAGNESIUM	50000.0	51191.78	102.4

SAMPLE: CCV

File: AUF15B Jun 15, 2004 16:44

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	48370.27	96.7
CALCIUM	50000.0	51387.57	102.8
IRON	20000.0	20132.32	100.7
LEAD	1000.0	1018.08	101.8
MAGNESIUM	50000.0	51108.97	102.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** CTO301318-1

Concentration Units: ug/L

SAMPLE: CCV

File: AUF15B Jun 15, 2004 18:04

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	48121.13	96.2
CALCIUM	50000.0	51148.10	102.3
IRON	20000.0	19854.29	99.3
LEAD	1000.0	999.40	99.9
MAGNESIUM	50000.0	50652.19	101.3

SAMPLE: CCV

File: AUF15B Jun 15, 2004 19:25

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	47466.20	94.9
CALCIUM	50000.0	50924.40	101.8
IRON	20000.0	19747.13	98.7
LEAD	1000.0	1010.65	101.1
MAGNESIUM	50000.0	50215.40	100.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** CTO301318-1

Concentration Units: ug/L

SAMPLE: ICB

File: AUF15B Jun 15, 2004 10:48

Analyte	Result	C
ALUMINUM	25.97	B
CALCIUM	-3.73	B
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.52	U

SAMPLE: CCB

File: AUF15B Jun 15, 2004 11:28

Analyte	Result	C
ALUMINUM	-77.45	B
CALCIUM	10.79	B
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	-10.17	B

SAMPLE: CCB

File: AUF15B Jun 15, 2004 12:49

Analyte	Result	C
ALUMINUM	34.06	B
CALCIUM	3.13	U
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.52	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** CTO301318-1

Concentration Units: ug/L

SAMPLE: CCB

File: AUF15B Jun 15, 2004 14:09

Analyte	Result	C
ALUMINUM	98.42	B
CALCIUM	-8.23	B
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.52	U

SAMPLE: CCB

File: AUF15B Jun 15, 2004 15:30

Analyte	Result	C
ALUMINUM	88.53	B
CALCIUM	-10.51	B
IRON	11.09	B
LEAD	1.70	U
MAGNESIUM	7.52	U

SAMPLE: CCB

File: AUF15B Jun 15, 2004 16:50

Analyte	Result	C
ALUMINUM	50.83	B
CALCIUM	-3.81	B
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.52	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** CTO301318-1

Concentration Units: ug/L

SAMPLE: CCB

File: AUF15B Jun 15, 2004 18:11

Analyte	Result	C
ALUMINUM	45.56	B
CALCIUM	3.13	U
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.52	U

SAMPLE: CCB

File: AUF15B Jun 15, 2004 19:31

Analyte	Result	C
ALUMINUM	70.05	B
CALCIUM	-4.74	B
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.52	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWUF11ICW1

Matrix: WATER **SDG Name:** CTO301318-1

QC Batch ID: UF11ICW1

Concentration Units : ug/L

Analyte	RESULT	C
LEAD	1.700	U

Katahdin Analytical Services 4000032

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services | **Client Field ID:** RR-MW-06-0504S

Matrix: WATER | **SDG Name:** CTO301318-1

Percent Solids: 0.00 | **Lab Sample ID:** WU1519-001P

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
LEAD, TOTAL	510.6000		-0.1300	U	500	102.1		75	125	P

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services | **Client Field ID:** RR-MW-06-0504S

Matrix: WATER | **SDG Name:** CTO301318-1

Percent Solids: 0.00 | **Lab Sample ID:** WU1519-001S

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	% R	Q	Control Limits (%R) Low	High	M
LEAD, TOTAL	511.4500		-0.1300	U	500	102.3		75	125	P

Comments:

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWUF11ICW1

Matrix: WATER **SDG Name:** CTO301318-1

QC Batch ID: UF11ICW1

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
LEAD	500.0	531.85	106.4	80	120

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** A

Instrument Name: TJA TRACE ICP **Date:** 4/28/04

Concentration Units: ug/L

Analyte	CRDL	IDL	M
LEAD	5.0	1.70	P

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** UF11ICW1

Matrix: WATER **SDG Name:** CTO301318-1

Method: P **Prep Date:** 06/11/2004

Client ID	Lab Sample ID	Initial (L)	Final (L)
LCSWUF11ICW1	LCSWUF11ICW1	0.05	0.05
PBWUF11ICW1	PBWUF11ICW1	0.05	0.05
G01-MW-03-0504	WU1503-003	0.05	0.05
G01-MW-10-0504	WU1503-004	0.05	0.05
G01-MW-12-0504	WU1503-005	0.05	0.05
RR-MW-06-0504	WU1519-001	0.05	0.05
RR-MW-06-0504P	WU1519-001P	0.05	0.05
RR-MW-06-0504S	WU1519-001S	0.05	0.05
A824-MW-01-0504	WU1519-002	0.05	0.05
A824-MW-02-0504	WU1519-003	0.05	0.05
A824-MW-03-0504	WU1519-004	0.05	0.05
KW-DUP-03-0504	WU1519-005	0.05	0.05
FC-MW-05-0504	WU1529-001	0.05	0.05
FC-MW-06-0504	WU1529-002	0.05	0.05
FC-MW-22-0504	WU1529-003	0.05	0.05
KW-DUP-01-0504	WU1529-004	0.05	0.05
G01-MW02-0504	WU1529-005	0.05	0.05
G01-MW04-0504	WU1529-006	0.05	0.05
G01-MW05-0504	WU1529-007	0.05	0.05
G01-MW11-0504	WU1529-008	0.05	0.05

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** CTO301318-1

Instrument ID: TJA TRACE ICP **File Name:** AUF15B

Date: 6/15/04 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements	
S0		1	9:58 Al	Ca	Fe Pb Mg
S1		1	10:04 Al	Ca	Fe Pb Mg
AL_IEC		1	10:14 Al	Ca	Fe Pb Mg
FE_IEC		1	10:21 Al	Ca	Fe Pb Mg
MN_IEC		1	10:28 Al	Ca	Fe Pb Mg
IEC		1	10:34 Al	Ca	Fe Pb Mg
ICV		1	10:41 Al	Ca	Fe Pb Mg
ICB		1	10:48 Al	Ca	Fe Pb Mg
PQL		1	10:55 Al	Ca	Fe Pb Mg
CRI		1	11:01 Al	Ca	Fe Pb Mg
ICSA		1	11:08 Al	Ca	Fe Pb Mg
ICSAB		1	11:15 Al	Ca	Fe Pb Mg
CCV		1	11:21 Al	Ca	Fe Pb Mg
CCB		1	11:28 Al	Ca	Fe Pb Mg
ZZZZZZ		1	11:35		
ZZZZZZ		1	11:42		
ZZZZZZ		1	11:48		
ZZZZZZ		1	11:55		
ZZZZZZ		1	12:02		
ZZZZZZ		5	12:08		
ZZZZZZ		1	12:15		
ZZZZZZ		1	12:22		
ZZZZZZ		20	12:29		
ZZZZZZ		1	12:35		
CCV		1	12:42 Al	Ca	Fe Pb Mg
CCB		1	12:49 Al	Ca	Fe Pb Mg
ZZZZZZ		1	12:55		
ZZZZZZ		1	13:02		
ZZZZZZ		1	13:09		
ZZZZZZ		5	13:16		
ZZZZZZ		1	13:22		
ZZZZZZ		1	13:29		
ZZZZZZ		1	13:36		
ZZZZZZ		1	13:43		
ZZZZZZ		1	13:49		
ZZZZZZ		1	13:56		
CCV		1	14:03 Al	Ca	Fe Pb Mg
CCB		1	14:09 Al	Ca	Fe Pb Mg
ZZZZZZ		1	14:16		
ZZZZZZ		1	14:23		
ZZZZZZ		5	14:29		
ZZZZZZ		1	14:36		
ZZZZZZ		1	14:43		
ZZZZZZ		1	14:50		
ZZZZZZ		1	14:56		
CRI		1	15:03 Al	Ca	Fe Pb Mg
ICSA		1	15:10 Al	Ca	Fe Pb Mg
ICSAB		1	15:16 Al	Ca	Fe Pb Mg
CCV		1	15:23 Al	Ca	Fe Pb Mg
CCB		1	15:30 Al	Ca	Fe Pb Mg

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** CTO301318-1

Instrument ID: TJA TRACE ICP **File Name:** AUF15B

Date: 6/15/04 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		1	15:37	
ZZZZZZ		1	15:43	
ZZZZZZ		1	15:50	
ZZZZZZ		5	15:57	
ZZZZZZ		1	16:03	
ZZZZZZ		1	16:10	
PBWUF11ICW1		1	16:17	Pb
LCSWUF11ICW1		1	16:23	Pb
WU1503-003	G01-MW-03-0504	1	16:30	Pb
WU1503-004	G01-MW-10-0504	1	16:37	Pb
CCV		1	16:44	Al Ca Fe Pb Mg
CCB		1	16:50	Al Ca Fe Pb Mg
WU1503-005	G01-MW-12-0504	1	16:57	Pb
WU1519-001	RR-MW-06-0504	1	17:04	Pb
WU1519-001L	RR-MW-06-0504L	5	17:11	Pb
WU1519-001P	RR-MW-06-0504P	1	17:17	Pb
WU1519-001S	RR-MW-06-0504S	1	17:24	Pb
WU1519-002	A824-MW-01-0504	1	17:31	Pb
WU1519-003	A824-MW-02-0504	1	17:37	Pb
WU1519-004	A824-MW-03-0504	1	17:44	Pb
WU1519-005	KW-DUP-03-0504	1	17:51	Pb
WU1529-001	FC-MW-05-0504	1	17:58	Pb
CCV		1	18:04	Al Ca Fe Pb Mg
CCB		1	18:11	Al Ca Fe Pb Mg
WU1529-002	FC-MW-06-0504	1	18:18	Pb
WU1529-003	FC-MW-22-0504	1	18:24	Pb
WU1529-004	KW-DUP-01-0504	1	18:31	Pb
WU1529-005	G01-MW02-0504	1	18:38	Pb
WU1529-006	G01-MW04-0504	1	18:45	Pb
WU1529-007	G01-MW05-0504	1	18:51	Pb
WU1529-008	G01-MW11-0504	1	18:58	Pb
CRI		1	19:05	Al Ca Fe Pb Mg
ICSA		1	19:11	Al Ca Fe Pb Mg
ICSAB		1	19:18	Al Ca Fe Pb Mg
CCV		1	19:25	Al Ca Fe Pb Mg
CCB		1	19:31	Al Ca Fe Pb Mg

Quality Control Report

Blank Sample Summary Report

Nitrate As N

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG7713	EPA 353.2	21-MAY-04	N/A	U 0.050 mg/L	.05 mg/L

Sulfate-Turbidimetric

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG7981	EPA 375.4	03-JUN-04	N/A	U 1.0 mg/L	1 mg/L
MBLANK	WG8051	EPA 375.4	07-JUN-04	N/A	U 1.0 mg/L	1 mg/L

Quality Control Report

Blank Sample Summary Report

Nitrate As N

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG7736	EPA 353.2	22-MAY-04	N/A	U 0.050 mg/L	.05 mg/L

Sulfate-Turbidimetric

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG7981	EPA 375.4	03-JUN-04	N/A	U 1.0 mg/L	1 mg/L

Quality Control Report

Blank Sample Summary Report

Nitrate As N

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG7789	EPA 353.2	26-MAY-04	N/A	U 0.050 mg/L	.05 mg/L

Sulfate-Turbidimetric

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG8204	EPA 375.4	17-JUN-04	N/A	U 1.0 mg/L	1 mg/L

Quality Control Report

Laboratory Control Sample Summary Report

Nitrate As N

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG7713-2	LCS	WG7713	21-MAY-04	N/A	mg/L	1	0.94	94	80-120	

Sulfate-Turbidimetric

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG7981-2	LCS	WG7981	03-JUN-04	N/A	mg/L	15	15.	102	80-120	
WG8051-2	LCS	WG8051	07-JUN-04	N/A	mg/L	15	16.	106	80-120	

Quality Control Report

Laboratory Control Sample Summary Report

Nitrate As N

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG7736-2	LCS	WG7736	22-MAY-04	N/A	mg/L	1	0.90	90	80-120	

Sulfate-Turbidimetric

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG7981-2	LCS	WG7981	03-JUN-04	N/A	mg/L	15	15.	102	80-120	

Quality Control Report

Laboratory Control Sample Summary Report

Nitrate As N

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG7789-2	LCS	WG7789	26-MAY-04	N/A	mg/L	1	0.93	93	80-120	

Sulfate-Turbidimetric

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG8204-2	LCS	WG8204	17-JUN-04	N/A	mg/L	15	14.	94	80-120	

Quality Control Report

Matrix Spike Sample Summary Report

Sulfate-Turbidimetric

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG8051-6	MS	WU1503-5	WG8051	07-JUN-04	mg/L	10	460	400	0*	75 - 125

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Matrix Spike Sample Summary Report

Nitrate As N

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG7736-3	MS	WU1519-1	WG7736	22-MAY-04	mg/L	.5	J 0.014	0.59	115	75 - 125
WG7736-4	MSD	WU1519-1	WG7736	22-MAY-04	mg/L	.5	J 0.014	0.56	109	75 - 125

Sulfate-Turbidimetric

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG7981-6	MS	WU1519-1	WG7981	03-JUN-04	mg/L	10	230	220	0*	75 - 125

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Quality Control Report

Matrix Spike Sample Summary Report

Nitrate As N

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG7789-4	MS	WU1529-5	WG7789	26-MAY-04	mg/L	.5	J 0.034	0.57	106	75 - 125

FIELD DUPLICATE PRECISION

ANALYTE	KW-DUP-01-0504	FC-MW-22-0504	RPD	DIFFERENCE
Lead	42.9	43.1	0.47	0.2

ANALYTE	KW-DUP-03-0504	A824-MW-01-0504	RPD	DIFFERENCE
Lead	1.7U	1.7U	#VALUE!	#VALUE!
Nitrate	0.05U	0.05U	#VALUE!	#VALUE!
Sulfate	46	28	48.65	18

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **C. BRYAN** **DATE: OCTOBER 14, 2004**

FROM: **D. SCHLOER** **CC: DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC/PAH/TRPH/OVG**
CTO 318, NAS KEY WEST
SDG: WU2587

SAMPLES: 1/Aqueous/VOC

TRIP BLANK

2/Aqueous/VOC/PAH/TRPH/OVG

A824-MW-01-0804 RR-MW-08-0804

Overview

The sample set for CTO 318; NAS Key West; SDG WU2587 consists of three (3) aqueous environmental samples including one trip blank. The samples were analyzed for Priority Pollutant List Volatile Organic Compounds (VOCs) plus BTEX and MTBE, Polycyclic Aromatic Hydrocarbons (PAHs) plus 1-methylnaphthalene and 2-methylnaphthalene, Total Residual Petroleum Hydrocarbons (TRPH), and the dissolved gas Methane (OVG).

The samples were collected by Tetra Tech NUS on August 19th, 2004 and analyzed by Katahdin Analytical Services. The dissolved gases analyses were subcontracted by Katahdin to Air Toxics, LTD. All analyses were conducted in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria using U.S. EPA Test Methods for Evaluating Solid Waste (SW-846) Methods 8260B, EPA 504.1, 8270C-Selective Ion Monitoring (SIM), Modified Robert S. Kerr (RSK) Standard Operating Procedure (SOP) – 147/175 and Florida Petroleum Residual Organic (FL-PRO) analytical and reporting protocol.

The data contained in this SDG were validated with regard to the following parameters:

- Data completeness
- * Holding times
- Initial and continuing calibration
- Blank results
- * Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

VOC

Analytical results for one trip blank (TRIP BLANK) are included in this SDG. The trip blank was free of VOC contaminants.

A 8260B calibration verification percent Difference (%D) exceeded the 25% quality control limit for chloroethane on instrument GCMS-F, on 08/31/04, at 07:36. No data validation action was taken on this basis, as only a limited data review was performed.

Recovery of the target compound 2-chloroethyl vinyl ether fell below the 50%-211% quality control limit for the analysis of the 8260B Laboratory Control Sample (LCS) analyzed on 08/31/04. No data validation action was taken on this basis as only a limited data review was performed.

Recovery of the 504.1 surrogate Tetrachloro-m-Xylene (TCX) exceeded the 57%-128% quality control limit on both analytical columns for the analysis of sample A824-MW-01-0804. No data validation action was taken on this basis, as only a limited data review was performed.

Recovery of the 504.1 surrogate TCX exceeded the 57%-128% quality control limit on one analytical column for the LCS/LSCD analyzed on 08/30/04. No data validation action was taken o this basis as only a limited data review was performed.

The trip blank was not analyzed for the extractable target VOC: 1,2-dibromoethane; therefore, a result for this compound does not appear in the electronic database.

PAH

The following compound was detected in the laboratory method blank at the maximum concentration indicated below:

Compound	Maximum Concentration	Action Level
Naphthalene	0.063 µg/L	0.31 µg/L

Blank Actions:

- Value < Action level and < reporting limit (RL); report value at RL, followed by a U.
- Value < Action level and > RL; report value, followed by a U.
- Value > Action level; report value unqualified.

A blank action level of 5X the maximum contaminant concentration was established to evaluate blank contamination for naphthalene. Sample aliquots and dilution factors were taken into consideration prior to the application of blank action levels. Positive results for naphthalene below the blank action level were qualified as nondetected (U), due to laboratory method blank contamination.

TRPH

The TRPH surrogate O-terphenyl was recovered below the 82%-1424% quality control limit for the analysis of the associated laboratory method blank. No data validation action was taken on this basis.

OVG

As noted in the laboratory case narrative, the vials for samples A824-MW-01-0804 and RR-MW-08-0804 were received at Air Toxics, LTD with significant headspace. No data validation action was taken on this basis.

Discrepancies were noted (methane results were reported as nondetected) between the analytical result Form Is and Electronic Data Deliverable (EDD) for both samples. The reviewer modified the electronic database to reflect the positive results for methane as reported on the Form Is.

Additional Comments

Positive results below the method Reporting Limit (RL) and greater than the Method Detection Limit (MDL) were qualified as estimated (J), due to uncertainty near the detection limit. Nondetected organic compounds were reported to the method RLs.

EXECUTIVE SUMMARY

Laboratory Performance Issues: The analytical result Form Is and EDD contained errors for the OVG fraction of both samples.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (10/99) and the NFESC guidelines entitled "Navy IRCDQM" (September, 1999). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS

Douglas Schloer
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 - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % 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 (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.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 less than sample activity

PROJ_NO: 4779

SDG: WU2587 MEDIA: WATER DATA FRACTION: OV

nsample	A824-MW-01-0804
samp_date	8/19/2004
lab_id	WU2587-1
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	U	
1,1,2,2-TETRACHLOROETHANE	1	U	U	
1,1,2-TRICHLOROETHANE	1	U	U	
1,1-DICHLOROETHANE	1	U	U	
1,1-DICHLOROETHENE	1	U	U	
1,2-DIBROMOETHANE	0.02	U	U	
1,2-DICHLOROETHANE	1	U	U	
1,2-DICHLOROPROPANE	1	U	U	
2-CHLOROETHYL VINYL ETHER	1	U	U	
BENZENE	1	U	U	
BROMODICHLOROMETHANE	1	U	U	
BROMOFORM	1	U	U	
BROMOMETHANE	2	U	U	
CARBON TETRACHLORIDE	1	U	U	
CHLOROBENZENE	1	U	U	
CHLORODIBROMOMETHANE	1	U	U	
CHLOROETHANE	2	U	U	
CHLOROFORM	1	U	U	
CHLOROMETHANE	2	U	U	
CIS-1,2-DICHLOROETHENE	1	U	U	
CIS-1,3-DICHLOROPROPENE	1	U	U	
ETHYLBENZENE	1	U	U	
M+P-XYLENES	0.7	J	J	P
METHYL TERT-BUTYL ETHER	2	U	U	
METHYLENE CHLORIDE	2	U	U	
O-XYLENE	0.2	J	J	P
TETRACHLOROETHENE	1	U	U	
TOLUENE	1	U	U	
TOTAL XYLENES	0.9	J	J	P
TRANS-1,2-DICHLOROETHENE	1	U	U	
TRANS-1,3-DICHLOROPROPENE	1	U	U	
TRICHLOROETHENE	1	U	U	

nsample	A824-MW-01-0804
samp_date	8/19/2004
lab_id	WU2587-1
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
VINYL CHLORIDE	2	U	U	

nsample	RR-MW-06-0804
samp_date	8/19/2004
lab_id	WU2587-2
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	U	
1,1,2,2-TETRACHLOROETHANE	1	U	U	
1,1,2-TRICHLOROETHANE	1	U	U	
1,1-DICHLOROETHANE	1	U	U	
1,1-DICHLOROETHENE	1	U	U	
1,2-DIBROMOETHANE	0.02	U	U	
1,2-DICHLOROETHANE	1	U	U	
1,2-DICHLOROPROPANE	1	U	U	
2-CHLOROETHYL VINYL ETHER	1	U	U	
BENZENE	1	U	U	
BROMODICHLOROMETHANE	1	U	U	
BROMOFORM	1	U	U	
BROMOMETHANE	2	U	U	
CARBON TETRACHLORIDE	1	U	U	
CHLOROBENZENE	1	U	U	
CHLORODIBROMOMETHANE	1	U	U	
CHLOROETHANE	2	U	U	
CHLOROFORM	1	U	U	
CHLOROMETHANE	2	U	U	
CIS-1,2-DICHLOROETHENE	1	U	U	
CIS-1,3-DICHLOROPROPENE	1	U	U	
ETHYLBENZENE	1	U	U	
M+P-XYLENES	2	U	U	
METHYL TERT-BUTYL ETHER	2	U	U	
METHYLENE CHLORIDE	2	U	U	
O-XYLENE	1	U	U	
TETRACHLOROETHENE	1	U	U	
TOLUENE	1	U	U	
TOTAL XYLENES	3	U	U	
TRANS-1,2-DICHLOROETHENE	1	U	U	
TRANS-1,3-DICHLOROPROPENE	1	U	U	
TRICHLOROETHENE	1	U	U	

PROJ_NO: 4779

SDG: WU2587 MEDIA: WATER DATA FRACTION: OV

nsample	RR-MW-06-0804
samp_date	8/19/2004
lab_id	WU2587-2
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
VINYL CHLORIDE	2	U	U	

nsample	TRIP BLANK
samp_date	7/26/2004
lab_id	WU2587-3
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	U	
1,1,2,2-TETRACHLOROETHANE	1	U	U	
1,1,2-TRICHLOROETHANE	1	U	U	
1,1-DICHLOROETHANE	1	U	U	
1,1-DICHLOROETHENE	1	U	U	
1,2-DICHLOROETHANE	1	U	U	
1,2-DICHLOROPROPANE	1	U	U	
2-CHLOROETHYL VINYL ETHER	1	U	U	
BENZENE	1	U	U	
BROMODICHLOROMETHANE	1	U	U	
BROMOFORM	1	U	U	
BROMOMETHANE	2	U	U	
CARBON TETRACHLORIDE	1	U	U	
CHLOROBENZENE	1	U	U	
CHLORODIBROMOMETHANE	1	U	U	
CHLOROETHANE	2	U	U	
CHLOROFORM	1	U	U	
CHLOROMETHANE	2	U	U	
CIS-1,2-DICHLOROETHENE	1	U	U	
CIS-1,3-DICHLOROPROPENE	1	U	U	
ETHYLBENZENE	1	U	U	
M+P-XYLENES	2	U	U	
METHYL TERT-BUTYL ETHER	2	U	U	
METHYLENE CHLORIDE	2	U	U	
O-XYLENE	1	U	U	
TETRACHLOROETHENE	1	U	U	
TOLUENE	1	U	U	
TOTAL XYLENES	3	U	U	
TRANS-1,2-DICHLOROETHENE	1	U	U	
TRANS-1,3-DICHLOROPROPENE	1	U	U	
TRICHLOROETHENE	1	U	U	
VINYL CHLORIDE	2	U	U	

PROJ_NO: 4779

SDG: WU2587 MEDIA: WATER DATA FRACTION: OS

nsample	A824-MW-01-0804	nsample	RR-MW-06-0804
samp_date	8/19/2004	samp_date	8/19/2004
lab_id	WU2587-1	lab_id	WU2587-2
qc_type	NM	qc_type	NM
units	UG/L	units	UG/L
Pct_Solids	0.0	Pct_Solids	0.0
DUP_OF:		DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	U	
2-METHYLNAPHTHALENE	0.2	U	U	
ACENAPHTHENE	0.2	U	U	
ACENAPHTHYLENE	0.2	U	U	
ANTHRACENE	0.2	U	U	
BENZO(A)ANTHRACENE	0.2	U	U	
BENZO(A)PYRENE	0.2	U	U	
BENZO(B)FLUORANTHENE	0.2	U	U	
BENZO(G,H,I)PERYLENE	0.2	U	U	
BENZO(K)FLUORANTHENE	0.2	U	U	
CHRYSENE	0.2	U	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	U	
FLUORANTHENE	0.2	U	U	
FLUORENE	0.2	U	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	U	
NAPHTHALENE	0.2	JB	U	A
PHENANTHRENE	0.2	U	U	
PYRENE	0.2	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.2	U	U	
2-METHYLNAPHTHALENE	0.2	U	U	
ACENAPHTHENE	0.2	U	U	
ACENAPHTHYLENE	0.2	U	U	
ANTHRACENE	0.2	U	U	
BENZO(A)ANTHRACENE	0.2	U	U	
BENZO(A)PYRENE	0.2	U	U	
BENZO(B)FLUORANTHENE	0.2	U	U	
BENZO(G,H,I)PERYLENE	0.2	U	U	
BENZO(K)FLUORANTHENE	0.2	U	U	
CHRYSENE	0.2	U	U	
DIBENZO(A,H)ANTHRACENE	0.2	U	U	
FLUORANTHENE	0.2	U	U	
FLUORENE	0.2	U	U	
INDENO(1,2,3-CD)PYRENE	0.2	U	U	
NAPHTHALENE	0.2	U	U	
PHENANTHRENE	0.2	U	U	
PYRENE	0.2	U	U	

PROJ_NO: 4779

SDG: WU2587 MEDIA: WATER DATA FRACTION: PET

nsample	A824-MW-01-0804
samp_date	8/19/2004
lab_id	WU2587-1
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	U	

nsample	RR-MW-06-0804
samp_date	8/19/2004
lab_id	WU2587-2
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	500	U	U	

PROJ_NO: 4779

SDG: WU2587 MEDIA: WATER DATA FRACTION: OVG

nsample	A824-MW-01-0804	nsample	RR-MW-06-0804
samp_date	8/19/2004	samp_date	8/19/2004
lab_id	0408459-01A	lab_id	0408459-02A
qc_type	NM	qc_type	NM
units	UG/L	units	UG/L
Pct_Solids	0.0	Pct_Solids	0.0
DUP_OF:		DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
METHANE	160	U		

Parameter	Result	Lab Qual	Val Qual	Qual Code
METHANE	130	U		

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 351 NAS KEY WEST
PO No:
Sample Date: 08/19/04
Received Date: 08/20/04
Extraction Date:
Analysis Date: 08/31/04
Report Date: 09/09/2004
Matrix: WATER
% Solids: NA

Lab ID: WU2587-1
Client ID: A824-MW-01-0804
SDG: WU2587
Extracted by:
Extraction Method: SW846 5030
Analyst: NB
Analysis Method: SW846 8260B
Lab Prep Batch: WG9524
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	J	0.9	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	J	0.7	1.0	2	2	0.3
95-47-6	o-Xylene	J	0.2	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		93%				
17060-07-0	1,2-Dichloroethane-D4		90%				
2037-26-5	Toluene-D8		95%				
460-00-4	P-Bromofluorobenzene		94%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 351 NAS KEY WEST
PO No:
Sample Date: 08/19/04
Received Date: 08/20/04
Extraction Date:
Analysis Date: 08/31/04
Report Date: 09/09/2004
Matrix: WATER
% Solids: NA

Lab ID: WU2587-2
Client ID: RR-MW-06-0804
SDG: WU2587
Extracted by:
Extraction Method: SW846 5030
Analyst: NB
Analysis Method: SW846 8260B
Lab Prep Batch: WG9524
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		98%				
17060-07-0	1,2-Dichloroethane-D4		94%				
2037-26-5	Toluene-D8		98%				
460-00-4	P-Bromofluorobenzene		97%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 351 NAS KEY WEST
PO No:
Sample Date: 07/26/04
Received Date: 08/20/04
Extraction Date:
Analysis Date: 08/31/04
Report Date: 09/09/2004
Matrix: WATER
% Solids: NA

Lab ID: WU2587-3
Client ID: TRIP BLANK
SDG: WU2587
Extracted by:
Extraction Method: SW846 5030
Analyst: NB
Analysis Method: SW846 8260B
Lab Prep Batch: WG9524
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	2	1.0	2	2	0.6
75-01-4	Vinyl chloride	U	2	1.0	2	2	0.2
74-83-9	Bromomethane	U	2	1.0	2	2	0.6
75-00-3	Chloroethane	U	2	1.0	2	2	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		98%				
17060-07-0	1,2-Dichloroethane-D4		96%				
2037-26-5	Toluene-D8		99%				
460-00-4	P-Bromofluorobenzene		95%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 351 NAS KEY WEST
PO No:
Sample Date: 08/19/04
Received Date: 08/20/04
Extraction Date: 08/30/04
Analysis Date: 08/30/04
Report Date: 09/13/2004
Matrix: WATER
% Solids: NA

Lab ID: WU2587-1
Client ID: A824-MW-01-0804
SDG: WU2587
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG9501
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.019
877-09-8	Tetrachloro-M-Xylene		*166%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 351 NAS KEY WEST
PO No:
Sample Date: 08/19/04
Received Date: 08/20/04
Extraction Date: 08/30/04
Analysis Date: 08/30/04
Report Date: 09/15/2004
Matrix: WATER
% Solids: NA

Lab ID: WU2587-2
Client ID: RR-MW-06-0804
SDG: WU2587
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG9501
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.019
877-09-8	Tetrachloro-M-Xylene		106%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 351 NAS KEY WEST
PO No:
Sample Date: 08/19/04
Received Date: 08/20/04
Extraction Date: 08/25/04
Analysis Date: 09/15/04
Report Date: 09/16/2004
Matrix: WATER
% Solids: NA

Lab ID: WU2587-1
Client ID: A824-MW-01-0804
SDG: WU2587
Extracted by: MC
Extraction Method: SW846 3520
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG9400
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	JB	0.050	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.077
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.058
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.077
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.077
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.077
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.096
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.077
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
7297-45-2	2-Methylnaphthalene-d10		84%				
81103-79-9	Fluorene-d10		93%				
1718-52-1	Pyrene-d10		81%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 351 NAS KEY WEST
PO No:
Sample Date: 08/19/04
Received Date: 08/20/04
Extraction Date: 08/25/04
Analysis Date: 09/15/04
Report Date: 09/16/2004
Matrix: WATER
% Solids: NA

Lab ID: WU2587-2
Client ID: RR-MW-06-0804
SDG: WU2587
Extracted by: MC
Extraction Method: SW846 3520
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG9400
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	0.20	1.0	0.20	0.20	0.048
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.048
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.077
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.058
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.077
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.077
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.10
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.086
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.067
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.086
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.077
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.086
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.096
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.14
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.077
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.077
7297-45-2	2-Methylnaphthalene-d10		77%				
81103-79-9	Fluorene-d10		83%				
1718-52-1	Pyrene-d10		80%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 351 NAS KEY WEST
PO No:
Sample Date: 08/19/04
Received Date: 08/20/04
Extraction Date: 08/26/04
Analysis Date: 09/10/04
Report Date: 09/13/2004
Matrix: WATER
% Solids: NA

Lab ID: WU2587-1
Client ID: A824-MW-01-0804
SDG: WU2587
Extracted by: MC
Extraction Method: SW846 3510
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG9438
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	280
	n-Triacontane-D62		70%				
	O-Terphenyl		90%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 351 NAS KEY WEST
PO No:
Sample Date: 08/19/04
Received Date: 08/20/04
Extraction Date: 08/26/04
Analysis Date: 09/10/04
Report Date: 09/13/2004
Matrix: WATER
% Solids: NA

Lab ID: WU2587-2
Client ID: RR-MW-06-0804
SDG: WU2587
Extracted by: MC
Extraction Method: SW846 3510
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG9438
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	280
	n-Triacontane-D62		101%				
	O-Terphenyl		101%				

AIR TOXICS LTD.

SAMPLE NAME: A824-MW-01-0804

ID#: 0408459-01A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7082705	Date of Collection:	8/19/04
Dil. Factor:	1.00	Date of Analysis:	8/27/04 09:33 AM

Compound	Rpt. Limit (uG/L)	Amount (uG/L)
Methane	10	160

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: RR-MW-06-0804

ID#: 0408459-02A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7082706	Date of Collection:	8/19/04
Dil. Factor:	1.00	Date of Analysis:	8/27/04 09:55 AM

Compound	Rpt. Limit (uG/L)	Amount (uG/L)
Methane	10	130

Container Type: VOA Vial-40 mL

APPENDIX C

SUPPORT DOCUMENTATION

NAS K-W
CTO 318

SDG WU2587

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	A824-MW-01-0804	WU2587-001	NM	08/19/2004	09/09/2004	09/22/2004	21	13	34
M	UG/L	RR-MW-06-0804	WU2587-002	NM	08/19/2004	09/09/2004	09/22/2004	21	13	34
NTA	MG/L	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/20/2004	08/20/2004	1	0	1
NTA	MG/L	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/20/2004	08/20/2004	1	0	1
SO4	MG/L	RR-MW-06-0804	WU2587-2	NM	08/19/2004	09/11/2004	09/11/2004	23	0	23
SO4	MG/L	A824-MW-01-0804	WU2587-1	NM	08/19/2004	09/11/2004	09/11/2004	23	0	23
OS	%	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/25/2004	09/15/2004	6	21	27
OS	%	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/25/2004	09/15/2004	6	21	27
OS	UG/L	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/25/2004	09/15/2004	6	21	27
OS	UG/L	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/25/2004	09/15/2004	6	21	27
EDB	%	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/30/2004	08/30/2004	11	0	11
EDB	%	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/30/2004	08/30/2004	11	0	11
EDB	UG/L	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/30/2004	08/30/2004	11	0	11
EDB	UG/L	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/30/2004	08/30/2004	11	0	11
OV	%	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/31/2004	08/31/2004	12	0	12

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	%	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/31/2004	08/31/2004	12	0	12
OV	%	TRIP BLANK	WU2587-3	NM	07/26/2004	08/31/2004	08/31/2004	36	0	36
OV	UG/L	TRIP BLANK	WU2587-3	NM	07/26/2004	08/31/2004	08/31/2004	36	0	36
OV	UG/L	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/31/2004	08/31/2004	12	0	12
OV	UG/L	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/31/2004	08/31/2004	12	0	12
METH	UG/L	A824-MW-01-0804	0408459-01A	NM	08/19/2004	08/27/2004	08/27/2004	8	0	8
METH	UG/L	RR-MW-06-0804	0408459-02A	NM	08/19/2004	08/27/2004	08/27/2004	8	0	8
TPH	%	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/26/2004	09/10/2004	7	15	22
TPH	%	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/26/2004	09/10/2004	7	15	22
TPH	UG/L	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/26/2004	09/10/2004	7	15	22
TPH	UG/L	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/26/2004	09/10/2004	7	15	22

Katahdin ANALYTICAL SERVICES
340 County Road No. 5
P.O. Box 720
Westbrook, ME 04092
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

7

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page 1 of 1

Client	Contact	Phone #	Fax #
Tetra Tech NUS	Chuck Bryan	(803) 649-7963	(803) 642-8459

Address 900 Trail Ridge Road City Aiken State SC Zip Code 29803

Purchase Order # Proj. Name / No. Katahdin Quote #

Bill (if different than above) ~~Address~~ Air Bill # 8425-8908-9104

Sampler (Print / Sign) SCOTT R. McGUIRE / Scott R. McGuire Copies To:

LAB USE ONLY WORK ORDER #: KM2587

KATAHDIN PROJECT NUMBER

REMARKS:

SHIPPING INFO: ☒ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO:

TEMP°C ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	Filt. ☐Y ☐N BTEX, MTBE, PPL VOH/HCl	Filt. ☐Y ☐N RAH	Filt. ☐Y ☐N EDB/HCl	Filt. ☐Y ☐N TRPH/HCl	Filt. ☐Y ☐N Lead/HNO3	Filt. ☐Y ☐N Nitrate, Sulfate	Filt. ☐Y ☐N Methane/HCl	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N
	A824-MW-01-0804	19 Aug 04 / 1115	GW	12	3	1	2	2	1	1	2			
	RR-MW-06-0804	19 Aug 04 / 1220	GW	12	3	1	2	2	1	1	2			
	Trip Blank	/			✓									
		/												
		/												
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		/												
		/												
		/												
	SRM	/												

10-9-04

COMMENTS

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Scott R. McGuire	8/19/04 1500	Fed Ex		8/20/04 0905	David Tai
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

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

ORIGINAL

S-COC1

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO 351 NAS KEY WEST
TASK ORDER MANAGER: CHARLES BRYAN
WU2587

Sample Receipt

The following samples were received on August 20, 2004 and were logged in under Katahdin Analytical Services work order number WU2587 for a hardcopy due date of September 15, 2004.

KATAHDIN Sample No.	TTNUS Sample Identification
WU2587-1	A824-MW-01-0804
WU2587-2	RR-MW-06-0804
WU2587-3	TRIP BLANK

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.

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, **Andrea J. Colby**. This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order WU2587 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, Office of Solid Waste and Emergency Response, for the specific methods listed below or on the Report of Analysis. Some manual integrations may have been performed due to split peaks and/or corrected baselines. All have been flagged with a "M" (software-generated) on the pertinent quantitation report.

FL-PRO Analysis

The method blank WG9438-1 had a low recovery for the surrogate, o-terphenyl that was low and outside of the method acceptance limits. The recovery for the second surrogate n-triacontane-D_{62} was within the method acceptance limits. Since the surrogate recoveries for samples WU2587-1 and 2 were acceptable the samples were not reextracted.

The calibration verification standards (CV) (files CUI2027 and CUI2036) had low responses for one or more of the individual hydrocarbons, which resulted in %D's that were greater than 25%. Sinoe the

method requirement applies to only the PRO range responses, which were acceptable, the associated samples were not reanalyzed.

504 Analysis

The laboratory control sample and the laboratory control duplicate sample (WG9501-2 and 3) have high recoveries for the surrogate TCMX on channel A that are outside of laboratory established acceptance limits. Since the surrogate on the second channel was acceptable, the samples were not reextracted.

Sample WU2587-1 had high recoveries for the surrogate TCMX on both channels that were outside of laboratory established acceptance limits. Since a high recovery would indicate a high bias and the sample did not detect any target analytes above the MDL, the sample was not reanalyzed.

8270C SIM Analysis

One or more target analytes may have been detected above the MDL in some method blanks. Any of these analytes that were also detected in any of the associated samples were flagged with a "B" qualifier indicating that the analyte was detected in the method blank analyzed and/or extracted concurrently with the sample.

8260B Analysis

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived for the full list of spiked compounds. The acceptance limits for the MS/MSD are for a short list of the spiked compounds. Katahdin standard operating procedure is not to take corrective action until greater than ten percent of the spiked analytes (with the exception of the common laboratory contaminants acetone and methylene chloride) in the LCS are outside of the QC limits.

One or more target analytes may have been detected above the MDL in some method blanks. Any of these analytes that were also detected in any of the associated samples were flagged with a "B" qualifier indicating that the analyte was detected in the method blank analyzed and/or extracted concurrently with the sample.

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

Metals Analysis

The samples of Katahdin Work Order WU2587 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Aqueous Waste", SW-846, November 1986, Third Edition.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Aqueous-matrix Katahdin Sample Nos. WU2587-(1 and 2) were digested for ICP analysis on 09/09/04 (QC Batch UI09ICW0) in accordance with USEPA Method 3010A.

ICP analyses of Work Order WU2587 sample digestates were performed in accordance with USEPA Method 6010A using a Thermo Jarrell Ash (TJA) Trace ICP spectrometer. All samples were analyzed

within holding times and all analytical run QC criteria were met, with the following comments or exceptions:

Some of the results for run QC samples (ICV, ICB, CCV, CCB, ICSA, and ICSAB) included in the accompanying data package may have exceeded acceptance limits for some elements. Please note that all client samples and batch QC samples associated with out-of-control results for run QC samples were subsequently reanalyzed for the analytes in question with the following exception:

The Contract Required detection limit sample (CRI) analyzed in analytical sequence AUI21A at 21:26 failed high for lead. The associated sample results were accepted because they had measured lead concentrations below the Practical Quantitation Limit (PQL).

Wet Chemistry Analysis

The samples of Work Order WU2587 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for nitrate and sulfate were performed according to "Methods for Chemical Analysis of Water and Wastes", EPA 600/4-79-020, 1979 Revised 1983, U.S. EPA.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Practical Quantitation Limit (PQL) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U PQL", where "PQL" is the numerical value of the Practical Quantitation Limit.

All analyses were performed within analytical hold times. All quality control criteria were met.

No deviations were noted by the Wet Chemistry group.

Subcontracted Analysis

Analyses for Methane, Ethane, and Ethene were performed by a subcontract laboratory. Please refer to the section of the data package titled Subcontracted Data.

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.

Deborah J. Nadeau 9.29.04

Deborah Nadeau
Operations Manager

KATAHDIN ANALYTICAL SERVICES, INC.
SAMPLE RECEIPT CONDITION REPORT

Tel. (207) 874-2400
Fax (207) 775-4029

LAB (WORK ORDER) # WU 2587

PAGE: 1 OF 1

COOLER: 1 OF 1

CLIENT: Tetra Tech

PROJECT: C70351 NAS Key West

COC#

SDG#

DATE / TIME RECEIVED: 8/20/04 0908

DELIVERED BY: FedEx

RECEIVED BY:

LIMS ENTRY BY:

LIMS REVIEW BY / PM: AC

	YES	NO	EXCEPTIONS	COMMENTS	RESOLUTION
1. CUSTODY SEALS PRESENT / INTACT?	☑	☐	☐		
2. CHAIN OF CUSTODY PRESENT IN THIS COOLER?	☑	☐	☐		
3. CHAIN OF CUSTODY SIGNED BY CLIENT?	☑	☐	☐		
4. CHAIN OF CUSTODY MATCHES SAMPLES?	☐	☒ *	☐		
5. TEMPERATURE BLANKS PRESENT?	☑	☐	☐	TEMP BLANK TEMP (°C)= 3.7	
6. SAMPLES RECEIVED AT 4°C +/- 2? (ICE) / ICE PACKS PRESENT (Y) or N?	☑	☐	☐	COOLER TEMP (°C)= NA (RECORD COOLER TEMP ONLY IF TEMP BLANK IS NOT PRESENT)	
7. VOLATILES FREE OF HEADSPACE?	☑	☐	☐		
8. TRIP BLANK PRESENT IN THIS COOLER	☑	☐	☐		
9. PROPER SAMPLE CONTAINERS AND VOLUME?	☑	☐	☐		
10. SAMPLES WITHIN HOLD TIME UPON RECEIPT?	☑	☐	☐		
11. SAMPLES PROPERLY PRESERVED[1]?	☒	☒ *	☐		
12. CORRECTIVE ACTION REPORT FILED?	☐	☒	N/A		

13. ANALYTICAL PROGRAMS (CIRCLE ONE) COMMERCIAL CLP HAZWRAP (NFESC) ACOE AFCEE OTHER (STATE OF ORIGIN):

LOG - IN NOTES[1]: * = Trip Blank not on COC - add to COC for Check Bryan 8/23/04.
- Amber bottles for TRPH test pH > 2 added 1mL HCl. pH ≤ 2

(1) Use this space (and additional sheets if necessary) to document samples that are received broken or compromised, C-O-C discrepancies, radiation checks, residual chlorine check, results of pH check if required. If samples required pH adjustment, record volume and type of preservative added.

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Aug. 20, 2004
02:33 PM

Login Number: WU2587

Account: TETRAT001
Tetra Tech NUS, Inc.

Project: TETRATKW001

NoWeb

Login Information

ANALYSIS INSTRUCTIONS	:	
CLIENT PO#	:	MSA-0402-N4113-05 N2943-WR451(SS)
COOLER TEMPERATURE	:	3.7
DELIVERY SERVICES	:	FEDEX
EDD FORMAT	:	KAS050QC-TXT
MAIL DATE	:	
PM	:	AJC
PROJECT NAME	:	CTO 351 NAS KEY WEST
QC LEVEL	:	III
REGULATORY LIST	:	NFESC
REPORT INSTRUCTIONS	:	Data summary needs all forms. Rpt to MDL/IDL & flag to PQL. Email EDD to Amy. Send copy of rpt on 2 CDs.
SDG ID	:	
SDG STATUS	:	

Primary Report Address:

Amy Thomson
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:

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Comments
WU2587-1	A824-MW-01-0804	19-AUG-04 11:15	20-AUG-04			15-SEP-04	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	E353.2-NITRATE	21-AUG-04	125mL Plastic	1
Aqueous	S	E375.4-SULFATE	16-SEP-04	250mL Plastic	
Aqueous	S	E504.1-S	02-SEP-04	40mL Vial+HCl	2
Aqueous	S	RSKSOP-175-SUB		40mL Vial+HCl	2
Aqueous	S	SW3010-PREP	15-FEB-05		1
Aqueous	S	SW6010-LEAD	15-FEB-05	250mL Plastic+HNO3	
Aqueous	S	SW8100M-FLPRO	26-AUG-04	1L N-Amber Glass	2
Aqueous	S	SW8260-S	02-SEP-04	40mL Vial+HCl	3
Aqueous	S	SW8270SIM-S	26-AUG-04	1L N-Amber Glass	1

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Comments
WU2587-2	RR-MW-06-0804	19-AUG-04 12:20	20-AUG-04			15-SEP-04	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	E353.2-NITRATE	21-AUG-04	125mL Plastic	1
Aqueous	S	E375.4-SULFATE	16-SEP-04	250mL Plastic	
Aqueous	S	E504.1-S	02-SEP-04	40mL Vial+HCl	2
Aqueous	S	RSKSOP-175-SUB		40mL Vial+HCl	2
Aqueous	S	SW3010-PREP	15-FEB-05		1
Aqueous	S	SW6010-LEAD	15-FEB-05	250mL Plastic+HNO3	
Aqueous	S	SW8100M-FLPRO	26-AUG-04	1L N-Amber Glass	2
Aqueous	S	SW8260-S	02-SEP-04	40mL Vial+HCl	3
Aqueous	S	SW8270SIM-S	26-AUG-04	1L N-Amber Glass	1

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Comments
WU2587-3	TRIP BLANK	26-JUL-04 11:45	20-AUG-04			15-SEP-04	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SW8260-S	09-AUG-04	40mL Vial+HCl	2

Total Samples: *3* ***Total Analyses:*** *19*

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 351 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 08/31/04
Report Date: 09/09/2004
Matrix: WATER
% Solids: NA

Lab ID: WG9524-2
Client ID: WG9524-Blank
SDG: WU2587
Extracted by:
Extraction Method: SW846 5030
Analyst: NB
Analysis Method: SW846 8260B
Lab Prep Batch: WG9524
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
74-87-3	Chloromethane	U	1	1.0	1	1	0.6
75-01-4	Vinyl chloride	U	1	1.0	1	1	0.2
74-83-9	Bromomethane	U	1	1.0	1	1	0.6
75-00-3	Chloroethane	U	1	1.0	1	1	0.2
75-35-4	1,1-Dichloroethene	U	1	1.0	1	1	0.1
75-09-2	Methylene Chloride	U	2	1.0	2	2	0.4
156-60-5	trans-1,2-Dichloroethene	U	1	1.0	1	1	0.1
1634-04-4	Methyl tert-butyl ether	U	2	1.0	2	2	0.2
75-34-3	1,1-Dichloroethane	U	1	1.0	1	1	0.1
156-59-2	cis-1,2-Dichloroethene	U	1	1.0	1	1	0.09
67-66-3	Chloroform	U	1	1.0	1	1	0.1
56-23-5	Carbon Tetrachloride	U	1	1.0	1	1	0.1
71-55-6	1,1,1-Trichloroethane	U	1	1.0	1	1	0.2
71-43-2	Benzene	U	1	1.0	1	1	0.09
107-06-2	1,2-Dichloroethane	U	1	1.0	1	1	0.2
79-01-6	Trichloroethene	U	1	1.0	1	1	0.08
78-87-5	1,2-Dichloropropane	U	1	1.0	1	1	0.1
75-27-4	Bromodichloromethane	U	1	1.0	1	1	0.09
10061-01-5	cis-1,3-dichloropropene	U	1	1.0	1	1	0.1
110-75-8	2-Chloroethylvinylether	U	1	1.0	1	1	0.2
108-88-3	Toluene	U	1	1.0	1	1	0.2
127-18-4	Tetrachloroethene	U	1	1.0	1	1	0.4
10061-02-6	trans-1,3-Dichloropropene	U	1	1.0	1	1	0.2
79-00-5	1,1,2-Trichloroethane	U	1	1.0	1	1	0.1
124-48-1	Dibromochloromethane	U	1	1.0	1	1	0.08
108-90-7	Chlorobenzene	U	1	1.0	1	1	0.09
100-41-4	Ethylbenzene	U	1	1.0	1	1	0.2
1330-20-7	Xylenes (total)	U	3	1.0	3	3	0.5
75-25-2	Bromoform	U	1	1.0	1	1	0.1
79-34-5	1,1,2,2-Tetrachloroethane	U	1	1.0	1	1	0.2
	m+p-Xylenes	U	2	1.0	2	2	0.3
95-47-6	o-Xylene	U	1	1.0	1	1	0.2
1868-53-7	Dibromofluoromethane		95%				
17060-07-0	1,2-Dichloroethane-D4		93%				
2037-26-5	Toluene-D8		98%				
460-00-4	P-Bromofluorobenzene		96%				

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 351 NAS KEY WEST SDG No.: WU2587

Lab File ID: FB513 BFB Injection Date: 08/26/04

Instrument ID: GCMS-F BFB Injection Time: 0850

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.9
75	30.0 - 60.0% of mass 95	44.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	77.3
175	5.0 - 9.0% of mass 174	5.0 (6.4)1
176	95.0 - 101.0% of mass 174	75.4 (97.5)1
177	5.0 - 9.0% of mass 176	5.0 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

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		VSTD005F26A	F5426	08/26/04	1141
02		VSTD200F26B	F5431	08/26/04	1436
03		VSTD100F26B	F5432	08/26/04	1510
04		VSTD020F26B	F5433	08/26/04	1545
05		VSTD001F26D	F5436	08/26/04	1729
06		VSTD050F26B	F5437	08/26/04	1803
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

ok

10-11-04

FORM V VOA

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 351 NAS KEY WEST SDG No.: WU2587

Lab File ID: FB516 BFB Injection Date: 08/31/04

Instrument ID: GCMS-F BFB Injection Time: 0709

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.3
75	30.0 - 60.0% of mass 95	34.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	81.3
175	5.0 - 9.0% of mass 174	5.1 (6.3)1
176	95.0 - 101.0% of mass 174	79.7 (98.0)1
177	5.0 - 9.0% of mass 176	7.1 (8.9)2

1-Value is % mass 174 2-Value is % mass 176

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		VSTD050F31A	F5478	08/31/04	0736
02	WG9524-LCS	WG9524-1	F5479	08/31/04	0822
03	WG9524-BLANK	WG9524-2	F5481	08/31/04	0941
04	TRIP BLANK	WU2587-3	F5482	08/31/04	1020
05	A824-MW-01-0804	WU2587-1	F5486	08/31/04	1238
06	RR-MW-06-0804	WU2587-2	F5487	08/31/04	1313
07					
08					
09					
10					
11					
12					
13					
14					
15					
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21					
22					

FORM V VOA

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 351 NAS KEY WEST SDG No.: WU2587

Instrument ID: GCMS-F Calibration Date: 08/31/04 Time: 0736

Lab File ID: F5478 Init. Calib. Date(s): 08/26/04 08/26/04

Init. Calib. Times: 0958 1803

GC Column: RTX-VMS ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Chloromethane	0.6200000	0.5840600	0.5840600	0.1	-5.80		AVRG
Vinyl chloride	0.5580000	0.5488600	0.5488600	0.01	-1.64	20.00	AVRG
Bromomethane	0.2390000	0.1855400	0.1855400	0.01	-22.37		AVRG
Chloroethane	67.919000	50.000000	0.3075600	0.01	35.84		LINR
1,1-Dichloroethene	0.4510000	0.4051700	0.4051700	0.1	-10.16	20.00	AVRG
Methylene Chloride	53.092000	50.000000	0.6395900	0.01	6.18		LINR
trans-1,2-Dichloroethene	0.5490000	0.5846400	0.5846400	0.01	6.49		AVRG
Methyl tert-butyl ether	1.2800000	1.3067000	1.3067000	0.01	2.08		AVRG
1,1-Dichloroethane	0.9450000	1.0000000	1.0000000	0.3	5.82		AVRG
cis-1,2-Dichloroethene	0.6140000	0.6435800	0.6435800	0.01	4.82		AVRG
Chloroform	0.8800000	0.8975000	0.8975000	0.01	1.99	20.00	AVRG
Carbon Tetrachloride	0.3460000	0.3563600	0.3563600	0.01	2.99		AVRG
1,1,1-Trichloroethane	0.6580000	0.6703400	0.6703400	0.01	1.88		AVRG
Benzene	1.4250000	1.4970000	1.4970000	0.01	5.05		AVRG
1,2-Dichloroethane	0.4040000	0.4050300	0.4050300	0.01	0.25		AVRG
Trichloroethene	0.3380000	0.3485800	0.3485800	0.01	3.13		AVRG
1,2-Dichloropropane	0.3600000	0.3769100	0.3769100	0.01	4.70	20.00	AVRG
Bromodichloromethane	0.4200000	0.4392800	0.4392800	0.01	4.59		AVRG
cis-1,3-dichloropropene	0.5250000	0.5782800	0.5782800	0.01	10.15		AVRG
2-Chloroethylvinylether	57.914000	50.000000	6.57e-002	0.01	15.83		LINR
Toluene	0.8650000	0.9299400	0.9299400	0.01	7.51	20.00	AVRG
Tetrachloroethene	0.3300000	0.3413400	0.3413400	0.01	3.44		AVRG
trans-1,3-Dichloropropene	0.3980000	0.4326400	0.4326400	0.01	8.70		AVRG
1,1,2-Trichloroethane	0.2420000	0.2484000	0.2484000	0.01	2.64		AVRG
Dibromochloromethane	0.3910000	0.4202100	0.4202100	0.01	7.47		AVRG
Chlorobenzene	1.1350000	1.2055000	1.2055000	0.3	6.21		AVRG
Ethylbenzene	1.7950000	1.9206000	1.9206000	0.01	7.00	20.00	AVRG
Xylenes (total)	1.9100000	0.7465700	0.7465700	0.01	-60.91		AVRG
Bromoform	0.2420000	0.2557600	0.2557600	0.1	5.69		AVRG

10-11-04

FORM VII PEST

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES, Lab Code: KAS

Project: CTO 351 NAS KEY WEST SDG No.: WU2587

	CLIENT SAMPLE ID	LAB SAMPLE ID	SMC1 DBF#	SMC2 DCA#	SMC3 TOL#	SMC4 BFB#	TOT OUT
01	WG9524-LCS	WG9524-1	90	87	93	92	0
02	WG9524-BLANK	WG9524-2	95	93	98	96	0
03	TRIP BLANK	WU2587-3	98	96	99	95	0
04	A824-MW-01-0804	WU2587-1	93	90	95	94	0
05	RR-MW-06-0804	WU2587-2	98	94	98	97	0
06							
07							
08							
09							
10							
11							
12							
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25							
26							
27							
28							

	QC LIMITS
SMC1 (DBF) = Dibromofluoromethane	(76-118)
SMC2 (DCA) = 1,2-Dichloroethane-D4	(76-119)
SMC3 (TOL) = Toluene-D8	(68-122)
SMC4 (BFB) = P-Bromofluorobenzene	(56-119)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

Katahdin Analytical Services 1000003

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: CTO 351 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 08/31/04
Report Date: 09/09/2004
Matrix: WATER

Lab ID: WG9524-1
Client ID: WG9524-LCS
SDG: WU2587
Extracted by:
Extraction Method: SW846 5030
Analyst: NB
Analysis Method: SW846 8260B
Lab Prep Batch: WG9524
Units: ug/l

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.	%REC.	QC. LIMITS
Dibromomethane	50	NA	52	104	88-130
1,2-Dichloropropane	50	NA	49	98	80-122
Bromodichloromethane	50	NA	45	90	83-133
cis-1,3-dichloropropene	50	NA	52	104	81-138
1,4-Dioxane	1000	NA	758	76	60-140
2-Chloroethylvinylether	50	NA	12	* 24	50-211
Toluene	50	NA	51	101	88-121
4-methyl-2-pentanone	50	NA	44	88	72-140
Tetrachloroethene	50	NA	48	97	77-129
trans-1,3-Dichloropropene	50	NA	56	112	81-149
1,1,2-Trichloroethane	50	NA	50	100	82-126
Dibromochloromethane	50	NA	51	101	80-133
1,3-Dichloropropane	50	NA	50	100	86-125
1,2-Dibromoethane	50	NA	52	104	88-127
2-Hexanone	50	NA	48	97	45-146
Chlorobenzene	50	NA	50	99	84-123
Ethylbenzene	50	NA	48	97	84-134
1,1,1,2-Tetrachloroethane	50	NA	49	98	83-130
Xylenes (total)	150	NA	154	103	88-123
m+p-Xylenes	100	NA	103	103	88-122
o-Xylene	50	NA	52	103	90-123
Styrene	50	NA	51	102	87-131
Bromoform	50	NA	53	106	77-138
Isopropylbenzene	50	NA	53	107	88-125
cis-1,4-Dichloro-2-Butene	50	NA	46	93	60-140
trans-1,4-Dichloro-2-Butene	50	NA	48	97	60-140
Bromobenzene	50	NA	49	98	84-133
N-Propylbenzene	50	NA	52	103	88-124
1,1,2,2-Tetrachloroethane	50	NA	50	100	81-131
1,3,5-Trimethylbenzene	50	NA	50	101	89-124
2-Chlorotoluene	50	NA	51	101	84-128
1,2,3-Trichloropropane	50	NA	51	102	76-132
4-Chlorotoluene	50	NA	51	102	86-132
tert-Butylbenzene	50	NA	51	102	82-131
Pentachloroethane	50	NA	50	101	60-140
1,2,4-Trimethylbenzene	50	NA	49	98	88-121
P-Isopropyltoluene	50	NA	53	106	86-122
1,3-Dichlorobenzene	50	NA	50	101	86-124
1,4-Dichlorobenzene	50	NA	50	101	80-127
N-Butylbenzene	50	NA	49	99	81-133
sec-Butylbenzene	50	NA	51	103	85-122
1,2-Dichlorobenzene	50	NA	51	101	86-126
1,2-Dibromo-3-Chloropropane	50	NA	49	98	61-136
1,3,5-Trichlorobenzene	50	NA	50	99	67-128
Hexachlorobutadiene	50	NA	48	96	52-129

10-12-04

Katahdin Analytical Services 1000007

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 351 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 08/30/04
Analysis Date: 08/30/04
Report Date: 09/13/2004
Matrix: WATER
% Solids: NA

Lab ID: WG9501-1
Client ID: WG9501-Blank
SDG: WU2587
Extracted by: LAD
Extraction Method: 504.1
Analyst: LAD
Analysis Method: EPA 504.1
Lab Prep Batch: WG9501
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
106-93-4	1,2-Dibromoethane	U	0.020	1.0	0.020	0.020	0.020
877-09-8	Tetrachloro-M-Xylene		107%				

Katahdin Analytical Services 6000005

FORM 8
VOLATILE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 351 NAS KEY WEST SDG No.: WU2587

GC Column: RTX-CLP II ID: 0.53 (mm) Init. Calib. Date(s): 08/30/04 08/30/04

Instrument ID: GC03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 11.43

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	RT #
01	ICAL	0.02 UG/ML	08/30/04	1517	11.44	
02	ICAL	0.05 UG/ML	08/30/04	1535	11.43	
03	ICAL	0.10UG/ML	08/30/04	1554	11.43	
04	ICAL	0.25 UG/ML	08/30/04	1612	11.43	
05	ICAL	0.50 UG/ML	08/30/04	1631	11.43	
06	ICAL	1.0 UG/ML	08/30/04	1649	11.43	
07	ICAL	2.5 UG/ML	08/30/04	1707	11.43	
08	WG9501-BLANK	WG9501-1	08/30/04	1726	11.43	
09	WG9501-LCS	WG9501-2	08/30/04	1744	11.43	
10	WG9501-LCSD	WG9501-3	08/30/04	1803	11.43	
11	A824-MW-01-0	WU2587-1	08/30/04	1916	11.44	
12	RR-MW-06-080	WU2587-2	08/30/04	1934	11.44	
13	CV	CV	08/30/04	1953	11.44	
14						
15						
16						
17						
18						
19						
20						

ok.
ok
5 ok
ok

QC LIMITS
TCX = Tetrachloro-M-Xylene (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

10-11-04

FORM VIII PEST

FORM 8
SEMIVOLATILE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 351 NAS KEY WEST SDG No.: WU2587

GC Column: RTX-CLPII ID: 0.53 (mm) Init. Calib. Date(s): 08/30/04 08/30/04

Instrument ID: GC03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION TCX: 12.12					
	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	RT #
01	ICAL	0.02 UG/ML	08/30/04	1517	12.13	
02	ICAL	0.05 UG/ML	08/30/04	1535	12.12	
03	ICAL	0.10UG/ML	08/30/04	1554	12.12	
04	ICAL	0.25 UG/ML	08/30/04	1612	12.11	
05	ICAL	0.50 UG/ML	08/30/04	1631	12.11	
06	ICAL	1.0 UG/ML	08/30/04	1649	12.11	
07	ICAL	2.5 UG/ML	08/30/04	1707	12.11	
08	WG9501-BLANK	WG9501-1	08/30/04	1726	12.11	
09	WG9501-LCS	WG9501-2	08/30/04	1744	12.12	
10	WG9501-LCSD	WG9501-3	08/30/04	1803	12.12	
11	A824-MW-01-0	WU2587-1	08/30/04	1916	12.12	
12	RR-MW-06-080	WU2587-2	08/30/04	1934	12.12	
13	CV	CV	08/30/04	1953	12.13	
14						
15						
16						
17						
18						
19						
20						

ok
ok
ok
ok

QC LIMITS

TCX = Tetrachloro-M-Xylene (+/- 0.24 MINUTES)

10-11-04

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 351 NAS KEY WEST SDG No.: WU2587

GC Column(1): SPB 608 ID: 0.53 (mm) GC Column(2): RTX-CLP IIID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	S2 1 REC#	S2 2 REC#	S3 1 REC#	S3 2 REC#	TOT OUT
01	WG9501-BLANK	WG9501-1	105	107					0
02	WG9501-LCS	WG9501-2	130*	128					1
03	WG9501-LCSD	WG9501-3	130*	127					1
04	A824-MW-01-0804	WU2587-1	160*	166*					2
05	RR-MW-06-0804	WU2587-2	106	104					0
06									
07									
08									
09									
10									
11									
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28									

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-M-Xylene (57-128)

10-11-04

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

KATAHDIN ANALYTICAL SERVICES

Protocol: EPA 500 Methods

Method: EPA 504.1

Analysis: EDB & DBCP

Matrix: Aqueous

Surrogate ID: P2886

Spike ID: a) P2897
b) P2898
c) P2840
d) P2781

Reviewed by: _____

Count	Date Ext.	Init.	Client	Sample ID	Smpl. + Vial	Vial	Smpl. Amt.	Surr. Vol.	Spk. Vol.	Final Vol.	Comments
1	8-30-04	UAD	QC	0.02	NA	NA	35ml	12.5	B 10	2ml	
2	↓	↓	↓	0.05	↓	↓	↓	25	B 25	↓	
3				0.10				37.5	B 50		
4				0.25				50	B 125		
5				0.50				62.5	B 250		
6				1.0				125	A 50		
7				2.5				250	A 125		
8				WG8561-1				125	—		
9				-2				↓	B 125		
10	↓	↓	↓	-3	↓	↓	↓	↓	B 125	↓	

KATAHDIN ANALYTICAL SERVICES

Count	Date Ext.	Init.	Client	Sample ID	Smpl. + Vial	Vial	Smpl. Amt.	Surr. Vol.	Spk. Vol.	Final Vol.	Comments
1	8-30-04	LAD	QC	DBCM 149/ml	NA	NA	35ml	125	D 500	2ml	
2	↓	↓	↓	QC IND 0.25 ug/ml	↓	↓	↓	↓	C 125	↓	
3	↓	↓	↓	MDL 0.02 ug/ml	↓	↓	↓	↓	B 10	↓	
4	↓	↓	TT	LCS2587-1	63.40	26.70	36.70	↓	NA	↓	
5	↓	↓	↓	↓ ->	63.37	26.54 ~~26.54~~	36.83	↓	NA	↓	
6											
7											
8											
9											
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19											
20											

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 351 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 08/25/04
Analysis Date: 09/15/04
Report Date: 09/16/2004
Matrix: WATER
% Solids: NA

Lab ID: WG9400-1
Client ID: WG9400-Blank
SDG: WU2587
Extracted by: MC
Extraction Method: SW846 3520
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG9400
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	0.063	1.0	0.20	0.20	0.050
91-57-6	2-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.080
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.050
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.080
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.060
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.080
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.080
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.11
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.090
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.12
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.070
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.090
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.080
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.090
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.10
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.15
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.080
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.080
7297-45-2	2-Methylnaphthalene-d10		92%				
81103-79-9	Fluorene-d10		104%				
1718-52-1	Pyrene-d10		134%				

 U8671.D

10-11-04

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 351 NAS KEY WEST SDG No.: WU2587

Lab File ID: UD801 DFTPP Injection Date: 09/15/04

Instrument ID: GCMS-U DFTPP Injection Time: 1023

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 (0.4)1
69	Less than 100.0% of mass 198	49.2
70	Less than 2.0% of mass 69	0.1 (0.3)1
127	40.0 - 60.0% of mass 198	54.4
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	6.5
275	10.0 - 30.0% of mass 198	20.3
365	1.0 - 100.0% of mass 198	2.0
441	0.0 - 100.0% of mass 443	14.3 (86.3)2
442	40.0 - 100.0% of mass 198	85.8
443	17.0 - 23.0% of mass 442	16.6 (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		SSTD1.00U0915	U8663	09/15/04	1044
02		SSTD3.00U0915	U8664	09/15/04	1129
03		SSTD2.00U0915	U8665	09/15/04	1215
04		SSTD0.50U0915	U8666	09/15/04	1301
05		SSTD0.20U0915	U8667	09/15/04	1347
06	RR-MW-06-0804	WU2587-2	U8669	09/15/04	1521
07	A824-MW-01-0804	WU2587-1	U8670	09/15/04	1607
08	WG9400-BLANK	WG9400-1	U8671	09/15/04	1652
09	WG9400-LCS	WG9400-2	U8672	09/15/04	1738
10	WG9400-LCSD	WG9400-3	U8673	09/15/04	1823
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

ok

/ contaminat

ok

10-12-04

FORM V SV

FORM 2
WATER SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 351 NAS KEY WEST SDG No.: WU2587

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	RR-MW-06-0804	WU2587-2	77	83	80						0
02	A824-MW-01-0804	WU2587-1	84	93	81						0
03	WG9400-BLANK	WG9400-1	92	104	134						0
04	WG9400-LCS	WG9400-2	106	116	103						0
05	WG9400-LCSD	WG9400-3	103	118	110						0
06											
07											
08											
09											
10											
11											
12											
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24											
25											
26											
27											
28											

		QC LIMITS
S1	= 2-Methylnaphthalene-d1	(30-150)
S2	= Fluorene-d10	(30-150)
S3	= Pyrene-d10	(30-150)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

SV/
SIM-CLLE

Katahdin Analytical Services, Inc.
Organic Extraction Log

Protocol: SW846/EPA
Analysis: Semivolatile Organics
Date QC Started: 8-25-04
QC Expiration Date: 9-8-04
SURROGATE ID: SV1060 SIm
SURROGATE ID: SV1067 SV

Analytical Method: SW846-8270
EPA-625 or CLP
Extraction Technique: CLLE-3520
SEP-3510
Matrix: AQUEOUS
SPIKE ID: SV1065 SIm
SPIKE ID: SV1064 SV

CLEAN-UP: GC screen, GPC, Florisil, Acid Wash, Other:
Solvent Lot # MeCl2: A18E10
All volumes in milliliters unless otherwise indicated.

pH Adjustments - 1st extraction: >11
2nd extraction:
Have all samples been adjusted for pH? Yes

Count	Date Extracted	Ext. Init.	Sample ID	Initial Volume	Surr. Vol.	Spike Vol.	Final Vol.	Date Conc.	Tray Location	Init.	Comments
Blank-1	8-25-04	MC	W69400-1	1000mL	1mL	NR	1mL	09.14.04	SV002 B9	JP	R23426
LCS-1			-2			1mL			B10		
MS			-3						C1		
MSD	8/27/04	JFC	W69464-1 W69463-1	1000mL	2.0mL	NR	1mL	9-7-04	SV000 E1	MC	R23501 R23502
Blank-2			W69464-2		1.9mL	1.0mL			E2		LCS SIM
LCS-2			-3						E3		MS SIM W01461-47
Blank-3			-4						E4		MSD SIM W01461-47
LCS-3			W69469-2						E5		LCS SV
Blank-4			-3						E6		MS SV W01461-47Re
LCS-4			-4						E7		MSD SV W01461-47Re
Blank-5											
LCS-5											
Blank-6											
LCS-6											

SV/sim CLE

All volumes in milliliters unless otherwise indicated.

Count	Date Extracted	Ext. Init.	Sample ID	Initial Volume	Surr. Vol.	Spike Vol.	Final Vol.	Date Conc.	Tray Location	Init.	Comments
1	8-25-04	MC	WU2587 -1	1010mL	1mL	NR	1mL	09.14.04	SV002 C2	JP	
2	↓	↓	↓ -2	↓	↓	↓	↓	↓	C3	↓	
3	8/27/04	JFC	WU2661 - 2,15	1060mL	2.0mL	NR	1mL	9-7-04	SV000 E8	MC	-25V -15.57m
4	↓	↓	WU2661-3,16	↓	↓	↓	↓	↓	SV001 A1	↓	-3SV -16.57m
5			WU2661-4,17						A2		-4 SV -17.57m
6			WU2661-5,18						A3		-5SV -18.57m
7			WU2661-6,19						A4		-6 SV -19.57m
8			WU2661-7,20						A5		-7 SV -20.57m
9	↓	↓	WU2661-8,21	↓	↓	↓	↓	↓	A6	↓	-8 SV -21.57m
10											
11											
12											
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14											
15											
16											
17											
18											
19											
20											

Reviewed By: _____

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 351 NAS KEY WEST
PO No:
Sample Date:
Received Date:
Extraction Date: 08/26/04
Analysis Date: 09/10/04
Report Date: 09/13/2004
Matrix: WATER
% Solids: NA

Lab ID: WG9438-1
Client ID: WG9438-Blank
SDG: WU2587
Extracted by: MC
Extraction Method: SW846 3510
Analyst: SAW
Analysis Method: SW846 M8100
Lab Prep Batch: WG9438
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	Petroleum Range Organics	U	500	1.0	500	500	280
	n-Triacontane-D62		75%				
	O-Terphenyl		* 80%				

FORM 8
FL-PRO ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 351 NAS KEY WEST SDG No.: WU2587

GC Column: ZB-1 ID: 0.53 (mm) Init. Calib. Date(s): 01/15/04 01/15/04

Instrument ID: GC12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 18.20 S2 : 24.42

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
01	ICAL	FLPRO 5 UG/M	01/15/04	0329	18.20	24.42
02	ICAL	FLPRO 20 UG/	01/15/04	0438	18.20	24.42
03	ICAL	FLPRO 50 UG/	01/15/04	0548	18.20	24.42
04	ICAL	FLPRO 100UG/	01/15/04	0658	18.20	24.42
05	ICAL	FLPRO 200UG/	01/15/04	0809	18.20	24.42
06	INDSOURCE	FLPRO IND	01/15/04	0919	18.20	24.42
07	CV	FLPRO 50 UG/	09/10/04	1630	18.08	24.23
08	WG9438-BLANK	WG9438-1	09/10/04	1850	18.08	24.23
09	WG9438-LCS	WG9438-2	09/10/04	2000	18.08	24.23
10	WG9438-LCSD	WG9438-3	09/10/04	2110	18.08	24.23
11	A824-MW-01-0	WU2587-1	09/10/04	2220	18.08	24.22
12	RR-MW-06-080	WU2587-2	09/10/04	2330	18.08	24.23
13	CV	FLPRO 50 UG/	09/11/04	0259	18.08	24.23
14						
15						
16						
17						
18						
19						
20						

ok
OK
clean.
OK
OK

QC LIMITS

S1 = O-Terphenyl (+/- 0.36 MINUTES)
S2 = n-Triacontane-D62 (+/- 0.49 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PEST

FORM 2

WATER FL-PRO SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 351 NAS KEY WEST SDG No.: WU2587

10-12-04

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 OTP#	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	WG9438-BLANK	WG9438-1	75	80*							1
02	WG9438-LCS	WG9438-2	78	84							0
03	WG9438-LCSD	WG9438-3	85	92							0
04	A824-MW-01-0804	WU2587-1	70	90							0
05	RR-MW-06-0804	WU2587-2	101	101							0
06											
07											
08											
09											
10											
11											
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27											
28											

		QC LIMITS
S1	= n-Triacontane-D62	(42-193)
S2 (OTP)	= O-Terphenyl	(82-142)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

FORM II SV-1

FLO PRO - SEP

Katahdin Analytical Services, Inc.
Organic Extraction Log

Analysis: FUEL OILS by: SW846/8015M MEDEP 4.1.25 MADEP EPH FLOPRO CT ETPH

Extraction: SW846: CLLE/3520 SEP/3510

Date QC Started: 8-26-04

QC Expiration Date: 9-9-04

Matrix: AQUEOUS

QC Batch ID:

SURROGATE ID: GC0131; GC0151 (A

SPIKE ID: GC0138

CLEAN-UP: GC screen, GPC, Florosil, Acid Wash, Other:

Solvent Lot # MRCl2: A18E10

Solvent Lot #

Sample pHs checked prior to extraction: Y / N

(unpreserved samples should be noted on comments.)

Blanks & LCSs adjusted to pH 2 w/ 1:1 HCl: Y / N

Count	Date Extracted	Ext. Init.	Sample ID	Initial Volume	Surr. Vol.	Spike Vol.	Final Vol.	Date Conc.	Tray Location	Init.	Comments
Blank-1	8-26-04	MC	WG9438-1	1000ml	2ml	MR	2ml	9-8-04	~~F0339~~ JP	~~JP~~/JP AB	MC Tray location FL17 A9
LCS-1	↓	↓	↓ -2	↓	↓	2ml	↓	↓	See side	↓	↓ A10
MS	↓	↓	↓ -3	↓	↓	↓	↓	↓		↓	↓ A11
MSD											
Blank-2											
LCS-2											
Blank-3											
LCS-3											
Blank-4											
LCS-4											
Blank-5											
LCS-5											
Blank-6											
LCS-6											

Count	Date Extracted	Ext. Init.	Sample ID	Initial Volume	Surr. Vol.	Spike Vol.	Final Vol.	Date Conc.	Tray Location	Init.	Comments
1	8-26-04	MC	WU2587-1	1010mL	2mL	NR	2mL	9-8-04	FL7 / A12	MC	
2	↓	↓	↓ -2	↓	↓	↓	↓	↓	B1	↓	(M)
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
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18											
19											
20											

Reviewed By: _____

LABORATORY NARRATIVE
Modified RSK 175
Katahdin Laboratory
Workorder# 0408459

Two VOA Vial-40 mL samples were received on August 24, 2004. The laboratory performed analysis via Modified RSK 175 for Methane using GC/FID. The method involves placing an aliquot of the sample in a headspace vial. The vial is then placed into HP7694 Headspace Autosampler equipped with oven, shaker and 1 mL sample loop. Sample is incubated and then equilibrated at 40°C for 15 minutes with high agitation. Finally, a direct injection of the headspace is performed. See the data sheets for the reporting limits for each compound.

Requirement	*RSK 175*	*ATL Modifications*
Sample Collection	Collect sample in 60 mL crimp-top vial.	Collect sample in 40 mL VOA vial.
Headspace Generation	Headspace is generated in 60 mL sample vial by displacing volume of liquid with Helium. The amount of liquid should be 10% of sample volume in bottle, up to 10 mL.	5.0 mL of sample is displaced with 5.0 mL Nitrogen and transferred to a Nitrogen purged and capped autosampler vial. Headspace is then generated in the autosampler vial.
Sample Preparation	Sample is shaken 5 min. to equilibrate analyte between headspace and liquid phase.	Prior to injection, autosampler shakes sample for 15 min. while heating to 40°C.
Headspace Injection	Syringe injection of 300 mL headspace into GC.	Autosampler pressurizes sample to fill 1.0 mL loop with headspace sample.
Calibration and Quantitation	Direct injections of gas phase standards are used to obtain a Calibration Curve. Henry's Law is used to calculate mg of gas per Liter of water. Calculation requires recording total volume of serum bottle and headspace, and sample temperature.	Calibration standards are prepared by addition of a gaseous spike solution to clean water. Response factors are calculated for each level of a multi point calibration, and the mean is used to calculate quantitation for each target analyte.
Initial Calibration Curve (ICAL)	Linear regression	% RSD </= 30%, use average RF to quantify results
Lab Blanks	Blank subtraction is performed.	No blank subtraction; Lab Blank must be less than the Reporting Limit.
Specified Detectors	FID or ECD	FID or TCD

Receiving Notes

Water samples A824-MW-01-0804 and RR-MW-06-0804 were received with a significant amount of headspace. (i.e., the diameter of the bubble was greater than 5 mm). The discrepancy was noted in the Sample Receipt Confirmation email/fax.

0002

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
A824-MW-01-0804	0408459-01A	8/19/2004	8/26/2004	NA	8	8/27/2004	NA	Good
RR-MW-06-0804	0408459-02A	8/19/2004	8/26/2004	NA	8	8/27/2004	NA	Good
Lab Blank	0408459-03A	NA	NA	NA	NA	8/27/2004	NA	Good
LCS	0408459-04A	NA	NA	NA	NA	8/27/2004	NA	Good
LCSD	0408459-05A	NA	NA	NA	NA	8/27/2004	NA	Good

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0408459-03A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7082704	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 8/27/04 09:01 AM	

Compound	Rpt. Limit (uG/L)	Amount (uG/L)
Methane	10	Not Detected

Container Type: NA - Not Applicable

Instrument RunLog

@Air Toxics Ltd.

Log Book #: 842

192

0021

	Use	File #	Sample Name/Client	Can #	Pressure	Amount	Dilution Factor	Date Analyzed	Time Analyzed	Init.	Comments
1	✓	7041l-01	Blank	HQSP	5.41psi	1.0mL	1.0	4/11/03	1056	ACT	
2	✓	02	738-152A						1142		
3	✓	03	B						1205		
4	✓	04	C						1229		
5	✓	05	D						1252		
6	✓	06	E						1315		
7	✓	07	F						1338		
8	✓	08	G						1402		
9	✓	09	LCS						1425		
10	✓	10	Blank						1448		
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

4/11/03 ACT

10-12-04

Calculation Check: File ID: 7041105a Compound: Methane Initials: ACT

Sample amount = Area Counts Sample x Dilution Factor = (1215758) x (1) = 0.0628600

(19329655)

Reported Result: 0.0629

RF

Signed

4/11/03

Date

Date Revised: 07/11/01

Instrument RunLog

@Air Toxics Ltd. Method Type: Mod. RSK-175 Logbook #: 941

366

	Use	File #	Sample Name/Client	Can #/Vial #	Pressure	Amount	DF	Date Analyzed	Time Analyzed	Init	Comments
1	✓	7082701	1068-12A -01	HDSP	5.4 psi	1.0 mL Loop	1.00	8/27/04	0754	ACT	CCV — OK
2	✓	02	1068-11F -01						0816		LCS → Batch: 082704-01
3	✓	03	↓ -02						0839		LCSD SGC
4	✓	04	Lab Blank -01						0901		— clean.
5	✓	05	0408459 -01A						0933		
6	✓	06	↓ -02A						0955		
7	✓	07	0408460 -01A						1017		
8	✓	08	↓ -02A						1039		
9	R	09	↓ -03A						1102		Bad Run
10	✓	10	0408487 -01A						1124		
11	✓	11	0408524 -01A						1146		
12	✓	12	↓ -01AA						1208		
13	✓	13	0408525 -01A						1231		
14	✓	14	0408460 -03A						1253		
15	✓	15	1068-12A -02						1315		

Calculation Check: File ID: 7082701 — 8/27/04 Compound: Methane Initials: ACT

Sample amount = Area Counts Sample / RF x Dilution Factor = (27491503) / (19329654.8) x (1.00) = 1.422 Reported Result: 1.422

Signed — 8/27/04 Date

Date Revised: 08/23/02

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab Sample ID: &

Client Sample ID: LCSD & LCS

Lab File ID: 7082702.d & 7082703.d

Dilution: 1.00 & 1.00

Date Analyzed: 8/27/04 & 8/27/04

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD
74-82-8	Methane	85		105		21

70-130

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Headspace Preparation Logbook

@Air Toxics Ltd.

Logbook #: 900

Preparation Date: 4/11/03 **Analysis:** Methane/Ethane/Ethene/Propane/Propene **pH (CO_2 Analysis only):** NA

ATL Sample ID #	Client I.D. #	Final Vol. (mL)	Comments
738-132 A	NA	5.0	Spike Volume: 0.30 mL from 738-134
B			0.38 mL 738-135
C			2.0 mL ↓
D			5.0 mL
E			1.0 mL 738-133
F			4.0 mL ↓
G			1.0 mL 843-181
Lab Blank			

4/11/03 AG

Spiking Information

	Spike Std.ID	Spike Vol.(µL)	Spike Conc. (%)	Final Conc. (µg/mL water)
CCV	4/11/03 AG		Methane: ~~Ethane:~~ Ethene: Propane: Propene: CO_2:	Methane: ~~Ethane:~~ Ethene: Propane: Propene: CO_2:
LCS/MS /MSD	738-131 D -1 4-11-03 AG	50	Methane: 50.0 Ethane: 25.0 Ethene: 25.0	Methane: 0.378 Ethane: 0.354 Ethene: 0.331
		50	Propane: 0.1 Propene: 0.1 CO_2: NA	Propane: 0.002 Propene: 0.002 CO_2: NA

Comments:

Signed

4/11/03
Date

0020

Headspace Preparation Logbook **@Air Toxics Ltd.** **Logbook #:** 110

Date / Batch ID: 082704-01 **pH of QC:** NA (CO2 On

ATL Sample ID #		Client ID #	Comments
0408459	-01A	A824-MW-01-0804	bubble >5mm pH<2
↓	-02A	RR-MW-06-0804	↓ ↓
0408460	-01A	0435ITSI091	
↓	-02A	↓ 90	
↓	-03A	↓ 94	bubble ≥5 mm
0408487	-01A	0435ITSI089	
Lab Blank	-01	NA	
LCS	-01	↓	
LCSD	-01	↓	
0408524	-01A	C-1	bubble <5mm
↓	-01AA	↓	
0408525	-01A	R-2	
0408460	-03A	0435ITSI094	bubble <5mm (hold vial)

8/27/04
AG

- ***based on a 5 mL final volume***

Spike ID		Final Conc. (µg/mL)			
LCS/MS/MSD	1068-11F-1	Methane:	0.756	Propane:	NA
		Ethane:	0.709	Propene:	↓
		Ethene:	0.661	CO2:	

Comments: CCV: 1068-12A-1,2

Signed 8/27/04 Date

0066

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**C. BRYAN**	**DATE:**	**OCTOBER 7, 2004**
FROM:	**ETHAN G. LEE**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – LEAD AND MISCELLANEOUS PARAMETERS**
NAS KEY WEST – CTO 318
SAMPLE DELIVERY GROUP (SDG) – WU2587

SAMPLES: 2/AQUEOUS/

A824-MW-01-0804 RR-MW-06-0804

Overview

The sample set for NAS Key West, CTO 318, SDG WU2587, consists of two (2) aqueous environmental samples.

The samples were analyzed for lead, nitrate, and sulfate. The samples were collected by Tetra Tech NUS on August 19, 2004 and analyzed by Katahdin Analytical Services. Lead analyses were conducted using SW846 method 6010B. Nitrate analyses were conducted using EPA method 353.2. Sulfate analyses were conducted using EPA method 375.4.

Metals analyses were conducted using Inductively Coupled Plasma (ICP) methodologies.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Recoveries
* • Laboratory Blank Analyses
* • Detection Limits

Notes

Dilutions were performed for sulfate for both samples due to high concentrations.

Executive Summary

Laboratory Performance: No quality control issues were noted for this SDG.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", July 2002 and the NFESC document entitled "Navy IRCDQM" (September 1999).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Ethan G. Lee
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 - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % 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 (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.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 less than sample activity

PROJ_NO: 4779

SDG: WU2587 MEDIA: WATER DATA FRACTION: M

nsample	A824-MW-01-0804
samp_date	8/19/2004
lab_id	WU2587-001
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	1.7	U	

nsample	RR-MW-06-0804
samp_date	8/19/2004
lab_id	WU2587-002
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	1.7	U	

PROJ_NO: 4779

SDG: WU2587 MEDIA: WATER DATA FRACTION: MISC

nsample	A824-MW-01-0804
samp_date	8/19/2004
lab_id	WU2587-1
qc_type	NM
Pct_Solids	
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.54		
SULFATE	MG/L	290		

nsample	RR-MW-06-0804
samp_date	8/19/2004
lab_id	WU2587-2
qc_type	NM
Pct_Solids	
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
NITRATE-N	MG/L	0.05	U	
SULFATE	MG/L	82		

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** A824-MW-01-0804

Matrix: WATER **SDG Name:** WU2587

Percent Solids: 0.00 **Lab Sample ID:** WU2587-001

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.70	U		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** RR-MW-06-0804

Matrix: WATER **SDG Name:** WU2587

Percent Solids: 0.00 **Lab Sample ID:** WU2587-002

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-92-1	LEAD, TOTAL	1.70	U		P	1	5.0	1.70

Color Before: N/A Clarity Before: N/A

Color After: N/A Clarity After: N/A

Comments:

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU2587-1
Report Date: 16-SEP-04
Client PO: MSA-0402-N4113-05 N2943
Project: CTO 351 NAS KEY WEST
SDG: WU2587

Sample Description	Matrix	Date Sampled	Date Received
A824-MW-01-0804	AQ	19-AUG-04	20-AUG-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	0.54 mg/L	.05	EPA 353.2	WG9335	20-AUG-04	PAG	N/A	N/A	N/A	
Sulfate-Turbidimetric	290 mg/L	10	EPA 375.4	WG9845	11-SEP-04	KGT	N/A	N/A	N/A	

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: WU2587-2
Report Date: 16-SEP-04
Client PO: MSA-0402-N4113-05 N2943
Project: CTO 351 NAS KEY WEST
SDG: WU2587

Sample Description	Matrix	Date Sampled	Date Received
RR-MW-06-0804	AQ	19-AUG-04	20-AUG-04

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	By	Prep. Method	Prep. Date	By	Footnotes
Nitrate As N	U0.050 mg/L	.05	EPA 353.2	WG9335	20-AUG-04	PAG	N/A	N/A	N/A	
Sulfate-Turbidimetric	82. mg/L	5	EPA 375.4	WG9845	11-SEP-04	KGT	N/A	N/A	N/A	

APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG WU2587

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	A824-MW-01-0804	WU2587-001	NM	08/19/2004	09/09/2004	09/22/2004	21	13	34
M	UG/L	RR-MW-06-0804	WU2587-002	NM	08/19/2004	09/09/2004	09/22/2004	21	13	34
NTA	MG/L	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/20/2004	08/20/2004	1	0	1
NTA	MG/L	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/20/2004	08/20/2004	1	0	1
SO4	MG/L	RR-MW-06-0804	WU2587-2	NM	08/19/2004	09/11/2004	09/11/2004	23	0	23
SO4	MG/L	A824-MW-01-0804	WU2587-1	NM	08/19/2004	09/11/2004	09/11/2004	23	0	23
OS	%	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/25/2004	09/15/2004	6	21	27
OS	%	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/25/2004	09/15/2004	6	21	27
OS	UG/L	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/25/2004	09/15/2004	6	21	27
OS	UG/L	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/25/2004	09/15/2004	6	21	27
EDB	%	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/30/2004	08/30/2004	11	0	11
EDB	%	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/30/2004	08/30/2004	11	0	11
EDB	UG/L	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/30/2004	08/30/2004	11	0	11
EDB	UG/L	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/30/2004	08/30/2004	11	0	11
OV	%	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/31/2004	08/31/2004	12	0	12

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	%	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/31/2004	08/31/2004	12	0	12
OV	%	TRIP BLANK	WU2587-3	NM	07/26/2004	08/31/2004	08/31/2004	36	0	36
OV	UG/L	TRIP BLANK	WU2587-3	NM	07/26/2004	08/31/2004	08/31/2004	36	0	36
OV	UG/L	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/31/2004	08/31/2004	12	0	12
OV	UG/L	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/31/2004	08/31/2004	12	0	12
METH	UG/L	A824-MW-01-0804	0408459-01A	NM	08/19/2004	08/27/2004	08/27/2004	8	0	8
METH	UG/L	RR-MW-06-0804	0408459-02A	NM	08/19/2004	08/27/2004	08/27/2004	8	0	8
TPH	%	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/26/2004	09/10/2004	7	15	22
TPH	%	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/26/2004	09/10/2004	7	15	22
TPH	UG/L	A824-MW-01-0804	WU2587-1	NM	08/19/2004	08/26/2004	09/10/2004	7	15	22
TPH	UG/L	RR-MW-06-0804	WU2587-2	NM	08/19/2004	08/26/2004	09/10/2004	7	15	22

Katahdin ANALYTICAL SERVICES
340 County Road No. 5
P.O. Box 720
Westbrook, ME 04092
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

7

Page 1 of 1

Client	Contact	Phone #	Fax #
Tetra Tech NUS	Chuck Bryan	(803) 649-7963	(803) 642-8454

Address 900 Trail Ridge Road City Aiken State SC Zip Code 29803

Purchase Order # Proj. Name / No. Katahdin Quote #

Bill (if different than above) ~~Address~~ Air Bill # 8425-8908-9104

Sampler (Print / Sign) SCOTT R. McGuire / Scott R. McGuire Copies To:

LAB USE ONLY WORK ORDER #: EM2587

KATAHDIN PROJECT NUMBER

REMARKS:

SHIPPING INFO: ☒ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO:

TEMP°C ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	ANALYSIS AND CONTAINER TYPE PRESERVATIVES: Filt. ☐Y ☐N BTEX, MTBE, PPL VOH/HCl	RAH	EDB/HCl	TRPH/HCl	Lead/HNO3	Nitrate, Sulfate	Methane/HCl	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N
	A824-MW-01-0804	19 Aug 04 / 1115	GW	12	3	1	2	2	1 ✓	1 ✓	2			
	RR-MW-06-0804	19 Aug 04 / 1220	GW	12	3	1	2	2	1 ✓	1 ✓	2			
	Trip Blank	/			✓									
		/												
		/												
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		/												
		/												
		/												
	SRM	/												

COMMENTS

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Scott R. McGuire	8/19/04 1500	Fed Ex		8/20/04 0905	
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

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

ORIGINAL

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO 351 NAS KEY WEST
TASK ORDER MANAGER: CHARLES BRYAN
WU2587

Sample Receipt

The following samples were received on August 20, 2004 and were logged in under Katahdin Analytical Services work order number WU2587 for a hardcopy due date of September 15, 2004.

KATAHDIN Sample No.	TTNUS Sample Identification
WU2587-1	A824-MW-01-0804
WU2587-2	RR-MW-06-0804
WU2587-3	TRIP BLANK

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.

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, **Andrea J. Colby**. This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order WU2587 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, Office of Solid Waste and Emergency Response, for the specific methods listed below or on the Report of Analysis. Some manual integrations may have been performed due to split peaks and/or corrected baselines. All have been flagged with a "M" (software-generated) on the pertinent quantitation report.

FL-PRO Analysis

The method blank WG9438-1 had a low recovery for the surrogate, o-terphenyl that was low and outside of the method acceptance limits. The recovery for the second surrogate n-triacontane-D_{62} was within the method acceptance limits. Since the surrogate recoveries for samples WU2587-1 and 2 were acceptable the samples were not reextracted.

The calibration verification standards (CV) (files CUI2027 and CUI2036) had low responses for one or more of the individual hydrocarbons, which resulted in %D's that were greater than 25%. Since the

method requirement applies to only the PRO range responses, which were acceptable, the associated samples were not reanalyzed.

504 Analysis

The laboratory control sample and the laboratory control duplicate sample (WG9501-2 and 3) have high recoveries for the surrogate TCMX on channel A that are outside of laboratory established acceptance limits. Since the surrogate on the second channel was acceptable, the samples were not reextracted.

Sample WU2587-1 had high recoveries for the surrogate TCMX on both channels that were outside of laboratory established acceptance limits. Since a high recovery would indicate a high bias and the sample did not detect any target analytes above the MDL, the sample was not reanalyzed.

8270C SIM Analysis

One or more target analytes may have been detected above the MDL in some method blanks. Any of these analytes that were also detected in any of the associated samples were flagged with a "B" qualifier indicating that the analyte was detected in the method blank analyzed and/or extracted concurrently with the sample.

8260B Analysis

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived for the full list of spiked compounds. The acceptance limits for the MS/MSD are for a short list of the spiked compounds. Katahdin standard operating procedure is not to take corrective action until greater than ten percent of the spiked analytes (with the exception of the common laboratory contaminants acetone and methylene chloride) in the LCS are outside of the QC limits.

One or more target analytes may have been detected above the MDL in some method blanks. Any of these analytes that were also detected in any of the associated samples were flagged with a "B" qualifier indicating that the analyte was detected in the method blank analyzed and/or extracted concurrently with the sample.

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

Metals Analysis

The samples of Katahdin Work Order WU2587 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Aqueous Waste", SW-846, November 1986, Third Edition.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Aqueous-matrix Katahdin Sample Nos. WU2587-(1 and 2) were digested for ICP analysis on 09/09/04 (QC Batch UI09ICW0) in accordance with USEPA Method 3010A.

ICP analyses of Work Order WU2587 sample digestates were performed in accordance with USEPA Method 6010A using a Thermo Jarrell Ash (TJA) Trace ICP spectrometer. All samples were analyzed

within holding times and all analytical run QC criteria were met, with the following comments or exceptions:

Some of the results for run QC samples (ICV, ICB, CCV, CCB, ICSA, and ICSAB) included in the accompanying data package may have exceeded acceptance limits for some elements. Please note that all client samples and batch QC samples associated with out-of-control results for run QC samples were subsequently reanalyzed for the analytes in question with the following exception:

The Contract Required detection limit sample (CRI) analyzed in analytical sequence AUI21A at 21:26 failed high for lead. The associated sample results were accepted because they had measured lead concentrations below the Practical Quantitation Limit (PQL).

Wet Chemistry Analysis

The samples of Work Order WU2587 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for nitrate and sulfate were performed according to "Methods for Chemical Analysis of Water and Wastes", EPA 600/4-79-020, 1979 Revised 1983, U.S. EPA.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Practical Quantitation Limit (PQL) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U PQL", where "PQL" is the numerical value of the Practical Quantitation Limit.

All analyses were performed within analytical hold times. All quality control criteria were met.

No deviations were noted by the Wet Chemistry group.

Subcontracted Analysis

Analyses for Methane, Ethane, and Ethene were performed by a subcontract laboratory. Please refer to the section of the data package titled Subcontracted Data.

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.

Deborah J. Nadeau 9.29.04

Deborah Nadeau
Operations Manager

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: WU2587 **SOW No.** SW846

Client Field ID	Lab Sample ID
A824-MW-01-0804	WU2587-001
RR-MW-06-0804	WU2587-002

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: Edward A. Morgan Name: Edward A. Morgan

Date: September 28, 2004 Title: Senior Chemist

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Concentration Units: ug/L

SAMPLE: ICV

File: AUI14B Sep 14, 2004 16:49

Analyte	True	Found	%R (1)
ALUMINUM	20000.0	18455.57	92.3
CALCIUM	20000.0	20946.95	104.7
IRON	20000.0	20162.05	100.8
LEAD	550.0	584.93	106.4
MAGNESIUM	20000.0	21162.88	105.8

SAMPLE: CCV

File: AUI14B Sep 14, 2004 17:29

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	48802.26	97.6
CALCIUM	50000.0	51659.45	103.3
IRON	20000.0	20409.11	102.0
LEAD	1000.0	1035.77	103.6
MAGNESIUM	50000.0	52160.53	104.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Concentration Units: ug/L

SAMPLE: CCV

File: AUI14B Sep 14, 2004 18:54

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	48602.96	97.2
CALCIUM	50000.0	51907.72	103.8
IRON	20000.0	20520.18	102.6
LEAD	1000.0	1056.27	105.6
MAGNESIUM	50000.0	52598.17	105.2

SAMPLE: CCV

File: AUI14B Sep 14, 2004 20:15

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	49102.38	98.2
CALCIUM	50000.0	51692.03	103.4
IRON	20000.0	20388.59	101.9
LEAD	1000.0	1038.89	103.9
MAGNESIUM	50000.0	52436.40	104.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Concentration Units: ug/L

SAMPLE: CCV

File: AUI14B Sep 14, 2004 21:35

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	50015.14	100.0
CALCIUM	50000.0	52547.78	105.1
IRON	20000.0	20761.50	103.8
LEAD	1000.0	1058.38	105.8
MAGNESIUM	50000.0	53415.12	106.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Concentration Units: ug/L

SAMPLE: ICV

File: AUI21A Sep 21, 2004 12:59

Analyte	True	Found	%R (1)
ALUMINUM	20000.0	18971.96	94.9
CALCIUM	20000.0	21135.06	105.7
IRON	20000.0	20463.45	102.3
LEAD	550.0	562.01	102.2
MAGNESIUM	20000.0	21418.44	107.1

SAMPLE: CCV

File: AUI21A Sep 21, 2004 13:39

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	48843.40	97.7
CALCIUM	50000.0	52061.00	104.1
IRON	20000.0	20629.42	103.1
LEAD	1000.0	1022.61	102.3
MAGNESIUM	50000.0	52429.84	104.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Concentration Units: ug/L

SAMPLE: CCV

File: AUI21A Sep 21, 2004 15:04

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	49240.76	98.5
CALCIUM	50000.0	52461.86	104.9
IRON	20000.0	20718.97	103.6
LEAD	1000.0	1028.14	102.8
MAGNESIUM	50000.0	52617.87	105.2

SAMPLE: CCV

File: AUI21A Sep 21, 2004 16:24

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	48326.06	96.7
CALCIUM	50000.0	51349.68	102.7
IRON	20000.0	20319.90	101.6
LEAD	1000.0	1007.13	100.7
MAGNESIUM	50000.0	51678.78	103.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Concentration Units: ug/L

SAMPLE: CCV

File: AUI21A Sep 21, 2004 17:45

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	48191.32	96.4
CALCIUM	50000.0	51956.94	103.9
IRON	20000.0	20522.62	102.6
LEAD	1000.0	1020.49	102.0
MAGNESIUM	50000.0	51988.48	104.0

SAMPLE: CCV

File: AUI21A Sep 21, 2004 19:05

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	48115.77	96.2
CALCIUM	50000.0	52325.79	104.7
IRON	20000.0	20626.59	103.1
LEAD	1000.0	1042.03	104.2
MAGNESIUM	50000.0	52291.66	104.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Concentration Units: ug/L

SAMPLE: CCV

File: AUI21A Sep 21, 2004 20:26

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	47520.63	95.0
CALCIUM	50000.0	53231.17	106.5
IRON	20000.0	21142.44	105.7
LEAD	1000.0	1077.98	107.8
MAGNESIUM	50000.0	53204.76	106.4

SAMPLE: CCV

File: AUI21A Sep 21, 2004 21:46

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	47568.89	95.1
CALCIUM	50000.0	53325.18	106.7
IRON	20000.0	21250.19	106.3
LEAD	1000.0	1076.24	107.6
MAGNESIUM	50000.0	53087.02	106.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Concentration Units: ug/L

SAMPLE: CCV

File: AUI21A Sep 21, 2004 23:07

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	47517.63	95.0
CALCIUM	50000.0	53513.35	107.0
IRON	20000.0	21299.61	106.5
LEAD	1000.0	1084.75	108.5
MAGNESIUM	50000.0	53135.00	106.3

SAMPLE: CCV

File: AUI21A Sep 22, 2004 0:28

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	47365.03	94.7
CALCIUM	50000.0	53618.78	107.2
IRON	20000.0	21333.36	106.7
LEAD	1000.0	1098.55	109.9
MAGNESIUM	50000.0	53152.00	106.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Concentration Units: ug/L

SAMPLE: CCV

File: AUI21A Sep 22, 2004 1:48

Analyte	True	Found	%R (1)
ALUMINUM	50000.0	47160.01	94.3
CALCIUM	50000.0	53527.51	107.1
IRON	20000.0	21355.65	106.8
LEAD	1000.0	1103.01	110.3
MAGNESIUM	50000.0	53072.34	106.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWUI09ICW0

Matrix: WATER **SDG Name:** WU2587

QC Batch ID: UI09ICW0

Concentration Units : ug/L

Analyte	RESULT	C
LEAD	-1.980	B

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Concentration Units: ug/L

SAMPLE: ICB

File: AUI14B Sep 14, 2004 16:56

Analyte	Result	C
ALUMINUM	21.47	B
CALCIUM	3.13	U
IRON	10.70	U
LEAD	-2.27	B
MAGNESIUM	7.52	U

SAMPLE: CCB

File: AUI14B Sep 14, 2004 17:36

Analyte	Result	C
ALUMINUM	18.30	U
CALCIUM	3.13	U
IRON	10.70	U
LEAD	-1.95	B
MAGNESIUM	7.52	U

SAMPLE: CCB

File: AUI14B Sep 14, 2004 19:01

Analyte	Result	C
ALUMINUM	18.30	U
CALCIUM	3.13	U
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.52	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Concentration Units: ug/L

SAMPLE: CCB

File: AUI14B Sep 14, 2004 20:21

Analyte	Result	C
ALUMINUM	-45.91	B
CALCIUM	6.93	B
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.52	U

SAMPLE: CCB

File: AUI14B Sep 14, 2004 21:42

Analyte	Result	C
ALUMINUM	-77.23	B
CALCIUM	13.26	B
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.52	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Concentration Units: ug/L

SAMPLE: ICB

File: AUI21A Sep 21, 2004 13:06

Analyte	Result	C
ALUMINUM	18.30	U
CALCIUM	3.13	U
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.52	U

SAMPLE: CCB

File: AUI21A Sep 21, 2004 13:46

Analyte	Result	C
ALUMINUM	18.30	U
CALCIUM	10.12	B
IRON	-11.33	B
LEAD	1.70	U
MAGNESIUM	9.70	B

SAMPLE: CCB

File: AUI21A Sep 21, 2004 15:11

Analyte	Result	C
ALUMINUM	48.31	B
CALCIUM	4.74	B
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.52	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Concentration Units: ug/L

SAMPLE: CCB

File: AUI21A Sep 21, 2004 16:31

Analyte	Result	C
ALUMINUM	40.48	B
CALCIUM	4.82	B
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.52	U

SAMPLE: CCB

File: AUI21A Sep 21, 2004 17:51

Analyte	Result	C
ALUMINUM	76.65	B
CALCIUM	3.13	U
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.62	B

SAMPLE: CCB

File: AUI21A Sep 21, 2004 19:12

Analyte	Result	C
ALUMINUM	93.09	B
CALCIUM	3.13	U
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.52	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Concentration Units: ug/L

SAMPLE: CCB

File: AUI21A Sep 21, 2004 20:33

Analyte	Result	C
ALUMINUM	127.16	B
CALCIUM	-4.78	B
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.52	U

SAMPLE: CCB

File: AUI21A Sep 21, 2004 21:53

Analyte	Result	C
ALUMINUM	129.47	B
CALCIUM	-5.13	B
IRON	-11.14	B
LEAD	1.70	U
MAGNESIUM	7.52	U

SAMPLE: CCB

File: AUI21A Sep 21, 2004 23:14

Analyte	Result	C
ALUMINUM	159.70	B
CALCIUM	-6.64	B
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	9.14	B

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Concentration Units: ug/L

SAMPLE: CCB

File: AUI21A Sep 22, 2004 0:34

Analyte	Result	C
ALUMINUM	180.60	B
CALCIUM	-8.32	B
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.64	B

SAMPLE: CCB

File: AUI21A Sep 22, 2004 1:55

Analyte	Result	C
ALUMINUM	193.75	B
CALCIUM	-13.10	B
IRON	10.70	U
LEAD	1.70	U
MAGNESIUM	7.52	U

Quality Control Report

Blank Sample Summary Report

Nitrate As N

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG9335	EPA 353.2	20-AUG-04	N/A	U 0.050 mg/L	.05 mg/L

Nitrite As N

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG9335	EPA 353.2	20-AUG-04	N/A	U 0.050 mg/L	.05 mg/L

Sulfate-Turbidimetric

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG9845	EPA 375.4	11-SEP-04	N/A	U 1.0 mg/L	1 mg/L

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** A

Instrument Name: TJA TRACE ICP **Date:** 4/28/04

Concentration Units: ug/L

Analyte	CRDL	IDL	M
LEAD	5.0	1.70	P

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** UI09ICW0

Matrix: WATER **SDG Name:** WU2587

Method: P **Prep Date:** 09/09/2004

Client ID	Lab Sample ID	Initial (L)	Final (L)
LCSWUI09ICW0	LCSWUI09ICW0	0.05	0.05
PBWUI09ICW0	PBWUI09ICW0	0.05	0.05
A824-MW-01-0804	WU2587-001	0.05	0.05
RR-MW-06-0804	WU2587-002	0.05	0.05

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Instrument ID: TJA TRACE ICP **File Name:** AUI14B

Date: 9/14/04 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
S0		1	15:59 Al	Ca Fe Pb Mg
S1		1	16:06 Al	Ca Fe Pb Mg
AL_IEC		1	16:16 Al	Ca Fe Pb Mg
FE_IEC		1	16:22 Al	Ca Fe Pb Mg
MN_IEC		1	16:29 Al	Ca Fe Pb Mg
MN_IEC		1	16:36 Al	Ca Fe Pb Mg
IEC		1	16:42 Al	Ca Fe Pb Mg
ICV		1	16:49 Al	Ca Fe Pb Mg
ICB		1	16:56 Al	Ca Fe Pb Mg
PQL		1	17:03 Al	Ca Fe Pb Mg
CRI		1	17:09 Al	Ca Fe Pb Mg
ICSA		1	17:16 Al	Ca Fe Pb Mg
ICSAB		1	17:23 Al	Ca Fe Pb Mg
CCV		1	17:29 Al	Ca Fe Pb Mg
CCB		1	17:36 Al	Ca Fe Pb Mg
ZZZZZZ		1	17:48	
ZZZZZZ		2	17:54	
ZZZZZZ		2	18:01	
ZZZZZZ		1	18:08	
ZZZZZZ		1	18:14	
ZZZZZZ		1	18:21	
ZZZZZZ		1	18:28	
ZZZZZZ		1	18:34	
ZZZZZZ		1	18:41	
ZZZZZZ		1	18:48	
CCV		1	18:54 Al	Ca Fe Pb Mg
CCB		1	19:01 Al	Ca Fe Pb Mg
PBWUI09ICW0		1	19:08	Pb
LCSWUI09ICW0		1	19:15	Pb
ZZZZZZ		1	19:21	
ZZZZZZ		1	19:28	
ZZZZZZ		1	19:35	
ZZZZZZ		1	19:41	
ZZZZZZ		1	19:48	
ZZZZZZ		1	19:55	
ZZZZZZ		1	20:01	
ZZZZZZ		1	20:08	
CCV		1	20:15 Al	Ca Fe Pb Mg
CCB		1	20:21 Al	Ca Fe Pb Mg
ZZZZZZ		1	20:28	
ZZZZZZ		1	20:35	
ZZZZZZ		1	20:41	
ZZZZZZ		1	20:48	
ZZZZZZ		1	20:55	
ZZZZZZ		1	21:02	
ZZZZZZ		1	21:08	
CRI		1	21:15 Al	Ca Fe Pb Mg
ICSA		1	21:22 Al	Ca Fe Pb Mg
ICSAB		1	21:28 Al	Ca Fe Pb Mg
CCV		1	21:35 Al	Ca Fe Pb Mg

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Instrument ID: TJA TRACE ICP **File Name:** AUI14B

Date: 9/14/04 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
CCB		1	21:42	Al Ca Fe Pb Mg

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Instrument ID: TJA TRACE ICP **File Name:** AUI21A

Date: 9/21/04 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
S0		1	12:16 Al	Ca Fe Pb Mg
S1		1	12:22 Al	Ca Fe Pb Mg
AL_IEC		1	12:32 Al	Ca Fe Pb Mg
FE_IEC		1	12:39 Al	Ca Fe Pb Mg
MN_IEC		1	12:45 Al	Ca Fe Pb Mg
IEC		1	12:52 Al	Ca Fe Pb Mg
ICV		1	12:59 Al	Ca Fe Pb Mg
ICB		1	13:06 Al	Ca Fe Pb Mg
PQL		1	13:12 Al	Ca Fe Pb Mg
CRI		1	13:19 Al	Ca Fe Pb Mg
ICSA		1	13:26 Al	Ca Fe Pb Mg
ICSAB		1	13:32 Al	Ca Fe Pb Mg
CCV		1	13:39 Al	Ca Fe Pb Mg
CCB		1	13:46 Al	Ca Fe Pb Mg
ZZZZZZ		1	13:53	
ZZZZZZ		1	13:59	
ZZZZZZ		1	14:06	
ZZZZZZ		1	14:13	
ZZZZZZ		1	14:19	
ZZZZZZ		1	14:26	
ZZZZZZ		1	14:33	
ZZZZZZ		1	14:39	
ZZZZZZ		1	14:50	
ZZZZZZ		1	14:57	
CCV		1	15:04 Al	Ca Fe Pb Mg
CCB		1	15:11 Al	Ca Fe Pb Mg
ZZZZZZ		1	15:17	
ZZZZZZ		1	15:24	
ZZZZZZ		1	15:31	
ZZZZZZ		2	15:37	
ZZZZZZ		1	15:44	
ZZZZZZ		1	15:51	
ZZZZZZ		1	15:57	
ZZZZZZ		1	16:04	
ZZZZZZ		1	16:11	
ZZZZZZ		1	16:18	
CCV		1	16:24 Al	Ca Fe Pb Mg
CCB		1	16:31 Al	Ca Fe Pb Mg
ZZZZZZ		1	16:38	
ZZZZZZ		1	16:44	
ZZZZZZ		1	16:51	
ZZZZZZ		1	16:58	
ZZZZZZ		1	17:04	
ZZZZZZ		1	17:11	
ZZZZZZ		1	17:18	
CRI		1	17:25 Al	Ca Fe Pb Mg
ICSA		1	17:31 Al	Ca Fe Pb Mg
ICSAB		1	17:38 Al	Ca Fe Pb Mg
CCV		1	17:45 Al	Ca Fe Pb Mg
CCB		1	17:51 Al	Ca Fe Pb Mg

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Instrument ID: TJA TRACE ICP **File Name:** AUI21A

Date: 9/21/04 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements		
ZZZZZZ		1	17:58			
ZZZZZZ		1	18:05			
ZZZZZZ		1	18:12			
ZZZZZZ		1	18:18			
ZZZZZZ		1	18:25			
ZZZZZZ		5	18:32			
ZZZZZZ		1	18:38			
ZZZZZZ		1	18:45			
ZZZZZZ		1	18:52			
ZZZZZZ		1	18:58			
CCV		1	19:05 Al	Ca	Fe Pb Mg	
CCB		1	19:12 Al	Ca	Fe Pb Mg	
ZZZZZZ		1	19:19			
ZZZZZZ		1	19:25			
ZZZZZZ		1	19:32			
ZZZZZZ		1	19:39			
ZZZZZZ		1	19:46			
ZZZZZZ		1	19:52			
ZZZZZZ		1	19:59			
ZZZZZZ		1	20:06			
ZZZZZZ		1	20:12			
ZZZZZZ		1	20:19			
CCV		1	20:26 Al	Ca	Fe Pb Mg	
CCB		1	20:33 Al	Ca	Fe Pb Mg	
ZZZZZZ		1	20:39			
ZZZZZZ		1	20:46			
ZZZZZZ		1	20:53			
ZZZZZZ		1	20:59			
ZZZZZZ		1	21:06			
ZZZZZZ		1	21:13			
ZZZZZZ		1	21:20			
CRI		1	21:26 Al	Ca	Fe Pb Mg	
ICSA		1	21:33 Al	Ca	Fe Pb Mg	
ICSAB		1	21:40 Al	Ca	Fe Pb Mg	
CCV		1	21:46 Al	Ca	Fe Pb Mg	
CCB		1	21:53 Al	Ca	Fe Pb Mg	
ZZZZZZ		1	22:00			
ZZZZZZ		1	22:06			
ZZZZZZ		1	22:13			
ZZZZZZ		1	22:20			
ZZZZZZ		1	22:27			
ZZZZZZ		5	22:33			
ZZZZZZ		1	22:40			
ZZZZZZ		1	22:47			
ZZZZZZ		1	22:54			
ZZZZZZ		1	23:00			
CCV		1	23:07 Al	Ca	Fe Pb Mg	
CCB		1	23:14 Al	Ca	Fe Pb Mg	
ZZZZZZ		1	23:21			
ZZZZZZ		3	23:27			
ZZZZZZ		1	23:34			

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** WU2587

Instrument ID: TJA TRACE ICP **File Name:** AUI21A

Date: 9/21/04 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		1	23:41	
ZZZZZZ		1	23:47	
ZZZZZZ		1	23:54	
ZZZZZZ		1	0:01	
WU2587-001	A824-MW-01-0804	1	0:08	Pb
WU2587-002	RR-MW-06-0804	1	0:14	Pb
ZZZZZZ		20	0:21	
CCV		1	0:28	Al Ca Fe Pb Mg
CCB		1	0:34	Al Ca Fe Pb Mg
ZZZZZZ		1	0:41	
ZZZZZZ		1	0:48	
ZZZZZZ		1	0:55	
ZZZZZZ		1	1:01	
ZZZZZZ		1	1:08	
ZZZZZZ		1	1:15	
ZZZZZZ		1	1:21	
CRI		1	1:28	Al Ca Fe Pb Mg
ICSA		1	1:35	Al Ca Fe Pb Mg
ICSAB		1	1:42	Al Ca Fe Pb Mg
CCV		1	1:48	Al Ca Fe Pb Mg
CCB		1	1:55	Al Ca Fe Pb Mg

APPENDIX D

TIDAL STUDY DATA

In-Situ Inc. MiniTroll Pro

Report generated: 5/26/2004 18:11:55
Report from file: C:\Win-Situ\Data\SN11960 2004-05-23 164845 Test #6.bin
DataMgr Version 3.71

Serial number: 11960
Firmware Version 3.07
Unit name:

Test name: Test #6

Test defined on: 5/23/2004 16:48:29
Test started on: 5/23/2004 16:48:45
Test stopped on: 5/25/2004 17:18:44
Test extracted on: N/A

Data gathered using Linear testing
Time between data points: Minutes.
Number of data samples: 195

TOTAL DATA SAMPLES 195

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [2]
Measurement type: Pressure
Channel name:
Sensor Range: 5 PSI.
Specific gravity: 1

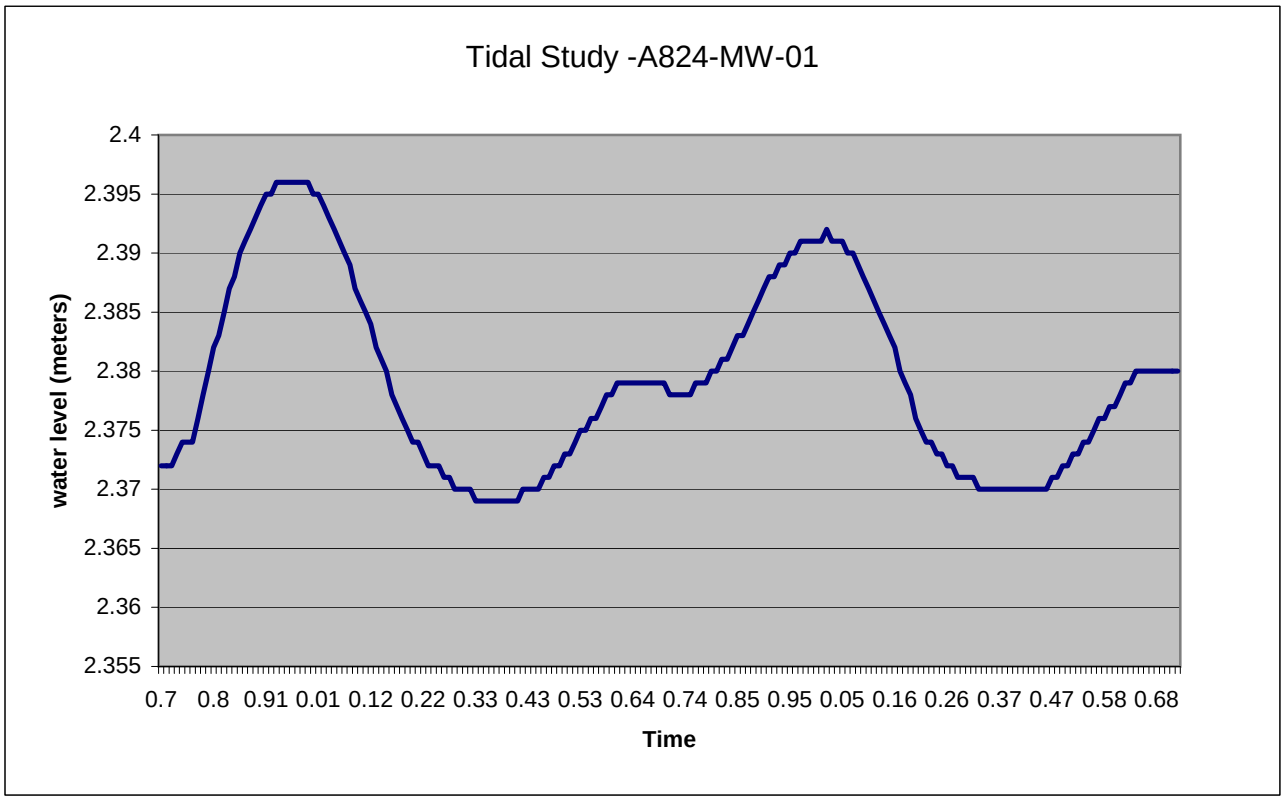
Date	Time	ET (min)	Chan[1] Celsius	Chan[2] Meters H2O
5/23/2004	16:48:45	0	25.87	2.372
5/23/2004	17:03:45	15	25.86	2.372
5/23/2004	17:18:45	30	25.85	2.372
5/23/2004	17:33:45	45	25.85	2.373
5/23/2004	17:48:45	60	25.85	2.374
5/23/2004	18:03:45	75	25.85	2.374
5/23/2004	18:18:45	90	25.85	2.374
5/23/2004	18:33:45	105	25.85	2.376
5/23/2004	18:48:45	120	25.85	2.378
5/23/2004	19:03:45	135	25.85	2.38
5/23/2004	19:18:45	150	25.85	2.382
5/23/2004	19:33:45	165	25.85	2.383
5/23/2004	19:48:45	180	25.85	2.385
5/23/2004	20:03:45	195	25.83	2.387
5/23/2004	20:18:45	210	25.85	2.388

5/23/2004	20:33:45	225	25.85	2.39
5/23/2004	20:48:45	240	25.85	2.391
5/23/2004	21:03:45	255	25.85	2.392
5/23/2004	21:18:45	270	25.85	2.393
5/23/2004	21:33:45	285	25.85	2.394
5/23/2004	21:48:45	300	25.85	2.395
5/23/2004	22:03:45	315	25.83	2.395
5/23/2004	22:18:45	330	25.85	2.396
5/23/2004	22:33:45	345	25.85	2.396
5/23/2004	22:48:45	360	25.85	2.396
5/23/2004	23:03:45	375	25.85	2.396
5/23/2004	23:18:45	390	25.85	2.396
5/23/2004	23:33:45	405	25.85	2.396
5/23/2004	23:48:45	420	25.85	2.396
5/24/2004	0:03:45	435	25.85	2.395
5/24/2004	0:18:45	450	25.85	2.395
5/24/2004	0:33:45	465	25.85	2.394
5/24/2004	0:48:45	480	25.85	2.393
5/24/2004	1:03:45	495	25.85	2.392
5/24/2004	1:18:45	510	25.85	2.391
5/24/2004	1:33:45	525	25.85	2.39
5/24/2004	1:48:45	540	25.85	2.389
5/24/2004	2:03:45	555	25.85	2.387
5/24/2004	2:18:45	570	25.85	2.386
5/24/2004	2:33:45	585	25.85	2.385
5/24/2004	2:48:45	600	25.85	2.384
5/24/2004	3:03:45	615	25.85	2.382
5/24/2004	3:18:45	630	25.85	2.381
5/24/2004	3:33:45	645	25.85	2.38
5/24/2004	3:48:45	660	25.85	2.378
5/24/2004	4:03:45	675	25.85	2.377
5/24/2004	4:18:45	690	25.85	2.376
5/24/2004	4:33:45	705	25.85	2.375
5/24/2004	4:48:45	720	25.85	2.374
5/24/2004	5:03:45	735	25.85	2.374
5/24/2004	5:18:45	750	25.85	2.373
5/24/2004	5:33:45	765	25.85	2.372
5/24/2004	5:48:45	780	25.85	2.372
5/24/2004	6:03:45	795	25.85	2.372
5/24/2004	6:18:45	810	25.85	2.371
5/24/2004	6:33:45	825	25.85	2.371
5/24/2004	6:48:45	840	25.85	2.37
5/24/2004	7:03:45	855	25.85	2.37
5/24/2004	7:18:45	870	25.85	2.37
5/24/2004	7:33:45	885	25.85	2.37
5/24/2004	7:48:45	900	25.85	2.369
5/24/2004	8:03:45	915	25.85	2.369
5/24/2004	8:18:45	930	25.85	2.369
5/24/2004	8:33:45	945	25.85	2.369
5/24/2004	8:48:45	960	25.85	2.369
5/24/2004	9:03:45	975	25.85	2.369
5/24/2004	9:18:45	990	25.85	2.369
5/24/2004	9:33:45	1005	25.85	2.369

5/24/2004	9:48:45	1020	25.85	2.369
5/24/2004	10:03:45	1035	25.85	2.37
5/24/2004	10:18:45	1050	25.85	2.37
5/24/2004	10:33:45	1065	25.85	2.37
5/24/2004	10:48:45	1080	25.85	2.37
5/24/2004	11:03:45	1095	25.85	2.371
5/24/2004	11:18:45	1110	25.85	2.371
5/24/2004	11:33:45	1125	25.85	2.372
5/24/2004	11:48:45	1140	25.86	2.372
5/24/2004	12:03:45	1155	25.85	2.373
5/24/2004	12:18:45	1170	25.85	2.373
5/24/2004	12:33:45	1185	25.85	2.374
5/24/2004	12:48:45	1200	25.85	2.375
5/24/2004	13:03:45	1215	25.85	2.375
5/24/2004	13:18:45	1230	25.85	2.376
5/24/2004	13:33:45	1245	25.85	2.376
5/24/2004	13:48:45	1260	25.85	2.377
5/24/2004	14:03:45	1275	25.86	2.378
5/24/2004	14:18:45	1290	25.85	2.378
5/24/2004	14:33:45	1305	25.85	2.379
5/24/2004	14:48:45	1320	25.85	2.379
5/24/2004	15:03:45	1335	25.85	2.379
5/24/2004	15:18:45	1350	25.85	2.379
5/24/2004	15:33:45	1365	25.86	2.379
5/24/2004	15:48:45	1380	25.86	2.379
5/24/2004	16:03:45	1395	25.86	2.379
5/24/2004	16:18:45	1410	25.86	2.379
5/24/2004	16:33:45	1425	25.86	2.379
5/24/2004	16:48:45	1440	25.86	2.379
5/24/2004	17:03:45	1455	25.86	2.378
5/24/2004	17:18:45	1470	25.85	2.378
5/24/2004	17:33:45	1485	25.86	2.378
5/24/2004	17:48:45	1500	25.86	2.378
5/24/2004	18:03:45	1515	25.85	2.378
5/24/2004	18:18:45	1530	25.85	2.379
5/24/2004	18:33:45	1545	25.85	2.379
5/24/2004	18:48:45	1560	25.86	2.379
5/24/2004	19:03:45	1575	25.85	2.38
5/24/2004	19:18:45	1590	25.85	2.38
5/24/2004	19:33:45	1605	25.85	2.381
5/24/2004	19:48:45	1620	25.86	2.381
5/24/2004	20:03:45	1635	25.85	2.382
5/24/2004	20:18:45	1650	25.86	2.383
5/24/2004	20:33:45	1665	25.86	2.383
5/24/2004	20:48:45	1680	25.85	2.384
5/24/2004	21:03:45	1695	25.86	2.385
5/24/2004	21:18:45	1710	25.86	2.386
5/24/2004	21:33:45	1725	25.86	2.387
5/24/2004	21:48:45	1740	25.86	2.388
5/24/2004	22:03:45	1755	25.86	2.388
5/24/2004	22:18:45	1770	25.86	2.389
5/24/2004	22:33:45	1785	25.86	2.389
5/24/2004	22:48:45	1800	25.86	2.39

5/24/2004	23:03:45	1815	25.86	2.39
5/24/2004	23:18:45	1830	25.86	2.391
5/24/2004	23:33:45	1845	25.86	2.391
5/24/2004	23:48:45	1860	25.86	2.391
5/25/2004	0:03:45	1875	25.86	2.391
5/25/2004	0:18:45	1890	25.86	2.391
5/25/2004	0:33:45	1905	25.86	2.392
5/25/2004	0:48:45	1920	25.86	2.391
5/25/2004	1:03:45	1935	25.86	2.391
5/25/2004	1:18:45	1950	25.86	2.391
5/25/2004	1:33:45	1965	25.86	2.39
5/25/2004	1:48:45	1980	25.86	2.39
5/25/2004	2:03:45	1995	25.86	2.389
5/25/2004	2:18:45	2010	25.86	2.388
5/25/2004	2:33:45	2025	25.86	2.387
5/25/2004	2:48:45	2040	25.86	2.386
5/25/2004	3:03:45	2055	25.86	2.385
5/25/2004	3:18:45	2070	25.86	2.384
5/25/2004	3:33:45	2085	25.86	2.383
5/25/2004	3:48:45	2100	25.86	2.382
5/25/2004	4:03:45	2115	25.86	2.38
5/25/2004	4:18:45	2130	25.86	2.379
5/25/2004	4:33:45	2145	25.86	2.378
5/25/2004	4:48:45	2160	25.86	2.376
5/25/2004	5:03:45	2175	25.86	2.375
5/25/2004	5:18:45	2190	25.86	2.374
5/25/2004	5:33:45	2205	25.86	2.374
5/25/2004	5:48:45	2220	25.86	2.373
5/25/2004	6:03:45	2235	25.85	2.373
5/25/2004	6:18:45	2250	25.86	2.372
5/25/2004	6:33:45	2265	25.86	2.372
5/25/2004	6:48:45	2280	25.86	2.371
5/25/2004	7:03:45	2295	25.86	2.371
5/25/2004	7:18:45	2310	25.86	2.371
5/25/2004	7:33:45	2325	25.86	2.371
5/25/2004	7:48:45	2340	25.86	2.37
5/25/2004	8:03:45	2355	25.86	2.37
5/25/2004	8:18:45	2370	25.86	2.37
5/25/2004	8:33:45	2385	25.86	2.37
5/25/2004	8:48:45	2400	25.86	2.37
5/25/2004	9:03:45	2415	25.86	2.37
5/25/2004	9:18:45	2430	25.86	2.37
5/25/2004	9:33:45	2445	25.86	2.37
5/25/2004	9:48:45	2460	25.86	2.37
5/25/2004	10:03:45	2475	25.86	2.37
5/25/2004	10:18:45	2490	25.86	2.37
5/25/2004	10:33:45	2505	25.86	2.37
5/25/2004	10:48:45	2520	25.86	2.37
5/25/2004	11:03:45	2535	25.86	2.37
5/25/2004	11:18:45	2550	25.86	2.371
5/25/2004	11:33:45	2565	25.86	2.371
5/25/2004	11:48:45	2580	25.86	2.372
5/25/2004	12:03:45	2595	25.87	2.372

5/25/2004	12:18:45	2610	25.86	2.373
5/25/2004	12:33:45	2625	25.86	2.373
5/25/2004	12:48:45	2640	25.86	2.374
5/25/2004	13:03:45	2655	25.86	2.374
5/25/2004	13:18:45	2670	25.86	2.375
5/25/2004	13:33:45	2685	25.86	2.376
5/25/2004	13:48:45	2700	25.86	2.376
5/25/2004	14:03:45	2715	25.86	2.377
5/25/2004	14:18:45	2730	25.86	2.377
5/25/2004	14:33:45	2745	25.86	2.378
5/25/2004	14:48:45	2760	25.86	2.379
5/25/2004	15:03:45	2775	25.87	2.379
5/25/2004	15:18:45	2790	25.86	2.38
5/25/2004	15:33:45	2805	25.87	2.38
5/25/2004	15:48:45	2820	25.87	2.38
5/25/2004	16:03:45	2835	25.87	2.38
5/25/2004	16:18:45	2850	25.87	2.38
5/25/2004	16:33:45	2865	25.87	2.38
5/25/2004	16:48:45	2880	25.86	2.38
5/25/2004	17:03:45	2895	25.86	2.38
5/25/2004	17:18:45	2910	25.86	2.38



In-Situ Inc. MiniTroll Pro

Report generated: 5/24/2004 18:13:58
Report from file: C:\Win-Situ\Data\SN12142 1999-01-10 203759 Test #7.bin
DataMgr Version 3.71

Serial number: 12142
Firmware Version 3.07
Unit name:

Test name: Test #7

Test defined on: 5/24/2004 20:37:49
Test started on: 5/23/2004 16:48:45
Test stopped on: 5/24/2004 17:18:45
Test extracted on: N/A

Data gathered using Linear testing
Time between data points: Minutes.
Number of data samples: 195

TOTAL DATA SAMPLES 195

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [2]
Measurement type: Pressure
Channel name:
Sensor Range: 5 PSI.
Specific gravity: 1

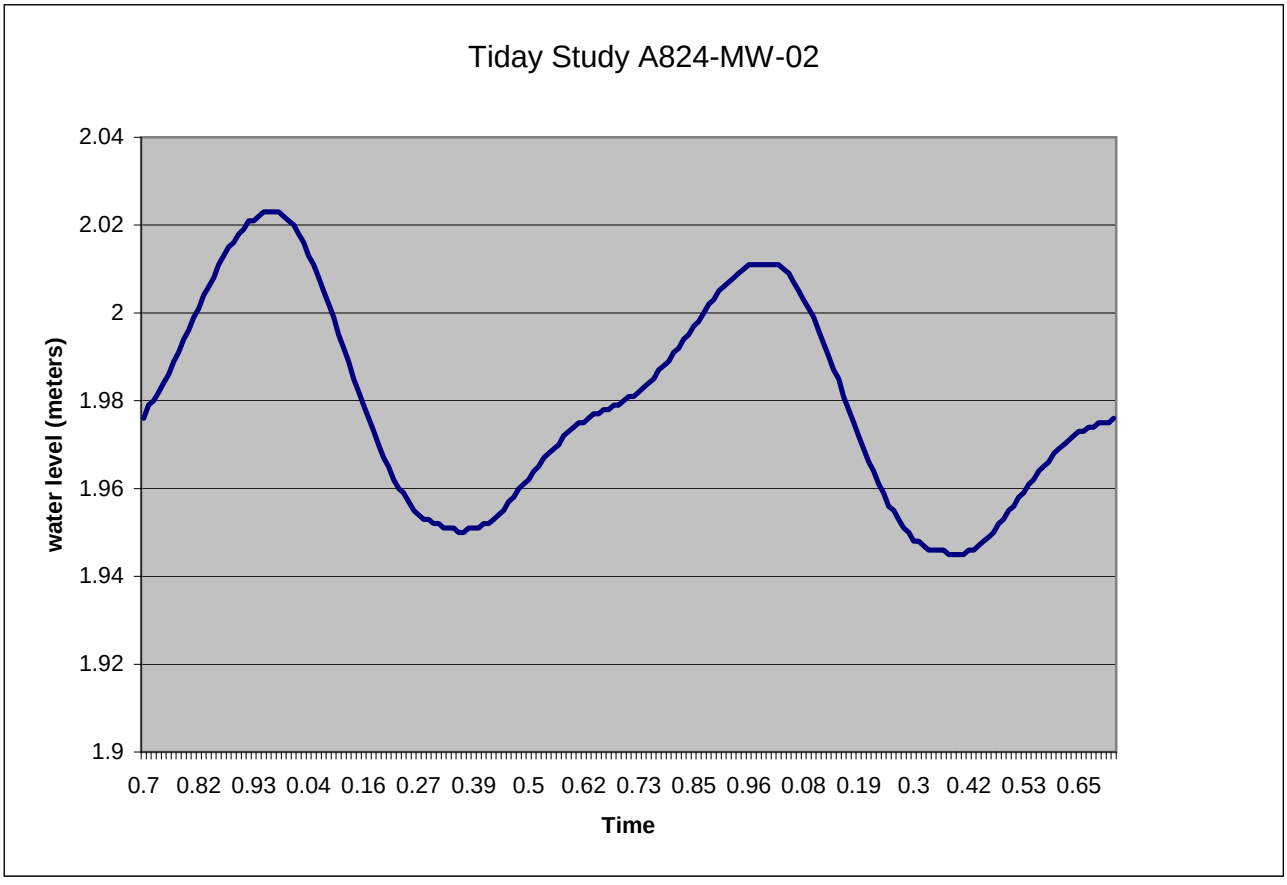
Date	Time	ET (min)	Chan[1] Celsius	Chan[2] Meters H2O
5/23/2004	16:48:45	0	27.17	1.976
5/23/2004	17:03:45	15	27.15	1.979
5/23/2004	17:18:45	30	27.15	1.98
5/23/2004	17:33:45	45	27.15	1.982
5/23/2004	17:48:45	60	27.14	1.984
5/23/2004	18:03:45	75	27.14	1.986
5/23/2004	18:18:45	90	27.12	1.989
5/23/2004	18:33:45	105	27.12	1.991
5/23/2004	18:48:45	120	27.12	1.994
5/23/2004	19:03:45	135	27.12	1.996
5/23/2004	19:18:45	150	27.12	1.999
5/23/2004	19:33:45	165	27.12	2.001
5/23/2004	19:48:45	180	27.12	2.004
5/23/2004	20:03:45	195	27.12	2.006
5/23/2004	20:18:45	210	27.12	2.008

5/23/2004	20:33:45	225	27.12	2.011
5/23/2004	20:48:45	240	27.12	2.013
5/23/2004	21:03:45	255	27.12	2.015
5/23/2004	21:18:45	270	27.12	2.016
5/23/2004	21:33:45	285	27.12	2.018
5/23/2004	21:48:45	300	27.12	2.019
5/23/2004	22:03:45	315	27.12	2.021
5/23/2004	22:18:45	330	27.12	2.021
5/23/2004	22:33:45	345	27.12	2.022
5/23/2004	22:48:45	360	27.12	2.023
5/23/2004	23:03:45	375	27.12	2.023
5/23/2004	23:18:45	390	27.12	2.023
5/23/2004	23:33:45	405	27.12	2.023
5/23/2004	23:48:45	420	27.12	2.022
5/23/2004	0:03:45	435	27.12	2.021
5/23/2004	0:18:45	450	27.12	2.02
5/23/2004	0:33:45	465	27.12	2.018
5/23/2004	0:48:45	480	27.12	2.016
5/23/2004	1:03:45	495	27.12	2.013
5/23/2004	1:18:45	510	27.14	2.011
5/23/2004	1:33:45	525	27.12	2.008
5/23/2004	1:48:45	540	27.14	2.005
5/23/2004	2:03:45	555	27.12	2.002
5/23/2004	2:18:45	570	27.14	1.999
5/23/2004	2:33:45	585	27.14	1.995
5/23/2004	2:48:45	600	27.14	1.992
5/23/2004	3:03:45	615	27.14	1.989
5/23/2004	3:18:45	630	27.14	1.985
5/23/2004	3:33:45	645	27.14	1.982
5/23/2004	3:48:45	660	27.14	1.979
5/23/2004	4:03:45	675	27.14	1.976
5/23/2004	4:18:45	690	27.14	1.973
5/23/2004	4:33:45	705	27.14	1.97
5/23/2004	4:48:45	720	27.14	1.967
5/23/2004	5:03:45	735	27.14	1.965
5/23/2004	5:18:45	750	27.14	1.962
5/23/2004	5:33:45	765	27.15	1.96
5/23/2004	5:48:45	780	27.15	1.959
5/23/2004	6:03:45	795	27.15	1.957
5/23/2004	6:18:45	810	27.14	1.955
5/23/2004	6:33:45	825	27.14	1.954
5/23/2004	6:48:45	840	27.14	1.953
5/23/2004	7:03:45	855	27.14	1.953
5/23/2004	7:18:45	870	27.14	1.952
5/23/2004	7:33:45	885	27.15	1.952
5/23/2004	7:48:45	900	27.15	1.951
5/23/2004	8:03:45	915	27.15	1.951
5/23/2004	8:18:45	930	27.15	1.951
5/23/2004	8:33:45	945	27.15	1.95
5/23/2004	8:48:45	960	27.14	1.95
5/23/2004	9:03:45	975	27.14	1.951
5/23/2004	9:18:45	990	27.14	1.951
5/23/2004	9:33:45	1005	27.15	1.951

5/23/2004	9:48:45	1020	27.14	1.952
5/23/2004	10:03:45	1035	27.14	1.952
5/23/2004	10:18:45	1050	27.15	1.953
5/23/2004	10:33:45	1065	27.15	1.954
5/23/2004	10:48:45	1080	27.14	1.955
5/23/2004	11:03:45	1095	27.14	1.957
5/23/2004	11:18:45	1110	27.14	1.958
5/23/2004	11:33:45	1125	27.15	1.96
5/23/2004	11:48:45	1140	27.14	1.961
5/23/2004	12:03:45	1155	27.15	1.962
5/23/2004	12:18:45	1170	27.14	1.964
5/23/2004	12:33:45	1185	27.14	1.965
5/23/2004	12:48:45	1200	27.14	1.967
5/23/2004	13:03:45	1215	27.15	1.968
5/23/2004	13:18:45	1230	27.15	1.969
5/23/2004	13:33:45	1245	27.15	1.97
5/23/2004	13:48:45	1260	27.14	1.972
5/23/2004	14:03:45	1275	27.14	1.973
5/23/2004	14:18:45	1290	27.15	1.974
5/23/2004	14:33:45	1305	27.15	1.975
5/23/2004	14:48:45	1320	27.15	1.975
5/23/2004	15:03:45	1335	27.14	1.976
5/23/2004	15:18:45	1350	27.15	1.977
5/23/2004	15:33:45	1365	27.15	1.977
5/23/2004	15:48:45	1380	27.15	1.978
5/23/2004	16:03:45	1395	27.15	1.978
5/23/2004	16:18:45	1410	27.15	1.979
5/23/2004	16:33:45	1425	27.15	1.979
5/23/2004	16:48:45	1440	27.15	1.98
5/23/2004	17:03:45	1455	27.15	1.981
5/23/2004	17:18:45	1470	27.15	1.981
5/23/2004	17:33:45	1485	27.15	1.982
5/23/2004	17:48:45	1500	27.15	1.983
5/23/2004	18:03:45	1515	27.15	1.984
5/23/2004	18:18:45	1530	27.15	1.985
5/23/2004	18:33:45	1545	27.15	1.987
5/23/2004	18:48:45	1560	27.15	1.988
5/23/2004	19:03:45	1575	27.15	1.989
5/23/2004	19:18:45	1590	27.14	1.991
5/23/2004	19:33:45	1605	27.14	1.992
5/23/2004	19:48:45	1620	27.15	1.994
5/23/2004	20:03:45	1635	27.15	1.995
5/24/2004	20:18:45	1650	27.15	1.997
5/24/2004	20:33:45	1665	27.15	1.998
5/24/2004	20:48:45	1680	27.15	2
5/24/2004	21:03:45	1695	27.15	2.002
5/24/2004	21:18:45	1710	27.15	2.003
5/24/2004	21:33:45	1725	27.15	2.005
5/24/2004	21:48:45	1740	27.15	2.006
5/24/2004	22:03:45	1755	27.15	2.007
5/24/2004	22:18:45	1770	27.15	2.008
5/24/2004	22:33:45	1785	27.15	2.009
5/24/2004	22:48:45	1800	27.15	2.01

5/24/2004	23:03:45	1815	27.15	2.011
5/24/2004	23:18:45	1830	27.15	2.011
5/24/2004	23:33:45	1845	27.15	2.011
5/24/2004	23:48:45	1860	27.15	2.011
5/24/2004	0:03:45	1875	27.15	2.011
5/24/2004	0:18:45	1890	27.15	2.011
5/24/2004	0:33:45	1905	27.15	2.011
5/24/2004	0:48:45	1920	27.15	2.01
5/24/2004	1:03:45	1935	27.15	2.009
5/24/2004	1:18:45	1950	27.15	2.007
5/24/2004	1:33:45	1965	27.15	2.005
5/24/2004	1:48:45	1980	27.15	2.003
5/24/2004	2:03:45	1995	27.15	2.001
5/24/2004	2:18:45	2010	27.15	1.999
5/24/2004	2:33:45	2025	27.15	1.996
5/24/2004	2:48:45	2040	27.15	1.993
5/24/2004	3:03:45	2055	27.15	1.99
5/24/2004	3:18:45	2070	27.15	1.987
5/24/2004	3:33:45	2085	27.15	1.985
5/24/2004	3:48:45	2100	27.15	1.981
5/24/2004	4:03:45	2115	27.15	1.978
5/24/2004	4:18:45	2130	27.15	1.975
5/24/2004	4:33:45	2145	27.15	1.972
5/24/2004	4:48:45	2160	27.16	1.969
5/24/2004	5:03:45	2175	27.16	1.966
5/24/2004	5:18:45	2190	27.16	1.964
5/24/2004	5:33:45	2205	27.16	1.961
5/24/2004	5:48:45	2220	27.16	1.959
5/24/2004	6:03:45	2235	27.16	1.956
5/24/2004	6:18:45	2250	27.16	1.955
5/24/2004	6:33:45	2265	27.16	1.953
5/24/2004	6:48:45	2280	27.16	1.951
5/24/2004	7:03:45	2295	27.16	1.95
5/24/2004	7:18:45	2310	27.16	1.948
5/24/2004	7:33:45	2325	27.16	1.948
5/24/2004	7:48:45	2340	27.16	1.947
5/24/2004	8:03:45	2355	27.16	1.946
5/24/2004	8:18:45	2370	27.16	1.946
5/24/2004	8:33:45	2385	27.16	1.946
5/24/2004	8:48:45	2400	27.16	1.946
5/24/2004	9:03:45	2415	27.16	1.945
5/24/2004	9:18:45	2430	27.16	1.945
5/24/2004	9:33:45	2445	27.16	1.945
5/24/2004	9:48:45	2460	27.16	1.945
5/24/2004	10:03:45	2475	27.16	1.946
5/24/2004	10:18:45	2490	27.16	1.946
5/24/2004	10:33:45	2505	27.16	1.947
5/24/2004	10:48:45	2520	27.16	1.948
5/24/2004	11:03:45	2535	27.16	1.949
5/24/2004	11:18:45	2550	27.16	1.95
5/24/2004	11:33:45	2565	27.16	1.952
5/24/2004	11:48:45	2580	27.16	1.953
5/24/2004	12:03:45	2595	27.16	1.955

5/24/2004	12:18:45	2610	27.16	1.956
5/24/2004	12:33:45	2625	27.16	1.958
5/24/2004	12:48:45	2640	27.16	1.959
5/24/2004	13:03:45	2655	27.16	1.961
5/24/2004	13:18:45	2670	27.16	1.962
5/24/2004	13:33:45	2685	27.16	1.964
5/24/2004	13:48:45	2700	27.16	1.965
5/24/2004	14:03:45	2715	27.16	1.966
5/24/2004	14:18:45	2730	27.16	1.968
5/24/2004	14:33:45	2745	27.16	1.969
5/24/2004	14:48:45	2760	27.16	1.97
5/24/2004	15:03:45	2775	27.16	1.971
5/24/2004	15:18:45	2790	27.16	1.972
5/24/2004	15:33:45	2805	27.16	1.973
5/24/2004	15:48:45	2820	27.16	1.973
5/24/2004	16:03:45	2835	27.16	1.974
5/24/2004	16:18:45	2850	27.16	1.974
5/24/2004	16:33:45	2865	27.16	1.975
5/24/2004	16:48:45	2880	27.16	1.975
5/24/2004	17:03:45	2895	27.16	1.975
5/24/2004	17:18:45	2910	27.16	1.976



In-Situ Inc. MiniTroll Pro

Report generated: 5/24/2004 18:09:22
Report from file: C:\Win-Situ\Data\SN12270 1999-01-07 231446 Test #8.bin
DataMgr Version 3.71

Serial number: 12270
Firmware Version 3.07
Unit name:

Test name: Test #8

Test defined on: 5/23/2004 16:48:45
Test started on: 5/23/2004 16:48:45
Test stopped on: 5/24/2004 17:18:45
Test extracted on: N/A

Data gathered using Linear testing
Time between data p Minutes.
Number of data samp 194

TOTAL DATA SAMPLE 194

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [2]
Measurement type: Pressure
Channel name:
Sensor Range: 5 PSI.
Specific gravity: 1

Date	Time	ET (min)	Chan[1] Celsius	Chan[2] Meters H2O
5/23/2004	16:48:45	0	26.46	2.299
5/23/2004	17:03:45	15	26.43	2.299
5/23/2004	17:18:45	30	26.41	2.299
5/23/2004	17:33:45	45	26.41	2.299
5/23/2004	17:48:45	60	26.4	2.299
5/23/2004	18:03:45	75	26.4	2.3
5/23/2004	18:18:45	90	26.4	2.3
5/23/2004	18:33:45	105	26.4	2.3
5/23/2004	18:48:45	120	26.39	2.301
5/23/2004	19:03:45	135	26.4	2.302
5/23/2004	19:18:45	150	26.39	2.303
5/23/2004	19:33:45	165	26.39	2.305
5/23/2004	19:48:45	180	26.39	2.306
5/23/2004	20:03:45	195	26.39	2.308
5/23/2004	20:18:45	210	26.39	2.31

5/23/2004	20:33:45	225	26.39	2.311
5/23/2004	20:48:45	240	26.39	2.312
5/23/2004	21:03:45	255	26.39	2.313
5/23/2004	21:18:45	270	26.39	2.313
5/23/2004	21:33:45	285	26.39	2.314
5/23/2004	21:48:45	300	26.39	2.315
5/23/2004	22:03:45	315	26.39	2.315
5/23/2004	22:18:45	330	26.39	2.316
5/23/2004	22:33:45	345	26.39	2.316
5/23/2004	22:48:45	360	26.39	2.316
5/23/2004	23:03:45	375	26.39	2.317
5/23/2004	23:18:45	390	26.39	2.317
5/23/2004	23:33:45	405	26.39	2.317
5/23/2004	23:48:45	420	26.39	2.316
5/23/2004	0:03:45	435	26.39	2.316
5/23/2004	0:18:45	450	26.4	2.315
5/23/2004	0:33:45	465	26.39	2.314
5/23/2004	0:48:45	480	26.39	2.313
5/23/2004	1:03:45	495	26.39	2.312
5/23/2004	1:18:45	510	26.39	2.311
5/23/2004	1:33:45	525	26.39	2.31
5/23/2004	1:48:45	540	26.4	2.309
5/23/2004	2:03:45	555	26.39	2.308
5/23/2004	2:18:45	570	26.4	2.306
5/23/2004	2:33:45	585	26.39	2.305
5/23/2004	2:48:45	600	26.39	2.303
5/23/2004	3:03:45	615	26.4	2.302
5/23/2004	3:18:45	630	26.39	2.3
5/23/2004	3:33:45	645	26.4	2.298
5/23/2004	3:48:45	660	26.39	2.297
5/23/2004	4:03:45	675	26.4	2.295
5/23/2004	4:18:45	690	26.4	2.293
5/23/2004	4:33:45	705	26.4	2.292
5/23/2004	4:48:45	720	26.4	2.29
5/23/2004	5:03:45	735	26.4	2.289
5/23/2004	5:18:45	750	26.4	2.288
5/23/2004	5:33:45	765	26.39	2.287
5/23/2004	5:48:45	780	26.4	2.286
5/23/2004	6:03:45	795	26.39	2.286
5/23/2004	6:18:45	810	26.4	2.285
5/23/2004	6:33:45	825	26.4	2.284
5/23/2004	6:48:45	840	26.4	2.284
5/23/2004	7:03:45	855	26.4	2.283
5/23/2004	7:18:45	870	26.4	2.283
5/23/2004	7:33:45	885	26.4	2.283
5/23/2004	7:48:45	900	26.4	2.282
5/23/2004	8:03:45	915	26.4	2.282
5/23/2004	8:18:45	930	26.4	2.282
5/23/2004	8:33:45	945	26.4	2.282
5/23/2004	8:48:45	960	26.4	2.282
5/23/2004	9:03:45	975	26.4	2.282
5/23/2004	9:18:45	990	26.4	2.282
5/23/2004	9:33:45	1005	26.4	2.282

5/23/2004	9:48:45	1020	26.4	2.282
5/23/2004	10:03:45	1035	26.4	2.283
5/23/2004	10:18:45	1050	26.4	2.283
5/23/2004	10:33:45	1065	26.4	2.284
5/23/2004	10:48:45	1080	26.4	2.284
5/23/2004	11:03:45	1095	26.4	2.285
5/23/2004	11:18:45	1110	26.4	2.286
5/23/2004	11:33:45	1125	26.4	2.287
5/23/2004	11:48:45	1140	26.4	2.288
5/23/2004	12:03:45	1155	26.4	2.288
5/23/2004	12:18:45	1170	26.4	2.289
5/23/2004	12:33:45	1185	26.4	2.291
5/23/2004	12:48:45	1200	26.4	2.291
5/23/2004	13:03:45	1215	26.4	2.292
5/23/2004	13:18:45	1230	26.4	2.293
5/23/2004	13:33:45	1245	26.4	2.294
5/23/2004	13:48:45	1260	26.4	2.295
5/23/2004	14:03:45	1275	26.4	2.296
5/23/2004	14:18:45	1290	26.4	2.296
5/23/2004	14:33:45	1305	26.4	2.296
5/23/2004	14:48:45	1320	26.4	2.297
5/23/2004	15:03:45	1335	26.4	2.297
5/23/2004	15:18:45	1350	26.4	2.296
5/23/2004	15:33:45	1365	26.4	2.296
5/23/2004	15:48:45	1380	26.4	2.295
5/23/2004	16:03:45	1395	26.4	2.295
5/23/2004	16:18:45	1410	26.4	2.295
5/23/2004	16:33:45	1425	26.4	2.294
5/23/2004	16:48:45	1440	26.4	2.293
5/23/2004	17:03:45	1455	26.4	2.293
5/23/2004	17:18:45	1470	26.4	2.293
5/23/2004	17:33:45	1485	26.4	2.292
5/23/2004	17:48:45	1500	26.4	2.293
5/23/2004	18:03:45	1515	26.4	2.293
5/23/2004	18:18:45	1530	26.4	2.293
5/23/2004	18:33:45	1545	26.4	2.293
5/23/2004	18:48:45	1560	26.41	2.293
5/23/2004	19:03:45	1575	26.4	2.293
5/23/2004	19:18:45	1590	26.4	2.293
5/23/2004	19:33:45	1605	26.4	2.294
5/23/2004	19:48:45	1620	26.4	2.294
5/23/2004	20:03:45	1635	26.4	2.294
5/24/2004	20:18:45	1650	26.4	2.295
5/24/2004	20:33:45	1665	26.4	2.296
5/24/2004	20:48:45	1680	26.4	2.297
5/24/2004	21:03:45	1695	26.4	2.299
5/24/2004	21:18:45	1710	26.4	2.3
5/24/2004	21:33:45	1725	26.4	2.302
5/24/2004	21:48:45	1740	26.4	2.303
5/24/2004	22:03:45	1755	26.4	2.304
5/24/2004	22:18:45	1770	26.4	2.304
5/24/2004	22:33:45	1785	26.4	2.305
5/24/2004	22:48:45	1800	26.4	2.306

5/24/2004	23:03:45	1815	26.4	2.307
5/24/2004	23:18:45	1830	26.4	2.307
5/24/2004	23:33:45	1845	26.41	2.308
5/24/2004	23:48:45	1860	26.4	2.309
5/24/2004	0:03:45	1875	26.41	2.309
5/24/2004	0:18:45	1890	26.41	2.31
5/24/2004	0:33:45	1905	26.4	2.31
5/24/2004	0:48:45	1920	26.41	2.31
5/24/2004	1:03:45	1935	26.41	2.311
5/24/2004	1:18:45	1950	26.4	2.311
5/24/2004	1:33:45	1965	26.4	2.31
5/24/2004	1:48:45	1980	26.41	2.31
5/24/2004	2:03:45	1995	26.41	2.309
5/24/2004	2:18:45	2010	26.41	2.308
5/24/2004	2:33:45	2025	26.41	2.307
5/24/2004	2:48:45	2040	26.41	2.306
5/24/2004	3:03:45	2055	26.41	2.305
5/24/2004	3:18:45	2070	26.41	2.304
5/24/2004	3:33:45	2085	26.41	2.302
5/24/2004	3:48:45	2100	26.41	2.301
5/24/2004	4:03:45	2115	26.41	2.299
5/24/2004	4:18:45	2130	26.41	2.298
5/24/2004	4:33:45	2145	26.41	2.296
5/24/2004	4:48:45	2160	26.41	2.294
5/24/2004	5:03:45	2175	26.41	2.292
5/24/2004	5:18:45	2190	26.41	2.291
5/24/2004	5:33:45	2205	26.41	2.289
5/24/2004	5:48:45	2220	26.41	2.288
5/24/2004	6:03:45	2235	26.41	2.286
5/24/2004	6:18:45	2250	26.41	2.285
5/24/2004	6:33:45	2265	26.41	2.284
5/24/2004	6:48:45	2280	26.41	2.283
5/24/2004	7:03:45	2295	26.41	2.282
5/24/2004	7:18:45	2310	26.41	2.281
5/24/2004	7:33:45	2325	26.41	2.28
5/24/2004	7:48:45	2340	26.41	2.28
5/24/2004	8:03:45	2355	26.41	2.28
5/24/2004	8:18:45	2370	26.41	2.279
5/24/2004	8:33:45	2385	26.41	2.279
5/24/2004	8:48:45	2400	26.41	2.279
5/24/2004	9:03:45	2415	26.41	2.279
5/24/2004	9:18:45	2430	26.41	2.279
5/24/2004	9:33:45	2445	26.41	2.279
5/24/2004	9:48:45	2460	26.41	2.279
5/24/2004	10:03:45	2475	26.41	2.279
5/24/2004	10:18:45	2490	26.41	2.279
5/24/2004	10:33:45	2505	26.41	2.279
5/24/2004	10:48:45	2520	26.41	2.28
5/24/2004	11:03:45	2535	26.41	2.28
5/24/2004	11:18:45	2550	26.41	2.281
5/24/2004	11:33:45	2565	26.41	2.281
5/24/2004	11:48:45	2580	26.41	2.282
5/24/2004	12:03:45	2595	26.41	2.283

5/24/2004	12:18:45	2610	26.41	2.284
5/24/2004	12:33:45	2625	26.41	2.285
5/24/2004	12:48:45	2640	26.41	2.286
5/24/2004	13:03:45	2655	26.41	2.287
5/24/2004	13:18:45	2670	26.41	2.289
5/24/2004	13:33:45	2685	26.41	2.29
5/24/2004	13:48:45	2700	26.41	2.291
5/24/2004	14:03:45	2715	26.41	2.292
5/24/2004	14:18:45	2730	26.41	2.293
5/24/2004	14:33:45	2745	26.41	2.293
5/24/2004	14:48:45	2760	26.41	2.294
5/24/2004	15:03:45	2775	26.41	2.294
5/24/2004	15:18:45	2790	26.41	2.294
5/24/2004	15:33:45	2805	26.41	2.294
5/24/2004	15:48:45	2820	26.43	2.294
5/24/2004	16:03:45	2835	26.41	2.293
5/24/2004	16:18:45	2850	26.43	2.293
5/24/2004	16:33:45	2865	26.41	2.292
5/24/2004	16:48:45	2880	26.41	2.292
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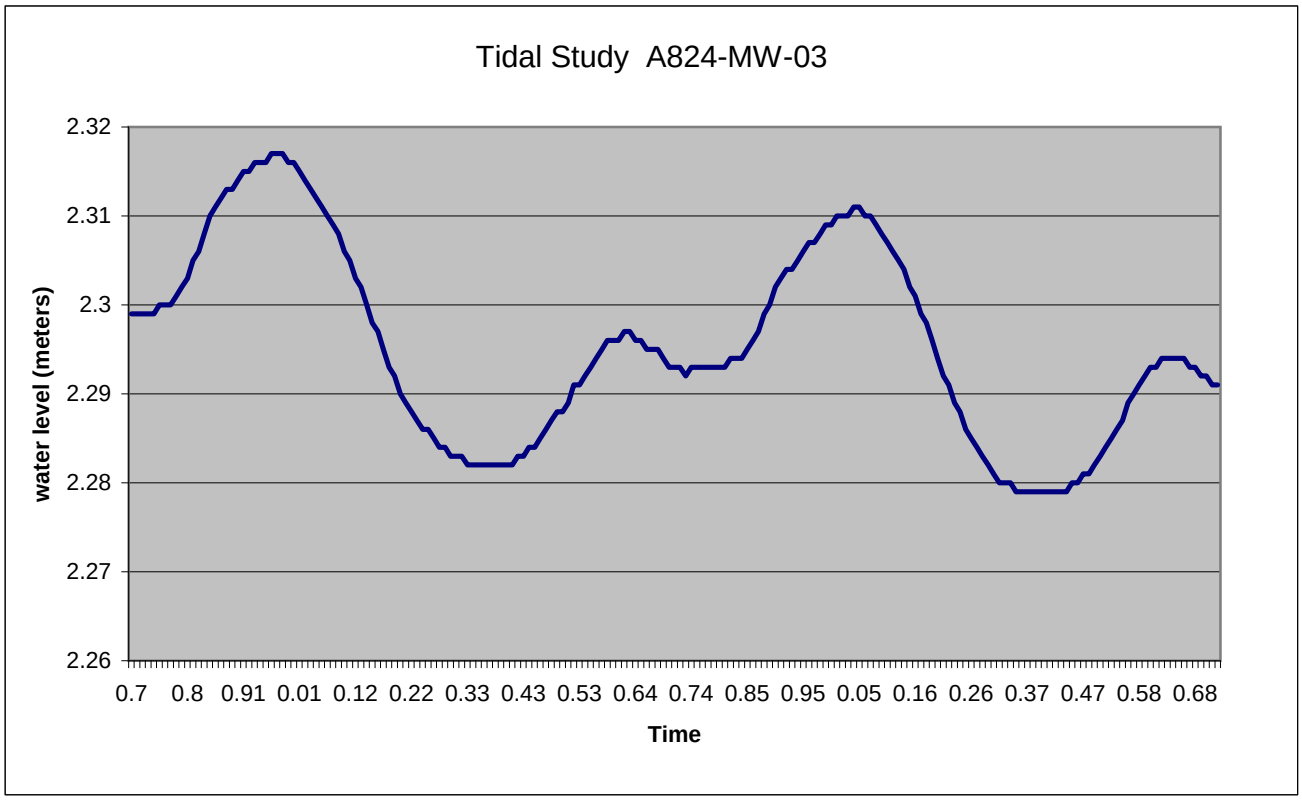
5/24/2004	17:18:45	2910	26.41	2.291



APPENDIX E

SLUG TESTS

Contained in Appendix D of the Contamination Assessment Report, SWMU 9, Jet Engine Test Cell, Building A969, prepared by ABB Environmental Services Inc., June 1994.

Aquifer Parameter Calculations

Hydraulic gradient

Water table elevations recorded on October 20, 1993, were used to calculate hydraulic gradients at the site. The hydraulic gradient was calculated by subtracting the difference in groundwater elevation (in feet) between two points, along a line oriented perpendicular to equipotential lines (see Figure 5-1). The elevation difference was divided by the horizontal distance between the two points to obtain a resulting gradient in feet per foot (ft/ft). Traverses were made perpendicular to equipotential contour lines from monitoring wells MW-10 to MW-17, from monitoring wells MW-9 to MW-17, and from monitoring wells MW-10 to MW-13 (see Figure 5-1), to calculate an average hydraulic gradient. For each traverse, the hydraulic gradient was calculated as follows:

$$i = (h_1 - h_2) / d \qquad (1)$$

where

i = hydraulic gradient (ft/ft);
h_1 = water table elevation, upgradient (feet);
h_2 = water table elevation, downgradient (feet); and
d = horizontal distance (feet) between h_1 and h_2 along a flow line.

Hydraulic gradients calculated in this manner vary from 1.4×10^{-3} ft/ft to 1.8×10^{-3} ft/ft. The average calculated hydraulic gradient at the site is 1.6×10^{-3} ft/ft.

Hydraulic conductivity

Hydraulic conductivity (K) from slug test data was calculated following the methods of Bouwer and Rice (1976) and Bouwer (1989) for partially penetrating wells screened in unconfined aquifers. The following well information was used to calculate the hydraulic conductivity:

- radius of well casing (r_c),
- r_w = radius of borehole (r_c plus radius of the sand pack surrounding the well screen),
- length of screened interval below the water table (L_e),
- effective well radius (r_e),
- depth of well below the water table (L_w),
- depth to confining unit or bottom of aquifer below the static water table (H), and
- plot of time versus the logarithm of y, where y is the difference between the static water level outside the well and the water level inside the well.

Figure D-1 is a well diagram depicting the aquifer and well parameters of interest. Calculations were made assuming that $L_w < H$. K was calculated as follows:

$$K = [R_c^2 \ln(\frac{r_e}{r_w}) - 2L_e] [\frac{1}{t} \ln(\frac{y_o}{y_t})] \quad (2)$$

where

y_0 = y at time zero, and
y_t = y at time t.

The effective well radius, r_e, and the term $[(1/t)\ln(y_0/y_t)]$ were derived by using the computer program AQTESOLV™ (Geraghty & Miller, 1989). This computer program follows procedures and assumptions outlined by Bouwer (1989).

Slug test graphs are attached at the end of this appendix. Values of y were calculated for a particular time, t, and plotted on the graph. The computer program selects a "best-fit" line through the data points by linear regression along a "straight-line" portion of the graph. The slope of the "best-fit" line is used to calculate the hydraulic conductivity, K.

Two slug tests each were performed inside monitoring well MW-2 and one slug test was performed inside monitoring well MW-5. K is reported in feet per minute (ft/min) on the slug test graphs and was recalculated to feet per day (ft/day). The average K from the data collected from monitoring well MW-2 is 8.6×10^{-1} ft/day. K calculated from the data collected from monitoring well MW-5 is 5.7×10^{-1} ft/day. The average K value from the data collected from both monitoring wells is 7.2×10^{-1} ft/day.

Average pore water velocity

Estimates of average pore water velocity were obtained using the following formula:

$$V = (K*I)/n \quad (3)$$

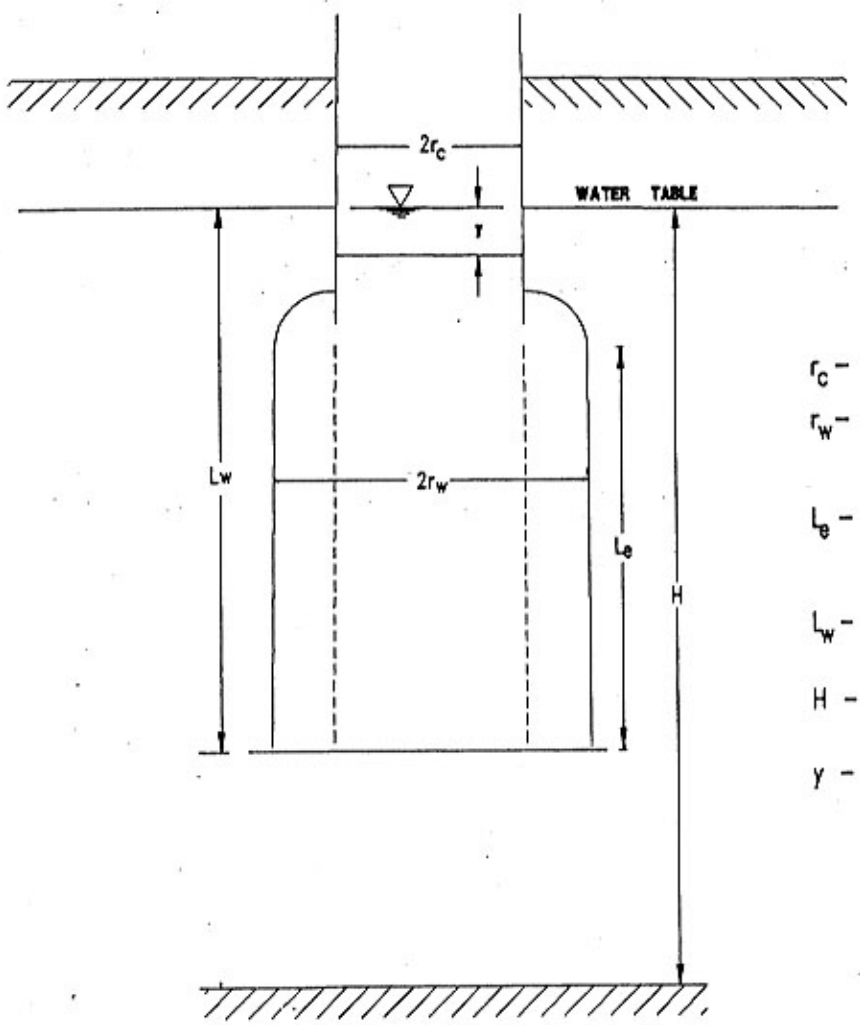
where

V = seepage velocity in ft/day,
K = hydraulic conductivity in ft/day,
i = hydraulic gradient, and
n = estimated porosity.

Assuming an estimated porosity of 30 percent for weathered to oolitic limestone (Davis and Deweist, 1966), an average hydraulic gradient of 1.6×10^{-3} ft/ft, and an average hydraulic conductivity of 7.2×10^{-1} ft/day, the average pore water velocity is calculated as follows:

$$V = (7.2 \times 10^{-1} \text{ ft/day} * 1.6 \times 10^{-3} \text{ ft/ft}) / 0.30$$

$$V = 3.8 \times 10^{-3} \text{ ft/day}.$$



r_c – Radius of well

r_w – Radius of well + total thickness of the sand/gravel pack

L_e – Length of screened interval below the water table

L_w – Depth of well below water table

H – Depth to confining unit below the water table

y – Difference between static water level outside well and water level inside well

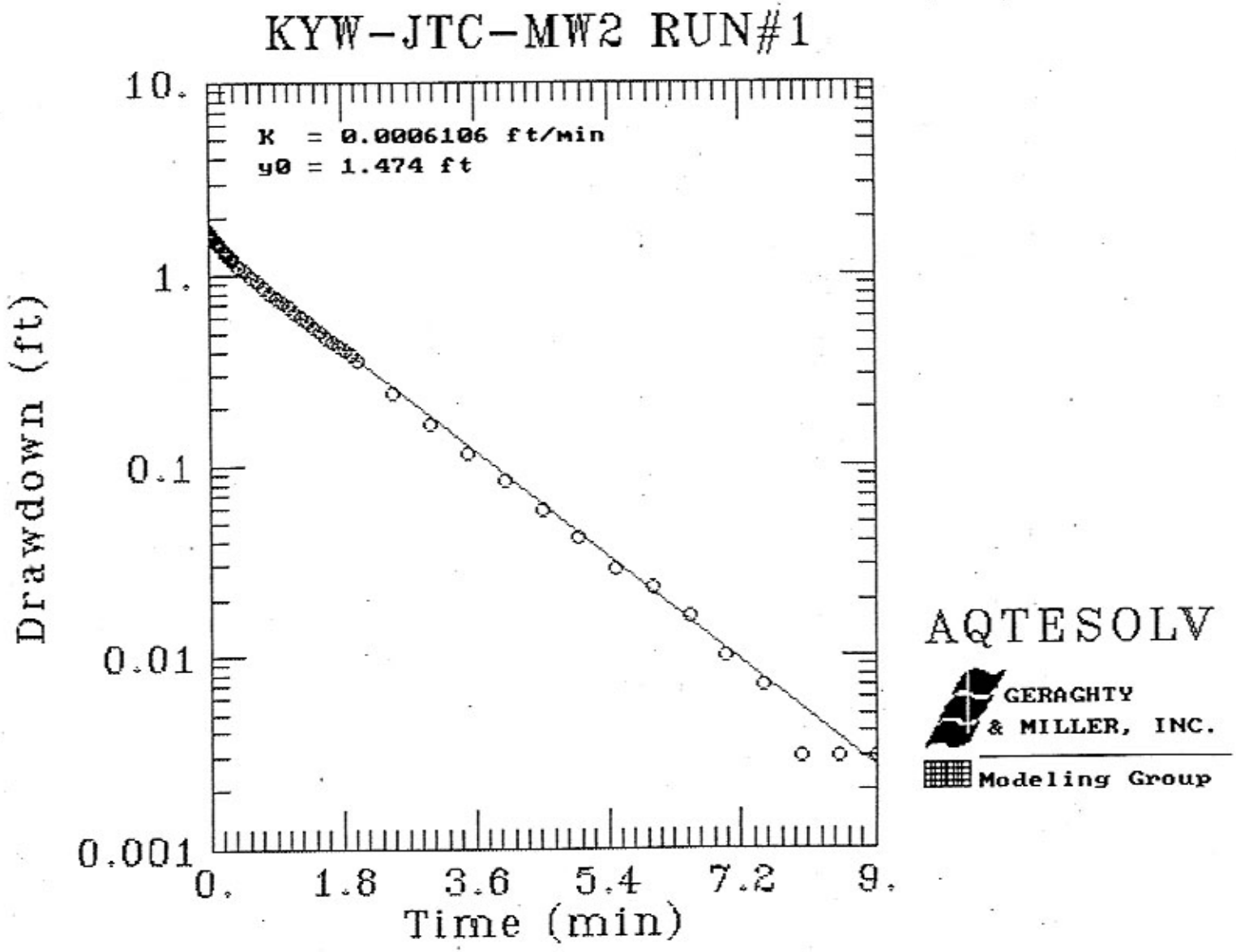
FIGURE D-1
DEFINITIONS OF SLUG TEST PARAMETERS (From Bouwer, 1989)

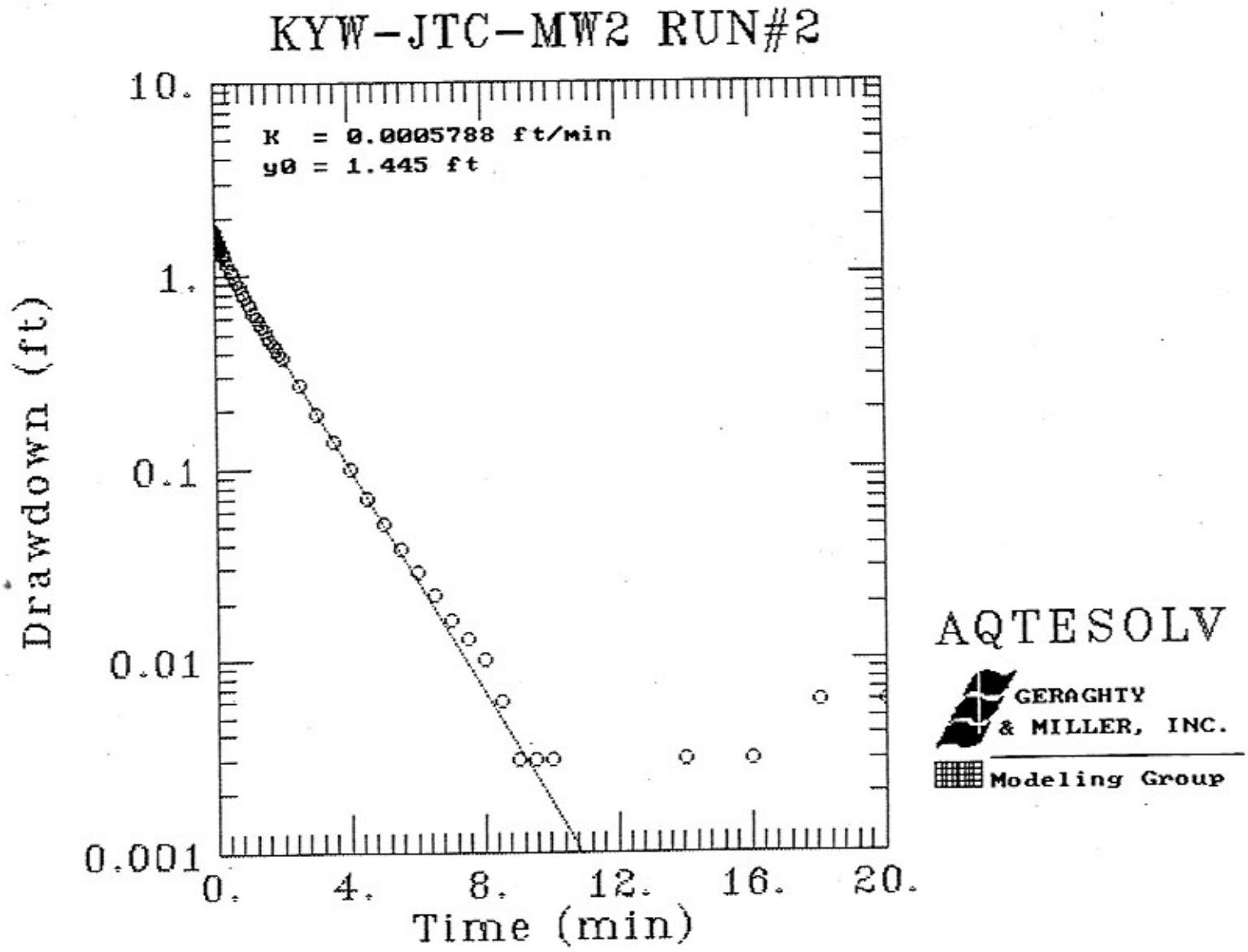
KEYWEST/D-1/KGP/06/22/93

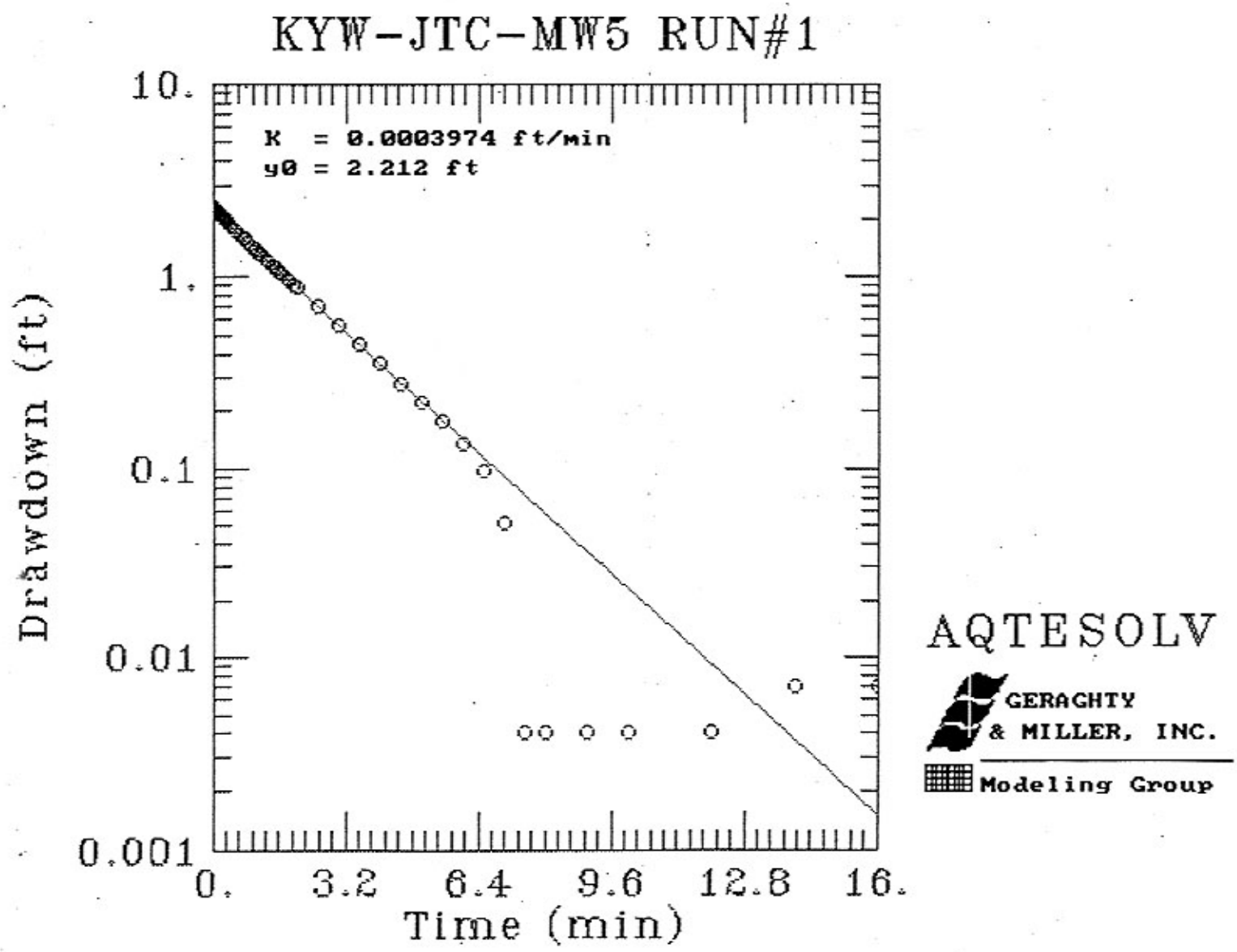
CONTAMINATION ASSESSMENT REPORT
JET ENGINE TEST CELL

BUILDING A-969
NAS KEY WEST,
KEYWEST, FLORIDA

SLUG TEST GRAPHS


KYW-JTC-MW2 RUN#1
K = 0.0006106 ft/min
y0 = 1.474 ft
Drawdown (ft)
10.
1.
0.1
0.01
0.001
0.
1.8
3.6
5.4
7.2
9.
Time (min)
AQTESOLV
GERAGHTY
& MILLER, INC.
Modeling Group


KYW-JTC-MW2 RUN#2
K = 0.0005788 ft/min
y0 = 1.445 ft
Drawdown (ft)
10.
1.
0.1
0.01
0.001
0.
4.
8.
12.
16.
20.
Time (min)
AQTESOLV
GERAGHTY
& MILLER, INC.
Modeling Group


KYW-JTC-MW5 RUN#1
K = 0.0003974 ft/min
y0 = 2.212 ft
Drawdown (ft)
10.
1.
0.1
0.01
0.001
0.
3.2
6.4
9.6
12.8
16.
Time (min)
AQTESOLV
GERAGHTY
& MILLER, INC.
Modeling Group