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Phase III Remedial Investigation Technical Memorandum for Area A Wetland - Site 2B

Naval Submarine Base New London

Groton, Connecticut

Naval Facilities Engineering Command Mid-Atlantic

Contract Number N62467-04-D-0055

Contract Task Order 439

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PHASE III REMEDIAL INVESTIGATION TECHNICAL MEMORANDUM FOR AREA A WETLAND - SITE 2B

NAVAL SUBMARINE BASE NEW LONDON
GROTON, CONNECTICUT

COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

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ACRONYMS

4,4'-DDD	1,1-dichloro-2,2-bis(4-chlorophenyl)ethane
4,4'-DDE	1,1-dichloro-2,2-bis(4-chlorophenyl)ethene
4,4'-DDT	1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane
BAF	Bioaccumulation Factor
BSAF	Biota Sediment Accumulation Factor
BERA	Baseline Ecological Risk Assessment
CD	Compact Disk
CDI	Chronic Daily Intake
CLEAN	Comprehensive Long-term Environmental Action Navy
COPC	Contaminant of Potential Concern
CSM	Conceptual Site Model
CTO	Contract Task Order
DDTR	DDT and its derivatives (e.g., DDD, DDE)
DoN	Department of the Navy
DQO	Data Quality Objective
Eco SSL	Ecological Soil Screening Level
EEQ	Ecological Effects Quotient
EPC	Exposure Point Concentration
ERA	Ecological Risk Assessment
ESLs	Ecological Screening Levels
FFS	Focused Feasibility Study
IAS	Initial Assessment Study
LOAEL	Lowest Observed Adverse Effects Level
msl	Mean Sea Level
NAVFAC	Naval Facilities Engineering Command
NEESA	Naval Energy and Environmental Support Activity
NOAA	National Oceanic and Atmospheric Administration
NOAEL	No Observed Adverse Effects Level
NSB-NLON	Naval Submarine Base – New London
ORNL	Oak Ridge National Lab
PAHs	Polycyclic Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls
PEC	Probable Effects Concentration
QAPP	Quality Assurance Project Plan
RAO	Remedial Action Objectives

RI	Remedial Investigation
SCS	Soil Conservation Service
SCV	Secondary Chronic Value
SERA	Screening Level Ecological Risk Assessment
SVOC	Semi Volatile Organic Compound
TAL	Target Analyte List
TCL	Target Compound List
TEC	Threshold Effects Concentration
TOC	Total Organic Carbon
TtNUS	Tetra Tech NUS, Inc.
TRV	Threshold Response Value
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

1.0 INTRODUCTION

This Phase III RI Report for Site 2B, Area A Wetland, at Naval Submarine Base – New London (NSB-NLON), Groton, Connecticut has been prepared by Tetra Tech NUS, Inc. (TtNUS) on behalf of the United States Navy, Naval Facilities Engineering Command Mid-Atlantic (NAVFAC) under the Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract Number N62467-04-D-0055, Contract Task Order (CTO) 439. Several previous investigations have been conducted for the Area A Wetland, including screening-level ecological risk assessments (SERAs). Based on the results of these investigations, a Quality Assurance Project Plan (QAPP) for a Phase III Remedial Investigation (RI) for Site 2B, Area A Wetland, was prepared (TtNUS, 2007).

1.1 INVESTIGATION OBJECTIVES

Data Quality Objectives (DQOs) were developed as part of the Phase III RI QAPP (TtNUS, 2007). The following three decision statements from the DQOs served as the objectives of the Phase III RI:

- After the collection of Phase III RI data for analytes of concern and conducting a SERA for ecological receptors of concern (based on existing data and Phase III RI data), determine whether an unacceptable ecological risk persists at Site 2B, Area A Wetland, and if so, recommend collection of additional data and a baseline ecological risk assessment (BERA). After the collection of additional data for analytes of concern (i.e., Phase IV RI, if necessary) and completion of the BERA for ecological receptors of concern using all data, determine whether an unacceptable ecological risk persists at the Site 2B, Area A Wetland. This part of the decision statement is not applicable for this report because it has not yet been determined whether the collection of additional data as part of a Phase IV RI is necessary.

- Determine whether the chemical concentrations in Phase III RI sediment samples are similar to those from the previous data set, and determine whether the extent of contamination is adequately defined.

- Determine the thickness of the overlying organic layer that has formed above the dredge spoils.

The field investigation to implement the tasks set forth in the Phase III RI QAPP was conducted in October 2007, when surface and subsurface sediment samples were collected for visual observations and chemical analysis. The data obtained as part of the Phase III RI are evaluated in this report to meet the objectives of the investigation.

1.2 ENVIRONMENTAL SETTING

The Area A Wetland is adjacent to the northeastern edge of the Area A Landfill and is approximately 26 acres in size. The location of the Area A Wetland within NSB NLON is shown on Figure 1-1. Figure 1-2 shows the surface features of the Area A Wetland. The Area A Wetland is a relatively flat-lying, swampy, vegetated area. The surface elevation for most of the wetland is between 70 and 80 feet above mean sea level (msl). This portion of NSB NLON was undeveloped wooded land, and possibly wetland, until the late 1950s.

The Area A Wetland is characterized as a palustrine emergent, nonpersistent, narrow-leaved and broad-leaved deciduous scrub/shrub wetland with a non-tidal artificial water regime. Areas of open water (generally shallow) are scattered across this wetland unit. The soft organic sediments that characterize these wetlands support a monoculture of the reed Phragmites commonis, which dominates all other vegetative forms. Although providing good cover, this emergent is not known to be used by any species of wildlife as a source of food. There are scattered patches of open water between the stands of reeds; scattered duckweed (*Lemna* spp.) and filamentous algae found in these areas of open water. As the substrates become firmer, the vegetation becomes more typical of vegetation associated with old fields and upland areas. Vegetation species found in the zone of transition include viburnum (*Viburnum recognitum*), spicebush (*Lindera benzoin*), and black alder (*Ilex verticillata*) (Atlantic, 1994). The areas adjacent to the Area A Wetland (e.g., Area A Downstream) provide good habitat for ecological receptors that may use the wetlands as a source of drinking water. In addition, the open water areas are known to be utilized by aquatic birds, amphibians, reptiles and aquatic insects; amphibians and aquatic insects represent potential prey for wildlife that could forage in this area.

A small pond is located at the southern portion of the wetland with 1 to 3 feet of standing water during all seasons. Phragmites is the predominant type of vegetation around the perimeter of the pond. Water from the wetland discharges through an earthen dike at the western edge of the wetland via four 24 inch metal culverts to the Area A Downstream Watercourses. These watercourses subsequently discharge into the Thames River.

The surface elevation increases to nearly 100 feet above msl in the northeastern corner of the wetland. This area was historically a stream valley. After the earthen dike was constructed and the ground surface of the wetland was raised by filling with dredge spoils, groundwater levels rose to the point that the dredge spoils placed in the northeastern corner became saturated.

The most prominent topographic feature of the wetland is a bedrock knob, located between the Area A Weapons Center and Area A Landfill. Bedrock is within 1 foot of the ground surface at this location. This

local bedrock knob is shown on the historical surface geology map, which pre-dates the construction of the earthen dike and filling activities.

The Soil Conservation Service (SCS) Soils Map (1983) classifies the soil at the Area A Wetland as Udorthents-Urban land, which is defined as excessively drained to moderately drained soils that have been disturbed by cutting and filling. This is consistent with historical information regarding the placement of dredge spoils in the area.

The Area A Wetland is underlain by an organic layer which covers the dredge spoils that consist of silt and clay with traces of fine sand and shell fragments. The makeup of the dredge spoils reflects their original depositional environment, i.e., river bottom sediments. The dredge spoils extend across the present site southeast and southwest beneath the Area A Landfill. Dredge spoils are between 25 and 35 feet thick on the southern side of the wetland adjacent to the landfill, and 10 to 15 feet thick on the northeastern side of the wetland. Where dredge spoils do not lie directly on bedrock, they are underlain by a thin remnant of topsoil, which consists of dark, organic rich silt, clay, and traces of roots. The topsoil is in turn underlain by alluvial deposits. On the surface, a layer of organic matter with varying depth is present over much of the Area A Wetland.

Groundwater is present within the overburden and bedrock underlying the Area A Wetland. As is typical for wetland environments, the water table is nearly at the ground surface throughout most of the Area A Wetland. Groundwater flows toward the bedrock valley and ultimately to the Area A Downstream Watercourses through a combination of discharge to local streams within the wetland and aquifer underflow. The hydraulic gradient is relatively flat across the Area A Wetland.

1.3 POTENTIAL SOURCES OF CONTAMINATION

In the late 1950s, dredge spoils from the Thames River were pumped to the Site 2B area and contained within an earthen dike that extends from the Area A Landfill to the southern side of the Area A Weapons Center. Based on the boring logs from the Phase I and Phase II RIs (Atlantic, 1992 and Brown and Root Environmental, 1997), the total volume of dredged material in the wetlands is approximately 1.2 million cubic yards. The concentrations of contaminants in the spoils prior to placement into the wetland are not known. The finer particulates, which typically have greater chemical concentrations than coarser sediments, may have accumulated in the area near the dike after being initially deposited elsewhere.

It was also reported that pesticide "bricks" were placed on ice in the wetland during winter and allowed to dissolve as a mosquito control measure. These "bricks" consisted of formulated (water-soluble) DDT and were used in the 1960s prior to the 1972 ban on DDT.

To the northwest of the Area A Wetland lies the Area A Weapons Center (Site 20) (see Figure 1-1). The site includes Building 524 and the north and south weapons storage areas. Building 524 is used for administration and minor torpedo assembly. No weapons production takes place in this building. Chemicals and chemical wastes, including cleaning and lubricating compounds, paints, adhesives, and liquid fuels, were stored in 1-gallon to 5-gallon containers in seven metal storage cabinets located on a paved area south of the building. Many of these materials are classified as corrosive or flammable. The north and south weapons storage bunkers are located southeast of Building 524 and are used to store simulator torpedoes. Weapons containing liquid fuels such as Otto fuel, JP-10, and TH Dimer (jet rocket fuel) are stored in these bunkers.

A ROD was signed for the soil and sediment OU associated with Site 20 (OU7) in June 2000 (Navy, 2000a). A small (less than 200 cubic yards) remedial action was conducted at the site in 2001 to address PAH and arsenic contamination in soil and sediment. The action was intended to mitigate direct exposures to soil and sediment and involved the excavation of soil and sediment with contaminant concentrations exceeding cleanup levels. Confirmatory soil and sediment samples were collected from the bottom and sidewalls of the excavation. Following verification of contaminated soil removal, the excavations were backfilled with clean soil, the drainage swales were regraded, and the disturbed asphalt was replaced.

Two drainage culverts (one along the northwestern side and one along the southeastern side of the Area A Wetland) collect runoff from the surrounding hillsides and from the Area A Weapons Center and discharge it to the Area A Wetland. The drainage culvert along the northwestern side eventually discharges to a storm sewer that passes along the southern side of the Area A Weapons Center and discharges into the Area A Wetland. The drainage culvert along the southeastern side of the wetland collects runoff from the hillside north of Area A Weapons Center and continues along the southeast side of Area A Weapons Center, eventually discharging to the Area A Wetland. Water typically flows in these drainage culverts immediately following precipitation events. Elevated levels of polycyclic aromatic hydrocarbons (PAHs) were detected in some of the sediment samples (see Figure 1, Appendix D), suggesting that the Weapons Center is a source of PAHs to the Area A Wetland. These samples are located downstream of the sediment (which contained elevated levels of PAHs) that was removed from drainage swales at the Area A Weapons Center.

The Area A Landfill is located on the eastern side of the Area A Wetland (see Figure 1-1). The area fill method was reportedly used in landfill operations in this area. New refuse was dumped from the face of previously deposited refuse and covered with earth. The cover material used on the landfill was sand and gravel obtained from the Groton water supply reservoir in Groton, CT. Landfilling operations ceased in 1973. After landfilling operations were discontinued, a concrete pad was constructed in the southwestern

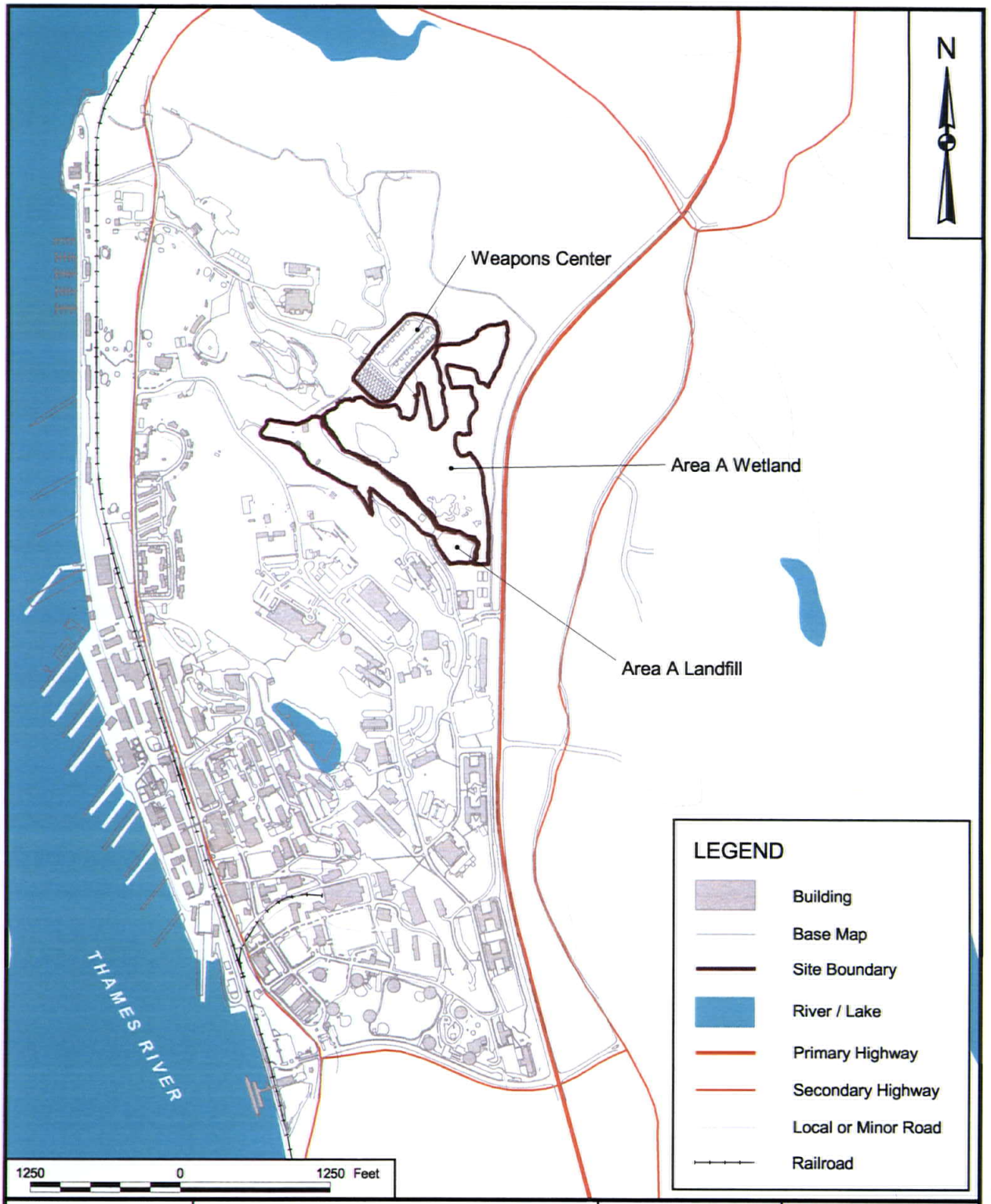
portion of the landfill for above-ground storage of industrial wastes. Up to the time of the remedial action at the Area A Landfill, the pad was still in existence. At the time of the Initial Assessment Study (IAS) (NEESA, 1983), 42 steel drums, 87 transformers [mineral oil and polychlorinated biphenyls (PCBs)], and 60 to 80 electrical switches were stored on the pad. Two transformers and several electrical switches were reportedly leaking. Past leakage of oil was also evident. Most drums were stacked on wooden pallets, and those having PCB labels were covered and bound with plastic sheeting. All of these materials were properly disposed off site.

The IAS Report also indicated that refuse, including steel drums, oxygen candles, wood and metal scrap, concrete, and tires, was exposed at the edge of the landfill adjacent to the wetland. The IAS Report stated that petroleum compounds had recently been poured from containers and had flowed into the wetland at two locations in the northwestern portion of the landfill. The IAS Report also stated that when batteries were overhauled, spent sulfuric acid solution was transferred to barrels and transported to the Area A Landfill for disposal. The acid was poured into trenches dug with a bulldozer and subsequently covered with soil. Atlantic personnel performed an inspection of the Area A Landfill on September 30, 1988. Iron floc was observed along the toe of the slope of the landfill extending from the dike to the eastern end of the deployed parking lot. Iron floc occurs when groundwater with high concentrations of iron discharge to an oxygen rich environment and bacteria use the iron and oxygen to form the orange floc. The slope of the landfill had been covered with fill, and material in the landfill was not visible.

Originally, runoff from the Area A Landfill drained as overland flow to the north into the Area A Wetland. As a result of the installation of the landfill cap in September 1997, surface water flow patterns at the landfill have been significantly altered. A storm water management system is incorporated into the landfill cover system to minimize ponding and potential leaching of contaminants to the groundwater through infiltration. The storm water management system was designed to direct runoff from a storm event around the cover system and into the Area A Wetland and to intercept a portion of the shallow groundwater flowing into the landfill from the southern slope. Runoff from the landfill discharges through a culvert into Site 3 to the northwest and ultimately into the Thames River. The system consists of five surface water diversion channels, two reinforced concrete culverts, and a riprap channel to convey the water. Four of the surface water diversion channels are asphalt lined to funnel surface water flow, and the fifth channel consists of riprap to provide appropriate erosion protection prior to discharge into the Area A Wetland. The two culverts were installed to allow vehicular access to the landfill at Thresher Avenue and at the access gate located north of Building 460.

In summary, there are several potential sources of contamination into the Area A Wetland. The most significant sources were historical (placement of dredge spoils, placement of DDT bricks, disposal of

petroleum compounds from the Area A Landfill, etc.). Other limited contributions are from ongoing stormwater runoff from the Area A watershed.



DRAWN BY J. ENGLISH — DATE 06/22/07	Tetra Tech NUS, Inc.	CONTRACT NUMBER CTO 0439	OWNER NO. —
CHECKED BY A. BERNHARDT — DATE 03/10/08	SITE LOCATION MAP AREA A WETLAND NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — DATE —	
COST/SCHEDULE-AREA		APPROVED BY — DATE —	
SCALE AS NOTED		DRAWING NO. FIGURE 1-1	REV 0

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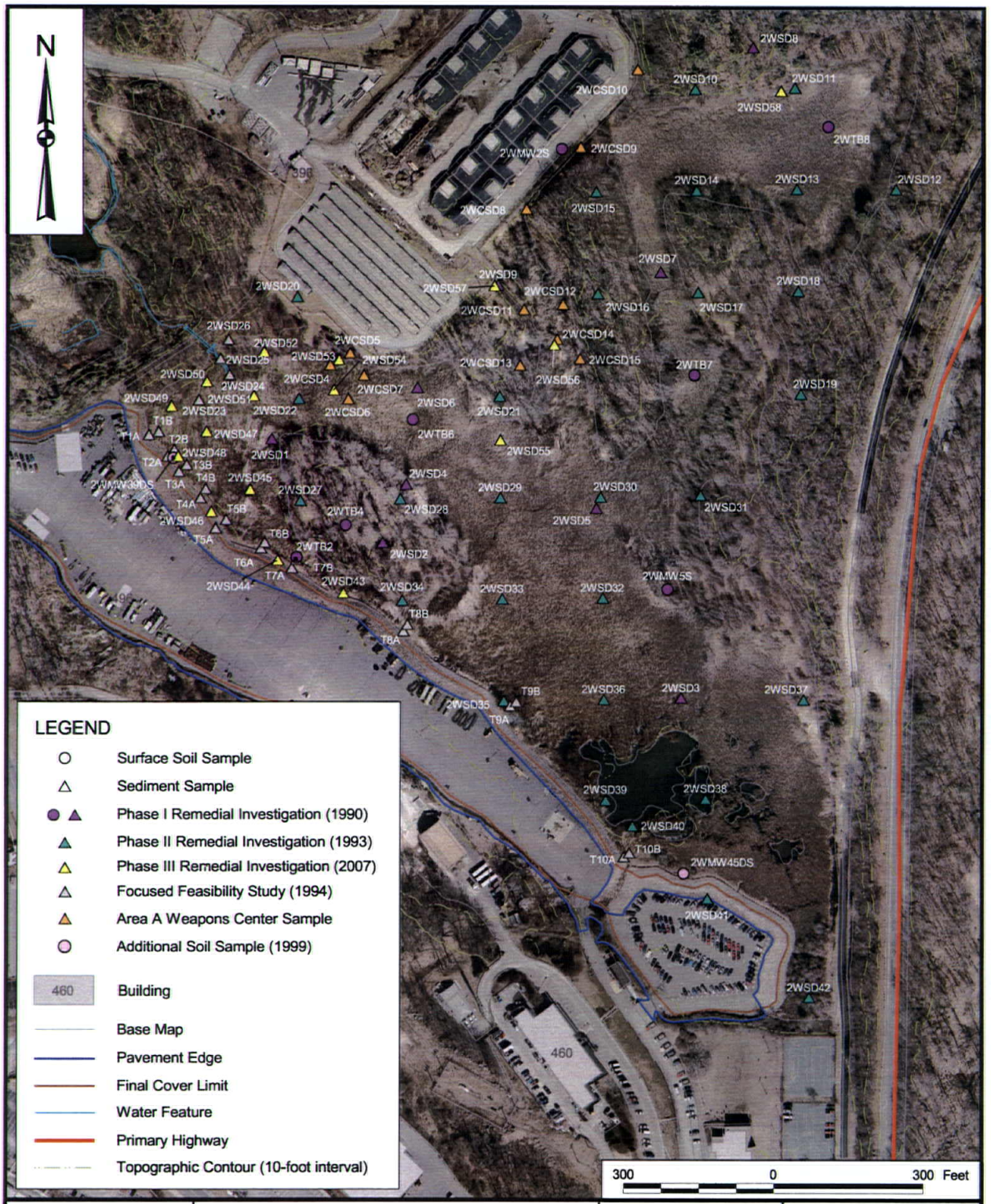

DRAWN BY	DATE	Tetra Tech NUS, Inc.	CONTRACT NUMBER	OWNER NO.
J. ENGLISH	06/22/07		CTO 0439	—
CHECKED BY	DATE	SOIL AND SEDIMENT SAMPLING LOCATIONS	APPROVED BY	DATE
A. BERNHARDT	03/10/08	AREA A WETLAND	—	—
COST/SCHEDULE-AREA		NAVAL SUBMARINE BASE NEW LONDON	APPROVED BY	DATE
		GROTON, CONNECTICUT	—	—
SCALE			DRAWING NO.	REV
AS NOTED			FIGURE 1-2	0

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2.0 FIELD INVESTIGATIONS

This section presents a brief summary of previous and current investigations conducted at the Area A Wetland and adjacent sites (Area A Landfill and Area A Weapons Center) during which samples within the Area A Wetland were collected for use in the SERA.

2.1 PREVIOUS INVESTIGATIONS

Section 1.4.2.1 in the Phase III RI QAPP presents a detailed discussion of the previous investigations conducted at the Area A Wetland and adjacent sites (TtNUS, 2007). Figure 1-2 shows the locations of sediment samples collected as part of the Phase III RI, the locations of sediment/soil samples in the Area A Wetland from previous investigations. Figure 2-1 is an expanded view of the area sampled during the Phase III RI. The data from the previous investigations that were evaluated in this updated SERA are listed below (Tables 2-1 and 2-2 summarize the analytical programs for the surface soil and sediment samples):

Phase I RI: Analytical data from surface soil samples were used to quantify risks to wildlife; sediment samples were used to quantify risks to sediment invertebrates and wildlife; and frog tissue samples were discussed qualitatively in the risk characterization section.

Phase II RI: Analytical data from sediment samples were used to quantify risks to sediment invertebrates and wildlife.

Focused Feasibility Study (FFS): Analytical data from sediment samples were used to quantify risks to sediment invertebrates and wildlife.

Additional Soil Samples: Analytical data from additional surface soil samples collected during the installation of monitoring wells at the Area A Landfill were used to quantify risks to wildlife.

Area A Weapons Center Investigations: Analytical data from sediment samples collected in or immediately adjacent to the Area A Wetland were used to determine potential sources of chemicals from the Area A Weapons Center to the Area A Wetland, to help define the extent of contamination in the Area A Wetland, and to quantify risks to sediment invertebrates and wildlife.

2.2 PHASE III REMEDIAL INVESTIGATION

In October 2007, sediment samples for chemical analysis were collected and visual observations of the depth of the organic layer above the dredge spoils were made in accordance with the Phase III RI QAPP (TtNUS, 2007). Copies of the field logbook, sample log sheets, and chain-of-custody forms are provided in Appendix A. Figure 1-2 shows the locations of the current and historical samples evaluated in this SERA. Figure 2-1 is an expanded view of the Area A Wetland from Figure 1-2 where Phase III RI samples were collected.

At each sediment sample location in the current investigation, surface sediment samples were collected from 0 to 4 inches or 0 to 6 inches below ground surface (bgs) using a stainless steel spoon. Table 2-3 presents a description of the sediment and depth to dredge spoils at each of the Phase III RI sample locations. In the QAPP, the depth of the surface sediment samples was proposed as 0 to 4 inches. However, at some locations, there was a thick (up to 2 inches) organic layer (e.g., plant material) on the surface. At those locations, the sampling depth was increased to 0 to 6 inches to collect more of the actual sediment as opposed to the organic material.

After the surface sediment samples were collected, a clean stainless steel bucket auger was used to core through the sediment to visually estimate the thickness of the organic layer above the dredge spoils. The dredge spoils were easily distinguished from the organic layer (brown soil); the dredge spoils were grey, with a clay-like consistency and a strong hydrogen sulfide odor. The depth of the top of the dredge spoils at each location was recorded in the field logbook.

All but two of the sixteen surface sediment samples were analyzed for target compound list (TCL) PAHs, pesticides, PCBs, target analyte list (TAL) metals, TOC, and pH. Sample 2W-SD-SD58-0001 was only analyzed for cadmium, and sample 2W-SD-SD57-0001 was only analyzed for PAHs and metals. These samples were added to the final QAPP based on comments from United States Environmental Protection Agency (USEPA) on the draft QAPP.

At five sample locations, subsurface sediment samples were collected from 2 to 4 feet and analyzed for PAHs, PCBs, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, metals, TOC, and pH. These samples were collected to evaluate whether the dredge spoils had elevated levels of chemicals compared to concentrations of chemicals in surface sediment. Only four subsurface sediment samples were proposed for collection in the Phase III RI QAPP, but one sample was added in the field (2W-SD-SD46-0002) after a petroleum odor was detected in the sediment at that location. At approximately half of the locations (as proposed in the QAPP), a sample was collected from the dredge spoils and analyzed for TOC only.

2.3 RESULTS

As indicated in Tables 2-1 and 2-2, the historical soil and sediment samples were analyzed for a variety of chemical parameters including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, PCBs, metals, and miscellaneous parameters. The Phase III RI surface and subsurface sediment samples were, with the few exceptions noted above, analyzed for PAHs, pesticides, PCBs, metals, and TOC. The following sections present a summary of the results of the Phase III RI and an evaluation of two of the study objectives.

The analytical data from the Phase III RI were validated in accordance with the appropriate USEPA Region 1 data validation guidelines as outlined in the Phase III RI QAPP (TtNUS, 2007). The data validation letters are included on the compact disk (CD) in Appendix B, along with the complete analytical data results. Appendix C contains tables that show analytical results for soil, surface sediment, and subsurface sediment for chemicals detected in at least one sample from the respective medium.

Generally, the qualifications to the analytical data were relatively minor, with one exception. Several samples had percent solids values that were less than 30 percent (see Appendix C). Most of these sediment samples were not wet, but they contained large amounts of filamentous organic matter. The organic matter caused the low percent solids values because of the large amount of water in plant material. In accordance with the data validation guidelines, the detected concentrations in the samples with less than 30 percent solids were qualified as estimated with a "J" qualifier, and non-detected results were rejected with "UR" qualifiers. The impact of the rejected data on the overall data evaluation process is expected to be small for the following reasons:

- Most of the rejected PAH results were in samples that had relatively low concentrations of other PAHs, so it is not likely that the PAH results that were rejected would have been found at elevated levels.

- As presented in the Phase III RI QAPP (TtNUS, 2007), the primary pesticide risk drivers are 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT; very few of the results for these three pesticides were rejected. The non-detected results for other pesticides were rejected in about half of the surface sediment samples, but those pesticides are not significant from a risk standpoint.

- The non-detected results for Aroclor-1260, the only PCB detected in sediment, were rejected in four samples. PCBs were only detected in a few of the historical sediment samples, so it is likely that PCBs would not have been detected at elevated levels in any of those four samples.

- Antimony (four locations), cadmium (three locations), cobalt (two locations), selenium (four locations), silver (eight locations), and thallium (five samples) were the only metals with rejected data in the Phase III RI data set. The rejected metals data do not affect the results of the SERA because the number of rejected data points compared to the total number of samples is low. Also, in the case of antimony, silver, and thallium, these metals were only detected in a few samples.

2.3.1 General Information

Tables 2-4 and 2-5 present surface soil and sediment ecological screening levels, respectively. These are discussed in more detail in Section 3.4

Table 2-6 presents summary statistics for surface soil analytical data, including a comparison of maximum detected concentrations to surface soil ecological screening levels. One SVOC, two pesticides, one PCB, and nine metals were detected at concentrations that exceeded their respective screening levels. Generally, maximum detected concentrations were detected in soil samples collected adjacent to the Area A Landfill (locations TB2, TB4, TB6, and TB8).

Tables 2-7 and 2-8 present summary statistics for surface and subsurface sediment analytical data, respectively, including a comparison of maximum detected concentrations to the sediment ecological screening levels. Several SVOCs, pesticides, a PCB, and metals were detected in surface sediment samples at concentrations that exceeded their respective screening levels. No VOCs, one PCB, and fewer SVOCs, pesticides, and metals were detected at concentrations that exceeded their respective screening levels in the sub-surface sediment samples.

Appendix D contains figures that show the concentrations of the following chemicals or parameters in surface and subsurface sediment and surface soil samples collected across the Area A Wetland for the various investigations:

- Total PAHs
- Aroclor-1260
- Total DDT
- Cadmium
- Copper
- Lead
- Mercury
- Nickel
- Zinc
- TOC

These parameters were selected for concentration figures for the following reasons:

- VOCs were detected in 25 percent or less of the samples, and the only VOCs detected at concentrations greater than their respective screening levels are common laboratory contaminants

(acetone, 2-butanone, and carbon disulfide). Therefore, VOCs are not likely to be significant risk drivers at the site and were not selected for concentration figures.

- Most SVOCs were detected at low concentrations and/or low frequencies, with the exception of PAHs. The concentrations of individual PAHs are generally elevated at the same locations, so the concentrations of total PAHs, the sum of the individual detected PAHs, are plotted on Figure 1 in Appendix D.

- 4,4'-DDD, 4.4'-DDE, and 4,4'-DDT were the most frequently detected pesticides and were detected at the greatest concentrations compared to their screening benchmarks. The sum of the detected concentrations of 4,4'-DDD, 4.4'-DDE, and 4,4'-DDT are plotted on Figure 2 in Appendix D because the concentrations of individual DDT congeners are generally elevated at the same locations. Although alpha-chlordane and gamma-chlordane were also detected relatively frequently, they were detected at much lower concentrations relative to their screening level. Therefore, they are not expected to be risk drivers at the site, and their concentrations were not plotted on figures in Appendix D.

- Aroclor-1260 was detected at concentrations that exceeded its respective screening benchmarks in several samples, so its concentrations are plotted on Figure 3 in Appendix D.

- Several metals were detected at concentrations that exceeded their respective screening benchmarks. However, to focus the data evaluation on the chemicals that have the greatest potential to be risk drivers, Figures 4 through 11 in Appendix D were only generated for metals that were detected at concentrations greater than their probable effects concentration (PEC) from MacDonald et al. (2000) or other higher-effects levels.

Surface soil samples are designated on the figures by a circle, and sediment samples are designated by a triangle. The sample locations are shaded green if the concentrations in sediment or soil are less than ecological sediment screening values (see Table 2-5), shaded red if the concentrations are greater than the PEC or other higher-effects levels for sediment (listed on the figures), and shaded yellow if the detected concentrations are between those values. The chemical concentrations in soil samples were compared to sediment screening values because some of the soil locations may be periodically submerged and/or the soil may erode into the sediment. If a chemical was not detected in a sample or the detection limit was rejected, a value equal to the detection limit was used as the sample concentration. Because total PAHs and total DDT were calculated using positive detections only, if PAHs or 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT were not detected in a sample, the total PAHs or total DDT values for those samples was zero. When a duplicate sample was collected at a location, the average of the

original and duplicate sample results was plotted. For locations where a surface and subsurface sediment sample were collected during the Phase III RI, the left side of the triangle is shaded with the color designation for the surface sample, and the right side of the triangle is shaded with the color designation for the subsurface sample.

During Phase III RI sampling at location 2WSD45, in northwestern area of the Area A Wetland, a strong petroleum/chemical odor was noted in the subsurface sediment. Therefore, a subsurface sediment sample was collected from this location and analyzed for PAHs, pesticides, PCBs, metals, and TOC. The analytical results for this sample are presented in Table 3 in Appendix C. Total PAH and total DDT results were generally greater at 2WSD45 than the other subsurface sediment samples, with the exception of 2WSD46, which had greater concentrations of total PAHs.

2.3.3 Comparison of Phase III RI Data to Historical Data

As presented in Section 1.1, one of the study objectives was to determine whether the chemical concentrations in the Phase III RI sediment samples are similar to those from the previous data set, and determine whether the extent of contamination is adequately defined. In addition, subsurface sediment samples collected at five locations were used to evaluate whether the dredge spoils had elevated levels of chemicals compared to surface sediment.

A review of the concentration figures in Appendix D shows that the greatest chemical concentrations were generally found in the western portion of the wetland, adjacent to the Area A Weapons Center and Area A Landfill. Other portions of the wetland generally had lower chemical concentrations; some detections were greater than their respective ecological screening levels but there was no discernable distribution pattern.

The Phase III RI data generally show chemical concentrations that are similar to or lower than the historical data. For example, on Figure 1 (in Appendix D), total PAH concentrations at 2WSD56 and 2WSD53 are less than the concentrations in adjacent samples (also see Table 2 in Appendix C). Total DDT concentrations generally decreased further away from the edge of the wetland. Therefore, the areas with chemical concentrations greater that the higher-effects levels, are bounded in the horizontal direction.

Table 2-9 presents the analytical results (side by side) for surface and subsurface samples for the chemicals presented in Appendix D. Table 2-3 presents descriptions of the sediment at various depth intervals. The surface sediment at the five locations where subsurface sediment samples were collected for chemical analysis was described as red-brown silty peat with some clay and roots. The subsurface sediment at the same locations was described as gray, clayey silt, which is representative of dredge

spoils. As can be seen in the table, the concentrations in the surface sediment samples were either similar to or higher than the concentrations in the subsurface samples, with the exception of 2WSD45, which had greater concentrations of some chemicals in the subsurface sediment sample. These results are similar to what was found in the surface/subsurface soil samples collected in the Area A Wetland during the Phase I RI, as discussed in the Phase III RI QAPP (TtNUS, 2007). This leads to the conclusion that the deeper dredge spoils are generally less contaminated than surface sediment, so the chemicals in the Area A Wetland are indicative of surface releases such as runoff and placement of the pesticide bricks versus the dredge spoils being contaminated.

After reviewing the draft Phase III RI QAPP, USEPA recommended collecting two additional sediment samples (at 2WSD57 and 2WSD58) because PAHs and/or metals were detected at concentrations greater than the higher-effects levels in nearby historical samples. The sample from 2WSD57 was analyzed for PAHs and TAL metals, and the sample from 2WSD58 was analyzed for cadmium only based on the historically high detection of cadmium near this location.

The total PAH value at 2WSD57 (48 mg/kg) was about an order of magnitude less than the total PAH results at the historical adjacent location 2WSD9 (411 mg/kg) (see Table 2 in Appendix C). The concentrations of metals were also generally lower in the more recent sample, with the exception of zinc. Cadmium was not detected at 2WSD58 but was detected at concentrations of 5 mg/kg and 6.7 mg/kg in the historical samples at locations 2WSD8 and 2WTB8, respectively, which were greater than the PEC of 4.98 mg/kg. Therefore, the concentrations of PAHs and metals in the 2WSD9 area have decreased over time, and the elevated cadmium results at 2WSD8 and 2WTB8 appear to be sporadic detections and not widespread cadmium contamination. In fact, cadmium was not detected at concentrations greater than the PEC in any of the Phase III RI sediment samples.

2.3.3 Thickness of Organic Layer

As presented in Section 1.1, one of the study objectives was to determine the thickness of the overlying organic layer that has formed above the dredge spoils. To meet this objective, sediment coring was conducted for visual observations to determine the depth of the organic layer above the dredge spoils. Surface and subsurface sediment sample results for percent solids and TOC were also used for this evaluation. The results of the visual observations are presented in Table 2-3. The results of the percent solids and TOC analyses are presented in Table 2-10. Figure 2-2 presents the depth of dredge spoils at each location, and Figure 12 in Appendix D presents the results of the TOC analysis.

The depth to dredge spoils values in Table 2-3 were based on the depth where the sediment became a grey silty clay with a distinctive hydrogen sulfide odor. The dredge spoils also had significantly lower percent TOC concentrations compared to the surface sediment, as indicated in Table 2-10. The average

TOC in surface sediment was 21.5 percent, and it was 5.5 percent in subsurface sediment. The surface sediment samples generally had lower percent solids than the subsurface sediment samples, which were related to the greater amounts of plant material in the surface sediment. As presented in Section 2.3, the large amounts of filamentous organic matter in surface sediment accounted for the lower percent solids values in those samples.

The depth to dredge spoils ranged from 2.5 inches at 2WSD58 to 20 inches at 2WSD50. The depth at 2WSD47 was greater than 18 inches; the exact depth could not be determined because the sediment would not stay in the auger bucket. The depth to dredge spoils is generally shallower along the edges of the wetland and deeper away from the edges.

TABLE 2-1

SUMMARY OF SAMPLING AND ANALYTICAL PROGRAM FOR SOIL
PHASE I REMEDIAL INVESTIGATION AND ADDITIONAL SOIL SAMPLES
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Sample ID	Sample Depth (feet below ground)	Analyses			
		Target Compound List (TCL)			TAL[2] Metals
		Volatiles	Semivolatiles	Pesticides/ PCBs[1]	
Phas I Remedial Investigation[3]					
2WTB2(0-2)	0-2	•[4]	•	•	•
090690-2WTB9(4-6)[5]	0-2	•	•	•	•
2WTB4(0-2)	0-2	•	•	•	•
2WTB6(0-2)	0-2	•	•	•	•
2WTB7(0-2)	0-2	•	•	•	•
2WTB7 (25-27)[6]	0-2	•	•	•	•
2WTB8(1-3)	1-3	•	•	•	•
2WMW2(0-2)	0-2	•	•	•	•
2WMW5(0-2)	0-2	•	•	•	•
2WTB11(0-2)[7]	0-2	•	•	•	•
Additional Soil Samples[8]					
2W-SU-39DS-00-99	0-2	•	•	•	•
2W-SU-45DS-00-99	0-2	•	•	•	•

1 Polychlorinated biphenyls.
2 Target Analyte List (TAL) metals plus boron and cyanide.
3 Only the surface soil samples evaluated in the Phase III ecological risk assessment are listed.
4 • indicates samples analyzed at a fixed-base laboratory.
5 090690-2WTB9 (4-6) is a field duplicate of 2WTB2 (0-2).
6 2WTB7 (25-27) is a field duplicate of 2WTB7 (0-2).
7 2WTB11 (0-2) is a field duplicate of 2WMW5 (0-2).
8 These soil samples were collected from monitoring wells borings at the Area A Landfill.

TABLE 2-2

SUMMARY OF SAMPLING AND ANALYTICAL PROGRAM FOR SEDIMENT - PHASE I, II, AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Sample ID	Sample Depth (feet below ground)	Analyses					
		Target Compound List				TAL Metals[2]	Engineering[3]
		Volatiles	Semivolatiles	Pesticides	PCB[1]		
Phase I RI - Area A Wetland							
112690-2WSD1	0-0.5	●[4]	●	●	●	●	
112690-2WSD10[5]	0-0.5	●	●			●	
112690-2WSD2	0-0.5	●	●	●	●	●	
112690-2WSD3	0-0.5	●	●	●	●	●	
112690-2WSD4	0-0.5	●	●	●	●	●	
112690-2WSD5	0-0.5	●	●	●	●	●	
112690-2WSD6	0-0.5	●	●	●	●	●	
112690-2WSD7	0-0.5	●	●	●	●	●	
112690-2WSD8	0-0.5	●	●	●	●	●	
112690-2WSD9	0-0.5	●	●	●	●	●	
Phase II RI - Area A Wetland							
2WSD10	0-0.5			○[6]			
2WSD11	0-0.5			○			
2WSD12	0-0.5			○			
2WSD13	0-0.5			●			
2WSD14	0-0.5			●/○			
2WSD15	0-0.5			○			
2WSD16	0-0.5			○			
2WSD17	0-0.5			○			
2WSD18	0-0.5			○			
2WSD19	0-0.5			○			
2WSD20	0-0.5			○			
2WSD21	0-0.5			○			
2WSD22	0-0.5			○			
2WSD27	0-0.5			○			
2WSD28	0-0.5			○			
2WSD29	0-0.5			○			
2WSD30	0-0.5			○			
2WSD31	0-0.5			○			
2WSD32	0-0.5			○			
2WSD33	0-0.5			○			
2WSD34	0-0.5			●/○			
2WSD35	0-0.5			○			
2WSD36	0-0.5			○			
2WSD37	0-0.5			○			
2WSD38	0-0.5			●/○			
2WSD39	0-0.5			●/○			●[7]
2WSD40	0-0.5			●/○			
2WSD41	0-0.5			●/○			
2WSD42	0-0.5			○			

TABLE 2-2

SUMMARY OF SAMPLING AND ANALYTICAL PROGRAM FOR SEDIMENT - PHASE I, II, AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Sample ID	Sample Depth (feet below ground)	Analyses					
		Target Compound List				TAL	
		Volatiles	Semivolatiles	Pesticides	PCB[1]	Metals[2]	Engineering[3]
Phase II RI - Area A Weapons Center							
2WCSD4	0-1	•	•	•	•	•	
2WCSD5	0-1	•	•	•	•	•	•
2WCSD6	0-1		•			•	
2WCSD7	0-1	•	•	•	•	•	
2WCSD8	0-1		•			•	
2WCSD9	0-1		•			•	
2WCSD10	0-1		•			•	
2WCSD11	0-1	•	•	•	•	•	•
2WCSD12	0-1		•			•	
2WCSD13	0-1		•			•	
2WCSD14	0-1		•			•	
2WCSD14-D	0-1		•			•	
2WCSD15	0-1		•			•	
Focused Feasibility Study[8]							
2WSD23	0-1			•	•		•
2WSD24	0-1			•	•		•
2WSD25	0-1			•	•		•
2WSD26	0-1			•	•		•
T1-A	0-1	•	•	•	•	•[9]	•
T1-B	0-1	•	•	•	•	•	•
T2-A	0-1	•	•	•	•	•	
DUP-03[10]	0-1	•	•	•	•	•	•
T2-B	0-1	•	•	•	•	•	•
T3-A	0-1	•	•	•	•	•	•
T3-B	0-1	•	•	•	•	•	•
T4-A	0-1	•	•	•	•	•	•
T4-B	0-1	•	•	•	•	•	•
T5-A	0-1	•	•	•	•	•	•
T5-B	0-1	•	•	•	•	•	•
T6-A	0-1	•	•	•	•	•	•
DUP-05[11]	0-1	•	•	•	•	•	•
T6-B	0-1	•	•	•	•	•	•
T7-A	0-1	•	•	•	•	•	•
T7-B	0-1	•	•	•	•	•	•
T8-A	0-1	•	•	•	•	•	•
T8-B	0-1	•	•	•	•	•	•
T9-A	0-1	•	•	•	•	•	•
T9-B	0-1	•	•	•	•	•	•
T10-A	0-1	•	•	•	•	•	•
T10-B	0-1	•	•	•	•	•	•

TABLE 2-2

SUMMARY OF SAMPLING AND ANALYTICAL PROGRAM FOR SEDIMENT - PHASE I, II, AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Sample ID	Sample Depth (feet below ground)	Analyses					
		Target Compound List				TAL Metals[2]	Engineering[3]
		Volatiles	Semivolatiles	Pesticides	PCB[1]		
Phase III RI - Area A Wetland							
Surface Sediment							
2W-SD-SD43-0001	0-0.33		•[12]	•	•	•[14]	•[13]
2W-SD-SD44-0001	0-0.33		•[12]	•	•	•[14]	•[13]
2W-SD-SD45-0001	0-0.33		•[12]	•	•	•[14]	•[13]
2W-SD-SD46-0001	0-0.33		•[12]	•	•	•[14]	•[13]
2W-SD-SD47-0001	0-0.5		•[12]	•	•	•[14]	•[13]
2W-SD-SD48-0001	0-0.33		•[12]	•	•	•[14]	•[13]
2W-SD-SD49-0001	0-0.33		•[12]	•	•	•[14]	•[13]
2W-SD-SD50-0001	0-0.33		•[12]	•	•	•[14]	•[13]
2W-SD-SD51-0001	0-0.5		•[12]	•	•	•[14]	•[13]
2W-SD-SD52-0001	0-0.5		•[12]	•	•	•[14]	•[13]
2W-SD-SD53-0001	0-0.5		•[12]	•	•	•[14]	•[13]
2W-SD-SD54-0001	0-0.5		•[12]	•	•	•[14]	•[13]
2W-SD-SD55-0001	0-0.5		•[12]	•	•	•[14]	•[13]
2W-SD-SD56-0001	0-0.33		•[12]	•	•	•[14]	•[13]
2W-SD-SD57-0001	0-0.33		•[12]			•[14]	•[13]
2W-SD-SD58-0001	0-0.33					•[15]	•[13]
Subsurface Sediment							
2W-SD-SD44-0002	1-2						•[13]
2W-SD-SD45-0002	2.5-3.33		•[12]	•	•	•[14]	•[13]
2W-SD-SD46-0204	2-3		•[12]	•	•	•[14]	•[13]
2W-SD-SD48-0204	2-3		•[12]	•	•	•[14]	•[13]
2W-SD-SD50-0204	2-4		•[12]	•	•	•[14]	•[13]
2W-SD-SD53-0204	2-4		•[12]	•	•	•[14]	•[13]
2W-SD-SD55-0002	2.25-2.5						•[13]
2W-SD-SD56-0002	2-2.25						•[13]
2W-SD-SD57-0002	1.25-1.66						•[13]

Only the sediment samples evaluated in the Phase III ecological risk assessment are included in this table.

1 Polychlorinated biphenyls.
2 Target Analyte List (TAL) metals plus boron and cyanide.
3 Engineering characteristics for sediment included grain size distribution, moisture content, and total organic carbon content.
4 • indicates samples analyzed at a fixed-base laboratory.
5 112690-2WSD10 is a field duplicate of 112690-2WSD1.
6 o indicates samples field screened with a portable gas chromatograph.
7 Engineering characteristics also measured in this sample include specific gravity, organic content, cation exchange capacity, and pH.
8 Samples 2WSD23, 2WSD24, 2WSD25, and 2WSD26 were collected as part of the Area A Downstream/OBDA Focused Feasibility Study (FFS). The remaining samples were collected as part of the Area A Landfill FFS.
9 For the FFS, samples were analyzed for TAL metals plus boron.
10 DUP-03 is a field duplicate of T2-A.
11 DUP-05 is a field duplicate of T6-A.
12 Polycyclic Aromatic Hydrocarbons (PAHs) only.
13 Total organic carbon only.
14 Target Analyte List metals only (did not include boron or cyanide).
15 Cadmium only.

TABLE 2-3

DESCRIPTION OF SEDIMENT AT EACH SAMPLE LOCATION FROM THE PHASE III REMEDIAL INVESTIGATION
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Sample Location	Depth to Dredge Spoils (inches)	Depth (inches)	Soil Description	Comments
2WSD43	6	0-4	Red brown silt, peat, trace roots	
		6-24	Gray clayey silt	Water at 18 inches
2WSD44	6	0-4	Red brown sandy silt, trace roots	
		4-6	Sand	
		6-24	Gray clayey silt	
2WSD45	18	0-18	Red brown silt, peat, wet	
		18-30	Dark gray clayey silt, roots, water	Petroleum odor
		30-48	Dredge spoils, very soft	
2WSD46	12	0-4	Red brown clayey silt, trace roots	
		4-12	Red brown silty sand	
		12-20	Gray clayey silt, trace roots	Water at 20 inches
		20-36	Gray clayey silt	
2WSD47	> 18	0-6	Red brown silty, peat, wet	Used a spoon to dig 18 inches. Material would not stay in bucket auger. Dredge spoils not observed.
		6-18	Red brown silty, peat, wet	
2WSD48	8	0-6	Brown to red brown silty peat, some clay, roots	
		6-8	Thin sand layer	
		8-48	Gray clayey silt, trace roots	
2WSD49	12	0-4	Red brown sandy silt, trace roots,	
		4-6	Red brown silty sand	
		6-12	Sandy clay mix	
		12-30	Gray clayey silt, trace roots	
2WSD50	20	0-20	Red brown clayey silt, peat, roots	
		20-48	Gray clayey silt, roots, wet	
2WSD51	18	0-18	Red brown silt, peat, moist, some roots	
		18-24	Gray clayey silt, trace roots, water	
2WSD52	4	0-4	Red brown silt, peat, moist	
		4-30	Gray clayey silt, some roots	
2WSD53	4	0-4	Red brown silt, peat, moist	
		4-48	Gray clayey silt, trace to some roots	24-48 inches very little roots
2WSD54	12	0-12	Red brown silt, peat	
		12-24	Gray clayey silt, some roots, wet	Hydrogen sulfide odor
2WSD55	10	0-10	Red brown silt, peat, trace sand	
		10-30	Gray clayey silt, slity clay, wet, some roots	Hydrogen sulfide odor, wet at 20 inches
2WSD56	6	0-2.5	Red brown sandy silt, trace roots, moist to wet	Not as much peat
		2.5-6	Red brown fine silty sand, trace clay, trace roots, moist/wet	Spoils red/brown
		20-27	Gray clayey silt, trace roots, wet	Hydrogen sulfide odor
		30	Bottom	
2WSD57	10	0-4	Gray brown fine/coarse sand, trace clay, wet trace organics	
		4-9	Gray fine/coarse sand, trace fine gravel, trace clay, trace roots	
		10-20	Gray clayey silt, trace sand, trace roots, wet	Hydrogen sulfide odor
2WSD58	2.5	0-2	Brown gray clayey silt with some roots	
		2	Gray silty clay/clayey silt with trace roots	
		2.5	Gray silty clay/clayey silt	

TABLE 2-4

SURFACE SOIL SCREENING LEVELS FOR WILDLIFE
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Screening Level	Source of Screening Level
Volatile Organics (µg/kg)		
2-BUTANONE	89,600	R5
ACETONE	2,500	R5
CARBON DISULFIDE	94.1	R5
METHYLENE CHLORIDE	4,050	R5
TETRACHLOROETHENE	9,920	R5
TRICHLOROETHENE	12,400	R5
Semivolatile Organics (µg/kg)		
ACENAPHTHENE	100,000	USEPA ECO-SSL(1)
ACENAPHTHYLENE	100,000	USEPA ECO-SSL(1)
ANTHRACENE	100,000	USEPA ECO-SSL(1)
BENZO(A)ANTHRACENE	1,100	USEPA ECO-SSL(1)
BENZO(A)PYRENE	1,100	USEPA ECO-SSL(1)
BENZO(B)FLUORANTHENE	1,100	USEPA ECO-SSL(1)
BENZO(G,H,I)PERYLENE	1,100	USEPA ECO-SSL(1)
BENZO(K)FLUORANTHENE	1,100	USEPA ECO-SSL(1)
BENZOIC ACID	NA	NA
BIS(2-ETHYLHEXYL) PHTHALATE	925	R5
CHRYSENE	1,100	USEPA ECO-SSL(1)
DIBENZO(A,H)ANTHRACENE	1,100	USEPA ECO-SSL(1)
FLUORANTHENE	100,000	USEPA ECO-SSL(1)
INDENO(1,2,3-CD)PYRENE	1,100	USEPA ECO-SSL(1)
PHENANTHRENE	100,000	USEPA ECO-SSL(1)
PYRENE	1,100	USEPA ECO-SSL(1)
Pesticides/PCBs (µg/kg)		
4,4'-DDD	21	USEPA ECO-SSL(1)
4,4'-DDE	21	USEPA ECO-SSL(1)
4,4'-DDT	21	USEPA ECO-SSL(1)
ALPHA-CHLORDANE	224	R5
AROCLOR-1260	0.332	R5
GAMMA-CHLORDANE	224	R5
TOTAL DDT	21	USEPA ECO-SSL(1)
Inorganics (mg/kg)		
ALUMINUM	pH<5.5	USEPA ECO-SSL(1,2)
ARSENIC	43	USEPA ECO-SSL(1)
BARIUM	2000	USEPA ECO-SSL(1)
BERYLLIUM	21	USEPA ECO-SSL(1)
CADMIUM	0.36	USEPA ECO-SSL(1)
CALCIUM	NA	NA
CHROMIUM	26	USEPA ECO-SSL(1)
COBALT	120	USEPA ECO-SSL(1)
COPPER	28	USEPA ECO-SSL(1)
IRON	5>pH>8	USEPA ECO-SSL(1,2)
LEAD	11	USEPA ECO-SSL(1)
MAGNESIUM	NA	NA
MANGANESE	4,000	USEPA ECO-SSL(1)
MERCURY	0.1	R5
NICKEL	130	USEPA ECO-SSL(1)

TABLE 2-4

SURFACE SOIL SCREENING LEVELS FOR WILDLIFE
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Screening Level	Source of Screening Level
POTASSIUM	NA	NA
SELENIUM	0.63	USEPA ECO-SSL(1)
SILVER	4.2	USEPA ECO-SSL(1)
SODIUM	NA	NA
VANADIUM	7.8	USEPA ECO-SSL(1)
ZINC	46	USEPA ECO-SSL(1)

R5 = USUSEPA Region 5 Ecological Soil Screening Level available at http://www.epa.gov/reg5rcra/ca/edql.htm.
EPA ECO-SSL = USEPA Ecological Soil Screening Level. Guidance Document for each chemical available at: http://www.epa.gov/ecotox/ecossl/.

NA = Not available or not applicable.

1 - Source of screening value is the lower of the wildlife Ecological Soil Screening Levels (Eco SSL).
2 - Eco SSL is based on the pH of the soil. Aluminum is considered a COPC only when the soil pH is less than 5.5. Iron is not expected to be toxic when the soil pH is between 5 and 8.

TABLE 2-5

SEDIMENT ECOOLOGICAL SCREENING LEVELS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Screening Level	Source of Screening Level
Volatile Organics (µg/kg)		
1,1,1-TRICHLOROETHANE	30	SCV
2-BUTANONE	270	SCV
ACETONE	8.7	SCV
CARBON DISULFIDE	0.85	SCV
CHLOROBENZENE	820	USEPA
METHYLENE CHLORIDE	370	SCV
TETRACHLOROETHENE	530	USEPA
TOLUENE	670	USEPA
TOTAL XYLENES	4	NOAA
TRICHLOROETHENE	1,600	USEPA
Semivolatile Organics (µg/kg)		
1,4-DICHLOROBENZENE	350	USEPA
2,4-DIMETHYLPHENOL	18	NOAA
2-METHYLNAPHTHALENE	20.2	NOAA
4-METHYLPHENOL	100	NOAA
ACENAPHTHENE	290	NOAA
ACENAPHTHYLENE	160	NOAA
ANTHRACENE	57.2	TEC
BENZO(A)ANTHRACENE	108	TEC
BENZO(A)PYRENE	150	TEC
BENZO(B)FLUORANTHENE	1,800	NOAA
BENZO(G,H,I)PERYLENE	170	OMOE
BENZO(K)FLUORANTHENE	240	OMOE
BENZOIC ACID	65	NOAA
BIS(2-ETHYLHEXYL) PHTHALATE	750	NOAA
BUTYL BENZYL PHTHALATE	11,000	SCV
CARBAZOLE	NA	NA
CHRYSENE	166	TEC
DIBENZO(A,H)ANTHRACENE	33	TEC
DIBENZOFURAN	2,000	USEPA
DI-N-BUTYL PHTHALATE	11,000	USEPA
DI-N-OCTYL PHTHALATE	11,000	USEPA(1)
FLUORANTHENE	423	TEC
FLUORENE	77.4	TEC
INDENO(1,2,3-CD)PYRENE	200	OMOE
NAPHTHALENE	176	TEC
PENTACHLOROPHENOL	17	NOAA
PHENANTHRENE	204	TEC
PHENOL	130	NOAA
PYRENE	195	TEC
TOTAL PAHs	1,610	TEC

TABLE 2-5

SEDIMENT ECOOLOGICAL SCREENING LEVELS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Screening Level	Source of Screening Level
Pesticides/PCBs (µg/kg)		
4,4'-DDD	4.88	TEC
4,4'-DDE	3.16	TEC
4,4'-DDT	4.16	TEC
ALDRIN	2	OMOE
ALPHA-CHLORDANE	3.24	TEC
AROCLOR-1260	59.8	TEC
TOTAL AROCLOR	59.8	TEC
BETA-BHC	2.37	TEC(2)
DELTA-BHC	2.37	TEC(2)
DIELDRIN	120	SQB
ENDOSULFAN I	2.9	USEPA
ENDOSULFAN II	14	USEPA
ENDOSULFAN SULFATE	5.4	USEPA
ENDRIN	54	SQB
ENDRIN ALDEHYDE	54	SQB(3)
ENDRIN KETONE	54	SQB(3)
GAMMA-BHC (LINDANE)	2.37	TEC
GAMMA-CHLORDANE	3.24	TEC
HEPTACHLOR	2.47	TEC(4)
HEPTACHLOR EPOXIDE	2.47	TEC
METHOXYCHLOR	19	USEPA
TOTAL DDT	5.28	TEC
Inorganics (mg/kg)		
ALUMINUM	25,500	NOAA
ANTIMONY	3	NOAA
ARSENIC	9.79	TEC
BARIUM	48	NOAA
BERYLLIUM	NA	NA
BORON	NA	NA
CADMIUM	0.99	TEC
CALCIUM	NA	NA
CHROMIUM	43.4	TEC
COBALT	50	OMOE
COPPER	31.6	TEC
CYANIDE	0.1	OMOE
IRON	20,000	OMOE
LEAD	35.8	TEC
MAGNESIUM	NA	NA
MANGANESE	460	OMOE
MERCURY	0.18	TEC
NICKEL	22.7	TEC
POTASSIUM	NA	NA
SELENIUM	1	NOAA
SILVER	0.5	OMOE

TABLE 2-5

SEDIMENT ECOOLOGICAL SCREENING LEVELS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Screening Level	Source of Screening Level
SODIUM	NA	NA
THALLIUM	NA	NA
VANADIUM	57	NOAA
ZINC	121	TEC

1 - Used di-n-butyl phthalate as a surrogate
2 - Used gamma-BHC as a surrogate
3 - Used endrin as a surrogate
4 - Used heptachlor epoxide as a surrogate.

NA = Not available or not applicable.

Sources in Order of Preference
1. SQB = Sediment Quality Benchmark (USEPA, 2003).
2. TEC = Threshold Effect Concentration (MacDonald, et al., 2000).
3. OMOE = Ontario Ministry of Environment and Energy (OMOE, 1993).
4. USEPA = United States Environmental Protection Agency, 1996. ECO Update, Ecotox Thresholds.
5. NOAA = National Oceanic and Atmospheric Administration (Buchman, 1999).
6. SCV = Secondary Chronic Value (Jones, et al., 1997).

TABLE 2-6

OCCURRENCE, DISTRIBUTION, AND SELECTION OF ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN - SURFACE SOIL PHASE I RI
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT
PAGE 1 OF 2

Chemical	Frequency of Detection	Minimum Concentration (1)	Maximum Concentration (1)	Sample with Maximum Concentration	Average of All Samples (2)	Average of Detected Concentrations (3)	Ecological Risk Screening			
							Screening Level(4)	Ecological Effects Quotient (5)	Retained as COPC (Yes/No)	Rationale
Volatile Organics (µg/kg)										
2-BUTANONE	3/9	5 J	310	083090-2WTB8(1-3)	50	134	89600	0 003	No	BSL
ACETONE	5/9	25	850	083090-2WTB8(1-3)	181	320	2500	0 340	No	BSL
CARBON DISULFIDE	2/9	6 J	8 J	083090-2WTB8(1-3)	6	7	94 1	0 085	No	BSL
METHYLENE CHLORIDE	3/9	3	6	2W-SU-45DS-00-99	4	4	4050	0.001	No	BSL
TETRACHLOROETHENE	1/9	7 J	7 J	083090-2WTB8(1-3)	5	7	9920	0 001	No	BSL
TRICHLOROETHENE	1/9	4 J	4 J	090690-2WTB4(0-2)	5	4	12400	0 0003	No	BSL
Semivolatile Organics (µg/kg)										
ACENAPHTHENE	1/9	270	270	2W-SU-39DS-00-99	311	270	100000	0 003	No	BSL
ACENAPHTHYLENE	3/9	59 J	120 J	083090-2WTB8(1-3)	220	85	100000	0.001	No	BSL
ANTHRACENE	2/9	52 J	79 J	083090-2WTB8(1-3)	226	66	100000	0 001	No	BSL
BENZO(A)ANTHRACENE	8/9	30	400 J	090690-2WTB2(0-2)	222	214	1100	0 364	No	BSL
BENZO(A)PYRENE	6/9	52	390 J	083090-2WTB8(1-3)	291	209	1100	0 355	No	BSL
BENZO(B)FLUORANTHENE	7/9	74 J	550 J	083090-2WTB8(1-3)	322	259	1100	0 500	No	BSL
BENZO(G,H,I)PERYLENE	2/9	49	260	2W-SU-39DS-00-99	312	155	1100	0 236	No	BSL
BENZO(K)FLUORANTHENE	6/9	71 J	390 J	083090-2WTB8(1-3)	271	225	1100	0 355	No	BSL
BENZOIC ACID	3/7	130 J	220 J	090590-2WTB7(0-2)-D	1191	170	NA	NA	Yes	NSL
BIS(2-ETHYLHEXYL) PHTHALATE	6/9	51 4 J	1300	083090-2WTB8(1-3)	445	482	**925**	NA	Yes	ASL
CHRYSENE	6/9	110 J	600 J	083090-2WTB8(1-3)	327	308	1100	0 545	No	BSL
DIBENZO(A,H)ANTHRACENE	1/9	32	32	2W-SU-39DS-00-99	282	32	1100	0 029	No	BSL
FLUORANTHENE	9/9	53 J	890	2W-SU-39DS-00-99	342	342	100000	0 009	No	ASL
INDENO(1,2,3-CD)PYRENE	2/9	140	270 J	083090-2WTB8(1-3)	286	205	1100	0 245	No	BSL
PHENANTHRENE	6/9	120 J	340 J	083090-2WTB8(1-3)	269	223	100000	0 003	No	BSL
PYRENE	9/9	98 J	810	2W-SU-39DS-00-99	354	354	1100	0 736	No	ASL
Pesticides/PCBs (µg/kg)										
4,4'-DDD	3/9	40	69 J	090690-2WTB6(0-2)	26	50	**21**	3.29	Yes	ASL
4,4'-DDE	2/9	5 2	10	2W-SU-45DS-00-99	13	7 6	21	0 476	No	BSL
4,4'-DDT	1/8	28	28	2W-SU-39DS-00-99	14	28	**21**	1 33	Yes	ASL
ALPHA-CHLORDANE	1/9	3	3	2W-SU-39DS-00-99	54	3	224	NA	No	BSL
GAMMA-CHLORDANE	1/9	2 2	2 2	2W-SU-39DS-00-99	54	2 2	224	NA	No	BSL
TOTAL DDT(6)	3/9	50	73 2	2W-SU-39DS-00-99	21	64	**21**	3 49	Yes	ASL
AROCLOR-1260	2/9	110	370 J	090690-2WTB2(0-2)	136	184	**0.332**	1114	Yes	ASL
Inorganics (mg/kg)										
ALUMINUM	9/9	4860	17900 J	083090-2WTB8(1-3)	13979	13979	pH<5 5(7)	NA	Yes	NSL
ARSENIC	9/9	1 2 B	15 1	2W-SU-45DS-00-99	7.2	7.2	43	0 351	No	BSL
BARIUM	9/9	28 3 B	93 8	083090-2WTB8(1-3)	54 1	54 1	2000	0 047	No	BSL
BERYLLIUM	8/9	0 28 B	1 8 J	090590-2WTB7(0-2)-D, 090690-2WTB2(0-2), 083090-2WTB8(1-3)	1 0	1 1	21	0 086	No	BSL
CADMIUM	8/9	0.16 B	7.2	090690-2WTB2(0-2)-D	3.8	4 2	**0.36**	20 0	Yes	ASL
CALCIUM	9/9	1170 J	3690 J	090690-2WTB2(0-2)-D	1799	1799	NA	NA	NA	NUT
CHROMIUM	9/9	12 2	102	083090-2WTB8(1-3)	58 5	58 5	**26**	3 92	Yes	ASL
COBALT	9/9	4 8 B	12 7	090590-2WTB7(0-2)-D	9 2	9 2	120	0 106	No	BSL
COPPER	9/9	16 9	64 1 J	090690-2WTB6(0-2)	36 0	36 0	**28**	2.29	Yes	ASL
IRON	9/9	8100	30800	090690-2WTB4(0-2)	23317	23317	5>pH>8(7)	NA	Yes	NSL
LEAD	9/9	11.2 J	128 J	090690-2WTB4(0-2)	42.4	42.4	**11**	11 6	Yes	ASL
MAGNESIUM	9/9	2170	7840	083090-2WTB8(1-3)	5898	5898	NA	NA	NA	NUT
MANGANESE	9/9	99.2	376	090690-2WTB2(0-2)-D	222	222	4000	0 094	No	BSL

TABLE 2-6

OCCURRENCE, DISTRIBUTION, AND SELECTION OF ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN - SURFACE SOIL PHASE I RI
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Frequency of Detection	Minimum Concentration (1)	Maximum Concentration (1)	Sample with Maximum Concentration	Average of All Samples (2)	Average of Detected Concentrations (3)	Ecological Risk Screening			
							Screening Level(4)	Ecological Effects Quotient (5)	Retained as COPC (Yes/No)	Rationale
MERCURY	4/9	0 21	0 69 J	090690-2WTB4(0-2)	0.25	0.47	0.1	6 90	Yes	ASL
NICKEL	9/9	14.7	26.9	083090-2WTB8(1-3)	21 3	21 3	130	0.207	No	BSL
POTASSIUM	9/9	1000	4320	090690-2WTB4(0-2)	3211	3211	NA	NA	NA	NUT
SELENIUM	5/9	0.7	2.4	2W-SU-45DS-00-99	0 92	1.35	0.63	3 81	Yes	ASL
SILVER	2/9	3 5	4 5	083090-2WTB8(1-3)	1.5	3 5	4.2	1.07	Yes	ASL
SODIUM	9/9	118 J	3150	083090-2WTB8(1-3)	1175	1175	NA	NA	NA	NUT
VANADIUM	9/9	33.2	75 J	083090-2WTB8(1-3)	50.8	50.8	7.8	9 62	Yes	ASL
ZINC	9/9	49 7	125 J	082390-2WMW2(0-2)	70 1	70 1	46	2.72	Yes	ASL

Shaded cells indicate that the chemical is retained as a COPC.

1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations detected and as one sample when determining the frequency of detection.
2 - Average of all analytical results is calculated using half of the detection limit for non-detects.
3 - Average of detected concentrations only
4 - Sources of screening values are presented in Table 2-5
5 - The Ecological Effects Quotient (EEQ) is the maximum detected concentration divided by the screening level.
6 - Values are based on detected concentrations only
7 - Screening level is based on the pH of the soil, however, soil pH data are not available

COPC = Chemical of potential concern.
NA = Not available or not applicable.
J = Estimated concentration.
B = Value is between the instrument detection limit and the contract required quantitation limit.

Rationale Codes:
For Selection as a COPC:
ASL = Above COPC Screening Level
NSL = No Screening Level/No Toxicity Data Available
For Elimination as a COPC:
BSL = Below COPC Screening Level
NUT = Essential Nutrient

TABLE 2-7

OCCURRENCE, DISTRIBUTION, AND SELECTION OF ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN - SURFACE SEDIMENT (PHASE I, II, AND III RIs AND FFS)
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Frequency of Detection[1]	Minimum Concentration[1]	Maximum Concentration[1]	Sample with Maximum Concentration	Average of All Samples[2]	Average of Detected Concentrations[3]	Ecological Risk Screening			
							Screening Level[4]	Ecological Effects Quotient[5]	Retained as COPC (Yes/No)[6]	Rationale
Volatile Organics (µg/kg)										
1,1,1-TRICHLOROETHANE	1/32	13 J	13 J	2WCSD5	9.34	13.0	30	0.433	No	BSL
2-BUTANONE	5/32	42 J	1400	T8-B	78 2	424	270	5.19	Yes	ASL
ACETONE	6/32	130	720	112690-2WSD7(0-0 5)	69 0	294	8.7	82.8	Yes	ASL
CARBON DISULFIDE	7/32	3 J	18 J	112690-2WSD3(0-0.5)	9 27	12.4	0.85	21.2	Yes	ASL
CHLOROBENZENE	3/33	2 J	14 J	T7-B	8 92	6 33	820	0 017	No	BSL
METHYLENE CHLORIDE	9/32	2 J	22	2WCSD4	13 1	9.44	370	0.059	No	BSL
TETRACHLOROETHENE	5/32	4 J	16 J	112690-2WSD4(0-0 5)	9.24	9 80	530	0.030	No	BSL
TOLUENE	7/32	2 J	6 J	T8-B	8 16	3.93	670	0 009	No	BSL
TOTAL XYLENES	1/32	3 J	3 J	T6-B	8 95	3.00	4	0 75	No	BSL
TRICHLOROETHENE	4/32	3 J	22	2WCSD5	9 70	10.5	1600	0 014	No	BSL
Semivolatile Organics (µg/kg)										
1,4-DICHLOROBENZENE	1/40	42 J	42 J	T6-B	605	42.0	350	0 12	No	BSL
2,4-DIMETHYLPHENOL	1/40	210 J	210 J	T8-B	610	210	18	11.7	Yes	ASL
2-METHYLNAPHTHALENE	8/48	7 J	55 J	T3-A	492	33.1	20 2	2.72	Yes	ASL
4-METHYLPHENOL	1/40	43 J	43 J	T9-A	608	43 0	100	0 43	No	BSL
ACENAPHTHENE	20/50	4.5 J	380 J	T7-B	459	70.4	290	1.31	Yes	ASL
ACENAPHTHYLENE	18/52	7 3 J	390	T3-A	464	65 0	160	2.44	Yes	ASL
ANTHRACENE	31/51	13 J	2400 J	112690-2WSD9(0-0.5)	416	169	57.2	42.0	Yes	ASL
BENZO(A)ANTHRACENE	48/56	25 J	27000	112690-2WSD9(0-0.5)	1112	1064	108	250	Yes	ASL
BENZO(A)PYRENE	45/56	30 J	35000	112690-2WSD9(0-0.5)	1282	1290	150	233	Yes	ASL
BENZO(B)FLUORANTHENE	47/56	44 J	55000	112690-2WSD9(0-0.5)	1646	1748	1800	30.6	Yes	ASL
BENZO(G,H,I)PERYLENE	45/56	27 J	23000	112690-2WSD9(0-0.5)	942	869	170	135	Yes	ASL
BENZO(K)FLUORANTHENE	43/56	49 J	45000	112690-2WSD9(0-0 5)	1388	1550	240	188	Yes	ASL
BENZOIC ACID	9/40	61 J	32000 J	112690-2WSD9(0-0.5)	2855	3739	65	492	Yes	ASL
BIS(2-ETHYLHEXYL)PHTHALATE	2/40	1100 J	3500 J	T10-B	718	2300	750	4.67	Yes	ASL
BUTYL BENZYL PHTHALATE	6/41	21 J	390 J	T7-B	582	102	11000	0.035	No	BSL
CARBAZOLE	9/31	25 J	660	2WCSD14	242	138	NSL	NA	Yes	NSL
CHRYSENE	49/56	38 J	42000	112690-2WSD9(0-0.5)	1461	1475	166	253	Yes	ASL
DIBENZO(A,H)ANTHRACENE	21/53	52	1400 J	2W-SD-SD57-0001	517	250	33	42.4	Yes	ASL
DIBENZOFURAN	12/41	35 J	1000 J	112690-2WSD9(0-0.5)	496	152	2000	0.5	No	BSL
DI-N-BUTYL PHTHALATE	9/40	23 J	180 J	2WCSD11	622	52.3	11000	0 016	No	BSL
DI-N-OCTYL PHTHALATE	2/40	26 J	72 J	2WCSD4	604	49.0	11000	0 007	No	BSL
FLUORANTHENE	52/56	56 J	80000	112690-2WSD9(0-0 5)	2310	2407	423	189	Yes	ASL
FLUORENE	26/52	5.8 J	1000 J	112690-2WSD9(0-0.5)	392	101	77.4	12.9	Yes	ASL
INDENO(1,2,3-CD)PYRENE	47/56	22 J	23000	112690-2WSD9(0-0.5)	980	891	200	115	Yes	ASL
NAPHTHALENE	13/48	4 J	160 J	2WCSD5	484	51 3	176	0.91	No	BSL
PENTACHLOROPHENOL	1/40	240 J	240 J	T1-B	2447	240	17	14.1	Yes	ASL
PHENANTHRENE	47/56	22 J	36000	112690-2WSD9(0-0.5)	1203	1185	204	176	Yes	ASL
PHENOL	1/40	32 J	32 J	2WCSD11	610	32 0	130	0.246	No	BSL
PYRENE	52/55	46 J	42000 J	112690-2WSD9(0-0 5)	1763	1811	195	215	Yes	ASL
TOTAL PAHs	54/56	230	411400	112690-2WSD9(0-0.5)	12551	13016	1610	256	Yes	ASL

TABLE 2-7

OCCURRENCE, DISTRIBUTION, AND SELECTION OF ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN - SURFACE SEDIMENT (PHASE I, II, AND III RIs AND FFS)
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Frequency of Detection[1]	Minimum Concentration[1]	Maximum Concentration[1]	Sample with Maximum Concentration	Average of All Samples[2]	Average of Detected Concentrations[3]	Ecological Risk Screening			
							Screening Level[4]	Ecological Effects Quotient[5]	Retained as COPC (Yes/No)[6]	Rationale
Pesticides/PCBs (µg/kg)										
4,4'-DDD	29/75	4.4 J	4800 J	2WSD25(0.0-1.0)	231	577	4 88	984	Yes	ASL
4,4'-DDE	32/80	2.7 J	720 J	2WSD25(0 0-1 0)	38 2	76.2	3 16	228	Yes	ASL
4,4'-DDT	25/70	4 4 J	2900	T3-B	130	340	4.16	697	Yes	ASL
TOTAL DDT	41/86	3.9	8420	2WSD25(0.0-1.0)	322	675	5 28	1595	Yes	ASL
ALDRIN	1/48	3 2 J	3 2 J	T5-A	5 00	3.20	2	1.60	Yes	ASL
ALPHA-CHLORDANE	16/51	2.9 J	52 J	2W-SD-SD43-0001	21.5	13 6	3 24	16.0	Yes	ASL
BETA-BHC	1/48	2 7 J	2.7 J	T5-A	4.99	2 70	2 37	1.14	Yes	ASL
DELTA-BHC	1/48	4.2 J	4.2 J	T5-A	5.02	4.20	2 37	1.77	Yes	ASL
DIELDRIN	2/71	8.4 J	26	T6-A	12.1	16 5	120	0.217	No	BSL
ENDOSULFAN I	4/48	2.1 J	11 J	T3-A	5 20	5.08	2 9	3.79	Yes	ASL
ENDOSULFAN II	2/46	6 9 J	31 J	T2-A	10.6	11.8	14	2.21	Yes	ASL
ENDOSULFAN SULFATE	3/47	6 9 J	14 J	T3-A	9.34	9 50	5.4	2.59	Yes	ASL
ENDRIN	5/48	7.8 J	18 J	2WCSD5	9.30	13.4	54	0 333	No	BSL
ENDRIN ALDEHYDE	6/38	5.6 J	140 J	2WCSD5	12.0	40.0	54	2.59	Yes	ASL
ENDRIN KETONE	1/47	20 J	20 J	T5-A	10.2	20 0	54	0.370	No	BSL
GAMMA-BHC (LINDANE)	2/48	3.5 J	8 2 J	2W-SD-SD56-0001	5.15	5.85	2.37	3.46	Yes	ASL
GAMMA-CHLORDANE	15/50	3 7 J	59 J	2W-SD-SD43-0001	21 3	12 6	3 24	18.2	Yes	ASL
HEPTACHLOR	3/48	2 8 J	4.5 J	T5-A	5 10	3 47	2.47	1.82	Yes	ASL
HEPTACHLOR EPOXIDE	4/48	2.2 J	4 5	T1-B	5 15	3.53	2 47	1.82	Yes	ASL
METHOXYCHLOR	2/47	37 J	83 J	2W-SD-SD47-0001-D	48.1	37.5	19	4.37	Yes	ASL
AROCLOR-1260	12/47	82 J	1500	T6-A-D	195	424	59 8	25.1	Yes	ASL
Inorganics (mg/kg)										
ALUMINUM	56/56	2560	28600 J	2W-SD-SD43-0001	12510	12510	25500	1.12	Yes	ASL
ANTIMONY	5/42	0 48 J	7.8 J	2WCSD10	1 46	2.22	3	2.6	Yes	ASL
ARSENIC	56/56	1 J	52.5 J	2W-SD-SD55-0001	9.98	9 98	9.79	5.36	Yes	ASL
BARIUM	56/56	11.9	394 J	2W-SD-SD50-0001	87 9	87.9	48	8.21	Yes	ASL
BERYLLIUM	45/56	0.14 J	4 1 J	T7-B	0 75	0.79	NSL	NA	Yes	NSL
BORON	14/31	11 J	39 7	2WCSD4	14.1	29.2	NSL	NA	Yes	NSL
CADMIUM	38/54	0 12 J	29.5	2WCSD5	1.74	2 38	0.99	29.8	Yes	ASL
CALCIUM	56/56	680 J	6800	112690-2WSD8(0-0 5)	2617	2617	NSL	NA	No	NUT
CHROMIUM	55/56	7	97.5	2WCSD6	40.3	41 0	43 4	2.25	Yes	ASL
COBALT	54/54	1.1 J	14 4	2WCSD5	6 57	6 57	50	0.288	No	BSL
COPPER	53/56	14.7	173 J	T7-B	51 5	54.2	31.6	5.47	Yes	ASL
CYANIDE	7/23	0.9 J	6 1 J	T7-B	1 30	2 35	0.1	61.0	Yes	ASL
IRON	56/56	5630	315000 J	2W-SD-SD50-0001	52632	52632	20000	15.8	Yes	ASL
LEAD	56/56	3 5	241 J	112690-2WSD9(0-0.5)	58 9	58 9	35 8	6.73	Yes	ASL
MAGNESIUM	56/56	682 J	10100 J	2W-SD-SD46-0001	4284	4284	NSL	NA	No	NUT
MANGANESE	56/56	55.3	2640	2WCSD5	327	327	460	5.74	Yes	ASL
MERCURY	39/49	0.02	1.2 J	T6-B	0 27	0.31	0 18	6.67	Yes	ASL
NICKEL	56/56	3.3 J	61.5 J	T2-A	19.8	19.8	22 7	2.71	Yes	ASL
POTASSIUM	54/56	434 J	5170 J	T8-B	2418	2492	NSL	NA	No	NUT
SELENIUM	18/52	0 67 J	9.8 J	2W-SD-SD50-0001	1 25	2 21	1	9.8	Yes	ASL
SILVER	9/48	0.17 J	0 96	T6-A	0.47	0.54	0 5	1.92	Yes	ASL
SODIUM	47/56	114	6650	112690-2WSD8(0-0 5)	1094	1289	NSL	NA	No	NUT

TABLE 2-7

OCCURRENCE, DISTRIBUTION, AND SELECTION OF ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN - SURFACE SEDIMENT (PHASE I, II, AND III RIs AND FFS)
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Frequency of Detection[1]	Minimum Concentration[1]	Maximum Concentration[1]	Sample with Maximum Concentration	Average of All Samples[2]	Average of Detected Concentrations[3]	Ecological Risk Screening			
							Screening Level[4]	Ecological Effects Quotient [5]	Retained as COPC (Yes/No)[6]	Rationale
THALLIUM	5/50	0.34 J	1.1 J	2W-SD-SD45-0001	0.39	0 65	NSL	NA	Yes	NSL
VANADIUM	56/56	8	289 J	2W-SD-SD43-0001	55 8	55.8	57	5.07	Yes	ASL
ZINC	55/56	17 3	702 J	T7-B	167	170	121	5.80	Yes	ASL
Miscellaneous Parameters										
PH	14/14	4.5	6.5	2W-SD-SD48-0001	5 68	5.68	NA	NA	NA	NA
TOTAL ORGANIC CARBON (mg/kg)	42/42	510	440000 J	2W-SD-SD51-0001	98350.00	98350	NA	NA	NA	NA
TOTAL SOLIDS (%)	16/16	14	63	2W-SD-SD57-0001	31 78	31.8	NA	NA	NA	NA

Shaded cells indicate that the chemical is retained as a COPC.

Footnotes

1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations detected and as one sample when determining the frequency of detection.
2 - Average of all analytical results are calculated using half of the detection limit for nondetects.
3 - Average of positive analytical results only.
4 - Sources of screening levels are provided in Table 2-5.
5 - The ecological effects quotient is the maximum detected concentration divided by the screening level.
6 - This column indicates retained as a COPC for sediment invertebrates

COPC = Chemical of potenial concern.
NA = Not available or not applicable.
J = Estimated concentration.

Rationale Codes:
For Selection as a COPC:
ASL = Above COPC Screening Level
NSL = No Screening Level/No Toxicity Data Available
For Elimination as a COPC:
BSL = Below COPC Screening Level
NUT = Essential Nutrient

TABLE 2-8

SUBSURFACE SEDIMENT SUMMARY STATISTICS - PHASE III INVESTIGATION AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Parameter	Frequency of Detection[1]	Minimum Concentration[1]	Maximum Concentration[1]	Sample with Maximum Concentration	Average of All Samples[2]	Average of Detected Concentrations[3]	Screening Level[4]	Maximum Concentration Exceeds Screening Level?
Semivolatile Organics (µg/kg)								
2-METHYLNAPHTHALENE	4/5	8.6 J	14 J	2W-SD-SD53-0204	14.3	11 1	20 2	No
ACENAPHTHENE	3/5	5.8 J	12 J	2W-SD-SD46-0204	14 3	8.73	290	No
ACENAPHTHYLENE	5/5	29 J	67	2W-SD-SD45-0002	47 8	47 8	160	No
ANTHRACENE	5/5	29 J	59	2W-SD-SD46-0204	48 4	48 4	57 2	Yes
BENZO(A)ANTHRACENE	5/5	170	430	2W-SD-SD46-0204	316	316	108	Yes
BENZO(A)PYRENE	5/5	170 J	370	2W-SD-SD46-0204	300	300	150	Yes
BENZO(B)FLUORANTHENE	5/5	160 J	480	2W-SD-SD45-0002	338	338	1800	No
BENZO(G,H,I)PERYLENE	5/5	95 J	220	2W-SD-SD46-0204	177	177	170	Yes
BENZO(K)FLUORANTHENE	5/5	100 J	270	2W-SD-SD45-0002	202	202	240	Yes
CHRYSENE	5/5	160	410	2W-SD-SD46-0204	316	316	166	Yes
CHRYSENE	5/5	160	410	2W-SD-SD45-0002	316	316	166	Yes
DIBENZO(A,H)ANTHRACENE	5/5	62 J	130 J	2W-SD-SD46-0204	108	108	33	Yes
DIBENZO(A,H)ANTHRACENE	5/5	62 J	130 J	2W-SD-SD53-0204	108	108	33	Yes
FLUORANTHENE	5/5	190	590	2W-SD-SD45-0002	402	402	423	Yes
FLUORENE	5/5	14 J	53 J	2W-SD-SD45-0002	27 0	27.0	77 4	No
INDENO(1,2,3-CD)PYRENE	5/5	130 J	320	2W-SD-SD46-0204	244	244	200	Yes
NAPHTHALENE	5/5	8 5 J	14 J	2W-SD-SD53-0204	11 1	11.1	176	No
PHENANTHRENE	5/5	98	250	2W-SD-SD46-0204	188	188	204	Yes
PYRENE	5/5	310	820	2W-SD-SD46-0204	616	616	195	Yes
TOTAL PAHs	5/5	1740	4376	2W-SD-SD46-0204	3355	3355	NA	NA
Pesticides/PCBs (µg/kg)								
4,4'-DDD	5/5	22 J	1200 J	2W-SD-SD45-0002	325	325	4 88	Yes
4,4'-DDE	5/5	6 1 J	180 J	2W-SD-SD45-0002	50 4	50 4	3 16	Yes
4,4'-DDT	3/5	4.5 J	79 J	2W-SD-SD45-0002	33.1	33 2	4 16	Yes
TOTAL DDT	5/5	32 6	1459	2W-SD-SD45-0002	396	396	5 28	Yes
AROCLOR-1260	2/5	28 J	220	2W-SD-SD46-0204	61 1	124	59 8	Yes
Inorganics (mg/kg)								
ALUMINUM	5/5	17400	23300	2W-SD-SD45-0002	19000	19000	25500	No
ARSENIC	5/5	9 5	12 4	2W-SD-SD45-0002	11 0	11 0	9 79	Yes
BARIUM	5/5	58 7	83 9	2W-SD-SD45-0002	71 6	71 6	48	Yes
BERYLLIUM	5/5	0 5	1 6	2W-SD-SD45-0002	0 780	0 780	NA	No
CADMIUM	5/5	0.54 J	2 5 J	2W-SD-SD45-0002	1 17	1 17	0 99	Yes
CALCIUM	5/5	3160	4050	2W-SD-SD45-0002	3604	3604	NA	NUT
CHROMIUM	5/5	44 8	79.5	2W-SD-SD53-0204	64 8	64.8	43 4	Yes
COBALT	5/5	5.8	9 1	2W-SD-SD45-0002	7.38	7 38	50	No
COPPER	5/5	35 6	60 6	2W-SD-SD45-0002	47 6	47.6	31 6	Yes
IRON	5/5	22300	36500	2W-SD-SD45-0002	27540	27540	20000	Yes
LEAD	5/5	31 5	55.5	2W-SD-SD53-0204	48 7	48 7	35 8	Yes
MAGNESIUM	5/5	5960 J	7730 J	2W-SD-SD53-0204	6924	6924	NA	NUT
MANGANESE	5/5	219	326	2W-SD-SD45-0002	274	274	460	No
MERCURY	5/5	0 24	0 5	2W-SD-SD48-0204	0 368	0.37	0.18	Yes
NICKEL	5/5	19.4	28.7	2W-SD-SD45-0002	23.1	23.1	22.7	Yes
POTASSIUM	5/5	3260	4320	2W-SD-SD53-0204	3864	3864	NA	NUT
SELENIUM	1/5	0.31 J	0 31 J	2W-SD-SD48-0204	0 232	0 310	1	No
SODIUM	5/5	944	4060	2W-SD-SD53-0204	2001	2001	NA	NUT
THALLIUM	4/5	0 64 J	0 82 J	2W-SD-SD53-0204	0 641	0.733	NA	No
VANADIUM	5/5	45 1	57.4	2W-SD-SD48-0204	51 0	51 0	57	Yes
ZINC	5/5	74	200	2W-SD-SD45-0002	113	113	121	Yes

TABLE 2-8

SUBSURFACE SEDIMENT SUMMARY STATISTICS - PHASE III INVESTIGATION AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Parameter	Frequency of Detection[1]	Minimum Concentration[1]	Maximum Concentration[1]	Sample with Maximum Concentration	Average of All Samples[2]	Average of Detected Concentrations[3]	Screening Level[4]	Maximum Concentration Exceeds Screening Level?
Miscellaneous Parameters								
PH	5/5	6 6	7 2	2W-SD-SD53-0204	6 86	6 86	NA	NA
TOTAL ORGANIC CARBON (mg/kg)	9/9	39000 J	81000 J	2W-SD-SD45-0002	54556	54556	NA	NA
TOTAL SOLIDS (%)	9/9	37	59	2W-SD-SD56-0002	50.9	50 9	NA	NA

Shaded cells indicate surface sediment criteria exceedance

1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations detected and as one sample when determining the frequency of detection.
2 - Average of all analytical results is calculated using half of the detection limit for nondetects.
3 - Average of detected concentrations only.
4 - Screening levels are for surface sediment, and sources are provided in Table 2-5.

NA = Not available or not applicable.
J = Estimated concentration

TABLE 2-9

COMPARISON OF SURFACE AND SUBSURFACE SEDIMENT ANALYTICAL RESULTS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WSD45		2WSD46		2WSD48	
SURFACE/SUBSURFACE	SURFACE	SUBSURFACE	SURFACE	SUBSURFACE	SURFACE	SUBSURFACE
SAMPLE NUMBER	2W-SD-SD45-0001	2W-SD-SD45-0002	2W-SD-SD46-0001	2W-SD-SD46-0204	2W-SD-SD48-0001	2W-SD-SD48-0204
TOP DEPTH (FT)	0	2.5	0	2	0	2
BOTTOM DEPTH (FT)	0.3	3.3	0.3	3	0.3	3
Parameter						
TOTAL PAHs (µg/kg)	1019	4130	6223	4376	11479	2901
AROCLOR-1260 (µg/kg)	100 UR	46 U	340	220	580	37 U
TOTAL DDT (µg/kg)	48.5	1459	265	207	515	236
ARSENIC (mg/kg)	16.9 J	12.4	17.4	9.5	11.5	11.9
CADMIUM (mg/kg)	0.15 UR	2.5 J	0.3	0.76 J	1.2	0.54 J
COPPER (mg/kg)	25.4 J	60.6	97.2	42	59.9	49.2
IRON (mg/kg)	300000 J	36500	57700	22300	40000	22600
LEAD (mg/kg)	14 J	51.3	78.5	51.1	49.7	53.9
MERCURY (mg/kg)	0.10 J	0.28	0.27	0.24	0.21	0.5
NICKEL (mg/kg)	15.7 J	28.7	33.4	21.1	30.2	19.4
ZINC (mg/kg)	342 J	200	320	98.5	624	74

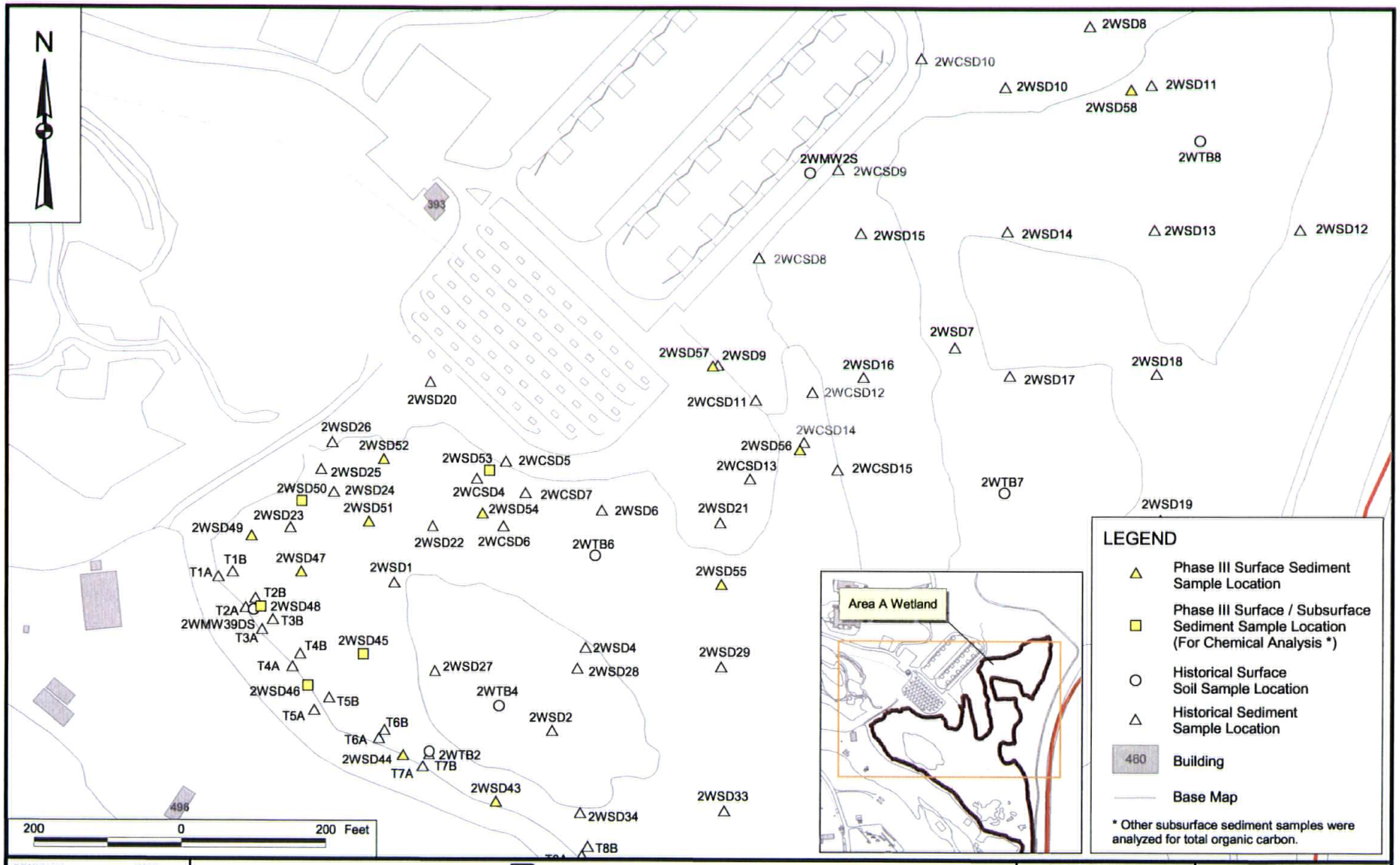
LOCATION	2WSD50		2WSD53		
SURFACE/SUBSURFACE	SURFACE	SUBSURFACE	SURFACE		SUBSURFACE
SAMPLE NUMBER	2W-SD-SD50-0001	2W-SD-SD50-0204	2W-SD-SD53-0001	2W-SD-SD53-0001-D	2W-SD-SD53-0204
TOP DEPTH (FT)	0	2	0	0	2
BOTTOM DEPTH (FT)	0.3	4	0.5	0.5	4
Parameter					
TOTAL PAHS ((µg/kg)	2430	1740	2872	2954	3629
AROCLOR-1260 (µg/kg)	370 J	28 J	50 U	50 U	32 U
TOTAL DDT (µg/kg)	118	32.6	11.8	8	43
ARSENIC (mg/kg)	43.6 J	10.7	28.2 J	29.2 J	10.4
CADMIUM (mg/kg)	0.14 UR	0.96 J	0.10 UJ	0.08 UJ	1.1 J
COPPER (mg/kg)	64 J	35.6	57.3 J	57.2 J	50.4
IRON (mg/kg)	315000 J	28500	199000	198000	27800
LEAD (mg/kg)	54 J	31.5	65.8	61.4	55.5
MERCURY (mg/kg)	0.29 J	0.35	0.2	0.21	0.47
NICKEL (mg/kg)	28.8 J	23.9	19.2 J	17.7 J	22.5
ZINC (mg/kg)	447 J	93.7	138	125	99.2

Shaded cells indicate maximum detected concentrations at that location.
J = Estimated concentration.
UJ = Non-detect estimated concentration.
UR = Non-detect rejected concentration.

TABLE 2-10

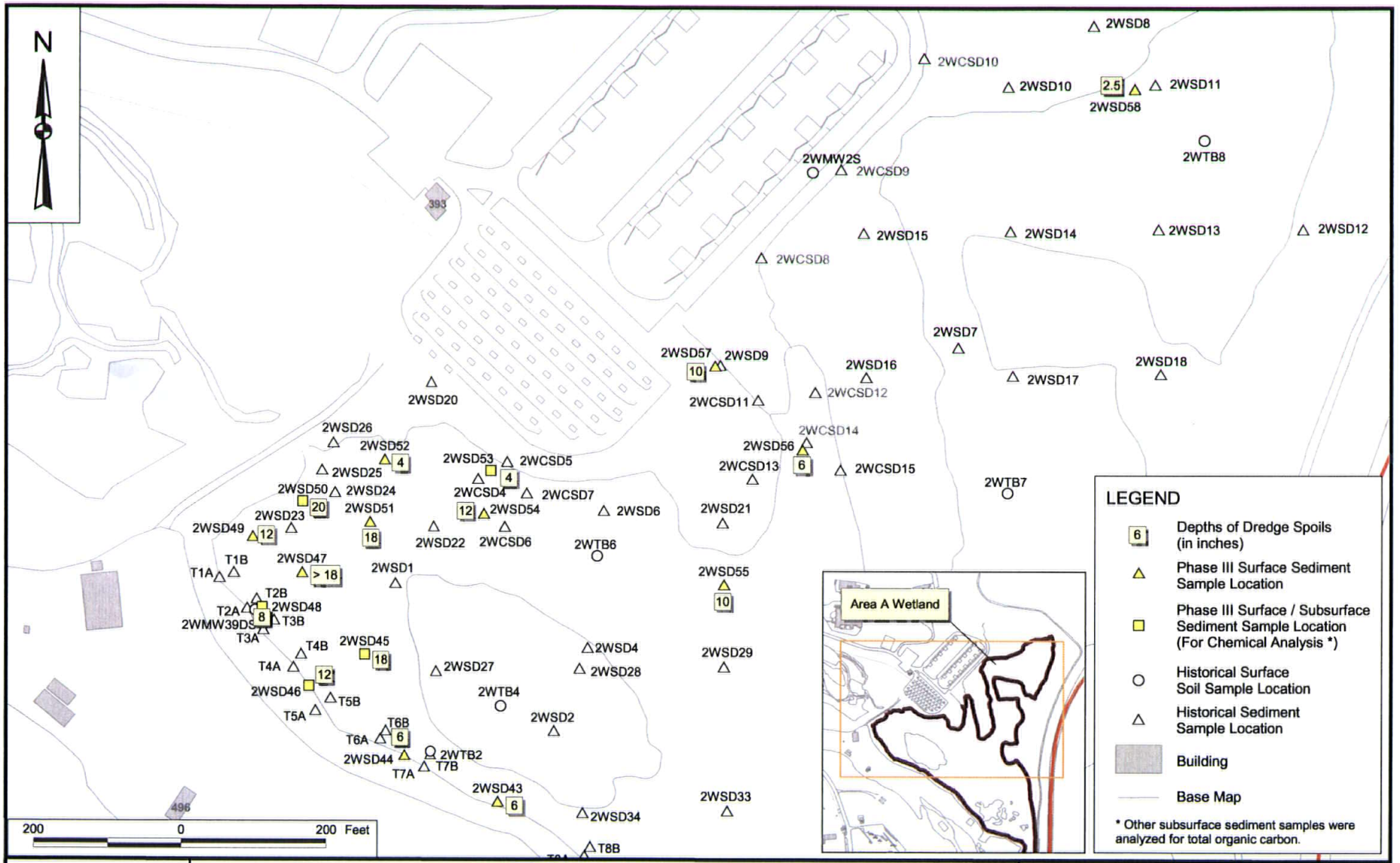
PERCENT SOLIDS AND TOTAL ORGANIC CARBON CONCENTRATIONS
PHASE III RI SEDIMENT SAMPLES
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Sample Location	Percent Solids		Total Organic Carbon (%)	
	Surface	Subsurface	Surface	Subsurface
2WSD43	22	---	18	
2WSD44	23	47	16	5.9
2WSD45	16	37	27	8.1
2WSD46	42	58	8.6	4
2WSD47	14	---	40	---
	15	---	37	---
2WSD48	38	46	12	6.4
2WSD49	30	---	13	---
2WSD50	21	49	20	4.5
2WSD51	14	---	44	---
2WSD52	37	---	25	---
2WSD53	34	54	20	5.7
	34	---	19	---
2WSD54	14	---	37	---
2WSD55	23	52	22	5.6
2WSD56	60	59	3.8	3.9
2WSD57	63	56	2.4	5
2WSD58	57	---	---	---
Average	**30.9**	**50.9**	**21.5**	**5.5**



DRAWN BY	DATE	Tetra Tech NUS, Inc.	CONTRACT NUMBER	OWNER NO.
J. ENGLISH	01/29/08		CTO 0439	—
CHECKED BY	DATE	PHASE III AND SELECTED HISTORICAL SAMPLING LOCATIONS	APPROVED BY	DATE
A. BERNHARDT	03/10/08	AREA A WETLAND	—	—
COST/SCHEDULE-AREA		NAVAL SUBMARINE BASE NEW LONDON	APPROVED BY	DATE
		GROTON, CONNECTICUT	—	—
SCALE			DRAWING NO.	REV
AS NOTED			FIGURE 2-1	0

P:\GIS\NLON\MAPDOCS\APR\AREA_A_SITE LOCATION.APR PHASE III SAMPLING LOCATIONS LAYOUT 03/10/08 JEE



DRAWN BY	DATE	Tetra Tech NUS, Inc.	CONTRACT NUMBER	OWNER NO.
J. ENGLISH	02/12/08		CTO 0439	—
CHECKED BY	DATE	DEPTH OF DREDGE SPOILS	APPROVED BY	DATE
A. BERNHARDT	03/10/08	AREA A WETLAND	—	—
COST/SCHEDULE-AREA		NAVAL SUBMARINE BASE NEW LONDON	APPROVED BY	DATE
		GROTON, CONNECTICUT	—	—
SCALE			DRAWING NO.	REV
AS NOTED			FIGURE 2-2	0

P:\GIS\NLON\MAPDOCS\APR\AREA_A_SITE LOCATION.APR AREA A DREDGE SPOILS DEPTH LAYOUT 03/10/08 JEE

3.0 ECOLOGICAL RISK ASSESSMENT

One of the primary objectives of the Phase III RI was to obtain current analytical data for surface sediment at the Area A Wetland to determine current potential risks to ecological receptors from chemicals detected in the sediment. As mentioned in Section 1.0, SERAs were previously conducted for the Area A Wetland as part of the Phase II RI (Brown and Root Environmental, 1997) and Phase III RI QAPP (TtNUS, 2007). The results of the updated SERA in the Phase III RI QAPP were used to determine additional data needs for the Phase III RI. The data collected as part of the Phase III RI, along with the existing data set, were evaluated in this SERA to further refine the risk assessment for the Area A Wetland to determine whether a Phase IV RI is necessary or whether adequate information exists to make a risk management decision for the site.

The Ecological Risk Assessment (ERA) methodology follows guidance presented in the following documents:

- Final Guidelines for Ecological Risk Assessment (USEPA, 1998).
- Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments (USEPA, 1997).
- Navy Policy for Conducting Ecological Risk Assessments [Department of Navy (DON), 1999].

The ERA process consists of the following eight steps that are required by the above documents for any ERA:

- Step 1 – Screening-Level Problem Formulation and Ecological Effects Evaluation
- Step 2 – Screening-Level Exposure Estimate and Risk Calculation
- Step 3 – Baseline Risk Assessment Problem Formulation
- Step 4 – Study Design and Data Quality Objective Process
- Step 5 – Field Verification of Sampling Design
- Step 6 – Site Investigation and Analysis Phase
- Step 7 – Risk Characterization
- Step 8 – Risk Management

This updated SERA for the Area A Wetland consists of Steps 1 and 2, along with the first part of Step 3, which is termed Step 3a. Step 3a considers factors other than comparisons of chemical concentrations to screening levels to further refine the list of chemicals of potential concern (COPCs) (see Section 3.7 for more details). The remaining steps (the rest of Step 3 through Step 7) are conducted only if additional

evaluations or investigations are necessary; these steps were not conducted as part of this report. A decision to proceed to a BERA is usually only made after the results of the SERA are evaluated.

3.1 PROBLEM FORMULATION

Problem formulation is the first part of the SERA and discusses the goals, breadth, and focus of the assessment. It includes general descriptions of the Area A Wetland with emphasis on the habitats and ecological receptors present. This phase also involves characterization of site-related chemicals, chemical sources, migration routes, and an evaluation of routes of chemical exposure. Components of the problem formulation, including the environmental setting and potential sources of contamination, are presented in Sections 1.2 and 1.3, respectively, of this report. The problem formulation was revised based on the conclusions of the SERA conducted in 2007 as part of the Phase III RI QAPP (TtNUS, 2007). These conclusions are as follows:

- Although several chemicals were detected in the surface soil at concentrations that exceeded their respective screening levels for plants and soil invertebrates, during the Step 3a evaluation, it was determined that risks to plants or soil invertebrates were not great enough to warrant further evaluation of these receptors at this site.

- Several chemicals were initially selected as COPCs in sediment because they were detected at concentrations that exceeded their respective screening levels. During the Step 3a evaluation, it was determined that the primary risk drivers were PAHs, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, PCBs, and metals.

- Several chemicals were initially selected as COPCs in surface water because they were detected at concentrations that exceeded their respective screening levels and may therefore, pose potential risks to aquatic organisms exposed to them. The concentrations of most of the chemicals only exceeded screening levels in a few samples; concentrations of barium, iron, and manganese had the most and greatest magnitude of screening level exceedances. The concentrations of metals in surface water samples vary throughout the sampling rounds so the potential for impacts to aquatic organisms will vary over time. However, potential risks to aquatic organisms were not great enough to warrant further evaluation of these receptors at this site

- Several chemicals had Ecological Effects Quotients (EEQs) greater than 1.0 based on conservative food-chain models. Fewer chemicals had EEQs greater than 1.0 after the food-chain model was refined in Step 3a. During the Step 3a evaluation, it was determined that risks to wildlife were not great enough to warrant further evaluation of these receptors at this site.

In summary, risks from soil contamination to plants and soil invertebrates estimated in the SERA presented in the Phase III RI QAPP (TtNUS, 2007) were not great enough for any chemicals to warrant further evaluation at this site. For that reason, additional soil samples were not collected as part of the Phase III RI so risks to these receptors are not re-evaluated in this SERA. Also, risks to aquatic organisms are not evaluated in this SERA. Additional surface water samples were not collected as part of the Phase III RI because risks to ecological receptors from surface water were not great enough to warrant further evaluation at this site. Additional sediment samples were collected as part of the Phase III RI because potential risks to sediment invertebrates were identified in the 2007 SERA. Therefore, risks to sediment invertebrates are re-evaluated in this updated SERA. Finally, although it was determined that risks to wildlife were not great enough for any chemicals to warrant further evaluation at this site, risks to wildlife are re-evaluated in this updated SERA for the following reasons: (1) additional surface sediment samples were collected for chemical analysis, so updated exposure point concentrations (EPCs) used in the food-chain model could be calculated; (2) based on a comment from USEPA on the Phase III RI QAPP, the Navy agreed to include all chemicals in the food-chain model, not only the bioaccumulative chemicals; and (3) there have been some recent updates/additions to USEPA Ecological Soil Screening levels (Eco SSLs) including toxicity reference values (TRVs).

3.2 POTENTIAL EXPOSURE PATHWAYS

This section describes how potential ecological receptors at the site may be exposed to contaminants in the Area A Wetland, regardless of the source of the contamination.

Terrestrial plants and soil invertebrates can be exposed to contaminated surface soil through direct contact or as invertebrates search for food and burrow into the soil. As discussed in Section 3.1, although these potential exposure pathways are complete, it was determined that risks to plants and soil invertebrates were not great enough for any chemicals to warrant further evaluation at this site. Therefore, these pathways are not evaluated in this SERA.

Mammals, birds, and reptiles can also ingest contaminated surface soil/sediment and food items (e.g., plants, invertebrates) in which contaminants have accumulated. Although the habitat in the wetland is poor for mammals, retiles, and birds because of the dense growth of Phragmites commonis, some mammals, reptiles, and birds likely inhabit and may obtain some of their food from the wetland. Therefore, these pathways are evaluated in this updated SERA.

Ecological receptors such as fish, invertebrates, mammals, birds, reptiles, and amphibians can be exposed to surface water through direct contact and incidental ingestion. As discussed in Section 3.1, although these potential exposure pathways are complete, it was determined that risks to aquatic

organisms and wildlife from chemicals in surface water were not great enough to warrant further evaluation at this site. Therefore, these pathways are not evaluated in this SERA.

Finally, invertebrates can be exposed to sediment contamination through direct contact. Potential risks to sediment invertebrates were identified in the previous SERAs conducted for the site. Therefore, this exposure pathway is evaluated in this updated SERA.

3.3 ENDPOINTS

3.3.1 Assessment Endpoints

Assessment endpoints are explicit expressions of the environmental value that is to be protected (USEPA, 1997a). The selection of these endpoints is based on the habitats present, migration pathways of probable contaminants, and routes that contaminants may take to enter receptors.

The habitats present at the Area A Wetland consist primarily of a wetland with some forested pockets within the wetland and along the boundaries. A small pond is also located within the wetlands. Based on the results of the SERA conducted as part of the Phase III RI QAPP (TtNUS, 2007), some of the assessment endpoints were eliminated from this SERA. The refined list of assessment endpoints includes the protection of the following groups of receptors from adverse effects of contaminants on their growth, survival, and reproduction:

- Invertivorous birds and mammals
- Herbivorous birds and mammals
- Sediment invertebrates

3.3.2 Measurement Endpoints

Measurement endpoints (or measures of effects as they are commonly referred to as) are estimates of biological impacts (e.g., mortality, growth, reproduction) that are used to evaluate the assessment endpoints. The following measures of effects were used to evaluate the assessment endpoints, where appropriate:

- Decreases in survival, reproduction, and growth of sediment invertebrates were evaluated by comparing chemical concentrations in sediment to screening values designed to be protective of ecological receptors.

- Decreases in survival and reproduction of birds and mammals were evaluated by comparing estimated ingested doses of contaminants in surface soil, sediment, and invertebrates to no observed adverse effects levels (NOAELs) and lowest observed adverse effects levels (LOAELs).

Many receptors in the sediment environments at the site are adequately described in general categories such as sediment invertebrates. This is due to the nature of the threshold values, effects values, or criteria typically used to characterize risk for such organisms. For vertebrate receptors, selection of a particular surrogate species is required so that intake through eating and drinking can be estimated. The availability of exposure parameters such as body mass, feeding rate, and drinking rate and the potential for the species or a similar species to be present at the site are primary factors in selecting surrogate species. The following surrogate species were used for the food-chain modeling conducted as part of this SERA:

- Herbivorous mammal - meadow vole
- Herbivorous bird - bobwhite quail
- Soil Invertivorous mammal - short-tailed shrew
- Soil Invertivorous bird - American robin
- Sediment Invertivorous mammal - raccoon
- Sediment Invertivorous bird - mallard

Receptor profiles for the above species are presented in Appendix E.

3.3.3 Refined Conceptual Site Model

A conceptual site model (CSM) in ERA problem formulation is a written description of predicted relationships between ecological entities and the stressors to which they may be exposed. The CSM consists of two primary components: predicted relationships among stressor, exposure, and assessment endpoint response and a diagram that illustrates the relationships (USEPA, 1998). The CSM presented in the SERA in the Phase III RI QAPP (TtNUS, 2007) was refined to only present the complete exposure pathways for the receptors that were evaluated as part of this updated SERA (see Figure 3-1). For example, although plants and soil invertebrates are exposed to chemicals in surface soil by direct contact and ingestion of soil, they are not presented in the refined CSM because they were not evaluated in this updated SERA. Also, terrestrial vertebrates may be exposed to chemicals found in air via inhalation but this is not a significant pathway and is not evaluated in this SERA.

At the Area A Wetland, the chemical sources consist of dredge spoils in subsurface sediment, surface runoff from the surrounding watershed, and groundwater discharge from the Area A Landfill that could

result in the migration of groundwater contaminants to surface water/sediment. The exposure media for ecological receptors are surface soil and sediment. Sediment invertebrates and vertebrates are exposed to the media by direct contact and ingestion of soil, sediment, and food items.

3.4 ECOLOGICAL EFFECTS EVALUATION

The preliminary ecological effects assessment is an investigation of the relationship between the exposure to a chemical and the potential for adverse effects resulting from this exposure. In this step, screening levels for toxicity of the chemicals to ecological receptors are compiled.

3.4.1 Sediment Invertebrates

Potential risks to sediment invertebrates exposed to chemicals in the Area A Wetland were evaluated by comparing chemical concentrations to ecological screening levels. Table 2-5 presents the sediment screening levels used in this SERA along with the sources of the values. These screening levels are based on direct risks to sediment invertebrates. The order of preference of the sources is also listed on the table. Freshwater screening levels were used because the wetland is not tidally influenced. Several sources had to be used because no one source has a complete list of screening values for all of the chemicals detected in the sediment samples. These screening levels are expressed in units of concentration because the media of concern are in direct contact with sediment invertebrates.

3.4.2 Mammals and Birds

The surface soil screening levels used in the SERA were either from the USEPA Ecological Soil Screening Level Guidance documents (USEPA, 2005 and chemical-specific Eco-SSL documents), or the USEPA Region 5 Ecological Soil Screening Levels (USEPA, 2003a) (Table 2-4). Only the values based on risks to wildlife from those two sources were listed on Table 2-4. The screening values in those documents are based on conservative exposure assumptions and toxicity data. As mentioned above, the sediment screening levels are based on risks to sediment invertebrates, not wildlife. For these reasons, risks to mammals and birds from exposure to chemicals in surface soil and sediment were determined using food-chain models to estimate Chronic Daily Intake (CDI) and compare the CDI to TRVs representing acceptable daily doses in mg/kg-day.

Appendix F presents the mammal and bird TRVs used in this SERA and the source of the TRVs. The TRVs were obtained from the Oak Ridge National Lab (ORNL) Toxicological Benchmarks for Wildlife: 1996 Revision (Sample et al., 1996) and the USEPA Eco SSL documents (USEPA, 2005 and chemical-specific Eco-SSL documents) but were supplemented with other toxicity information when necessary. If a subchronic study was used to develop the TRV, the final value was multiplied by a factor of 0.1 to account

for uncertainty between subchronic and chronic effects. Also, the LOAEL was multiplied by a factor of 0.1 to estimate a NOAEL TRV if only a LOAEL study was available.

The chemical-specific Eco SSL documents provide NOAELs and LOAELs from many studies, but TRVs were only calculated for NOAELs in those documents. The reason is that the Eco SSLs are meant to be conservative screening levels. Because risks based on both NOAELs and LOAELs are presented in this SERA, the geometric mean of growth and reproduction LOAELs from the chemical-specific Eco SSL documents were used to calculate LOAEL TRVs.

3.5 CHARACTERIZATION OF EXPOSURE

This portion of the SERA includes identification of contaminant concentration data used as the EPCs to represent ecological exposure in various media. Sediment invertebrates are exposed to chemicals in sediment through ingestion and/or direct contact. Maximum concentrations were used as EPCs for comparison to screening values to select COPCs.

The exposure dose to mammals and birds from COPCs in soil and sediment (and associated food items such as plants and invertebrates) were determined for the surrogate wildlife species using the following equation:

$$CDI = \frac{[(Cf * If) + (Cs * Is)] * H}{BW}$$

Where:

CDI	=	Chronic Daily Intake (mg/kg-day)
Cf	=	Contaminant concentration in food (see discussion below)
If	=	Food ingestion rate (kg/day)
Cs	=	Contaminant concentration in surface soil or sediment (mg/kg)
Is	=	Incidental surface soil or sediment ingestion rate (kg/day)
H	=	Portion of food intake from the contaminated area (unitless)
BW	=	Body weight (kg)

Exposure to chemicals in drinking water from Area A Wetland surface water was not included in the food-chain model because the chemical dose from the drinking water portion of the diet for wildlife was insignificant compared to the dose from ingestion of soil, sediment, and/or food items estimated in the SERA conducted as part of the Phase III RI QAPP (TtNUS, 2007). Also, new surface water samples were not collected as part of the Phase III RI.

Chemical concentrations in food items for soil invertivorous and herbivorous receptors were calculated using soil-to-invertebrate or soil-to-plant bioaccumulation factors (BAFs) and regression equations from the USEPA Eco SSL Guidance Document (2007) or BAFs from other published sources. The following equation was used to calculate chemical concentrations in plants or invertebrates when BAFs were used:

$$Cf = Cs * BAF$$

Where:

Cf	=	Contaminant concentration in food (mg/kg)
Cs	=	Contaminant concentration in surface soil (mg/kg)
BAF	=	Biota-soil bioaccumulation factor (unitless)

Chemical concentrations in food items for sediment invertivorous receptors were calculated using sediment-to-invertebrate BSAFs from the Biota Sediment Accumulation Factors for Invertebrates: Review and Recommendations for the Oak Ridge Reservation (ORNL, 1998) or sediment-to-fish BSAFs from the Incidence and Severity of Sediment Contamination in Surface Waters of the United States, Volume 1: National Sediment Quality Survey: Second Edition (USEPA, 2004). Fish BSAFs were used for organic chemicals (except PCBs) because sediment-to-invertebrate BSAFs were not available for most organic chemicals. Also, because none of the non-bioaccumulative metals have BSAFs, the geometric mean of the available BSAFs was used for the metals that did not have BSAFs, as opposed to using a BSAF of 1.0 as a default.

Contaminant concentrations in food items for sediment invertivorous mammals and birds were calculated as follows:

$$Cf\ (\text{for metals}) = Csd * BSAF$$

$$Cf\ (\text{for organics}) = Csd * \left(BSAF * \frac{\%L}{\%TOC} \right)$$

Where:

Cf	=	Contaminant concentration in food (mg/kg)
Csd	=	Contaminant concentration in sediment (mg/kg)
BSAF	=	Biota-sediment bioaccumulation factor (unitless)
%L	=	Percent lipids [9.44% (dry weight) for invertebrates (see Appendix E)]
%TOC	=	Percent total organic carbon [9.8% (average TOC for the site)]

Although frog and bird tissue data were collected from the site during the Phase II RI, the tissue data were not used in the food-chain model because the locations of these samples are not known (some of the samples were collected at other sites such as the Area A Downstream). However, the tissue data are discussed in the uncertainty analysis section of this SERA. Appendix B presents the analytical data for the tissue samples.

The exposure assumptions (e.g., ingestion rate, body weight) were obtained primarily from the Wildlife Exposure Factors Handbook (USEPA, 1993) with other sources used as necessary. Table 3-1 summarizes the exposure factors used for the food-chain model, and Appendix E presents the derivation of these parameters. The percent lipids values for invertebrates were calculated by averaging the dry-weight percent lipid values for freshwater crustacea, freshwater molluscs, and freshwater worms in from the United States Army Engineer Research and Development Center, Waterways Experiment Station, Environmental Laboratory (http://el.erdc.usace.army.mil/ered/index.html#misc) (see Appendix E). The food ingestion rates are on a dry-weight basis. The average TOC of 9.8 percent for the site is presented in Table 2-7. The sources of the BAFs and BSAFs are presented in Appendix F. Contaminants that do not have BAFs or BSAFs were assigned a default value of 1.0, except as described above.

The following input parameters were used in the dose equation under the conservative screening scenario:

- Maximum chemical concentrations in surface soil and sediment
- Conservative BAFs and BSAFs
- Conservative receptor body weights and ingestion rates

For refining the conservative exposure assumptions in Step 3a, the following input parameters were used:

- Average chemical concentrations in surface soil and sediment
- Average BAFs or BSAFs
- Average receptor body weights and ingestion rates

3.6 RISK CHARACTERIZATION

The risk characterization is the final phase of a SERA that compares exposure to ecological effects. It is at this phase that the likelihood of adverse effects occurring as a result of exposure to a stressor was evaluated. An EEQ approach was used to characterize the potential risk to ecological receptors. This approach characterizes the potential effects by comparing exposure concentrations/doses to effects data. When EEQs exceed 1.0, it is an indication that ecological receptors are potentially at risk. Additional

evaluation or data may be necessary to confirm with greater certainty whether ecological receptors are actually at risk, especially because most benchmarks are developed using conservative exposure assumptions and/or studies. An EEQ should not be construed as being probabilistic; rather, it is a numerical indicator of the extent to which an EPC exceeds or is less than a benchmark.

The EEQs for sediment invertebrates were calculated as follows:

$$EEQ = \frac{Csd}{SdSL}$$

where:

EEQ	=	Ecological Effects Quotient (unitless)
Csd	=	Contaminant concentration in sediment (µg/kg or mg/kg)
SdSL	=	Sediment screening level (µg/kg or mg/kg)

The EEQs for mammals and birds were calculated as follows:

$$EEQ = \frac{CDI}{TRV}$$

where:

EEQ	=	Ecological Effects Quotient (unitless)
CDI	=	Chronic daily intake (mg/kg-day)
TRV	=	Toxicity reference value (NOAEL or LOAEL) (mg/kg-day)

3.6.1 Selection of Contaminants of Potential Concern

The final part of the screening evaluation is the selection of COPCs. Chemicals not selected as COPCs are assumed to present negligible risk to ecological receptors and are not considered for further evaluation in this SERA. Chemicals retained as COPCs are evaluated further in Step 3a to determine whether they need to be further evaluated in the ERA process. Ecological COPCs were initially selected using the following procedures:

- Chemicals with EEQs greater than 1.0 (using screening values) were initially selected as COPCs for further evaluation because they have a potential to cause risk to ecological receptors.

- Chemicals with EEQs greater than 1.0 based on the conservative food-chain model using NOAELs were initially selected as COPCs because they have the potential to cause risk to higher trophic-level mammals and birds.

- Chemicals without screening values were initially selected as COPCs but were only evaluated qualitatively.

- Calcium, magnesium, potassium, and sodium were not retained as COPCs because they are essential nutrients that can be tolerated by living systems even at high concentrations. No evidence indicates that these chemicals are related to site operations, and they are not considered hazardous chemicals.

3.6.2 COPCs for Sediment Invertebrates

The data used to select COPCs for sediment invertebrates include the sediment samples collected as part of the Phase I, Phase II, and Phase III RIs, the FFS, and select sediment samples from the Area A Weapons Center. Appendix C presents the analytical results for chemicals detected in at least one sediment sample. Complete analytical results are presented on the CD in Appendix B. Table 2-7 presents summary statistics for surface sediment data, along with the selection of the COPCs. In summary, as a result of the screening process:

- Three VOCs were initially selected as COPCs because their maximum detected concentrations were greater than their respective screening levels.

- Twenty SVOCs and total PAHs were initially selected as COPCs because their maximum detected concentrations were greater than their respective screening levels. One SVOC was initially selected as a COPC because a screening level was not available for this chemical.

- Sixteen pesticides, total DDT, and one PCB were initially selected as COPCs because their maximum detected concentrations were greater than their respective screening levels.

- Seventeen inorganics were initially selected as COPCs because their maximum detected concentrations were greater than their respective screening levels. Three inorganics were initially selected as COPCs because screening levels are not available for those inorganics.

3.6.3 COPCs for Mammals and Birds

Based on an USEPA comment on the Phase III RI QAPP (TtNUS, 2007), all chemicals, including non-bioaccumulative chemicals were carried through the food-chain model if detected at concentrations exceeding screening levels based on risks to mammals and birds. Table 2-6 presents summary statistics for surface soil data, the screening levels, and the chemicals initially selected as COPCs and retained for food-chain modeling. In summary, as a result of the screening process:

- One SVOC was initially selected as a COPC because its maximum detected concentration was greater than its screening level. One SVOC was initially selected as a COPC because a screening level was not available for this chemical.

- Two pesticides, total DDT, and one PCB were initially selected as COPCs because their maximum detected concentrations were greater than their respective screening levels.

- Nine inorganics were initially selected as COPCs because their maximum detected concentrations were greater than their respective screening levels. Two inorganics were initially selected as COPCs because screening levels are not available for these inorganics.

All of the screening levels used to select sediment COPCs on Table 2-7 are based on direct risks to sediment invertebrates, not risks to mammals and birds. Therefore, all detected chemicals in Tables 2-7, and the chemicals initially selected as COPCs in Table 2-6, were carried through the conservative food-chain model.

Tables 3-2 and 3-3 summarize the results of conservative food-chain modeling for the terrestrial (herbivorous and soil invertivorous) and aquatic (sediment invertivorous) wildlife receptors (mammals and birds), respectively. Appendix G presents the calculation worksheets. Tables 1 and 2 in Appendix G present the chemical concentrations in various media (i.e., soil, sediment, tissue) that were used as EPCs in the food-chain models. The conservative food-chain modeling results were as follows:

Soil Herbivorous Receptors

- Aluminum, iron, mercury and selenium were retained as COPCs because their NOAEL EEQs were greater than 1.0.

Soil Invertivorous Receptors

- Aroclor-1260 and 11 metals were retained as COPCs because their NOAEL EEQs were greater than 1.0.

Sediment Invertivorous Receptors

- Six PAHs, 4,4'-DDD, 4,4'-DDE, endrin aldehyde, Aroclor-1260 and 17 metals were retained as COPCs because the NOAEL EEQs were greater than 1.0.

3.6.4 Summary of Screening Risks

Table 3-4 presents a summary of the chemicals retained as COPCs in surface soil and sediment and whether they were retained as COPCs for sediment invertebrates, mammals, and/or birds. Because several chemicals were retained as COPCs in surface soil and sediment, the SERA proceeded to the Step 3a refinement.

3.7 STEP 3A REFINEMENT

Step 3a consists of a refinement of conservative exposure assumptions/concentrations to evaluate potential risks to ecological receptors (e.g., sediment invertebrates and wildlife receptors). As presented in Section 3.0, the objective of this updated SERA is to determine whether an unacceptable ecological risk persists at the site, and if so, to recommend any additional data that could be collected as part of a BERA. This Step 3a refinement will focus on this objective.

3.7.1 Sediment Invertebrates

Table 2-7 lists the chemicals detected in sediment that were initially selected as COPCs for sediment invertebrates. The sediment samples collected as part of the Phase III RI were analyzed for PAHs, pesticides, PCBs, metals, pH, and TOC. Previous sediment samples were also analyzed for VOCs and additional SVOCs. The Step 3a refinement in the SERA prepared as part of the Phase III RI QAPP presented an evaluation of VOCs and non-PAH SVOCs so the Step 3a refinement for those chemicals is not repeated in this SERA. This Step 3a evaluation is limited to those parameters analyzed for as part of the Phase III RI.

Total PAHs were evaluated instead of individually detected PAHs in the sediment as part of the Step 3a refinement because the toxicity of PAHs is additive, and several studies have reported toxicity data for total PAHs (Di Toro et al., 2000). Figure 1 in Appendix D shows total PAH results compared to the screening level (1,610 µg/kg), which is the Threshold Effects Concentration (TEC), and compared to the

PEC of 22,800 µg/kg from MacDonald el al. (2000). As can be seen from the figure, total PAHs were detected in several samples at concentrations that exceeded the TEC and were detected at five locations at concentrations that exceeded the PEC. The samples with the greatest concentrations were located adjacent to the Area A Landfill and Area A Weapons Center. The sediment samples in the eastern portion of the Area A Wetland had PAH concentrations that were less than the screening level. Risks to sediment invertebrates from PAHs are possible, and PAHs are therefore retained as COPCs for further discussion below.

Several pesticides were initially selected as COPCs in sediment samples because they were detected at concentrations that exceeded their respective screening levels. Of these pesticides, 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT are considered to be the risk drivers because they were detected most frequently (in approximately 50 percent of the samples) in sediment samples, and had the greatest EEQs compared to their respective screening levels (see Table 2-7). Figure 2 in Appendix D shows the total DDT (sum of 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT) results compared to the screening level (5.28 µg/kg), which is the TEC, and the PEC of 572 µg/kg from MacDonald el al., (2000). As can be seen from the figure, total DDT was detected in several samples at concentrations that exceeded the TEC and PEC. The samples with the greatest concentrations were located adjacent to the Area A Landfill. The sediment samples in the northern and eastern portion of the Area A Wetland had total DDT concentrations less than the screening level. Ecological-Based Remedial Action Objectives (RAO) were developed as part of the FS for Soil and Sediment at Area A Downstream/OBDA Site 3 (Brown and Root Environmental, 1997). For sediment, an RAO of 2 mg/kg was developed for total DDT using a combination of sediment chemistry data, toxicity test data, and macroinvertebrate data. Total DDT concentrations in the Area A Wetland were greater than 2 mg/kg at three locations (2WSD24, 2WSD25, and TB3); none of the Phase III RI surface sediment samples had total DDT concentrations greater than 2 mg/kg. The three locations with total DDT concentrations greater than 2 mg/kg are located in the far western portion of the wetland (see Figure 2 in Appendix D). Other pesticides were detected at concentrations that exceeded screening levels in several samples. However, 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT are the primary pesticide risk drivers and any potential risks to sediment invertebrates from the other pesticides would be accounted for by evaluating risks from 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT. Therefore, risks to sediment invertebrates from pesticides are possible, and the pesticides 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT are retained as COPCs for further discussion below.

Aroclor-1260 was the only PCB detected in sediment samples, and was initially selected as a COPC because it was detected at concentrations that exceeded its screening level. Figure 3 in Appendix D shows the Aroclor-1260 results compared to the screening level (59.8 µg/kg), which is the TEC, and the PEC of 676 µg/kg from MacDonald el al. (2000). Aroclor-1260 was only detected in 12 of 47 samples; the locations with non-detected results are identified by an asterisk on Figure 3. All of the detections were in

samples adjacent to the Area A Landfill or just north of the landfill in the western corner of the wetland. Therefore, risks to sediment invertebrates from Aroclor-1260 are possible in this area, and PCBs are retained as COPCs for further discussion below.

Several metals were retained as COPCs because they were detected at concentrations that exceeded their respective screening levels. Figures 4 through 11 in Appendix D show the concentrations of selected metals (arsenic, cadmium, copper, iron, lead, mercury, nickel, and zinc) compared to their respective TECs and PECs. Several samples had concentrations of these metals that exceeded TECs; many fewer samples had concentrations that exceeded PECs. The general observations for each of the metals are as follows:

- Arsenic: No specific trends in the data were observed. The two locations where arsenic concentrations were greater than the PEC are not near each other and are bounded by samples with lower or non-detected arsenic concentrations

- Cadmium: Eight locations had cadmium concentrations that exceeded its PEC. However, the elevated detections do not appear to be related to any site activities. Four of these locations are near the Area A Landfill or Area A Weapons Center, but they are bounded by samples with lower or non-detected cadmium concentrations. The other four locations are scattered throughout the wetland in a way that would not suggest a release from a site.

- Copper: The two locations with copper concentrations that exceed the PEC are located along the Area A Landfill, so it is possible the runoff from the landfill contributed to copper concentrations at these locations. However, the concentrations at the two locations (161 mg/kg and 173 mg/kg) only slightly exceeded the PEC (149 mg/kg).

- Iron: The iron concentrations are greatest along a section of the Area A Landfill and also in the western portion of the wetland near the dike. The concentrations of iron are generally more elevated in the Phase III RI samples than the historical samples, which may be indicative of a more recent source of iron to the wetland, such as iron precipitation from groundwater/surface water.

- Lead: Four locations had lead concentrations that exceeded the PEC. Two are located in the drainage ditch from the Area A Weapons Center, one is located just south of the weapons center, and one is located adjacent to the Area A Landfill. The four locations are all bounded by other sediment samples with lead concentrations less than the PEC.

- Mercury: Only one location adjacent to the Area A Landfill had a mercury concentration that slightly exceeded the PEC, so mercury does not appear to be a significant concern for sediment invertebrates.

- Nickel: One location adjacent to the Area A Landfill had a nickel concentration that only slightly exceeded the PEC, and most of the locations had nickel concentrations less than the TEC.

- Zinc: Five locations had zinc concentrations that exceeded the PEC. All five locations are adjacent to the Area A Landfill, so it is possible the runoff from the landfill contributed to zinc concentrations at these locations. The five locations are generally bounded by other sediment samples with zinc concentrations less than the PEC.

In summary, PAHs, pesticides, PCBs, and metals were detected in several samples at concentrations that exceed screening levels and higher-effects levels. The greatest concentrations for most of the chemicals are immediately adjacent to the Area A Landfill and/or Area A Weapons Center. For total DDT, elevated levels also were found along the dike at the western portion of the wetland. Based strictly on the comparison of chemical concentrations in sediment to screening levels, risks to sediment invertebrates in the area of the elevated chemical concentrations would be expected. However, risks to sediment invertebrates are not likely to be significant enough to warrant further evaluations (e.g., toxicity testing) for the following reasons:

- The wetland dries up periodically, as evidenced by the lack of water during the Phase III RI sampling event. This periodic drying will stress and/or kill many of the sediment invertebrates present in the wetland.

- When the wetland is ponded, the water is often likely to be stagnant because the wetland is essentially flat with little water movement through the wetland. This, combined with the large amount of organic material in the sediment, will tend to increase the water temperature and decrease oxygen levels in the water when the organic material decomposes. Both of these situations (high temperature and low dissolved oxygen) will further stress and/or kill sediment invertebrates.

- TOC concentrations were very high in many of the sediment samples; the average TOC concentration of 9.8 percent. Figure 12 in Appendix D presents the TOC results at each location where TOC was measured. By comparing other figures in Appendix D with Figure 12, it can be seen that many of the locations with elevated concentrations of PAHs, pesticides, PCBs, and some of the metals are the same locations where TOC concentrations were elevated (i.e., greater than 5 percent). Organic chemicals such as PCBs and PAHs bind to organic carbon reducing their bioavailability at

those locations with elevated TOC concentrations, which decreases the likelihood that the chemicals will impact sediment invertebrates.

For the reasons stated above, the potential risks to sediment invertebrates from chemicals in sediment do not appear to be significant enough to warrant proceeding further into the ERA process to conduct site-specific toxicity tests.

3.7.2 Mammals and Birds

As presented in Section 3.6.3, the EEQs from the terrestrial food-chain modeling were greater than 1.0 for several chemicals using maximum chemical concentrations and conservative exposure assumptions. Therefore, as part of the Step 3a refinement, risks were recalculated using average chemical concentrations and average exposure assumptions.

Table 3-5 presents the NOAEL and LOAEL EEQs from the food-chain models for soil herbivorous and invertivorous receptors using average inputs, and Table 3-6 presents the NOAEL and LOAEL EEQs from the terrestrial food-chain models for sediment invertivorous receptors using average inputs. The results for the various receptors are summarized as follows:

- Soil herbivorous receptors: Aluminum was the only chemical that had NOAEL or LOAEL EEQs greater than 1.0 using the average scenario in the vole model.

- Soil invertivorous receptors: NOAEL EEQs were greater than 1.0 for aluminum, cadmium, chromium, iron, lead, mercury, and vanadium in the robin food-chain model. NOAEL EEQs were greater than 1.0 for Aroclor-1260, aluminum, cadmium, iron, mercury, and nickel in the shrew food-chain model. Mercury in the robin model and aluminum in the shrew model were the only chemicals that had LOAEL EEQs greater than 1.0.

- Sediment invertivorous receptors: NOAEL EEQs were greater than 1.0 for Aroclor-1260, aluminum, copper, iron, mercury, and vanadium in the mallard food-chain model. The NOAEL EEQ was greater than 1.0 for Aroclor-1260, aluminum, and iron in the raccoon food-chain model. Iron and vanadium in the duck model and aluminum and iron in the raccoon model were the only chemicals that had LOAEL EEQs greater than 1.0.

3.7.2.1 Soil Herbivorous/Invertivorous Mammals and Birds

Site-specific background concentrations of inorganics in soil were established at NSB-NLON in 1995 based on soil samples collected at non-impacted locations across the facility (Atlantic, 1995). Of the

inorganics with EEQs greater than 1.0 in the less conservative food-chain model, the concentrations of aluminum and iron in site samples were similar to concentrations in background samples, as follows:

- Aluminum was detected in the Area A Wetland samples at maximum and average concentrations of 17,900 mg/kg and 13,979 mg/kg, respectively, which are similar to the maximum and average concentrations of 17,600 mg/kg and 13,427 mg/kg in the background samples.

- Iron was detected in the Area A Wetland samples at maximum and average concentrations of 30,800 mg/kg and 23,317 mg/kg, respectively, which are similar to the maximum and average concentrations of 17,200 mg/kg and 13,341 mg/kg in the background samples.

Aluminum and iron also are generally not considered very toxic to wildlife because they are typically not very bioavailable in the environment. Therefore, risks from aluminum and iron likely to be low and similar to background risks, so these inorganics are not retained for further evaluation.

With the exception of mercury in the robin model, the EEQs based on NOAELs in the robin and shrew food-chain models were low (less than 3.0), and the EEQs based on LOAELs were less than 1.0. Although the surface soil samples were not analyzed for TOC, based on the high TOC results in the sediment samples (see Figure 12 in Appendix D) and the close proximity of several of the soil samples to the sediment samples (see Figure 1-2), it is likely that the TOC concentrations at most soil locations are high. Because high TOC concentrations are expected to reduce the bioavailability of metals and Aroclor-1260, it is not likely that the metals and Aroclor-1260 with low EEQs will cause a significant risk to mammals or birds. Therefore, these chemicals are not retained as COPCs for further evaluation of risks to these receptors.

In the robin model, mercury had an EEQ of 16 based on the NOAEL, and an EEQ of 1.6 based on the LOAEL. The elevated EEQs are primarily due to the conservativeness of the model and the very low TRVs for birds. Mercury was detected in 4 of 9 soil samples at maximum and average concentrations of 0.69 mg/kg and 0.25 mg/kg, respectively. In addition, although mercury was detected in 39 of 49 sediment samples, the mercury does not appear to be site-related. Based on the distribution of mercury presented in Figure 9 in Appendix D, mercury concentrations were generally lower in the samples closest to the Area A Weapons Center and Area A Landfill. By comparing Figure 9 to Figure 12 in Appendix D, it appears locations with lower mercury concentrations are generally the same locations with lower TOC concentrations. Also, only one mercury concentration was greater than 1 mg/kg (1.2 mg/kg at T6B), and most of the results were less than 0.3 mg/kg. This tends to suggest a more ubiquitous source of mercury, such as atmospheric deposition. Finally, although the exact locations of the bird samples are not known, mercury was detected in only 1 of 17 bird samples at a low concentration of 0.083 mg/kg (see Tables 4

and 6 in Appendix B). For these reasons, risks to mammals or birds from mercury in soil are not significant enough to retain mercury as a COPC for further evaluation of risks to these receptors

3.7.2.2 Sediment Invertivorous Mammals and Birds

For Aroclor-1260, the EEQs based on NOAELs were greater than 1.0 for the mallard and raccoon models, but the EEQs were less than 1.0 based on LOAELs. Aroclor-1260 was detected in only 12 of 47 samples at a maximum concentration of 1.5 mg/kg. As indicated in Section 6.2, all of the detections were in the samples adjacent to the Area A Landfill or just north of the landfill in the western corner of the wetland. The TOC concentrations of these samples were high, ranging from 2 to over 10 percent (see Figure 12 in Appendix D), which will decrease the bioavailability of the PCBs. Finally, the home range for the mallard (275 to 1,500 acres) and raccoon (96 to 6,300 acres) are much larger than the size of the Area A Wetland (26 acres). Therefore, because the EEQs based on LOAELs were less than 1.0, the bioavailability of the PCBs are expected to be low, and invertivorous birds and mammals will not likely obtain all of their food from the site, risks to these receptors are expected to be low and PCBs are not retained as COPCs for further evaluation of risks to invertivorous birds and mammals.

For metals in the mallard and raccoon models, the EEQs based on NOAELs were low (less than 4.0) and the EEQs based on LOAELs were less than 1.0, except for the non-bioaccumulative chemicals aluminum, iron, and vanadium.

The NOAEL-based EEQs for copper (1.4) and mercury (3.3) based on the mallard food-chain model were low. As discussed above for the robin model, mercury does not appear to be site related. Also, using the same rationale as discussed above for Aroclor-1260 (i.e., home range of receptors, high TOC levels in sediment), risks to sediment invertivorous birds are expected to be low. Therefore, copper and mercury are not retained as COPCs for further evaluation of risks to wildlife.

The Eco SSL document (USEPA, 2003b) indicates that aluminum should not be a COPC if the pH of the soil is greater than 5.5 standard units (SU) because the soluble and toxic forms of aluminum are only present in soil at pH values less than 5.5 SU. Although the Area A Wetland consists of mostly sediment not soil, the same principal applies. The average pH in the sediment samples is 5.8 SU, so it is not likely that aluminum will be toxic at the site. Regarding iron, the Eco SSL document indicates that the main concern from an ecological risk perspective for iron is not direct chemical toxicity per se, but the effect of iron as a mediator in the geochemistry of other (potentially toxic) metals and the potential physical hazard of depositing flocculent (USEPA, 2003c). Finally, vanadium is another metal that is expected to have low bioavailability in the environment. Its LOAEL EEQ was just slightly greater than 1.0. None of these three metals had BSAFs, so the BSAF used in the food-chain model for these metals was the geometric mean of the BSAFs for the bioaccumulative chemicals (0.422) (see calculation in Appendix F. Three of the

metals considered bioaccumulative (arsenic, chromium, and lead) had BSAFs lower than 0.422, indicating that the food-chain models for aluminum, iron, and vanadium are overly conservative. This, combined with the information presented above for aluminum and iron, and using the same rationale as discussed above for Aroclor-1260 (i.e., home range of receptors, high TOC levels in sediment), risks to sediment invertivorous mammals and birds are expected to be low. Therefore, aluminum, iron, and vanadium are not retained as COPCs for further evaluation of risks to these mammals and birds.

In summary, risks are not great enough at the site to warrant retaining any chemicals in surface soil or sediment for further evaluation of risks to mammals and birds.

TABLE 3-1

EXPOSURE PARAMETERS FOR FOOD-CHAIN MODELS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Species/Exposure Inputs	Conservative Inputs		Average Inputs	
	Values	Units	Values	Units
Bobwhite Quail				
Body Weight = BW	1.540E-01	kg	1.751E-01	kg
Food Ingestion Rate = If	4.880E-03	kg/day	4.080E-03	kg/day
Soil Ingestion Rate = Is	6.783E-04	kg/day	2.489E-04	kg/day
Home Range = HR	Assume 100% on site		1.880E+01	acres
Meadow Vole				
Body Weight = BW	1.700E-02	kg	3.580E-02	kg
Food Ingestion Rate = If	3.756E-03	kg/day	3.488E-03	kg/day
Soil Ingestion Rate = Is	1.202E-04	kg/day	4.186E-05	kg/day
Home Range = HR	Assume 100% on site		6.590E-02	acres
American Robin				
Body Weight = BW	7.73E-02	kg	8.04E-02	kg
Food Ingestion Rate = If	1.25E-02	kg/day	1.19E-02	kg/day
Soil Ingestion Rate - Is	2.046E-03	kg/day	7.601E-04	kg/day
Home Range = HR	Assume 100% on site		6.100E-01	acres
Short-Tailed Shrew				
Body Weight = BW	1.500E-02	kg	1.610E-02	kg
Food Ingestion Rate = If	1.600E-03	kg/day	1.433E-03	kg/day
Soil Ingestion Rate - Is	4.801E-05	kg/day	1.289E-05	kg/day
Home Range = HR	Assume 100% on site		9.699E-01	acres
Raccoon				
Body Weight = BW	3.670E+00	kg	5.636E+00	kg
Food Ingestion Rate = If	2.370E-01	kg/day	1.840E-01	kg/day
Sediment Ingestion Rate = Is	2.228E-02	kg/day	1.730E-02	kg/day
Home Range = HR	Assume 100% on site		1.558E+03	acres
Mallard Duck				
Body Weight = BW	1.04E+00	kg	1.17E+00	kg
Food Ingestion Rate = If	8.20E-02	kg/day	7.83E-02	kg/day
Sediment Ingestion Rate = Is	2.706E-03	kg/day	2.583E-03	kg/day
Home Range = HR	Assume 100% on site		1.433E+03	km-radius

The exposure factors were derived as presented in Appendix E.

The soil/sediment ingestion rates were calculated by multiplying the food ingestion rates by the following incidental soil/sediment ingestion rates:

	Conservative	Average	Source
Bobwhite Quail	13.90%	6.10%	1, 2
Meadow Vole	3.20%	1.20%	1
American Robin	16.40%	6.40%	1,4
Short-tailed Shrew	3%	0.90%	1
Raccoon	9.4%	9.4%	3
Mallard Duck	3.3%	3.3%	3

1 - United States Environmental Protection Agency, 2007.
2 - Based on the mourning dove.
3 - Beyer, et al., 1994.
4 - Based on the American woodcock.

TABLE 3-2

CONSERVATIVE FOOD-CHAIN MODEL RESULTS SOIL INVERTIVOROUS AND HERBIVOROUS RECEPTORS
SITE 2B - AREA A WETLAND
NSB NLON, GROTON, CONNECTICUT

Chemical	Herbivorous Receptors EEQs				Soil Invertivorous Receptors EEQs			
	Bobwhite Quail		Meadow Vole		American Robin		Short-Tailed Shrew	
	NOAEL	LOAEL	NOAEL	LOAEL	NOAEL	LOAEL	NOAEL	LOAEL
Volatile Organics								
2-BUTANONE	NV	NV	4.0E-05	1.5E-05	NV	NV	1.9E-05	7.5E-06
ACETONE	NV	NV	9.8E-02	2 0E-02	NV	NV	9.3E-03	1.9E-03
CARBON DISULFIDE	NV	NV	2.9E-04	1 4E-04	NV	NV	7 0E-05	3.4E-05
METHYLENE CHLORIDE	NV	NV	1.5E-03	1 8E-04	NV	NV	1.1E-04	1.3E-05
TETRACHLOROETHENE	NV	NV	1.4E-03	2.7E-04	NV	NV	5.5E-04	1.1E-04
TRICHLOROETHENE	NV	NV	1.9E-03	1.9E-04	NV	NV	6.3E-04	6.3E-05
Semivolatile Organics								
ACENAPHTHENE	7.8E-04	7 8E-05	6.9E-05	1.3E-05	3.9E-02	3.9E-03	7.2E-04	1.3E-04
ACENAPHTHYLENE	1.2E-03	1.2E-04	2.1E-04	3.9E-05	1.7E-02	1.7E-03	3.2E-04	5.9E-05
ANTHRACENE	9.9E-04	9.9E-05	1.8E-04	3.4E-05	1.1E-02	1.1E-03	2.1E-04	3.9E-05
BENZO(A)ANTHRACENE	1.5E-03	1 5E-04	1 8E-02	3.0E-04	5.7E-02	5.7E-03	1.1E-01	1.8E-03
BENZO(A)PYRENE	1.7E-03	1.7E-04	2 3E-02	3.6E-04	5.6E-02	5 6E-03	1.1E-01	1.8E-03
BENZO(B)FLUORANTHENE	3.9E-03	3.9E-04	6.8E-02	1.1E-03	7 9E-02	7.9E-03	1 6E-01	2 5E-03
BENZO(G,H,I)PERYLENE	1.8E-03	1.8E-04	3.2E-02	5.1E-04	3.7E-02	3.7E-03	7 4E-02	1.2E-03
BENZO(K)FLUORANTHENE	1.7E-03	1.7E-04	2.3E-02	3.7E-04	5.6E-02	5.6E-03	1.1E-01	1.8E-03
BENZOIC ACID	NV	NV	NV	NV	NV	NV	NV	NV
BIS(2-ETHYLHEXYL) PHTHALATE	NV	NV	1.4E-03	1.4E-04	NV	NV	7 8E-03	7.8E-04
CHRYSENE	2.1E-03	2.1E-04	2.5E-02	3.9E-04	8.6E-02	8.6E-03	1.7E-01	2.7E-03
DIBENZO(A,H)ANTHRACENE	1.4E-04	1.4E-05	1.9E-03	3.0E-05	4.6E-03	4.6E-04	9.1E-03	1.5E-04
FLUORANTHENE	9.0E-03	9.0E-04	1.6E-03	2.9E-04	1.3E-01	1.3E-02	2.4E-03	4.4E-04
INDENO(1,2,3-CD)PYRENE	1.1E-03	1.1E-04	1.4E-02	2.2E-04	3.9E-02	3.9E-03	7.7E-02	1.2E-03
PHENANTHRENE	7.6E-03	7.6E-04	1.5E-03	2.8E-04	4.9E-02	4.9E-03	9.0E-04	1.7E-04
PYRENE	1.1E-02	1.1E-03	2.2E-01	3.5E-03	1.2E-01	1.2E-02	2.3E-01	3.7E-03
Pesticides/PCBs								
4,4'-DDD	2.9E-03	2.4E-04	2.0E-02	5.2E-04	3.6E-01	3.0E-02	3.6E-01	9 5E-03
4,4'-DDE	5.5E-04	4.6E-05	4.3E-03	1.1E-04	1.5E-01	1.2E-02	1.5E-01	4 0E-03
4,4'-DDT	1.3E-03	1.1E-04	9.6E-03	2.5E-04	2.7E-01	2.3E-02	2.7E-01	7.2E-03
ALPHA-CHLORDANE	7.3E-06	1.5E-06	8.2E-06	4.1E-06	1.2E-03	2.3E-04	3.5E-04	1.8E-04
AROCLOR-1260	9.2E-03	9.2E-04	4.2E-02	4.2E-03	5.3E+00	5.3E-01	9.3E+00	9.3E-01
GAMMA-CHLORDANE	5 3E-06	1.1E-06	6.0E-06	3.0E-06	8.6E-04	1.7E-04	2.6E-04	1.3E-04
Inorganics								
ALUMINUM	7 4E-01	7.4E-02	7.6E+01	7.6E+00	7.4E+00	7.4E-01	1.5E+02	1.5E+01
ARSENIC	3.8E-02	1.9E-02	2.2E-01	5.1E-02	3 0E-01	1.5E-01	2.1E-01	4.9E-02
BARIUM	NV	NV	7.5E-02	4.7E-02	NV	NV	2.3E-02	1.5E-02
BERYLLIUM	NV	NV	4.0E-01	3.1E-01	NV	NV	2.7E-02	2.1E-02
CADMIUM	6.1E-02	1.4E-02	5.9E-01	6.6E-02	4.5E+00	1.0E+00	5.5E+00	6.2E-01
CHROMIUM	2.2E-01	3.7E-02	6.8E-01	2.8E-02	2.9E+00	5.0E-01	1.5E+00	6.3E-02
COBALT	7.7E-03	3.2E-03	1.5E-02	5.9E-03	7.7E-02	3.2E-02	2.8E-02	1.1E-02
COPPER	1.5E-01	1.7E-02	4.8E-01	3.2E-02	1.7E+00	2.0E-01	6.7E-01	4.5E-02
IRON	1.5E+00	1.5E-01	5.7E+00	5.7E-01	1.2E+01	1.2E+00	7.1E+00	7.1E-01
LEAD	4.2E-01	1.5E-02	3.8E-01	9.6E-03	6.1E+00	2.2E-01	1.0E+00	2.5E-02
MANGANESE	1.5E-02	6.9E-03	1 8E-01	6.3E-02	7.8E-02	3.7E-02	7.6E-02	2.7E-02
MERCURY	1.8E+01	1.8E+00	2.4E+01	4.8E+00	2.7E+01	2.7E+00	3.3E+00	6.5E-01
NICKEL	2.4E-02	8.5E-03	2.8E-01	3.2E-02	3.2E+00	1.1E+00	8.0E+00	9.2E-01
SELENIUM	1.8E-01	6.5E-02	2.2E+00	4.7E-01	1.2E+00	4.2E-01	1.4E+00	3.0E-01
SILVER	1 1E-02	3.6E-04	7.6E-03	3.9E-04	7.9E-01	2.7E-02	1.7E-01	8.4E-03
VANADIUM	9.9E-01	2.0E-01	1.5E-01	6.5E-02	7.2E+00	1.5E+00	1.4E-01	6.1E-02
ZINC	4.2E-02	1.6E-02	2.2E-01	5.5E-02	1.1E+00	4.1E-01	6.0E-01	1.5E-01

Cells are shaded if the EEQ is greater than 1.0.

NOAEL - No Observed Adverse Effects Level.
LOAEL - Lowest Observed Adverse Effects Level.
EEQ - Ecological Effects Quotient.
NV = No value, value not able to be calculated.

TABLE 3-3

CONSERVATIVE FOOD-CHAIN MODEL RESULTS
SEDIMENT INVERTIVOROUS RECEPTORS
SITE 2B - AREA A WETLAND
NSB NLON, GROTON, CONNECTICUT
PAGE 1 OF 2

Chemical	Sediment Invertivorous Receptors EEQs			
	Mallard Duck		Raccoon	
	NOAEL	LOAEL	NOAEL	LOAEL
Volatile Organics				
1,1,1-TRICHLOROETHANE	NV	NV	8.8E-07	8.8E-08
2-BUTANONE	NV	NV	5.4E-05	2.1E-05
ACETONE	NV	NV	4.9E-03	9.8E-04
CARBON DISULFIDE	NV	NV	9.7E-05	4.8E-05
CHLOROBENZENE	NV	NV	3.5E-04	1.7E-04
METHYLENE CHLORIDE	NV	NV	2.6E-04	3.0E-05
TETRACHLOROETHENE	NV	NV	7.8E-04	1.6E-04
TOLUENE	NV	NV	1.6E-05	1.6E-06
TOTAL XYLENES	NV	NV	9.9E-05	7.9E-05
TRICHLOROETHENE	NV	NV	2.1E-03	2.1E-04
Semivolatile Organics				
1,4-DICHLOROBENZENE	NV	NV	9.5E-05	9.5E-06
2,4-DIMETHYLPHENOL	NV	NV	2.9E-03	5.7E-04
2-METHYLNAPHTHALENE	2.1E-03	2.1E-04	5.7E-05	1.1E-05
4-METHYLPHENOL	NV	NV	5.9E-04	2.0E-04
ACENAPHTHENE	4.6E-03	4.6E-04	1.4E-04	2.6E-05
ACENAPHTHYLENE	4.8E-03	4.8E-04	1.4E-04	2.6E-05
ANTHRACENE	2.9E-02	2.9E-03	8.8E-04	1.6E-04
BENZO(A)ANTHRACENE	3.3E-01	3.3E-02	1.1E+00	1.7E-02
BENZO(A)PYRENE	4.3E-01	4.3E-02	1.4E+00	2.2E-02
BENZO(B)FLUORANTHENE	6.7E-01	6.7E-02	2.2E+00	3.4E-02
BENZO(G,H,I)PERYLENE	2.8E-01	2.8E-02	9.0E-01	1.4E-02
BENZO(K)FLUORANTHENE	5.5E-01	5.5E-02	1.8E+00	2.8E-02
BENZOIC ACID	NV	NV	NV	NV
BIS(2-ETHYLHEXYL) PHTHALATE	NV	NV	1.3E-02	1.3E-03
BUTYL BENZYL PHTHALATE	NV	NV	1.7E-03	5.6E-04
CARBAZOLE	8.1E-03	8.1E-04	2.6E-02	4.1E-04
CHRYSENE	5.1E-01	5.1E-02	1.6E+00	2.6E-02
DIBENZO(A,H)ANTHRACENE	1.7E-02	1.7E-03	5.5E-02	8.8E-04
DIBENZOFURAN	3.9E-02	3.9E-03	1.1E-01	1.8E-03
DI-N-BUTYL PHTHALATE	NV	NV	2.2E-05	6.7E-06
FLUORANTHENE	9.8E-01	9.8E-02	2.9E-02	5.4E-03
FLUORENE	1.2E-02	1.2E-03	3.7E-04	6.8E-05
INDENO(1,2,3-CD)PYRENE	2.8E-01	2.8E-02	9.0E-01	1.4E-02
NAPHTHALENE	2.0E-03	2.0E-04	5.9E-05	1.1E-05
PENTACHLOROPHENOL	2.8E-03	3.6E-04	1.9E-03	7.2E-04
PHENANTHRENE	4.4E-01	4.4E-02	1.3E-02	2.4E-03
PYRENE	5.1E-01	5.1E-02	1.6E+00	2.6E-02
Pesticides/PCBs				
4,4'-DDD	5.0E-01	4.2E-02	7.6E-01	2.0E-02
4,4'-DDE	1.9E+00	1.6E-01	2.4E+00	6.3E-02
4,4'-DDT	1.6E+00	1.4E-01	2.2E+00	5.7E-02
ALDRIN	NV	NV	1.9E-03	3.8E-04
ALPHA-CHLORDANE	8.8E-03	1.8E-03	3.4E-03	1.7E-03
AROCLOR-1260	4.0E+01	4.0E+00	8.8E+01	8.8E+00
BETA-BHC	6.7E-04	1.7E-04	7.9E-04	1.6E-04
DELTA-BHC	1.0E-03	2.6E-04	3.5E-02	3.5E-03
DIELDRIN	5.1E-02	4.5E-03	2.0E-01	2.4E-03
ENDOSULFAN I	1.5E-04	1.5E-05	8.6E-03	8.6E-04
ENDOSULFAN II	4.3E-04	4.3E-05	2.4E-02	2.4E-03
ENDOSULFAN SULFATE	1.9E-04	1.9E-05	1.1E-02	1.1E-03
ENDRIN	2.4E-01	2.4E-02	2.3E-02	2.3E-03
ENDRIN ALDEHYDE	1.9E+00	1.9E-01	1.8E-01	1.8E-02
ENDRIN KETONE	2.7E-01	2.7E-02	2.6E-02	2.6E-03
GAMMA-BHC (LINDANE)	5.7E-04	5.7E-05	1.2E-04	1.2E-05

TABLE 3-3

CONSERVATIVE FOOD-CHAIN MODEL RESULTS
SEDIMENT INVERTIVOROUS RECEPTORS
SITE 2B - AREA A WETLAND
NSB NLON, GROTON, CONNECTICUT

Chemical	Sediment Invertivorous Receptors EEQs			
	Mallard Duck		Raccoon	
	NOAEL	LOAEL	NOAEL	LOAEL
GAMMA-CHLORDANE	4.7E-03	9.4E-04	1.9E-03	9.3E-04
HEPTACHLOR	NV	NV	5.3E-03	5.3E-04
HEPTACHLOR EPOXIDE	NV	NV	5.3E-03	5.3E-04
METHOXYCHLOR	NV	NV	2.4E-03	1.2E-03
Inorganics				
ALUMINUM	4.4E+01	4.4E+00	2.1E+03	2.1E+02
ANTIMONY	NV	NV	1.9E+01	4.0E-01
ARSENIC	1.3E+00	6.6E-01	2.6E+00	5.8E-01
BARIUM	NV	NV	1.1E+00	6.8E-01
BERYLLIUM	NV	NV	1.1E+00	8.7E-01
BORON	2.3E-01	6.7E-02	2.0E-01	6.1E-02
CADMIUM	1.3E+01	2.9E+00	2.0E+01	2.2E+00
CHROMIUM	1.4E+00	2.5E-01	1.5E+00	6.1E-02
COBALT	3.2E-01	1.3E-01	2.8E-01	1.1E-01
COPPER	1.8E+01	2.1E+00	1.1E+01	7.2E-01
CYANIDE	NV	NV	1.3E-02	1.3E-03
IRON	5.3E+02	5.3E+01	9.0E+02	9.0E+01
LEAD	7.4E+00	2.7E-01	2.3E+00	5.9E-02
MANGANESE	2.5E+00	1.2E+00	7.3E+00	2.6E+00
MERCURY	4.3E+01	4.3E+00	7.2E+00	1.4E+00
NICKEL	1.7E+00	6.1E-01	5.6E+00	6.5E-01
SELENIUM	5.7E+00	2.0E+00	9.8E+00	2.1E+00
SILVER	8.1E-02	2.7E-03	2.3E-02	1.2E-03
THALLIUM	NV	NV	2.1E+01	2.1E+00
VANADIUM	1.4E+02	2.9E+01	9.9E+00	4.4E+00
ZINC	6.3E+00	2.4E+00	4.6E+00	1.2E+00

Cells are shaded if the value is greater than 1.0.

NOAEL - No Observed Adverse Effects Level.
LOAEL - Lowest Observed Adverse Effects Level.
EEQ - Ecological Effects Quotient.
NV = No value, value not able to be calculated.

TABLE 3-4

SUMMARY OF INITIAL ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN
SEDIMENT AND SURFACE SOIL
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Surface Sediment		Surface Soil	
	Sediment Invertebrates	Sediment Invertivores	Herbivorous Mammals	Invertivorous Mammals
Volatile Organics				
2-BUTANONE	X			
ACETONE	X			
CARBON DISULFIDE	X			
Semivolatile Organics				
2,4-DIMETHYLPHENOL	X			
2-METHYLNAPHTHALENE	X			
ACENAPHTHENE	X			
ACENAPHTHYLENE	X			
ANTHRACENE	X			
BENZO(A)ANTHRACENE	X	X		
BENZO(A)PYRENE	X	X		
BENZO(B)FLUORANTHENE	X	X		
BENZO(G,H,I)PERYLENE	X			
BENZO(K)FLUORANTHENE	X	X		
BENZOIC ACID	X			
BIS(2-ETHYLHEXYL) PHTHALATE	X			
CARBAZOLE	X			
CHRYSENE	X	X		
DIBENZO(A,H)ANTHRACENE	X			
FLUORANTHENE	X			
FLUORENE	X			
INDENO(1,2,3-CD)PYRENE	X			
PENTACHLOROPHENOL	X			
PHENANTHRENE	X			
PYRENE	X	X		
TOTAL PAHs	X			
Pesticides/PCBs				
4,4'-DDD	X			
4,4'-DDE	X	X		
4,4'-DDT	X	X		
TOTAL DDT	X			
ALDRIN	X			
ALPHA-CHLORDANE	X			
BETA-BHC	X			
DELTA-BHC	X			
ENDOSULFAN I	X			
ENDOSULFAN II	X			
ENDOSULFAN SULFATE	X			
ENDRIN ALDEHYDE	X	X		
GAMMA-BHC (LINDANE)	X			
GAMMA-CHLORDANE	X			
HEPTACHLOR	X			
HEPTACHLOR EPOXIDE	X			
METHOXYCHLOR	X			
AROCLOR-1260	X	X		X

TABLE 3-4

SUMMARY OF INITIAL ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN
SEDIMENT AND SURFACE SOIL
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Surface Sediment		Surface Soil	
	Sediment Invertebrates	Sediment Invertivores	Herbivorous Mammals	Invertivorous Mammals
Inorganics				
ALUMINUM	X	X	X	X
ANTIMONY	X	X		
ARSENIC	X	X		
BARIUM	X	X		
BERYLLIUM	X	X		
BORON	X			
CADMIUM	X	X		X
CHROMIUM	X	X		X
COPPER	X	X		X
CYANIDE	X			
IRON	X	X	X	X
LEAD	X	X		X
MANGANESE	X	X		
MERCURY	X	X	X	X
NICKEL	X	X		X
SELENIUM	X	X	X	X
SILVER	X	X		
THALLIUM	X	X		
VANADIUM	X	X		X
ZINC	X	X		X

X - Indicates that the chemical was selected as a chemical of potential in the screening step. These chemicals were further evaluated in Step 3a.

TABLE 3-5

LESS CONSERVATIVE FOOD-CHAIN MODEL RESULTS
SOIL INVERTIVOROUS AND HERBIVOROUS RECEPTORS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Herbivorous Receptors EEQs				Soil Invertivorous Receptors EEQs			
	Bobwhite Quail		Meadow Vole		American Robin		Short-Tailed Shrew	
	NOAEL	LOAEL	NOAEL	LOAEL	NOAEL	LOAEL	NOAEL	LOAEL
Pesticides/PCBs								
AROCLOR-1260	1.1E-03	1.1E-04	2.9E-03	2 9E-04	7.5E-01	7.5E-02	1.2E+00	1.2E-01
Inorganics								
ALUMINUM	1.9E-01	1.9E-02	1.0E+01	1.0E+00	2.0E+00	2.0E-01	3.4E+01	3.4E+00
CADMIUM	2.4E-02	5.5E-03	1.7E-01	1.9E-02	2.4E+00	5.6E-01	2.7E+00	3.1E-01
CHROMIUM	5 2E-02	8.9E-03	1.3E-01	5.2E-03	1.2E+00	2.0E-01	6.8E-01	2.8E-02
COPPER	5.9E-02	6.8E-03	1.5E-01	9.9E-03	7.6E-01	8.8E-02	3.0E-01	2.0E-02
IRON	3.5E-01	3.5E-02	7.4E-01	7.4E-02	3.4E+00	3.4E-01	1.9E+00	1.9E-01
LEAD	6 8E-02	2.5E-03	5.5E-02	1 4E-03	1.7E+00	6.4E-02	3.2E-01	8.1E-03
MERCURY	6.4E-01	6.4E-02	5.0E-01	1.0E-01	1.6E+01	1.6E+00	1.9E+00	3.8E-01
NICKEL	8.2E-03	3.0E-03	7 6E-02	8.7E-03	5.3E-01	1.9E-01	1.2E+00	1.4E-01
SELENIUM	4.2E-02	1.5E-02	3.2E-01	7.0E-02	4.7E-01	1.7E-01	5.5E-01	1.2E-01
VANADIUM	2.3E-01	4.6E-02	2.0E-02	8 8E-03	2.3E+00	4.7E-01	5.5E-02	2.4E-02
ZINC	1.9E-02	7.5E-03	6.7E-02	1.7E-02	7.8E-01	3.0E-01	4.1E-01	1.0E-01

Chemicals are shown only if retained as a COPC in the conservative food-chain model.
Cells are shaded if the EEQ is greater than 1.0.

NOAEL - No Observed Adverse Effects Level.
LOAEL - Lowest Observed Adverse Effects Level.
EEQ - Ecological Effects Quotient.

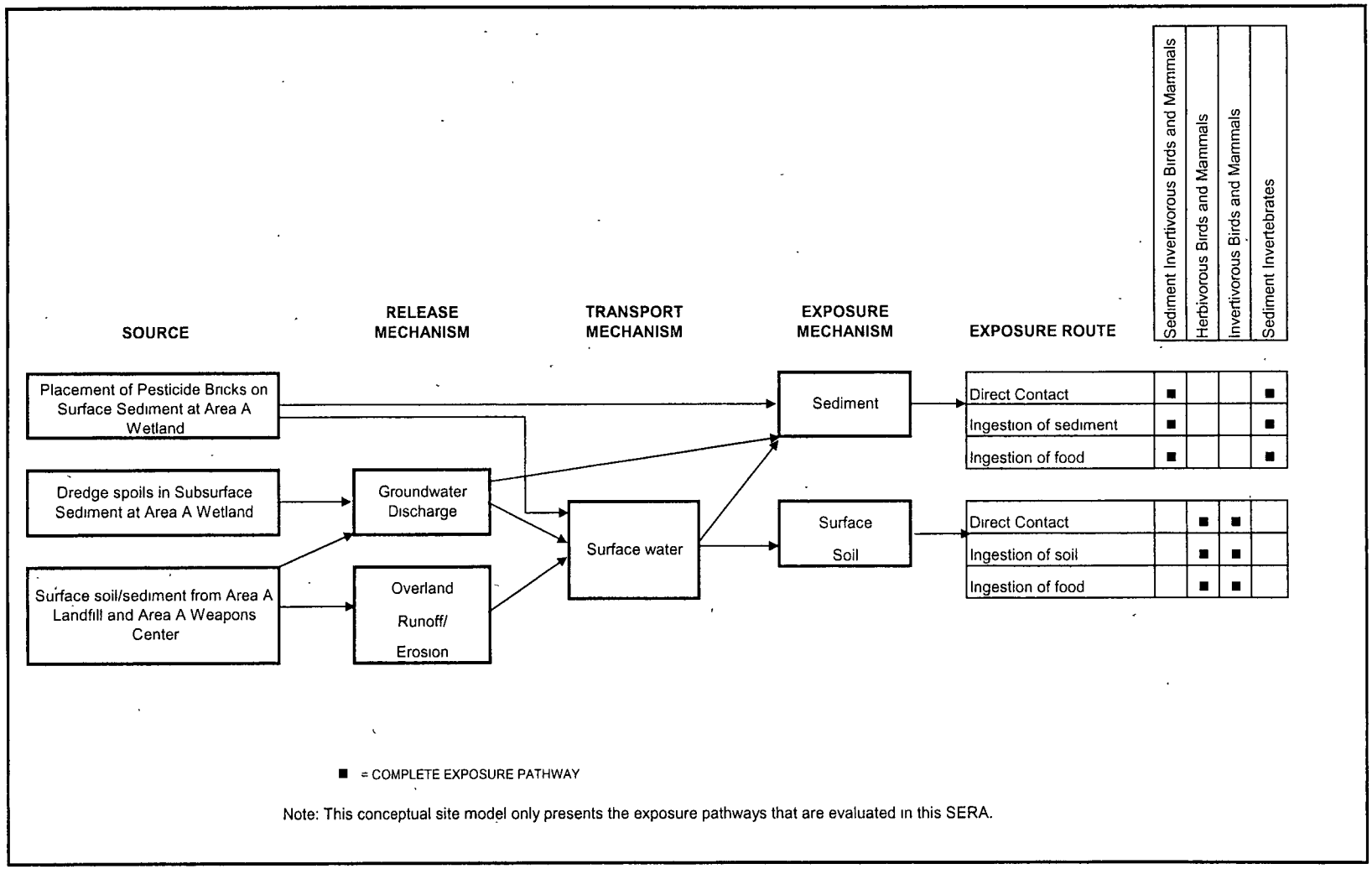
TABLE 3-6

LESS CONSERVATIVE FOOD CHAIN MODEL RESULTS
SEDIMENT INVERTIVOROUS RECEPTORS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Sediment Invertivorous Receptors EEQs			
	Mallard Duck		Raccoon	
	NOAEL	LOAEL	NOAEL	LOAEL
Semivolatile Organics				
BENZO(A)ANTHRACENE	1.2E-02	1.2E-03	2.2E-02	3.5E-04
BENZO(A)PYRENE	1.3E-02	1.3E-03	2.5E-02	4.1E-04
BENZO(B)FLUORANTHENE	1.7E-02	1.7E-03	3.3E-02	5.2E-04
BENZO(K)FLUORANTHENE	1.5E-02	1.5E-03	2.7E-02	4.4E-04
CHRYSENE	1.5E-02	1.5E-03	2.9E-02	4.6E-04
PYRENE	1.8E-02	1.8E-03	3.5E-02	5.6E-04
Pesticides/PCBs				
4,4'-DDE	8.4E-02	7.1E-03	6.4E-02	1.7E-03
4,4'-DDT	6.3E-02	5.3E-03	4.9E-02	1.3E-03
AROCLOR-1260	2.5E+00	2.5E-01	3.3E+00	3.3E-01
ENDRIN ALDEHYDE	1.4E-01	1.4E-02	7.7E-03	7.7E-04
Inorganics				
ALUMINUM	3.5E+00	3.5E-01	1.1E+02	1.1E+01
ANTIMONY	NV	NV	4.2E-01	8.9E-03
ARSENIC	5.3E-02	2.6E-02	7.4E-02	1.7E-02
BARIUM	NV	NV	2.9E-02	1.8E-02
BERYLLIUM	NV	NV	2.4E-02	1.9E-02
CADMIUM	5.0E-02	1.2E-02	5.1E-02	5.7E-03
CHROMIUM	1.4E-01	2.3E-02	1.1E-01	4.4E-03
COPPER	1.4E+00	1.6E-01	4.9E-01	3.4E-02
IRON	1.6E+01	1.6E+00	1.8E+01	1.8E+00
LEAD	2.5E-01	9.2E-03	6.8E-02	1.7E-03
MANGANESE	5.6E-02	2.6E-02	1.1E-01	3.8E-02
MERCURY	3.3E+00	3.3E-01	3.4E-01	6.8E-02
NICKEL	1.0E-01	3.7E-02	2.2E-01	2.5E-02
SELENIUM	1.3E-01	4.7E-02	1.5E-01	3.2E-02
THALLIUM	NV	NV	8.9E-01	8.9E-02
VANADIUM	5.0E+00	1.0E+00	2.3E-01	1.0E-01
ZINC	3.3E-01	1.3E-01	1.5E-01	3.7E-02

Chemicals are shown only if retained as a COPC in the conservative food-chain model.
Cells are shaded if the value is greater than 1.0.

NOAEL - No Observed Adverse Effects Level.
LOAEL - Lowest Observed Adverse Effects Level.
EEQ - Ecological Effects Quotient.
NV = No value, value not able to be calculated.



Blank space indicates incomplete exposure pathway or relatively insignificant, or not applicable, potential exposure.

FIGURE 3-1

ECOLOGICAL CONCEPTUAL SITE MODEL
AREA A WETLAND, NSB-NLON
GROTON, CONNECTICUT

4.0 ECOLOGICAL RISK UNCERTAINTY ANALYSIS

This section presents some of the general uncertainties associated with ecological risk assessment.

4.1 UNCERTAINTY IN MEASUREMENT AND ASSESSMENT ENDPOINTS

Measurement endpoints were used to evaluate the assessment endpoints selected for this SERA, but the measures of effects were not the same as the assessment endpoints. The measures were used to predict effects to the assessment endpoints by selecting surrogate species that were evaluated. For example, impacts to a raccoon were used to assess impacts to small mammal populations. However, predicting impacts to raccoons may either underprotect or overprotect the small mammal population, resulting from differences in ingestion rates, toxicity, food preferences, etc. between the different species.

Several endpoints were not quantitatively evaluated in the ERA. For example, risks to reptiles and amphibians were not quantitatively evaluated because exposure factors are not established for most species, and toxicity data for these receptors are very limited.

4.2 UNCERTAINTY IN EXPOSURE CHARACTERIZATION

Contaminant doses to terrestrial wildlife were calculated using an equation that incorporates ingestion rates, body weights, BAFs, and other exposure factors. These exposure factors are obtained from literature studies or predicted using various equations. Ingestion rates and body weights vary between species, especially between species inhabiting different areas.

Bioaccumulation of contaminants into various biological media (e.g., plants, invertebrates, small mammals) depends on characteristics of the media such as pH, organic carbon, etc. The BAFs that were used for the ERA came from a variety of sources, as indicated in Appendix F. All the values were from the literature because no site-specific values are available. There are uncertainties associated with accumulation factors from the literature because they may either underpredict of overpredict tissue concentrations, depending on how representative the factors are of site conditions. For organic chemicals, adjustments are made for differences in percent lipid values for invertebrates, which helps decrease some of the uncertainties. Also, BSAFs were not available for non-bioaccumulative metals so the geometric means of the BSAFs of the bioaccumulative metals were used as the BSAFs for non-bioaccumulative metals. This will tend to overestimate exposure of non-bioaccumulative metals to mammals and birds.

Frog tissue samples were collected during the Phase I RI. The frog data were not used in the food-chain model because it was assumed that the raccoons would consume only sediment invertebrates, which is more conservative than a diet of invertebrates and frogs. The degree of conservativeness can be seen by comparing the maximum concentrations of metals in the tissue samples (Table 5 in Appendix B) to the metals concentrations estimated in sediment invertebrates in the food-chain model (Appendix G). Because metals concentrations were greater in sediment invertebrates than frogs, potential risks to sediment invertivorous mammals would have been lower than what was predicted in the food-chain model had the frog data been used as part of the diet for mammals and birds.

Phragmites wetlands typically offer little value for wildlife and tend to reduce biodiversity. This will limit the numbers and types of mammals and birds that inhabit the area, and thus reduce these receptors exposure to chemicals in the soil/sediment.

4.3 UNCERTAINTY IN ECOLOGICAL EFFECTS DATA

Uncertainty exists in the ecological effects data, including the screening levels and wildlife TRVs. Several of the screening levels are very conservative and typically are based on studies where the bioavailability of the chemical is much greater than it is in the environment. This is especially true for chemicals such as aluminum and iron, which are typically not very bioavailable in the environment. However, metals salts are usually used in studies to develop TRVs, which are very bioavailable forms of the metals.

The NOAELs and LOAELs used for the wildlife endpoint species are based on species other than the endpoint species (e.g., rats, mice). Uncertainty exists in the application of toxicity data across species because a contaminant may be more or less toxic to the endpoint species than it was to the test study species.

4.4 UNCERTAINTY IN RISK CHARACTERIZATION

The potential for adverse risks may be anticipated if an EEQ is greater than or equal to 1.0, regardless of the magnitude of the EEQ. Although the relationship between the magnitude of an EEQ and toxicity is not necessarily linear, the magnitude of an EEQ can be used as an approximation of the extent of potential risks, especially if there is sufficient confidence in the screening level used. Uncertainty exists in how the predicted risks to a species at the site translate into risk to the population in the area as a whole.

5.0 SUMMARY

This section presents a summary of the findings of the SERA that was conducted for the site.

5.1 GENERAL FINDINGS

A review of the concentration figures in Appendix D shows that the greatest chemical concentrations were generally found in the western portion of the wetland, adjacent to the Area A Weapons Center and Area A Landfill. Other portions of the wetland generally had lower chemical concentrations; some detections were greater than their respective ecological screening levels but there was no discernable distribution pattern.

The chemical concentrations in the surface sediment samples were either similar to or higher than the concentrations in the subsurface samples, with the exception of 2WSD45, which had greater concentrations of some chemicals in the subsurface sediment sample. This leads to the conclusion that the deeper dredge spoils are generally less contaminated than surface sediment, so the chemicals in the Area A Wetland are indicative of surface releases such as runoff and placement of the pesticide bricks versus the dredge spoils being contaminated.

5.2 COMPARISON OF PHASE III RI DATA TO HISTORICAL DATA

Phase III RI samples generally have similar or lower chemical concentrations than historical samples. Also, total DDT concentrations generally decreased further away from the edge of the wetland, so areas with chemical concentration greater than the higher-effects levels are bounded in the horizontal direction.

The total PAH value at 2WSD57 (Phase III RI) was about an order of magnitude less than total PAH results at the historical adjacent location 2WSD9, and the concentrations of metals were also generally lower in the Phase III RI sample. Therefore, the concentrations of PAHs and metals by 2WSD9 have decreased over time.

Cadmium was not detected at 2WSD58 but was detected at concentrations greater than higher-effects levels at two nearby historical sample locations. The sporadic nature of the elevated cadmium results (near 2WSD8 and 2WTB8) do not indicate widespread cadmium contamination at the site. Cadmium was not detected at concentrations greater than the higher-effects levels in any of the Phase III RI sediment samples.

5.3 THICKNESS OF ORGANIC LAYER

The depth to the dredge spoils ranged from 2.5 inches at 2WSD58 to 20 inches at 2WSD50. The depth at 2WSD47 is greater than 18 inches; the exact depth could not be determined because the sediment would not stay in the auger bucket. The depth to the dredge spoils is generally shallower along the border of the wetland and deeper toward the middle of the wetland.

5.4 RISKS TO SEDIMENT INVERTEBRATES

In summary, PAHs, pesticides, PCBs, and metals were detected in several samples at concentrations that exceed screening levels and higher-effects levels. The greatest concentrations for most of the chemicals are immediately adjacent to the Area A Landfill and/or Area A Weapons Center. For total DDT, elevated levels were also found along the dike in the western portion of the wetland. Based on the comparison of chemical concentrations in sediment to screening levels, risks to sediment invertebrates in the area of the elevated chemical concentrations would be expected. However, risks to sediment invertebrates are not likely to be significant enough to warrant further evaluations (e.g., toxicity testing) for several reasons including natural stressors (i.e., low dissolved oxygen, intermittent water) and high TOC levels (which will tend to bind the chemicals and make them less available ecological receptors).

5.5 RISKS TO MAMMALS AND BIRDS

Several chemicals had EEQs greater than 1.0 based on conservative food-chain models. Fewer chemicals had EEQs greater than 1.0 after the food-chain model was refined in Step 3a. During the Step 3a evaluation, it was determined that risks to wildlife were not great enough for any chemicals to warrant further evaluation at this site.

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APPENDIX A

FIELD LOG BOOK, SAMPLE LOG, AND CHAIN OF CUSTODY FORMS

TITLE NSB-NLON - AREA A **PROJECT NO.** G00873

WED OCT 17 2007 **BOOK** 2626

Work continued from Page

AM: PARTLY CLDY WARM
PM: " " WARM

SJC, ES, AB, JW } THUS

0530 - SJC AT AIRPORT - TRAVEL TO PROV, RI - THEN TO NSB-NLON

1130 - ARRIVE AT MOTEL - CHECK IN - LOAD EQUIP INTO VEHICLES.

1300 - ARRIVE ON SITE - GET BADGED - MET W/ D. COVANT - DIGGING PERMITS FOR WELL INV NOT READY. GO TO OUR SHARED TRAILER.

1430 GO TO WEAPONS AREA - LAY OUT 4 SED LOC THERE - HAD TO GET OUT BY 1600HRS.

1645 GET INTO AREA A - (GATE HAD TO BE OPENED) PROCEED TO LAYOUT REMAINING SED LOC - JOHN WRIGHT USING GPS TO LOCATE.

1900 LV SITE - ALL 16 LOC WERE LAYED OUT.

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE SJ Conte **DATE** 10/17/07

WITNESS **DATE**

TITLE NSB NLON

PROJECT NO. G00873

THUR OCT 18, 2007

BOOK 2626

Work continued from Page

AT SITE: SJC, AB, ES } TT NUS.

AM: OVERCAST, WARM.
PM: " "

0650 AT SITE - CONDUCT SITE SP HES. TRAINING FOR 3 TT NUS EMPLOYEES.

0820 AT LOCATION 58

(58)

0-2 Brn Gray Clayey Silt - Some Roots
2' Gray Silty Clay / Clayey silt - Tr Roots w/ odor
2.5 Btm - Same as above - wet ~2.5

Top 2" BRN - Peat silt w/ Roots
Top of Spoils ~ 2-5" BGS.

0855 AT LOCATION 57 - Near Culvert ~3 or 4' from previous stake

(57)

0-4" Gray Brn F/C sand - Tr Clay wet - Tr Organics SW
4"-9" Gray F/C Sand - Tr F Gravel Tr Clay - Tr Roots

Work continued to Page

SCIENTIFIC LINDERY PRODUCTIONS CHICAGO 60505

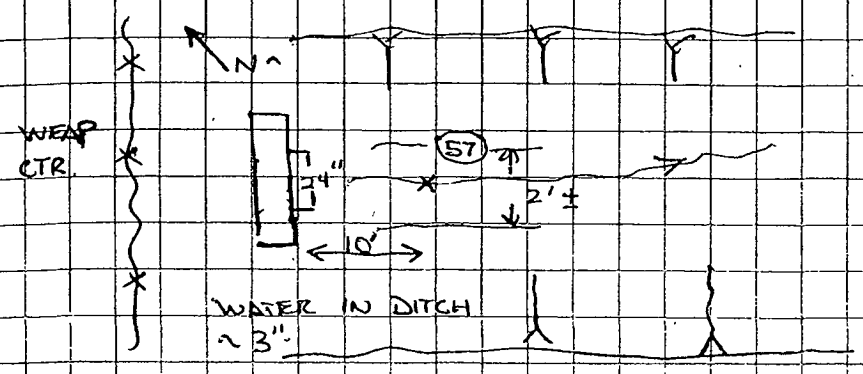
SIGNATURE

WITNESS SJ Conte

DATE 10/17/07

DATE

Work continued from Page



10" → 20" Gray Clayey Silt - trace Sand - Tr Roots
wet - Sl. odor - (Spoils) ? looks similar to 58

Took 2 Samples Here - Metals, PAH (4oz)
- TOC (4oz)
Used SS Auger.

AT LOCATION 56 - DS From 57 (Wetlands)

Not as Much Peat
0 - 2½" Red Brn Sandy Silt - Tr Roots Moist → wet
56 2½ - 6" = Red Brn Fine Silty Sand - Tr Clay Roots Moist wet
6" start of Spoils - But Red/Brn
20" → 27" Gray Clayey Silt - Tr Roots ODOR - Wet
24" - 27" (TOC) Hi "ODOR"
30" Botm

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE SJ Conti DATE 10/18/07
WITNESS DATE

TITLE NSB-NLON

PROJECT NO. 600873

THURS (CONT.)

BOOK 2626

Work continued from Page

1025 AT LOCATION 55.

(55) 0-10" Red Brown Silt/Peat Tr Sand.
10"-30" Gray Clayey silt/Silty Clay (SPOILS)
w/ ODOR Some Roots - Wet CL/ML
More wet @ 20" ±
2"-6" Regular Sample 1-8oz, 1-4oz *
27"-30" (TOC Sample) 1-4oz
* Sample Just below roots, peat, etc.

1100 PROCEED TO DECON BOWLS, SPOONS, AUGERS, ETC. (Alconox & water)

1230 BACK AT AREA "A" LANDFILL. PARK ON DIKE (OK TO DO THIS) HAVE TO CHECK IN AT "RED SHED" FIRST.

1312 AT LOCATION 54 (INT WETLAND)

(54) 0-12" Red Brn Silt/Peat
12"-24" Gray Clayey Silt - Some Roots
(ODOR) (WET) (SPOILS)

Surf Soil Only. 0-6" (1320)

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE DJ Conti **DATE** 10/18/07

WITNESS **DATE**

THURS (CONT)

Work continued from Page

1335 AT LOCATION 53 - EDGE WETLAND

(53) 0-4" Red Brn Pt/Silt MOIST
4"-48" GRAY - CLAYEY SILT - TR TO SOME ROOTS (SPOILS)
24" → 48" V. LITTLE ROOTS

TOOK SUB SAMPLE HERE 2'-4' FULL ANALYTICAL
USED SS Auger.
MIXED BY HAND IN SS BOWL.
TOOK SURF SOIL 0-6" (ALSO DUP) 53-0001
ALSO TOOK MS/MSD (53-0001)

1425 AT LOCATION 51 - INT WETLAND

(51) 0-18" Red Brn Silt/Peat MOIST
TO GRAY CLAYEY SILT - SOME ROOTS (SPOILS)
18"-24' Gray Clayey Silt, Tr ROOTS SPOILS.
Water in hole preventing good rec of sample.

1.5' WATER IN HOLE - FIRST LOC THAT HAD WATER IN THE BORING.

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE SJ Conti DATE 10/18/07
WITNESS DATE

TITLE NSB-NLON THURS (CONT)

PROJECT NO. G00873

BOOK 2626

Work continued from Page

1520 AT LOCATION 52 (EDGE OF WETLAND)

(52) 0-4" SILT/Pt (Red Brown) MOIST
4"-30" Gray Clayey Silt - Some Roots (SPOILS)

Sample from 0-6" w/ SS Spoon (1530)

1550 AT LOCATION 50 (INT WETLAND)
[TOOK surf and sub surf here]

(50) 0 - 20" Red Brn Clayey Silt/Peat - Roots
20"-48" Gray Clayey Silt - Roots wet (SPOILS)
Sub Surf @ 1600
Water ~ 36" Surf @ 1605

1625 AT LOCATION 49* - (Edge of Wetland)

(49) 0-4" Red Brn Sandy Silt - Tr Roots
4"-6" Silty SAND (Red Brn)
6"-12" Sandy - Clay Mix - (SPOILS)
12"-30" Gray Clayey Silt - Trace Roots ↓

* Moved ~ 20' @ 100° from John Wrights original location - due to Sand near surf.

w/ODOR

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE SJ Conti DATE 10/18/07

WITNESS DATE

TITLE NSB NLON THURS (CONT)

PROJECT NO. G00873

BOOK 2626

Work continued from Page

1640 - DECON AUGERS, SPOONS, SS BOWLS, ETC W/ ALCONOX AND DI WATER.

1710 AT LOCATION 45 INT WETLANDS

(45) 0-18" Red Brown Silt/pt - wet (WATER ≈ 18")
18" -30" DK Gray Clayey Silt - Roots
(HIGH ODOR - PETROLEUM
30" - 48" - HIT Dredge Spoils - Boring is wet Difficult to get rep sample due to softness of matl. Auger practically dropped by its own weight from ≈ 18 TO 30".
Took Surf and Sub Surf Soil 0001 - 0-4" 0002 - 30"-40"

10:00 10/19/07 AT Location 46 Edge of wetland

(46) 0-4" Red Brn Clayey silt - Trace Roots
4-12" Silty Sand (Red Brn)
12-20" Spoils Tr. Roots Gray clayey silt
20" water in the hole
21" - 36" Spoils - gray clayey Silt

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE SJ Conte DATE 10/18/07

WITNESS DATE

TITLE NSB-NLON Friday (cont)

PROJECT NO. G00873

BOOK 2626

Work continued from Page

10/19 12:15 AT Location 47 Int. Wetland

(47) 0-6" Red/Brn Silty Peat wet
12:45 Took sample and field duplicate
Using spoon dug to 18". Spoils are
deeper than 18" Did not auger.

13:30 AT Location 44 Edge Wetland
(44) 0-4" Red/Brn Sandy silt Tr. roots
4-6" Sand
6"-24" Spoils grey clayey silt
Sampled 13:45 -0001 ft
Sampled 14:00 -0002 ft. TOC only

14:05 AT Location 43 Edge wetland

(43) 0-4" Red/Brn silt/Peat Tr. Roots
6"-24" Spoils grey clayey silt
18" Water in the hole Sheen on
the water. Slight oder
14:30 Sampled -0001 ft.

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE SJ Conti

DATE 10/19/07

WITNESS

DATE

TITLE NSB-NLON

PROJECT NO. G00873

FRIDAY (CONT)

BOOK 2626

Work continued from Page

BRN TO

(48) 0-6" RED BRN Silty Peat - Some Clay - Roots
6"-8" Thin Sand layer.
8"-48" Gray Clayey silt - Tr Roots (SPOILS)

TOOK BOTH SURF AND SUBSURFACE HERE
USED SS SPOON FOR SURF AND SS AUGER
FOR SUB SURF 2 TO 4'

1530 CLEAN UP / DECON GO TO TRAILER
START SORTING SAMPLES

1630 AT TRAILER - CLEAN UP - DO PAPER
WORK

1730 LV SITE - WORK ON COCS AT
MOTEL.

SCIENTIFIC PHOTO PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE SJ Conti

DATE 10/19/07

WITNESS

DATE

TITLE NSB NLON AREA A **PROJECT NO.** G00973

SAT OCT 20 2007 **BOOK** 2626

Work continued from Page At Site ES/SJC

AM: PARTLY CLOUDY WARM

PM: " " "

0700 AT SITE - PROCEED TO PACK SAMPLES FROM AREA A WETLAND

1000 DROP OFF SAMPLES (3 COOLERS) AT FED EX KINKOS - SENT TO KATAHDIN VIA AB# 8631 2526 1310 (146 lbs)

1045 PROCEEDED TO LOWER BASE TO CONTINUE WELL INV. SEE NB# 2625 FOR DETAILS.

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE SJ Conti DATE 10/20/07

WITNESS DATE

MULTIPLE SAMPLE LOG SHEET

PAGE 1 OF ___

Tetra Tech NUS, Inc.

☒ SURFACE SOIL ☒ SEDIMENT
☒ SUBSURFACE SOIL ☐ LAGOON / POND
☐ OTHER _____

SIGNATURE(S): SJ Conti
SAMPLER (S): Aaron Bernhardt

PROJECT NAME: NSB-NLON - AREA - SITE 2B
PROTECT NUMBER: G00873

LOCATION: AREA A WETLAND

SAMPLE No.	SAMPLE METHOD	DEPTH (ft)	DATE 2007	TIME	CONCENTRATION (L)LOW (H)HIGH	(G) GRAB (C) COMPOSITE	TOTAL No. OF CONTAINERS	ANALYSES: PAHs, PEST PCBs (8 oz)	METALS, pH TOC (4 oz)	PAHs (only) 4 oz (8 oz)	METALS (4 oz) (only)	CADMIUM (4 oz)	TOC (only) (4 oz)	USCS	PID READING	SOIL DESCRIPTION
2W-SD-SD58-0001	SS Spoon	0-4"	10/18	0830	L	G	1					1		ML	—	2½" Deep to top of Dredge Spoil. Brn to Gray Clayey Silt
2W-SD-SD57-0001	SS Auger	0-4	"	0855	L	G	~~3~~ 2			1	1		+	SW	—	~~TOC~~ Br GRAY F/C Sand - Tr Clay
2W-SD-SD57-0002	"	15"-20"	"	0855	L	G	1						1	ML	—	TOC (Add'l Sample) Clayey Silt Tr Roots.
2W-SD-SD56-0001	SS Spoon	0-4"	"	1010	L	G	2	1	1					ML	—	Red Brn Sandy Silt
2W-SD-SD56-0002	SS Auger	24"-27"	"	1010	L	G	1						1	CL/ML	—	Gray Clayey Silt
2W-SD-SD55-0001	SS Spoon	0-6"	"	1040	L	G	2	1	1					ML/Pt	—	Red Brn Silt/Peat/Org
2W-SD-SD55-0002	SS Auger	27"-36"	"	1040	L	G	1						1	ML/CL	-	Gray Clayey Silt - Peat
2W-SD-SD54-0001	SS Spoon	0-6"	"	1320	L	G	2	1	1					ML/Pt	-	Red Brn Clayey Silt - Peat
2W-SD-SD53-0001	SS Spoon	0-6"	"	1355	L	G	4	(2)	(2)						—	
2W-SD-SD53-0204	SS Auger	24"-48"	"	1345	L	G	2	1	1					ML/CL	—	Gray Clayey Silt - Tr Roots
2W-FD-101807-01	SS Spoon	0-6"	"	0000 [redacted]	L	G	2	1	1					DUP 53-0001	—	DUP 53-0001
2W-SD-SD51-0001	SS Spoon	0-6"	"	1440	L	G	2	1	1					ML/Pt	—	Red Brn Silt/Pt - Roots
2W-SD-SD52-0001	"	0-6"	"	1530	L	G	2	1	1					ML/Pt	-	" " " "

REMARKS: (2) MS/MSD

LABORATORY: KATAHDIN

COC No.:

MULTIPLE SAMPLE LOG SHEET

Tetra Tech NUS, Inc.

☒ SURFACE SOIL ☒ SEDIMENT
☒ SUBSURFACE SOIL ☐ LAGOON / POND
☐ OTHER _____

SIGNATURE(S): S. Conte
SAMPLER (S): Aaron Bernhardt

PROJECT NAME: NSB-NLON - AREA A - SITE 2B
PROTECT NUMBER: G00873

LOCATION: AREA A WETLAND

SAMPLE No.	SAMPLE METHOD	DEPTH (ft)	DATE 2007	TIME	CONCENTRATION (L)LOW (H)HIGH	(G) GRAB (C) COMPOSITE	TOTAL No. OF CONTAINERS	ANALYSES: PAHs, PEST PCBs (8oz)	METALS, PH TOC (4oz)	PAHs (only) (8oz)	METALS (4oz) (only)	CADMIUM (4oz)	TOC (only) (4oz)	USCS	PID READING	SOIL DESCRIPTION
• 2W-SD-SD50-0204	SS Auger	24"-48"	10/18	1600	L	G	2	1	1					CL/ML	—	Gray Clayey Silt - Tr Roots Wet
2W-SD-SD50-0001	SS spoon	0-4"	"	1605	"	"	2	1	1					ML/Pt	—	Red Brn ~~Gray~~ Clayey Silt - ~~Tr~~ Some Roots
2W-SD-SD49-0001	"	0-4"	"	1630	"	"	2	1	1					SM/Pt	—	Red Brn Sandy Silt - Tr Roots
2W-SD-SD45-0001	"	0-4"	10/18	1725	"	"	2	1	1					ML/Pt	—	Red Brn Silt/Peat - TR ROOTS WET
X 2W-SD-SD45-0002	SS. Auger	30"-40"	10/18	1730	"	"	2	1	1					ML	—	DK Gray Clayey Silt - Petr. Odor Tr Roots
2W-SD-SD46-0001	SS Spoon	0-4"	10/19	1020	"	"	2	1	1					ML/Pt	—	Red Brn clayey Silt some Roots
• 2W-SD-SD46-0204	SS Auger	24"-36"	10/19	1040	"	"	2	1	1					ML/CL	—	spoils grey clayey silt
2W-SD-SD47-0001	SS Spoon	0-6"	"	1245	"	"	2	1	1					ML/Pt	—	Red Brn Silt/peat Tr roots
2W-FD-101907-01	"	0-6"	"	0000	"	"	2	1	1					—	—	Red Brn Silt/Peat Tr roots
2W-SD-SD44-0001	"	0-4"	"	1345	"	"	2	1	1					ML/Pt	—	Red Brn Sandy Silt Tr roots
2W-SD-SD44-0002	SS Auger	12-24"	"	14:00	"	"	1						1	ML/CL	—	spoils grey clayey silt
2W-SD-SD43-0001	SS Spoon	0-4"	"	14:30	"	"	2	1	1					ML/Pt	—	Red Brn Silt/peat Tr. Roots
2W-SD-SD48-0001	SS SPOON	0-4"	"	1520	"	"	2	1	1					ML/Pt	—	RED BRN CLAYEY SILT/PEAT
2W-SD-SD48-0204	SS Auger	24"-36"	"	1530	"	"	2	1	1					ML/CL	—	GRAY CLAYEY SILT

REMARKS:
• Sub Surf Sample
X Add'l sample Due to visual obs and petroleum odor.

LABORATORY: KATAHDIN

COC No.:

MULTIPLE SAMPLE LOG SHEET

Tetra Tech NUS, Inc.

[] SURFACE SOIL [] SEDIMENT
[] SUBSURFACE SOIL [] LAGOON / POND
[X] OTHER Field / Rinse Blank

SIGNATURE(S): Ed Sedlmyer

SAMPLER (S): Ed Sedlmyer

PROJECT NAME: NSB-NLON - AREA A - SITE 2B

PROTECT NUMBER: G00873

LOCATION: AREA A WETLAND

SAMPLE No.	SAMPLE METHOD	DEPTH (Ft.)	DATE 2007	TIME	CONCENTRATION (L)LOW (H)HIGH	(G) GRAB (C) COMPOSITE	TOTAL No. OF CONTAINERS	ANALYSES: PAHs, PEST. PCBs (1L)	ANALYSES: METALS, pH TOC (500 mL)	ANALYSES: ~~PAHS (only) (8oz)~~	ANALYSES: ~~METALS (4oz) (only)~~	ANALYSES: ~~CADMIUM (4oz)~~	ANALYSES: ~~TOC (only) (4oz)~~	USCS	PID READING	SOIL DESCRIPTION
2W-RB-101907-01	G		10/19	0730	L	G	5	4	1					—	—	Rinse Blank
2W-FB-101907-01	G		10/19	0750	L	G	5	4	1					—	—	Field Blank

REMARKS: Rinse Blank over Auger head, spoon bowl

LABORATORY: KATAHDIN

COC No.: 4595

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 4596 | PAGE 1 OF 3

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
G00873	NSB NLON AREA A	A. BERNHARDT	412 921 7090	KATAHDIN / COLBY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
SJ Conti		S CONTI	412 921 7090	
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX #		

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 G G

PRESERVATIVE USED: 4°C 4°C 4°C 4°C 4°C 4°C

TYPE OF ANALYSIS

DATE YEAR 2007	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	PAH/PEST/PCB (8oz)	METALS/PH/TOC 4oz	PAHS (ONLY) 4oz	METALS (ONLY) 4oz	TOC CADMIUM (ONLY) 4oz	TOC (ONLY) 4oz			COMMENTS
10/18	0830	2W-SD-SD58-0001	SD58	0	4"	SO	G	1					1				
"	0855	2W-SD-SD57-0001	SD57	0	4"	SO	G	2			1	1					
"	0855	2W-SD-SD57-0002	SD57	15"	20"	SO	G	1						1			
"	1010	2W-SD-SD56-0001	SD56	0	4"	SO	G	2	1	1							
"	1010	2W-SD-SD56-0002	SD56	24"	27"	SO	G	1						1			
"	1040	2W-SD-SD55-0001	SD55	0	6"	SO	G	2	1	1							
"	1040	2W-SD-SD55-0002	SD55	27"	30"	SO	G	1						1			
"	1320	2W-SD-SD54-0001	SD54	0	6"	SO	G	2	1	1							
"	1355	2W-SD-SD53-0001	SD53	0	6"	SO	G	4	2	2							DO MS/MSD (QC)
"	1345	2W-SD-SD53-0204	SD53	24"	48"	SO	G	2	1	1							
"	0000	2W-FD-101807-01	FD	—	—	SO	G	2	1	1							DUP OF 537 (QC)
"	1440	2W-SD-SD51-0001	SD51	0	6"	SO	G	2	1	1							
"	1530	2W-SD-SD52-0001	SD52	0	6"	SO	G	2	1	1							

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY SJ Conti	10/20/07	1000	1. RECEIVED BY FED EX		
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 NUS-001

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 4597 | PAGE 2 OF 3

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
G00873	NSB-NLON AREA A	A. BERNHARTD	412 921 7090	KATAHDIN / COLBY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
S Conti		S CONTI	412 921 7090	
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX #		

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 G G

PRESERVATIVE USED: 4°C 4°C 4°C 4°C 4°C 4°C

TYPE OF ANALYSIS

DATE YEAR 2007	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	PAH/PEST/PCB (8 OZ)	METALS/pH/TOC (4 OZ)	PAH (ONLY) (4 OZ)	TOC (ONLY) (4 OZ)					COMMENTS
10/18	1600	2W-SD-SD50-0204	SD50	24"	48"	SO	G	2	1	1							
10/18	1605	2W-SD-SD50-0001	SD50	0	4"	SO	G	2	1	1							
10/18	1630	2W-SD-SD49-0001	SD49	0	4"	SO	G	2	1	1							
10/18	1725	2W-SD-SD45-0001	SD45	0	4"	SO	G	2	1	1							
10/18	1730	2W-SD-SD45-0002	SD45	30"	40"	SO	G	2	1	1							
10/19	1020	2W-SD-SD46-0001	SD46	0	4"	SO	G	2	1	1							
10/19	1040	2W-SD-SD46-0204	SD46	24"	36"	SO	G	2	1	1							
10/19	1245	2W-SD-SD47-0001	SD47	0	6"	SO	G	2	1	1							
10/19	0000	2W-FD-101907-01	FD	—	—	SO	G	2	1	1							DUP OF SD47 0001
10/19	1345	2W-SD-SD44-0001	SD44	0	4"	SO	G	2	1	1							
10/19	1400	2W-SD-SD44-0002	SD44	12"	24"	SO	G	1			1						
10/19	1430	2W-SD-SD43-0001	SD43	0	4"	SO	G	2	1	1							
10/19	~~1520~~	~~2W-SD-SD48-0001~~	~~SD48~~	~~0~~	~~4"~~	~~SO~~	~~G~~	~~2~~	~~1~~	~~1~~							
	~~1530~~	~~2W-SD-SD48-0204~~	~~SD48~~	~~24"~~	~~36"~~	~~SO~~	~~G~~	~~2~~	~~1~~	~~1~~							

1. RELINQUISHED BY	DATE	TIME	1. RECEIVED BY	DATE	TIME
S Conti	10/20/07	1000	FED EX		
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. CHAIN OF CUSTODY | NUMBER 4595 | PAGE 3 OF 3

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
G00873	NSB-NLON AREA A	A BERNHARDT	412 921 7090	KATAHDIN / COLBY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
SJ Conti		S CONTI	412 921 7090	
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX #		

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G G G P
PRESERVATIVE USED: 4°C 4°C 4°C HNO3

DATE YEAR 2007	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: PAHS	PEST/PCBS	METALS					COMMENTS
10/19	0730	2W-RB-101907-01	RB	—	—	AQ	G	5	2	2	1					OVER Auger SPOONS, BOWLS
10/19	0750	2W-FB-101907-01	FB	—	—	AQ	G	5	2	2	1					DI WATER

1. RELINQUISHED BY	DATE	TIME	1. RECEIVED BY	DATE	TIME
SJ Conti	10/20/07	1000	FED EX		
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)

FORM II 4/02R NUS-001

APPENDIX B

VALIDATION LETTERS AND ANALYTICAL RESULTS (ON CD-ROM)

Tetra Tech NUS

INTERNAL CORRESPONDENCE

TO:	**A. BERNHARDT**	**DATE:**	**JANUARY 17, 2008**
FROM:	**MATTHEW D. KRAUS**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – PAH/PEST/PCB**
NSB NEW LONDON – CTO 439
SDG – SA6036

SAMPLES: 16/Sediment/

2W-FD-101807-01	2W-SD-SD45-0001	2W-SD-SD45-0002
2W-SD-SD46-0001	2W-SD-SD46-0204	2W-SD-SD49-0001
2W-SD-SD50-0001	2W-SD-SD50-0204	2W-SD-SD51-0001
2W-SD-SD52-0001	2W-SD-SD53-0001	2W-SD-SD53-0204
2W-SD-SD54-0001	2W-SD-SD55-0001	2W-SD-SD56-0001
2W-SD-SD57-0001		

Overview

The sample set for CTO 439, NSB New London, SDG: SA6036, consists of sixteen sediment environmental samples. One field duplicate pair (2W-FD-101807-01 / 2W-SD-SD53-0001) is included in this SDG.

All of the samples were analyzed for target compound list (TCL) polychlorinated aromatic hydrocarbons (PAHs), organochlorine pesticides (PEST) and polychlorinated biphenyls (PCBs) except for sample 2W-SD-SD57-0001 which was analyzed for PAHs only. The samples were collected by Tetra Tech NUS from October 18-19, 2007 and analyzed by Mitkem Corporation under Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. The PAH, PEST and PCB analyses were conducted in accordance with SW-846 methods 8270C, 8180A and 8082, respectively. Gas chromatography/mass spectrometry (GC/MS) with selective ion monitoring (SIM) and gas chromatography/electron capture detector (GC/ECD), methodologies/instrumentation were implemented for PAH and PEST/PCB analyses, respectively. A USEPA Region I Tier III data validation was performed on all samples.

Data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • GC/MS Instrument Tuning
• Initial and Continuing Calibration Recoveries
* • Laboratory Method/Preparation Blank Analyses
• Surrogate Recoveries
• Matrix Spike Recoveries
* • Laboratory Control Sample Recoveries
• Internal Standards Recoveries
* • Detection Limits
* • Field Duplicate Precision
• Compound Quantitation

* - All quality control criteria were met for this parameter.

PAH

The continuing calibration percent difference (%D) for benzo(k)fluoranthene on instrument GCMS-R at 12:43 on 11/06/07 was not within the ±25% quality control (QC) criteria. The positive benzo(k)fluoranthene results reported for samples 2W-SD-SD57-0001, 2W-SD-SD56-0001, 2W-SD46-0001 and 2W-SD-SD46-0204 were qualified as estimated, "J".

The continuing calibration %Ds for benzo(a)anthracene, benzo(k)fluoranthene and dibenzo(a,h)anthracene on instrument GCMS-R at 11:35 on 11/08/07 were not within the ±25% QC criteria. The positive and non-detected results reported for the aforementioned compounds were qualified as estimated, "J" or "UJ", respectively, for samples 2W-SD-SD55-0001, 2W-SD-SD51-0001, 2W-SD-SD49-0001 and 2W-SD-SD45-0001.

The laboratory control sample (LCS) percent recovery (%R) for dibenzo(a,h)anthracene was greater than the upper QC limit for WG45069-2 (LCS) analyzed on 11/01/07 at 17:49 on instrument GCMS-R affecting all samples. The positive and non-detected results reported for dibenzo(a,h)anthracene were qualified as estimated, "J" or "UJ", respectively.

The matrix spike (MS) %R for fluoranthene on 11/02/07 at 12:59 on instrument GCMS-R was slightly greater than the upper quality control limit affecting sample 2W-SD-SD53-0001. No data was qualified because the corresponding matrix spike duplicate (MSD) %R for fluoranthene was within quality control limits.

The MSD %Rs for pyrene, benzo(a)pyrene and indeno(1,2,3-cd)pyrene were slightly greater than corresponding upper quality control limits affecting sample 2W-SD-SD53-0001. No data was qualified because the corresponding MS %Rs for the aforementioned compounds were within quality control limits.

The perylene-D12 internal standard area counts were greater then the upper QC limit for the MS and MSD analyses of sample 2W-SD-SD-0001. No data was qualified because no environmental samples were directly affected.

The chrysene-D12 and perylene-D12 internal standard area counts were greater then the upper QC limit for sample 2W-SD-SD56-0001. The positive result reported for dibenzo(a,h)anthracene was qualified as estimated, "J". All other affected compounds were reported from a dilution of sample 2W-SD-SD56-0001 therefore no validation action was taken.

The perylene-D12 internal standard area counts were greater then the upper QC limit for samples 2W-SD-SD57-0001, 2W-SD-SD53-0001, 2W-SD-SD53-0204 and 2W-SD-SD50-0204. The positive results reported for benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthrancene and benzo(g,h,i)perylene were qualified as estimated, "J", for samples 2W-SD-SD53-0001, 2W-SD-SD53-0204 and 2W-SD-SD50-0204. No data was qualified for sample 2W-SD-SD57-0001 because all of the affected compound results are reported from a dilution of that sample.

PEST

The continuing calibration %Ds for all PEST compounds except alpha-BHC, aldrin, 4,4'-DDE, 4,4'-DDD and dieldrin were not within the ±15% QC criteria on instrument GC08 at 23:18 on 10/26/07 on columns 1 (ZB-MULTIRESIDUE-1) and 2 (ZB-MULTIRESIDUE-2) affecting samples 2W-SD-SD56-0001, 2W-SD-SD55-0001, 2W-SD-SD54-0001, 2W-SD-SD53-0001 and 2W-FD-101807. The affected positive and non-detected compound results reported for the aforementioned samples were qualified as estimated, "J" or "UJ", respectively.

The continuing calibration %D for endrin ketone and endosulfan sulfate on instrument GC08 at 15:09 on 11/02/07 was not within the ±15% QC criteria on columns 1 and 2 affecting samples 2W-SD-SD46-0001, 2W-SD-SD49-0001, 2W-SD-SD50-0204, 2W-SD-SD52-0001 and 2W-SD-SD53-0204. The affected non-detected endrin ketone and endosulfan sulfate results reported for the aforementioned samples were qualified as estimated, "UJ".

The continuing calibration %Ds for gamma-BHC, heptachlor, beta-BHC, delta-BHC, endrin, 4,4'-DD, 4,4'-DDT, endosulfan sulfate, methoxychlor and endrin ketone on instrument GC08 at 20:34 on 11/02/07 were not within the ±15% QC criteria on columns 1 and 2 affecting samples 2W-SD-SD45-0001, 2W-SD-SD46-0001, 2W-SD-SD49-0001, 2W-SD-SD50-0001, 2W-SD-SD50-0204, 2W-SD-SD51-0001, 2W-SD-SD52-0001 and 2W-SD-SD53-0204. The affected positive and non-detected compound results reported for the aforementioned samples were qualified as estimated, "J" or "UJ", respectively, unless an affected non-detected result was previously qualified due to low percent solids (<30%) in which case such the result was qualified as rejected, "UR".

The continuing calibration %Ds for gamma-BHC, delta-BHC, endrin, heptachlor, 4,4'-DDD, 4,4'-DDT, endosulfan sulfate, methoxychlor and endrin ketone on instrument GC08 at 22:55 on 11/05/07 were not within the ±25% QC criteria on columns 1 and 2 affecting samples 2W-SD-SD45-0002 and 2W-SD-SD46-0204. The affected positive and non-detected compound results reported for the aforementioned samples were qualified as estimated, "J" or "UJ", respectively.

Sample 2W-SD-SD56-0001 yielded a %R for the surrogate decachlorobiphenyl which was greater than the upper QC limit. No data was qualified because the corresponding %R for decachlorobiphenyl and both %Rs for tetrachloro-m-xylene were within QC limits.

Sample 2W-SD-SD54-0001 yielded %Rs for the surrogates decachlorobiphenyl and tetrachloro-m-xylene which were less than respective lower QC limits. The positive PEST compounds reported for sample 2W-SD-SD54-0001 were qualified as estimated, "J". The affected non-detected results were qualified as rejected, "UR", due to low percent solids.

Sample 2W-SD-SD53-0001 yielded a %R for the surrogate decachlorobiphenyl which was less than the lower QC limit. No data was qualified because the corresponding %R for decachlorobiphenyl and both %Rs for tetrachloro-m-xylene were within QC limits.

The LCS %R for gamma-BHC was greater than the upper QC limit in WG44926-2 (LCS) analyzed on 10/26/07 at 18:46 on instrument GC08 affecting all samples except 2W-SD-SD45-0002, 2W-SD-SD46-0001 and 2W-SD-SD46-0204. The positive result reported for gamma-BHC for sample 2W-SD-SD56-0001 was qualified as estimated, "J".

The following positive compound results were qualified as estimated, "J", for the following samples because the sample result relative percent difference (RPD) between columns exceeded 25%:

Sample	Compound	RPD
2W-SD-SD45-0002	4,4'-DDE	40.8%
2W-SD-SD46-0204	4,4'-DDT	38.3%
2W-SD-SD49-0001	gamma-Chlordane	26.3%
2W-SD-SD50-0001	gamma-Chlordane	27.4%
	4,4'-DDD	28.0%
	4,4'-DDT	45.3%
2W-SD-SD50-0204	4,4'-DDT	30.4%
2W-SD-SD53-0001	4,4'-DDT	35.6%

2W-SD-SD56-0001	4,4'-DDT	50.1%

PCB

The average continuing calibration %D for all Aroclor-1016 peaks was not within the ±25% QC criteria on instrument GC06 at 03:25 on 11/03/07 on column 1. No data was qualified because the average %D of the Aroclor-1016 peaks on column 2 was within quality control limits and all of the affected Aroclor-1016 results were reported as non-detected.

Samples 2W-SD-SD56-0001 and WG44925-BLANK yielded %Rs for the surrogate tetrachloro-m-xylene which were greater than the upper QC limit. No data was qualified because the corresponding %Rs for decachlorobiphenyl and tetrachloro-m-xylene were within QC limits for both samples.

Notes

Several results were qualified as estimated, "J", due to uncertainty near the detection limit.

Two of three laboratory Sample Receipt Condition Reports were marked to indicate that samples were not properly preserved; however, the laboratory case narrative stated nothing pertaining to this anomaly. The laboratory was contacted and stated the marks indicating that the samples were not properly preserved are incorrect.

Positive and non-detected results reported for samples 2W-SD-SD45-0001, 2W-SD-SD50-0001, 2W-SD-SD51-0001, 2W-SD-SD54-0001 and 2W-SD-SD55-0001 were qualified as estimated, "J", or rejected, "UR", respectively due to sample consistency (percent solids < 30%).

The following table lists compounds which were reported from dilutions due to the initial compound results exceeding the calibration range of instrumentation:

Sample	Dilution Factor	Compounds
2W-SD-SD46-0001	2X	Fluoranthene, Pyrene
2W-SD-SD46-0204	2X	Fluoranthene, Pyrene

Sample	Dilution Factor	Compounds
2W-SD-SD53-0204	2X	Pyrene
2W-SD-SD56-0001	5X	Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene
2W-SD-SD57-0001	20X	Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene

According to the laboratory case narrative all samples analyzed for the PCB fraction were subjected to a sulfur cleanup which was not completely effective; therefore, the PCB results may be affected due to sulfur interference.

The initial PAH analysis of sample 2W-SD-SD50-0204 yielded an internal standard response for perylene-d12 which was noncompliant with quality control (QC) criteria. The sample was re-analyzed and the internal standard response was still noncompliant. PAH compound results are reported from the initial analysis of sample 2W-SD-SD50-0204.

The PEST fraction of sample 2W-SD-SD53-0204 was diluted approximately 10X by the laboratory due to a matrix-related anomaly resulting in increased reporting limits for target compounds.

Executive Summary

Laboratory Performance: Several PAH and PEST compounds were qualified due to calibration noncompliance. Dibenzo(a,h)anthracene and gamma-BHC were qualified due to laboratory control sample noncompliance. Several PAH compounds were qualified due to internal standard noncompliance.

Other Factors Affecting Data Quality: Several results were qualified due to uncertainty near the detection limit. Several PEST results were qualified due to sample result RPD between corresponding detectors. Non-detected PEST results for sample 2W-SD-SD54-001 were qualified due to surrogate noncompliance.

The data for these analyses were reviewed with reference to the "USEPA Region 1 Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses", December 1996, and the (DOD) QSM document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006).

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 (DOD) QSM Guidelines and the Quality Assurance Project Plan (QAPP)."

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Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C – Regional Worksheets
4. Appendix D - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

A	= Lab Blank Contamination
B	= Field Blank Contamination
C	= Calibration Noncompliance (e.g. %RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	= GC/MS Tuning Noncompliance
D	= MS/MSD Recovery Noncompliance
E	= LCS/LCSD Recovery Noncompliance
F	= Laboratory Duplicate Imprecision
G	= Field Duplicate Imprecision
H	= Holding Time Exceedance
I	= ICP Serial Dilution Noncompliance
J	= GFAA PDS – GFAA MSA's r <0.995 / ICP PDS Recovery Noncompliance
K	= IPC Interference – included ICS %R Noncompliance
L	= Instrument Calibration Range Exceedance
M	= Sample Preservation Noncompliance
N	= Internal Standard Noncompliance
N01	= Internal Standard Recovery Noncompliance Dioxins
N02	= Recovery Standard Noncompliance Dioxins
N03	= Clean-up Standard Noncompliance Dioxins
O	= Poor Instrument Performance (e.g. base-line drifting)
P	= Uncertainty near detection limit (< 2 x IDL for inorganics and < CRDL for organics)
Q	= Other problems (can encompass a number of issues; e.g. chromatography, interferences, etc.)
R	= Surrogate Recovery Noncompliance
S	= Pesticide/PCB Resolution
T	= % Breakdown Noncompliance for DDT and Endrin
U	= % Difference between columns/detectors > 25% for positive results determined via GC/HPLC
V	= Non-linear calibrations; correlation coefficient r < 0.995
W	= EMPC result
X	= Signal to noise response drop
Y	= Percent solids <30%
Z	= Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: PAH

nsample	2W-FD-101807-01	nsample	2W-SD-SD45-0001RA	nsample	2W-SD-SD45-0002
samp_date	10/18/2007	samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-11	lab_id	SA6036-17RA	lab_id	SA6036-18
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	33.7	Pct_Solids	16.6	Pct_Solids	36.9
DUP_OF:	2W-SD-SD53-0001	DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	59	U	
2-METHYLNAPHTHALENE	59	U	
ACENAPHTHENE	4.5	J	P
ACENAPHTHYLENE	19	J	P
ANTHRACENE	24	J	P
BENZO(A)ANTHRACENE	260		
BENZO(A)PYRENE	270		
BENZO(B)FLUORANTHENE	350		
BENZO(G,H,I)PERYLENE	170		
BENZO(K)FLUORANTHENE	180		
CHRYSENE	300		
DIBENZO(A,H)ANTHRACENE	98	J	E
FLUORANTHENE	440		
FLUORENE	8.4	J	P
INDENO(1,2,3-CD)PYRENE	250		
NAPHTHALENE	59	U	
PHENANTHRENE	180		
PYRENE	400		

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	120	UR	Y
2-METHYLNAPHTHALENE	120	UR	Y
ACENAPHTHENE	120	UR	Y
ACENAPHTHYLENE	120	UR	Y
ANTHRACENE	120	UR	Y
BENZO(A)ANTHRACENE	77	J	CPY
BENZO(A)PYRENE	95	J	PY
BENZO(B)FLUORANTHENE	160	J	Y
BENZO(G,H,I)PERYLENE	88	J	PY
BENZO(K)FLUORANTHENE	79	J	CPY
CHRYSENE	98	J	PY
DIBENZO(A,H)ANTHRACENE	120	UR	Y
FLUORANTHENE	150	J	Y
FLUORENE	120	UR	Y
INDENO(1,2,3-CD)PYRENE	100	J	PY
NAPHTHALENE	120	UR	Y
PHENANTHRENE	52	J	PY
PYRENE	120	J	PY

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	54	U	
2-METHYLNAPHTHALENE	54	U	
ACENAPHTHENE	54	U	
ACENAPHTHYLENE	67		
ANTHRACENE	58		
BENZO(A)ANTHRACENE	360		
BENZO(A)PYRENE	360		
BENZO(B)FLUORANTHENE	480		
BENZO(G,H,I)PERYLENE	180		
BENZO(K)FLUORANTHENE	270		
CHRYSENE	410		
DIBENZO(A,H)ANTHRACENE	110	J	E
FLUORANTHENE	590		
FLUORENE	53	J	P
INDENO(1,2,3-CD)PYRENE	230		
NAPHTHALENE	12	J	P
PHENANTHRENE	220		
PYRENE	730		

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: PAH

nsample	2W-SD-SD46-0001
samp_date	10/19/2007
lab_id	SA6036-19
qc_type	NM
units	UG/KG
Pct_Solids	42.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	48	U	
2-METHYLNAPHTHALENE	7	J	P
ACENAPHTHENE	11	J	P
ACENAPHTHYLENE	57		
ANTHRACENE	61		
BENZO(A)ANTHRACENE	590		
BENZO(A)PYRENE	510		
BENZO(B)FLUORANTHENE	590		
BENZO(G,H,I)PERYLENE	330		
BENZO(K)FLUORANTHENE	360	J	C
CHRYSENE	580		
DIBENZO(A,H)ANTHRACENE	180	J	E
FLUORENE	21	J	P
INDENO(1,2,3-CD)PYRENE	460		
NAPHTHALENE	5.6	J	P
PHENANTHRENE	360		

nsample	2W-SD-SD46-0001DL
samp_date	10/19/2007
lab_id	SA6036-19DL
qc_type	NM
units	UG/KG
Pct_Solids	42.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
FLUORANTHENE	1100		
PYRENE	1000		

nsample	2W-SD-SD46-0204
samp_date	10/19/2007
lab_id	SA6036-20
qc_type	NM
units	UG/KG
Pct_Solids	58.4
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	34	U	
2-METHYLNAPHTHALENE	9.7	J	P
ACENAPHTHENE	12	J	P
ACENAPHTHYLENE	52		
ANTHRACENE	59		
BENZO(A)ANTHRACENE	430		
BENZO(A)PYRENE	370		
BENZO(B)FLUORANTHENE	450		
BENZO(G,H,I)PERYLENE	220		
BENZO(K)FLUORANTHENE	240	J	C
CHRYSENE	410		
DIBENZO(A,H)ANTHRACENE	130	J	E
FLUORENE	25	J	P
INDENO(1,2,3-CD)PYRENE	320		
NAPHTHALENE	8.5	J	P
PHENANTHRENE	250		

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: PAH

nsample	2W-SD-SD46-0204DL	nsample	2W-SD-SD49-0001RA	nsample	2W-SD-SD50-0001
samp_date	10/19/2007	samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-20DL	lab_id	SA6036-16RA	lab_id	SA6036-15
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	58.4	Pct_Solids	30.6	Pct_Solids	20.7
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
FLUORANTHENE	570		
PYRENE	820		

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	65	U	
2-METHYLNAPHTHALENE	65	U	
ACENAPHTHENE	65	U	
ACENAPHTHYLENE	7.3	J	P
ANTHRACENE	13	J	P
BENZO(A)ANTHRACENE	120	J	C
BENZO(A)PYRENE	150		
BENZO(B)FLUORANTHENE	230		
BENZO(G,H,I)PERYLENE	180		
BENZO(K)FLUORANTHENE	100	J	C
CHRYSENE	160		
DIBENZO(A,H)ANTHRACENE	65	UJ	CE
FLUORANTHENE	220		
FLUORENE	5.8	J	P
INDENO(1,2,3-CD)PYRENE	180		
NAPHTHALENE	65	U	
PHENANTHRENE	84		
PYRENE	190		

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	96	UR	Y
2-METHYLNAPHTHALENE	96	UR	Y
ACENAPHTHENE	96	UR	Y
ACENAPHTHYLENE	28	J	PY
ANTHRACENE	23	J	PY
BENZO(A)ANTHRACENE	200	J	Y
BENZO(A)PYRENE	240	J	Y
BENZO(B)FLUORANTHENE	300	J	Y
BENZO(G,H,I)PERYLENE	170	J	Y
BENZO(K)FLUORANTHENE	160	J	Y
CHRYSENE	220	J	Y
DIBENZO(A,H)ANTHRACENE	110	J	EY
FLUORANTHENE	330	J	Y
FLUORENE	96	UR	Y
INDENO(1,2,3-CD)PYRENE	230	J	Y
NAPHTHALENE	96	UR	Y
PHENANTHRENE	99	J	Y
PYRENE	320	J	Y

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: PAH

nsample	2W-SD-SD50-0204	nsample	2W-SD-SD51-0001RA	nsample	2W-SD-SD52-0001
samp_date	10/18/2007	samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-14	lab_id	SA6036-12RA	lab_id	SA6036-13
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	48.9	Pct_Solids	13.7	Pct_Solids	37.3
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	41	U	
2-METHYLNAPHTHALENE	8.6	J	P
ACENAPHTHENE	5.8	J	P
ACENAPHTHYLENE	29	J	P
ANTHRACENE	29	J	P
BENZO(A)ANTHRACENE	170		
BENZO(A)PYRENE	170	J	N
BENZO(B)FLUORANTHENE	160	J	N
BENZO(G,H,I)PERYLENE	95	J	N
BENZO(K)FLUORANTHENE	100	J	N
CHRYSENE	160		
DIBENZO(A,H)ANTHRACENE	62	J	EN
FLUORANTHENE	190		
FLUORENE	14	J	P
INDENO(1,2,3-CD)PYRENE	130	J	N
NAPHTHALENE	8.9	J	P
PHENANTHRENE	98		
PYRENE	310		

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	140	UR	Y
2-METHYLNAPHTHALENE	140	UR	Y
ACENAPHTHENE	140	UR	Y
ACENAPHTHYLENE	140	UR	Y
ANTHRACENE	140	UR	Y
BENZO(A)ANTHRACENE	45	J	CPY
BENZO(A)PYRENE	63	J	PY
BENZO(B)FLUORANTHENE	99	J	PY
BENZO(G,H,I)PERYLENE	49	J	PY
BENZO(K)FLUORANTHENE	49	J	CPY
CHRYSENE	66	J	PY
DIBENZO(A,H)ANTHRACENE	140	UR	Y
FLUORANTHENE	140	J	Y
FLUORENE	140	UR	Y
INDENO(1,2,3-CD)PYRENE	64	J	PY
NAPHTHALENE	140	UR	Y
PHENANTHRENE	47	J	PY
PYRENE	140	UR	Y

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	54	U	
2-METHYLNAPHTHALENE	54	U	
ACENAPHTHENE	5.5	J	P
ACENAPHTHYLENE	24	J	P
ANTHRACENE	22	J	P
BENZO(A)ANTHRACENE	160		
BENZO(A)PYRENE	200		
BENZO(B)FLUORANTHENE	240		
BENZO(G,H,I)PERYLENE	140		
BENZO(K)FLUORANTHENE	150		
CHRYSENE	200		
DIBENZO(A,H)ANTHRACENE	79	J	E
FLUORANTHENE	320		
FLUORENE	9.8	J	P
INDENO(1,2,3-CD)PYRENE	190		
NAPHTHALENE	54	U	
PHENANTHRENE	170		
PYRENE	320		

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: PAH

nsample	2W-SD-SD53-0001	nsample	2W-SD-SD53-0204	nsample	2W-SD-SD53-0204DL
samp_date	10/18/2007	samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-9	lab_id	SA6036-10	lab_id	SA6036-10DL
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	34.2	Pct_Solids	53.8	Pct_Solids	53.8
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	58	U	
2-METHYLNAPHTHALENE	58	U	
ACENAPHTHENE	5.2	J	P
ACENAPHTHYLENE	20	J	P
ANTHRACENE	28	J	P
BENZO(A)ANTHRACENE	240		
BENZO(A)PYRENE	260	J	N
BENZO(B)FLUORANTHENE	340	J	N
BENZO(G,H,I)PERYLENE	170	J	N
BENZO(K)FLUORANTHENE	220	J	N
CHRYSENE	280		
DIBENZO(A,H)ANTHRACENE	100	J	EN
FLUORANTHENE	440		
FLUORENE	9	J	P
INDENO(1,2,3-CD)PYRENE	250	J	N
NAPHTHALENE	58	U	
PHENANTHRENE	170		
PYRENE	340		

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	37	U	
2-METHYLNAPHTHALENE	14	J	P
ACENAPHTHENE	37	U	
ACENAPHTHYLENE	50		
ANTHRACENE	58		
BENZO(A)ANTHRACENE	350		
BENZO(A)PYRENE	350	J	N
BENZO(B)FLUORANTHENE	340	J	N
BENZO(G,H,I)PERYLENE	200	J	N
BENZO(K)FLUORANTHENE	220	J	N
CHRYSENE	320		
DIBENZO(A,H)ANTHRACENE	130	J	EN
FLUORANTHENE	360		
FLUORENE	23	J	P
INDENO(1,2,3-CD)PYRENE	290	J	N
NAPHTHALENE	14	J	P
PHENANTHRENE	200		

Parameter	Result	Val Qual	Qual Code
PYRENE	710		

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: PAH

nsample	2W-SD-SD54-0001	nsample	2W-SD-SD55-0001RA	nsample	2W-SD-SD56-0001
samp_date	10/18/2007	samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-8	lab_id	SA6036-6RA	lab_id	SA6036-4
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	14.1	Pct_Solids	23.2	Pct_Solids	60.1
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	140	UR	Y
2-METHYLNAPHTHALENE	140	UR	Y
ACENAPHTHENE	140	UR	Y
ACENAPHTHYLENE	140	UR	Y
ANTHRACENE	140	UR	Y
BENZO(A)ANTHRACENE	120	J	PY
BENZO(A)PYRENE	160	J	Y
BENZO(B)FLUORANTHENE	230	J	Y
BENZO(G,H,I)PERYLENE	160	J	Y
BENZO(K)FLUORANTHENE	140	J	Y
CHRYSENE	190	J	Y
DIBENZO(A,H)ANTHRACENE	100	J	EPY
FLUORANTHENE	290	J	Y
FLUORENE	140	UR	Y
INDENO(1,2,3-CD)PYRENE	220	J	Y
NAPHTHALENE	140	UR	Y
PHENANTHRENE	110	J	PY
PYRENE	180	J	Y

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	86	UR	Y
2-METHYLNAPHTHALENE	86	UR	Y
ACENAPHTHENE	86	UR	Y
ACENAPHTHYLENE	10	J	PY
ANTHRACENE	16	J	PY
BENZO(A)ANTHRACENE	140	J	CY
BENZO(A)PYRENE	190	J	Y
BENZO(B)FLUORANTHENE	310	J	Y
BENZO(G,H,I)PERYLENE	160	J	Y
BENZO(K)FLUORANTHENE	150	J	CY
CHRYSENE	180	J	Y
DIBENZO(A,H)ANTHRACENE	92	J	CEY
FLUORANTHENE	370	J	Y
FLUORENE	7.6	J	PY
INDENO(1,2,3-CD)PYRENE	220	J	Y
NAPHTHALENE	86	UR	Y
PHENANTHRENE	140	J	Y
PYRENE	260	J	Y

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	33	U	
2-METHYLNAPHTHALENE	33	U	
ACENAPHTHENE	15	J	P
ACENAPHTHYLENE	28	J	P
ANTHRACENE	70		
DIBENZO(A,H)ANTHRACENE	370	J	EN
FLUORENE	24	J	P
NAPHTHALENE	4	J	P

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: PAH

nsample	2W-SD-SD56-0001DL
samp_date	10/18/2007
lab_id	SA6036-4DL
qc_type	NM
units	UG/KG
Pct_Solids	60.1
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	1200		
BENZO(A)PYRENE	1500		
BENZO(B)FLUORANTHENE	1800		
BENZO(G,H,I)PERYLENE	1200		
BENZO(K)FLUORANTHENE	1100	J	C
CHRYSENE	1400		
FLUORANTHENE	2800	J	L
INDENO(1,2,3-CD)PYRENE	1600		
PHENANTHRENE	860		
PYRENE	2200		

nsample	2W-SD-SD57-0001
samp_date	10/18/2007
lab_id	SA6036-2
qc_type	NM
units	UG/KG
Pct_Solids	62.7
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	32	U	
2-METHYLNAPHTHALENE	32	U	
ACENAPHTHENE	61		
ACENAPHTHYLENE	22	J	P
ANTHRACENE	390		
FLUORENE	130		
NAPHTHALENE	6	J	P

nsample	2W-SD-SD57-0001DL
samp_date	10/18/2007
lab_id	SA6036-2DL
qc_type	NM
units	UG/KG
Pct_Solids	62.7
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	4000		
BENZO(A)PYRENE	3500		
BENZO(B)FLUORANTHENE	4600		
BENZO(G,H,I)PERYLENE	2600		
BENZO(K)FLUORANTHENE	2900	J	C
CHRYSENE	4100		
DIBENZO(A,H)ANTHRACENE	1400	J	E
FLUORANTHENE	8400		
INDENO(1,2,3-CD)PYRENE	3500		
PHENANTHRENE	4300		
PYRENE	8200		

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample	2W-FD-101807-01	nsample	2W-SD-SD45-0001	nsample	2W-SD-SD45-0001RA
samp_date	10/18/2007	samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-11	lab_id	SA6036-17	lab_id	SA6036-17RA
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	33.7	Pct_Solids	16.6	Pct_Solids	16.6
DUP_OF:	2W-SD-SD53-0001	DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	4.6	J	P
4,4'-DDE	3.4	J	P
4,4'-DDT	9.8	UJ	C
ALDRIN	5	U	
ALPHA-BHC	5	U	
ALPHA-CHLORDANE	5	UJ	C
AROCLOR-1016	50	U	
AROCLOR-1221	50	U	
AROCLOR-1232	50	U	
AROCLOR-1242	50	U	
AROCLOR-1248	50	U	
AROCLOR-1254	50	U	
AROCLOR-1260	50	U	
BETA-BHC	5	UJ	C
DELTA-BHC	5	UJ	C
DIELDRIN	9.8	U	
ENDOSULFAN I	5	UJ	C
ENDOSULFAN II	9.8	UJ	C
ENDOSULFAN SULFATE	9.8	UJ	C
ENDRIN	9.8	UJ	C
ENDRIN ALDEHYDE	9.8	UJ	C
ENDRIN KETONE	9.8	UJ	C
GAMMA-BHC (LINDANE)	5	UJ	C
GAMMA-CHLORDANE	5	UJ	C
HEPTACHLOR	5	UJ	C
HEPTACHLOR EPOXIDE	5	UJ	C
METHOXYCHLOR	50	UJ	C
TOXAPHENE	98	UJ	C

Parameter	Result	Val Qual	Qual Code
AROCLOR-1016	100	UR	Y
AROCLOR-1221	100	UR	Y
AROCLOR-1232	100	UR	Y
AROCLOR-1242	100	UR	Y
AROCLOR-1248	100	UR	Y
AROCLOR-1254	100	UR	Y
AROCLOR-1260	100	UR	Y

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	39	J	CY
4,4'-DDE	9.5	J	PY
4,4'-DDT	20	UR	Y
ALDRIN	10	UR	Y
ALPHA-BHC	10	UR	Y
ALPHA-CHLORDANE	10	UR	Y
BETA-BHC	10	UR	Y
DELTA-BHC	10	UR	Y
DIELDRIN	20	UR	Y
ENDOSULFAN I	10	UR	Y
ENDOSULFAN II	20	UR	Y
ENDOSULFAN SULFATE	20	UR	Y
ENDRIN	20	UR	Y
ENDRIN ALDEHYDE	20	UR	Y
ENDRIN KETONE	20	UR	Y
GAMMA-BHC (LINDANE)	10	UR	Y
GAMMA-CHLORDANE	10	UR	Y
HEPTACHLOR	10	UR	Y
HEPTACHLOR EPOXIDE	10	UR	Y
METHOXYCHLOR	100	UR	Y
TOXAPHENE	200	UR	Y

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample	2W-SD-SD45-0002	nsample	2W-SD-SD45-0002DL	nsample	2W-SD-SD46-0001
samp_date	10/18/2007	samp_date	10/18/2007	samp_date	10/19/2007
lab_id	SA6036-18	lab_id	SA6036-18DL	lab_id	SA6036-19
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	36.9	Pct_Solids	36.9	Pct_Solids	42.0
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
AROCLOR-1016	46	U	
AROCLOR-1221	46	U	
AROCLOR-1232	46	U	
AROCLOR-1242	46	U	
AROCLOR-1248	46	U	
AROCLOR-1254	46	U	
AROCLOR-1260	46	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	1200	J	C
4,4'-DDE	180	J	U
4,4'-DDT	79	J	CP
ALDRIN	46	U	
ALPHA-BHC	46	U	
ALPHA-CHLORDANE	46	U	
BETA-BHC	46	U	
DELTA-BHC	46	UJ	C
DIELDRIN	89	U	
ENDOSULFAN I	46	U	
ENDOSULFAN II	89	U	
ENDOSULFAN SULFATE	89	UJ	C
ENDRIN	89	UJ	C
ENDRIN ALDEHYDE	89	U	
ENDRIN KETONE	89	UJ	C
GAMMA-BHC (LINDANE)	46	UJ	C
GAMMA-CHLORDANE	46	U	
HEPTACHLOR	46	UJ	C
HEPTACHLOR EPOXIDE	46	U	
METHOXYCHLOR	460	UJ	C
TOXAPHENE	890	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	160	J	C
4,4'-DDE	40		
4,4'-DDT	65	J	C
ALDRIN	4	U	
ALPHA-BHC	4	U	
ALPHA-CHLORDANE	4	U	
AROCLOR-1016	40	U	
AROCLOR-1221	40	U	
AROCLOR-1232	40	U	
AROCLOR-1242	40	U	
AROCLOR-1248	40	U	
AROCLOR-1254	40	U	
AROCLOR-1260	340		
BETA-BHC	4	UJ	C
DELTA-BHC	4	UJ	C
DIELDRIN	7.8	U	
ENDOSULFAN I	4	U	
ENDOSULFAN II	7.8	U	
ENDOSULFAN SULFATE	7.8	UJ	C
ENDRIN	7.8	UJ	C
ENDRIN ALDEHYDE	7.8	U	
ENDRIN KETONE	7.8	UJ	C
GAMMA-BHC (LINDANE)	4	UJ	C
GAMMA-CHLORDANE	4	U	
HEPTACHLOR	4	UJ	C
HEPTACHLOR EPOXIDE	4	U	
METHOXYCHLOR	40	UJ	C
TOXAPHENE	78	U	

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample	2W-SD-SD46-0204	nsample	2W-SD-SD46-0204DL	nsample	2W-SD-SD49-0001
samp_date	10/19/2007	samp_date	10/19/2007	samp_date	10/18/2007
lab_id	SA6036-20	lab_id	SA6036-20DL	lab_id	SA6036-16
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	58.4	Pct_Solids	58.4	Pct_Solids	30.6
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
AROCLOR-1016	29	U	
AROCLOR-1221	29	U	
AROCLOR-1232	29	U	
AROCLOR-1242	29	U	
AROCLOR-1248	29	U	
AROCLOR-1254	29	U	
AROCLOR-1260	220		

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	180	J	C
4,4'-DDE	11	J	P
4,4'-DDT	16	J	CU
ALDRIN	5.8	U	
ALPHA-BHC	5.8	U	
ALPHA-CHLORDANE	5.8	U	
BETA-BHC	5.8	U	
DELTA-BHC	5.8	U	
DIELDRIN	11	U	
ENDOSULFAN I	5.8	U	
ENDOSULFAN II	11	U	
ENDOSULFAN SULFATE	11	UJ	C
ENDRIN	11	U	
ENDRIN ALDEHYDE	11	U	
ENDRIN KETONE	11	UJ	C
GAMMA-BHC (LINDANE)	5.8	U	
GAMMA-CHLORDANE	5.8	U	
HEPTACHLOR	5.8	UJ	C
HEPTACHLOR EPOXIDE	5.8	U	
METHOXYCHLOR	58	UJ	C
TOXAPHENE	110	U	

Parameter	Result	Val Qual	Qual Code
AROCLOR-1016	56	U	
AROCLOR-1221	56	U	
AROCLOR-1232	56	U	
AROCLOR-1242	56	U	
AROCLOR-1248	56	U	
AROCLOR-1254	56	U	
AROCLOR-1260	56	U	

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample	2W-SD-SD49-0001RA	nsample	2W-SD-SD50-0001	nsample	2W-SD-SD50-0001RA
samp_date	10/18/2007	samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-16RA	lab_id	SA6036-15	lab_id	SA6036-15RA
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	30.6	Pct_Solids	20.7	Pct_Solids	20.7
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	62	J	C
4,4'-DDE	11	J	P
4,4'-DDT	14	J	C
ALDRIN	5.6	U	
ALPHA-BHC	5.6	U	
ALPHA-CHLORDANE	16		
BETA-BHC	5.6	UJ	C
DELTA-BHC	5.6	UJ	C
DIELDRIN	11	U	
ENDOSULFAN I	5.6	U	
ENDOSULFAN II	11	U	
ENDOSULFAN SULFATE	11	UJ	C
ENDRIN	11	UJ	C
ENDRIN ALDEHYDE	11	U	
ENDRIN KETONE	11	UJ	C
GAMMA-BHC (LINDANE)	5.6	UJ	C
GAMMA-CHLORDANE	14	J	U
HEPTACHLOR	5.6	UJ	C
HEPTACHLOR EPOXIDE	5.6	U	
METHOXYCHLOR	56	UJ	C
TOXAPHENE	110	U	

Parameter	Result	Val Qual	Qual Code
AROCLOR-1016	82	UR	Y
AROCLOR-1221	82	UR	Y
AROCLOR-1232	82	UR	Y
AROCLOR-1242	82	UR	Y
AROCLOR-1248	82	UR	Y
AROCLOR-1254	82	UR	Y
AROCLOR-1260	370	J	Y

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	79	J	UY
4,4'-DDE	12	J	PY
4,4'-DDT	27	J	CUY
ALDRIN	8.2	UR	Y
ALPHA-BHC	8.2	UR	Y
ALPHA-CHLORDANE	11	J	Y
BETA-BHC	8.2	UR	Y
DELTA-BHC	8.2	UR	Y
DIELDRIN	16	UR	Y
ENDOSULFAN I	8.2	UR	Y
ENDOSULFAN II	16	UR	Y
ENDOSULFAN SULFATE	16	UR	Y
ENDRIN	16	UR	Y
ENDRIN ALDEHYDE	16	UR	Y
ENDRIN KETONE	16	UR	Y
GAMMA-BHC (LINDANE)	8.2	UR	Y
GAMMA-CHLORDANE	12	J	UY
HEPTACHLOR	8.2	UR	Y
HEPTACHLOR EPOXIDE	8.2	UR	Y
METHOXYCHLOR	82	UR	Y
TOXAPHENE	160	UR	Y

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SDG: SA6036 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample	2W-SD-SD50-0204
samp_date	10/18/2007
lab_id	SA6036-14
qc_type	NM
units	UG/KG
Pct_Solids	48.9
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
AROCLOR-1016	35	U	
AROCLOR-1221	35	U	
AROCLOR-1232	35	U	
AROCLOR-1242	35	U	
AROCLOR-1248	35	U	
AROCLOR-1254	35	U	
AROCLOR-1260	28	J	P

nsample	2W-SD-SD50-0204RA
samp_date	10/18/2007
lab_id	SA6036-14RA
qc_type	NM
units	UG/KG
Pct_Solids	48.9
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	22	J	C
4,4'-DDE	6.1	J	P
4,4'-DDT	4.5	J	CPU
ALDRIN	3.5	U	
ALPHA-BHC	3.5	U	
ALPHA-CHLORDANE	3.5	U	
BETA-BHC	3.5	UJ	C
DELTA-BHC	3.5	UJ	C
DIELDRIN	6.7	U	
ENDOSULFAN I	3.5	U	
ENDOSULFAN II	6.7	U	
ENDOSULFAN SULFATE	6.7	UJ	C
ENDRIN	6.7	UJ	C
ENDRIN ALDEHYDE	6.7	U	
ENDRIN KETONE	6.7	UJ	C
GAMMA-BHC (LINDANE)	3.5	UJ	C
GAMMA-CHLORDANE	3.5	U	
HEPTACHLOR	3.5	UJ	C
HEPTACHLOR EPOXIDE	3.5	U	
METHOXYCHLOR	35	UJ	C
TOXAPHENE	67	U	

nsample	2W-SD-SD51-0001
samp_date	10/18/2007
lab_id	SA6036-12
qc_type	NM
units	UG/KG
Pct_Solids	13.7
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
AROCLOR-1016	120	UR	Y
AROCLOR-1221	120	UR	Y
AROCLOR-1232	120	UR	Y
AROCLOR-1242	120	UR	Y
AROCLOR-1248	120	UR	Y
AROCLOR-1254	120	UR	Y
AROCLOR-1260	120	UR	Y

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample	2W-SD-SD51-0001RA	nsample	2W-SD-SD52-0001	nsample	2W-SD-SD52-0001DL
samp_date	10/18/2007	samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-12RA	lab_id	SA6036-13	lab_id	SA6036-13DL
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	13.7	Pct_Solids	37.3	Pct_Solids	37.3
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	110	J	CY
4,4'-DDE	13	J	PY
4,4'-DDT	16	J	CPY
ALDRIN	12	UR	Y
ALPHA-BHC	12	UR	Y
ALPHA-CHLORDANE	12	UR	Y
BETA-BHC	12	UR	Y
DELTA-BHC	12	UR	Y
DIELDRIN	24	UR	Y
ENDOSULFAN I	12	UR	Y
ENDOSULFAN II	24	UR	Y
ENDOSULFAN SULFATE	24	UR	Y
ENDRIN	24	UR	Y
ENDRIN ALDEHYDE	24	UR	Y
ENDRIN KETONE	24	UR	Y
GAMMA-BHC (LINDANE)	12	UR	Y
GAMMA-CHLORDANE	12	UR	Y
HEPTACHLOR	12	UR	Y
HEPTACHLOR EPOXIDE	12	UR	Y
METHOXYCHLOR	120	UR	Y
TOXAPHENE	240	UR	Y

Parameter	Result	Val Qual	Qual Code
AROCLOR-1016	46	U	
AROCLOR-1221	46	U	
AROCLOR-1232	46	U	
AROCLOR-1242	46	U	
AROCLOR-1248	46	U	
AROCLOR-1254	46	U	
AROCLOR-1260	46	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	340	J	C
4,4'-DDE	34	J	P
4,4'-DDT	420	J	C
ALDRIN	23	U	
ALPHA-BHC	23	U	
ALPHA-CHLORDANE	23	U	
BETA-BHC	23	UJ	C
DELTA-BHC	23	UJ	C
DIELDRIN	44	U	
ENDOSULFAN I	23	U	
ENDOSULFAN II	44	U	
ENDOSULFAN SULFATE	44	UJ	C
ENDRIN	44	UJ	C
ENDRIN ALDEHYDE	44	U	
ENDRIN KETONE	44	UJ	C
GAMMA-BHC (LINDANE)	23	UJ	C
GAMMA-CHLORDANE	23	U	
HEPTACHLOR	23	UJ	C
HEPTACHLOR EPOXIDE	23	U	
METHOXYCHLOR	230	UJ	C
TOXAPHENE	440	U	

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample	2W-SD-SD53-0001	nsample	2W-SD-SD53-0204	nsample	2W-SD-SD53-0204DL
samp_date	10/18/2007	samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-9	lab_id	SA6036-10	lab_id	SA6036-10DL
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	34.2	Pct_Solids	53.8	Pct_Solids	53.8
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	4.4	J	P
4,4'-DDE	3	J	P
4,4'-DDT	4.4	J	CPU
ALDRIN	5	U	
ALPHA-BHC	5	U	
ALPHA-CHLORDANE	5	UJ	C
AROCLOR-1016	50	U	
AROCLOR-1221	50	U	
AROCLOR-1232	50	U	
AROCLOR-1242	50	U	
AROCLOR-1248	50	U	
AROCLOR-1254	50	U	
AROCLOR-1260	50	U	
BETA-BHC	5	UJ	C
DELTA-BHC	5	UJ	C
DIELDRIN	9.6	U	
ENDOSULFAN I	5	UJ	C
ENDOSULFAN II	9.6	UJ	C
ENDOSULFAN SULFATE	9.6	UJ	C
ENDRIN	9.6	UJ	C
ENDRIN ALDEHYDE	9.6	UJ	C
ENDRIN KETONE	9.6	UJ	C
GAMMA-BHC (LINDANE)	5	UJ	C
GAMMA-CHLORDANE	5	UJ	C
HEPTACHLOR	5	UJ	C
HEPTACHLOR EPOXIDE	5	UJ	C
METHOXYCHLOR	50	UJ	C
TOXAPHENE	96	UJ	C

Parameter	Result	Val Qual	Qual Code
AROCLOR-1016	32	U	
AROCLOR-1221	32	U	
AROCLOR-1232	32	U	
AROCLOR-1242	32	U	
AROCLOR-1248	32	U	
AROCLOR-1254	32	U	
AROCLOR-1260	32	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	24	J	CP
4,4'-DDE	19	J	P
4,4'-DDT	61	UJ	C
ALDRIN	32	U	
ALPHA-BHC	32	U	
ALPHA-CHLORDANE	32	U	
BETA-BHC	32	UJ	C
DELTA-BHC	32	UJ	C
DIELDRIN	61	U	
ENDOSULFAN I	32	U	
ENDOSULFAN II	61	U	
ENDOSULFAN SULFATE	61	UJ	C
ENDRIN	61	UJ	C
ENDRIN ALDEHYDE	61	U	
ENDRIN KETONE	61	UJ	C
GAMMA-BHC (LINDANE)	32	U	
GAMMA-CHLORDANE	32	UJ	C
HEPTACHLOR	32	UJ	C
HEPTACHLOR EPOXIDE	32	U	
METHOXYCHLOR	320	UJ	C
TOXAPHENE	610	U	

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample	2W-SD-SD54-0001	nsample	2W-SD-SD55-0001	nsample	2W-SD-SD56-0001
samp_date	10/18/2007	samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-8	lab_id	SA6036-6	lab_id	SA6036-4
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	14.1	Pct_Solids	23.2	Pct_Solids	60.1
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	23	UR	Y
4,4'-DDE	6.4	J	RPY
4,4'-DDT	23	UR	Y
ALDRIN	12	UR	Y
ALPHA-BHC	12	UR	Y
ALPHA-CHLORDANE	12	UR	Y
AROCLOR-1016	120	UR	Y
AROCLOR-1221	120	UR	Y
AROCLOR-1232	120	UR	Y
AROCLOR-1242	120	UR	Y
AROCLOR-1248	120	UR	Y
AROCLOR-1254	120	UR	Y
AROCLOR-1260	120	UR	Y
BETA-BHC	12	UR	Y
DELTA-BHC	12	UR	Y
DIELDRIN	23	UR	Y
ENDOSULFAN I	12	UR	Y
ENDOSULFAN II	23	UR	Y
ENDOSULFAN SULFATE	23	UR	Y
ENDRIN	23	UR	Y
ENDRIN ALDEHYDE	23	UR	Y
ENDRIN KETONE	23	UR	Y
GAMMA-BHC (LINDANE)	12	UR	Y
GAMMA-CHLORDANE	12	UR	Y
HEPTACHLOR	12	UR	Y
HEPTACHLOR EPOXIDE	12	UR	Y
METHOXYCHLOR	120	UR	Y
TOXAPHENE	230	UR	Y

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	14	UR	Y
4,4'-DDE	3.9	J	PY
4,4'-DDT	14	UR	Y
ALDRIN	7.3	UR	Y
ALPHA-BHC	7.3	UR	Y
ALPHA-CHLORDANE	7.3	UR	Y
AROCLOR-1016	73	UR	Y
AROCLOR-1221	73	UR	Y
AROCLOR-1232	73	UR	Y
AROCLOR-1242	73	UR	Y
AROCLOR-1248	73	UR	Y
AROCLOR-1254	73	UR	Y
AROCLOR-1260	73	UR	Y
BETA-BHC	7.3	UR	Y
DELTA-BHC	7.3	UR	Y
DIELDRIN	14	UR	Y
ENDOSULFAN I	7.3	UR	Y
ENDOSULFAN II	14	UR	Y
ENDOSULFAN SULFATE	14	UR	Y
ENDRIN	14	UR	Y
ENDRIN ALDEHYDE	14	UR	Y
ENDRIN KETONE	14	UR	Y
GAMMA-BHC (LINDANE)	7.3	UR	Y
GAMMA-CHLORDANE	7.3	UR	Y
HEPTACHLOR	7.3	UR	Y
HEPTACHLOR EPOXIDE	7.3	UR	Y
METHOXYCHLOR	73	UR	Y
TOXAPHENE	140	UR	Y

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	5.5	U	
4,4'-DDE	2.7	J	P
4,4'-DDT	6	J	CU
ALDRIN	2.8	U	
ALPHA-BHC	2.8	U	
ALPHA-CHLORDANE	2.8	UJ	C
AROCLOR-1016	28	U	
AROCLOR-1221	28	U	
AROCLOR-1232	28	U	
AROCLOR-1242	28	U	
AROCLOR-1248	28	U	
AROCLOR-1254	28	U	
AROCLOR-1260	28	U	
BETA-BHC	2.8	UJ	C
DELTA-BHC	2.8	UJ	C
DIELDRIN	5.5	U	
ENDOSULFAN I	2.8	UJ	C
ENDOSULFAN II	5.5	UJ	C
ENDOSULFAN SULFATE	5.5	UJ	C
ENDRIN	5.5	UJ	C
ENDRIN ALDEHYDE	5.5	UJ	C
ENDRIN KETONE	5.5	UJ	C
GAMMA-BHC (LINDANE)	8.2	J	CE
GAMMA-CHLORDANE	2.8	UJ	C
HEPTACHLOR	2.8	UJ	C
HEPTACHLOR EPOXIDE	2.8	UJ	C
METHOXYCHLOR	28	UJ	C
TOXAPHENE	55	UJ	C

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 02-NOV-2007 18:38
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 33.7

Lab ID: SA6036-11
Client ID: 2W-FD-101807-01
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	59	1.0	20	59	5.3
91-57-6	2-Methylnaphthalene	U	59	1.0	20	59	8.2
90-12-0	1-Methylnaphthalene	U	59	1.0	20	59	27
208-96-8	Acenaphthylene	J	19	1.0	20	59	3.9
83-32-9	Acenaphthene	J	4.5	1.0	20	59	4.3
86-73-7	Fluorene	J	8.4	1.0	20	59	4.9
85-01-8	Phenanthrene		180	1.0	20	59	13
120-12-7	Anthracene	J	24	1.0	20	59	7.6
206-44-0	Fluoranthene		440	1.0	20	59	12
129-00-0	Pyrene		400	1.0	20	59	20
56-55-3	Benzo(a)anthracene		260	1.0	20	59	7.5
218-01-9	Chrysene		300	1.0	20	59	7.8
205-99-2	Benzo(b)fluoranthene		350	1.0	20	59	6.5
207-08-9	Benzo(k)fluoranthene		180	1.0	20	59	5.6
50-32-8	Benzo(a)pyrene		270	1.0	20	59	6.1
193-39-5	Indeno(1,2,3-cd)pyrene		250	1.0	20	59	13
191-24-2	Benzo(g,h,i)perylene		170	1.0	20	59	9.8
53-70-3	Dibenzo(a,h)anthracene		98	1.0	20	59	11
7297-45-2	2-Methylnaphthalene-d10		69%				
81103-79-9	Fluorene-d10		74%				
1718-52-1	Pyrene-d10		68%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 08-NOV-2007 17:20
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 16.6

Lab ID: SA6036-17RA
Client ID: 2W-SD-SD45-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	120	1.0	20	120	11
91-57-6	2-Methylnaphthalene	U	120	1.0	20	120	17
90-12-0	1-Methylnaphthalene	U	120	1.0	20	120	55
208-96-8	Acenaphthylene	U	120	1.0	20	120	8.0
83-32-9	Acenaphthene	U	120	1.0	20	120	8.8
86-73-7	Fluorene	U	120	1.0	20	120	9.9
85-01-8	Phenanthrene	J	52	1.0	20	120	26
120-12-7	Anthracene	U	120	1.0	20	120	15
206-44-0	Fluoranthene		150	1.0	20	120	24
129-00-0	Pyrene	J	120	1.0	20	120	41
56-55-3	Benzo(a)anthracene	J	77	1.0	20	120	15
218-01-9	Chrysene	J	98	1.0	20	120	16
205-99-2	Benzo(b)fluoranthene		160	1.0	20	120	13
207-08-9	Benzo(k)fluoranthene	J	79	1.0	20	120	11
50-32-8	Benzo(a)pyrene	J	95	1.0	20	120	12
193-39-5	Indeno(1,2,3-cd)pyrene	J	100	1.0	20	120	26
191-24-2	Benzo(g,h,i)perylene	J	88	1.0	20	120	20
53-70-3	Dibenzo(a,h)anthracene	U	120	1.0	20	120	23
7297-45-2	2-Methylnaphthalene-d10		62%				
81103-79-9	Fluorene-d10		65%				
1718-52-1	Pyrene-d10		66%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 02-NOV-2007 23:43
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 36.9

Lab ID: SA6036-18
Client ID: 2W-SD-SD45-0002
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	12	1.0	20	54	4.8
91-57-6	2-Methylnaphthalene	U	54	1.0	20	54	7.5
90-12-0	1-Methylnaphthalene	U	54	1.0	20	54	25
208-96-8	Acenaphthylene		67	1.0	20	54	3.6
83-32-9	Acenaphthene	U	54	1.0	20	54	4.0
86-73-7	Fluorene	J	53	1.0	20	54	4.4
85-01-8	Phenanthrene		220	1.0	20	54	12
120-12-7	Anthracene		58	1.0	20	54	6.9
206-44-0	Fluoranthene		590	1.0	20	54	11
129-00-0	Pyrene		730	1.0	20	54	19
56-55-3	Benzo(a)anthracene		360	1.0	20	54	6.8
218-01-9	Chrysene		410	1.0	20	54	7.2
205-99-2	Benzo(b)fluoranthene		480	1.0	20	54	6.0
207-08-9	Benzo(k)fluoranthene		270	1.0	20	54	5.1
50-32-8	Benzo(a)pyrene		360	1.0	20	54	5.6
193-39-5	Indeno(1,2,3-cd)pyrene		230	1.0	20	54	12
191-24-2	Benzo(g,h,i)perylene		180	1.0	20	54	9.0
53-70-3	Dibenzo(a,h)anthracene		110	1.0	20	54	10
7297-45-2	2-Methylnaphthalene-d10		69%				
81103-79-9	Fluorene-d10		50%				
1718-52-1	Pyrene-d10		69%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 06-NOV-2007 22:04
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 42.0

Lab ID: SA6036-19
Client ID: 2W-SD-SD46-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	5.6	1.0	20	48	4.3
91-57-6	2-Methylnaphthalene	J	7.0	1.0	20	48	6.6
90-12-0	1-Methylnaphthalene	U	48	1.0	20	48	22
208-96-8	Acenaphthylene		57	1.0	20	48	3.2
83-32-9	Acenaphthene	J	11	1.0	20	48	3.5
86-73-7	Fluorene	J	21	1.0	20	48	3.9
85-01-8	Phenanthrene		360	1.0	20	48	10
120-12-7	Anthracene		61	1.0	20	48	6.1
206-44-0	Fluoranthene	E	990	1.0	20	48	9.5
129-00-0	Pyrene	E	1000	1.0	20	48	16
56-55-3	Benzo(a)anthracene		590	1.0	20	48	6.0
218-01-9	Chrysene		580	1.0	20	48	6.3
205-99-2	Benzo(b)fluoranthene		590	1.0	20	48	5.2
207-08-9	Benzo(k)fluoranthene		360	1.0	20	48	4.4
50-32-8	Benzo(a)pyrene		510	1.0	20	48	4.9
193-39-5	Indeno(1,2,3-cd)pyrene		460	1.0	20	48	10
191-24-2	Benzo(g,h,i)perylene		330	1.0	20	48	7.9
53-70-3	Dibenzo(a,h)anthracene		180	1.0	20	48	9.0
7297-45-2	2-Methylnaphthalene-d10		64%				
81103-79-9	Fluorene-d10		67%				
1718-52-1	Pyrene-d10		59%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 06-NOV-2007 20:36
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 42.0

Lab ID: SA6036-19DL
Client ID: 2W-SD-SD46-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	95	2.0	20	95	8.5
91-57-6	2-Methylnaphthalene	U	95	2.0	20	95	13
90-12-0	1-Methylnaphthalene	U	95	2.0	20	95	44
208-96-8	Acenaphthylene	J	53	2.0	20	95	6.3
83-32-9	Acenaphthene	J	12	2.0	20	95	7.0
86-73-7	Fluorene	J	21	2.0	20	95	7.8
85-01-8	Phenanthrene		390	2.0	20	95	20
120-12-7	Anthracene	J	75	2.0	20	95	12
206-44-0	Fluoranthene		1100	2.0	20	95	19
129-00-0	Pyrene		1000	2.0	20	95	33
56-55-3	Benzo(a)anthracene		640	2.0	20	95	12
218-01-9	Chrysene		650	2.0	20	95	12
205-99-2	Benzo(b)fluoranthene		660	2.0	20	95	10
207-08-9	Benzo(k)fluoranthene		460	2.0	20	95	8.9
50-32-8	Benzo(a)pyrene		590	2.0	20	95	9.9
193-39-5	Indeno(1,2,3-cd)pyrene		580	2.0	20	95	21
191-24-2	Benzo(g,h,i)perylene		470	2.0	20	95	16
53-70-3	Dibenzo(a,h)anthracene		240	2.0	20	95	18
7297-45-2	2-Methylnaphthalene-d10		68%				
81103-79-9	Fluorene-d10		68%				
1718-52-1	Pyrene-d10		51%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 06-NOV-2007 22:48
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 58.4

Lab ID: SA6036-20
Client ID: 2W-SD-SD46-0204
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	8.5	1.0	20	34	3.1
91-57-6	2-Methylnaphthalene	J	9.7	1.0	20	34	4.7
90-12-0	1-Methylnaphthalene	U	34	1.0	20	34	16
208-96-8	Acenaphthylene		52	1.0	20	34	2.3
83-32-9	Acenaphthene	J	12	1.0	20	34	2.5
86-73-7	Fluorene	J	25	1.0	20	34	2.8
85-01-8	Phenanthrene		250	1.0	20	34	7.4
120-12-7	Anthracene		59	1.0	20	34	4.4
206-44-0	Fluoranthene	E	650	1.0	20	34	6.8
129-00-0	Pyrene	E	640	1.0	20	34	12
56-55-3	Benzo(a)anthracene		430	1.0	20	34	4.3
218-01-9	Chrysene		410	1.0	20	34	4.5
205-99-2	Benzo(b)fluoranthene		450	1.0	20	34	3.8
207-08-9	Benzo(k)fluoranthene		240	1.0	20	34	3.2
50-32-8	Benzo(a)pyrene		370	1.0	20	34	3.5
193-39-5	Indeno(1,2,3-cd)pyrene		320	1.0	20	34	7.4
191-24-2	Benzo(g,h,i)perylene		220	1.0	20	34	5.7
53-70-3	Dibenzo(a,h)anthracene		130	1.0	20	34	6.4
7297-45-2	2-Methylnaphthalene-d10		77%				
81103-79-9	Fluorene-d10		76%				
1718-52-1	Pyrene-d10		70%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 06-NOV-2007 21:20
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 58.4

Lab ID: SA6036-20DL
Client ID: 2W-SD-SD46-0204
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	8.2	2.0	20	68	6.1
91-57-6	2-Methylnaphthalene	U	68	2.0	20	68	9.4
90-12-0	1-Methylnaphthalene	U	68	2.0	20	68	32
208-96-8	Acenaphthylene	J	36	2.0	20	68	4.6
83-32-9	Acenaphthene	J	11	2.0	20	68	5.0
86-73-7	Fluorene	J	21	2.0	20	68	5.6
85-01-8	Phenanthrene		260	2.0	20	68	15
120-12-7	Anthracene	J	55	2.0	20	68	8.7
206-44-0	Fluoranthene		570	2.0	20	68	14
129-00-0	Pyrene		820	2.0	20	68	24
56-55-3	Benzo(a)anthracene		430	2.0	20	68	8.6
218-01-9	Chrysene		450	2.0	20	68	9.0
205-99-2	Benzo(b)fluoranthene		440	2.0	20	68	7.5
207-08-9	Benzo(k)fluoranthene		260	2.0	20	68	6.4
50-32-8	Benzo(a)pyrene		390	2.0	20	68	7.1
193-39-5	Indeno(1,2,3-cd)pyrene		340	2.0	20	68	15
191-24-2	Benzo(g,h,i)perylene		280	2.0	20	68	11
53-70-3	Dibenzo(a,h)anthracene		140	2.0	20	68	13
7297-45-2	2-Methylnaphthalene-d10		74%				
81103-79-9	Fluorene-d10		69%				
1718-52-1	Pyrene-d10		80%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 08-NOV-2007 16:38
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 30.6

Lab ID: SA6036-16RA
Client ID: 2W-SD-SD49-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	65	1.0	20	65	5.8
91-57-6	2-Methylnaphthalene	U	65	1.0	20	65	9.0
90-12-0	1-Methylnaphthalene	U	65	1.0	20	65	30
208-96-8	Acenaphthylene	J	7.3	1.0	20	65	4.4
83-32-9	Acenaphthene	U	65	1.0	20	65	4.8
86-73-7	Fluorene	J	5.8	1.0	20	65	5.4
85-01-8	Phenanthrene		84	1.0	20	65	14
120-12-7	Anthracene	J	13	1.0	20	65	8.3
206-44-0	Fluoranthene		220	1.0	20	65	13
129-00-0	Pyrene		190	1.0	20	65	22
56-55-3	Benzo(a)anthracene		120	1.0	20	65	8.2
218-01-9	Chrysene		160	1.0	20	65	8.6
205-99-2	Benzo(b)fluoranthene		230	1.0	20	65	7.2
207-08-9	Benzo(k)fluoranthene		100	1.0	20	65	6.1
50-32-8	Benzo(a)pyrene		150	1.0	20	65	6.8
193-39-5	Indeno(1,2,3-cd)pyrene		180	1.0	20	65	14
191-24-2	Benzo(g,h,i)perylene		180	1.0	20	65	11
53-70-3	Dibenzo(a,h)anthracene	U	65	1.0	20	65	12
7297-45-2	2-Methylnaphthalene-d10		54%				
81103-79-9	Fluorene-d10		66%				
1718-52-1	Pyrene-d10		61%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 02-NOV-2007 21:31
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 20.7

Lab ID: SA6036-15
Client ID: 2W-SD-SD50-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	96	1.0	20	96	8.6
91-57-6	2-Methylnaphthalene	U	96	1.0	20	96	13
90-12-0	1-Methylnaphthalene	U	96	1.0	20	96	44
208-96-8	Acenaphthylene	J	28	1.0	20	96	6.4
83-32-9	Acenaphthene	U	96	1.0	20	96	7.0
86-73-7	Fluorene	U	96	1.0	20	96	7.9
85-01-8	Phenanthrene		99	1.0	20	96	21
120-12-7	Anthracene	J	23	1.0	20	96	12
206-44-0	Fluoranthene		330	1.0	20	96	19
129-00-0	Pyrene		320	1.0	20	96	33
56-55-3	Benzo(a)anthracene		200	1.0	20	96	12
218-01-9	Chrysene		220	1.0	20	96	13
205-99-2	Benzo(b)fluoranthene		300	1.0	20	96	11
207-08-9	Benzo(k)fluoranthene		160	1.0	20	96	9.0
50-32-8	Benzo(a)pyrene		240	1.0	20	96	10
193-39-5	Indeno(1,2,3-cd)pyrene		230	1.0	20	96	21
191-24-2	Benzo(g,h,i)perylene		170	1.0	20	96	16
53-70-3	Dibenzo(a,h)anthracene		110	1.0	20	96	18
7297-45-2	2-Methylnaphthalene-d10		51%				
81103-79-9	Fluorene-d10		64%				
1718-52-1	Pyrene-d10		59%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 02-NOV-2007 20:47
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 48.9

Lab ID: SA6036-14
Client ID: 2W-SD-SD50-0204
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	8.9	1.0	20	41	3.7
91-57-6	2-Methylnaphthalene	J	8.6	1.0	20	41	5.6
90-12-0	1-Methylnaphthalene	U	41	1.0	20	41	19
208-96-8	Acenaphthylene	J	29	1.0	20	41	2.7
83-32-9	Acenaphthene	J	5.8	1.0	20	41	3.0
86-73-7	Fluorene	J	14	1.0	20	41	3.4
85-01-8	Phenanthrene		98	1.0	20	41	8.8
120-12-7	Anthracene	J	29	1.0	20	41	5.2
206-44-0	Fluoranthene		190	1.0	20	41	8.2
129-00-0	Pyrene		310	1.0	20	41	14
56-55-3	Benzo(a)anthracene		170	1.0	20	41	5.2
218-01-9	Chrysene		160	1.0	20	41	5.4
205-99-2	Benzo(b)fluoranthene		160	1.0	20	41	4.5
207-08-9	Benzo(k)fluoranthene		100	1.0	20	41	3.8
50-32-8	Benzo(a)pyrene		170	1.0	20	41	4.2
193-39-5	Indeno(1,2,3-cd)pyrene		130	1.0	20	41	8.9
191-24-2	Benzo(g,h,i)perylene		95	1.0	20	41	6.8
53-70-3	Dibenzo(a,h)anthracene		62	1.0	20	41	7.7
7297-45-2	2-Methylnaphthalene-d10		79%				
81103-79-9	Fluorene-d10		81%				
1718-52-1	Pyrene-d10		76%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 08-NOV-2007 15:55
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 48.9

Lab ID: SA6036-14RA
Client ID: 2W-SD-SD50-0204
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	8.7	1.0	20	41	3.7
91-57-6	2-Methylnaphthalene	J	8.6	1.0	20	41	5.6
90-12-0	1-Methylnaphthalene	U	41	1.0	20	41	19
208-96-8	Acenaphthylene	J	30	1.0	20	41	2.7
83-32-9	Acenaphthene	J	5.6	1.0	20	41	3.0
86-73-7	Fluorene	J	14	1.0	20	41	3.4
85-01-8	Phenanthrene		100	1.0	20	41	8.8
120-12-7	Anthracene	J	27	1.0	20	41	5.2
206-44-0	Fluoranthene		200	1.0	20	41	8.2
129-00-0	Pyrene		310	1.0	20	41	14
56-55-3	Benzo(a)anthracene		160	1.0	20	41	5.2
218-01-9	Chrysene		150	1.0	20	41	5.4
205-99-2	Benzo(b)fluoranthene		180	1.0	20	41	4.5
207-08-9	Benzo(k)fluoranthene		120	1.0	20	41	3.8
50-32-8	Benzo(a)pyrene		160	1.0	20	41	4.2
193-39-5	Indeno(1,2,3-cd)pyrene		140	1.0	20	41	8.9
191-24-2	Benzo(g,h,i)perylene		98	1.0	20	41	6.8
53-70-3	Dibenzo(a,h)anthracene		64	1.0	20	41	7.7
7297-45-2	2-Methylnaphthalene-d10		81%				
81103-79-9	Fluorene-d10		84%				
1718-52-1	Pyrene-d10		73%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 08-NOV-2007 15:12
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 13.7

Lab ID: SA6036-12RA
Client ID: 2W-SD-SD51-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	140	1.0	20	140	13
91-57-6	2-Methylnaphthalene	U	140	1.0	20	140	20
90-12-0	1-Methylnaphthalene	U	140	1.0	20	140	67
208-96-8	Acenaphthylene	U	140	1.0	20	140	9.7
83-32-9	Acenaphthene	U	140	1.0	20	140	11
86-73-7	Fluorene	U	140	1.0	20	140	12
85-01-8	Phenanthrene	J	47	1.0	20	140	31
120-12-7	Anthracene	U	140	1.0	20	140	18
206-44-0	Fluoranthene	J	140	1.0	20	140	29
129-00-0	Pyrene	U	140	1.0	20	140	50
56-55-3	Benzo(a)anthracene	J	45	1.0	20	140	18
218-01-9	Chrysene	J	66	1.0	20	140	19
205-99-2	Benzo(b)fluoranthene	J	99	1.0	20	140	16
207-08-9	Benzo(k)fluoranthene	J	49	1.0	20	140	14
50-32-8	Benzo(a)pyrene	J	63	1.0	20	140	15
193-39-5	Indeno(1,2,3-cd)pyrene	J	64	1.0	20	140	32
191-24-2	Benzo(g,h,i)perylene	J	49	1.0	20	140	24
53-70-3	Dibenzo(a,h)anthracene	U	140	1.0	20	140	27
7297-45-2	2-Methylnaphthalene-d10		66%				
81103-79-9	Fluorene-d10		68%				
1718-52-1	Pyrene-d10		64%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 02-NOV-2007 20:03
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 37.3

Lab ID: SA6036-13
Client ID: 2W-SD-SD52-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	54	1.0	20	54	4.8
91-57-6	2-Methylnaphthalene	U	54	1.0	20	54	7.4
90-12-0	1-Methylnaphthalene	U	54	1.0	20	54	25
208-96-8	Acenaphthylene	J	24	1.0	20	54	3.6
83-32-9	Acenaphthene	J	5.5	1.0	20	54	3.9
86-73-7	Fluorene	J	9.8	1.0	20	54	4.4
85-01-8	Phenanthrene		170	1.0	20	54	12
120-12-7	Anthracene	J	22	1.0	20	54	6.8
206-44-0	Fluoranthene		320	1.0	20	54	11
129-00-0	Pyrene		320	1.0	20	54	18
56-55-3	Benzo(a)anthracene		160	1.0	20	54	6.8
218-01-9	Chrysene		200	1.0	20	54	7.1
205-99-2	Benzo(b)fluoranthene		240	1.0	20	54	5.9
207-08-9	Benzo(k)fluoranthene		150	1.0	20	54	5.0
50-32-8	Benzo(a)pyrene		200	1.0	20	54	5.6
193-39-5	Indeno(1,2,3-cd)pyrene		190	1.0	20	54	12
191-24-2	Benzo(g,h,i)perylene		140	1.0	20	54	8.9
53-70-3	Dibenzo(a,h)anthracene		79	1.0	20	54	10
7297-45-2	2-Methylnaphthalene-d10		72%				
81103-79-9	Fluorene-d10		75%				
1718-52-1	Pyrene-d10		71%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 02-NOV-2007 17:12
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 34.2

Lab ID: SA6036-9
Client ID: 2W-SD-SD53-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	58	1.0	20	58	5.2
91-57-6	2-Methylnaphthalene	U	58	1.0	20	58	8.1
90-12-0	1-Methylnaphthalene	U	58	1.0	20	58	27
208-96-8	Acenaphthylene	J	20	1.0	20	58	3.9
83-32-9	Acenaphthene	J	5.2	1.0	20	58	4.3
86-73-7	Fluorene	J	9.0	1.0	20	58	4.8
85-01-8	Phenanthrene		170	1.0	20	58	12
120-12-7	Anthracene	J	28	1.0	20	58	7.5
206-44-0	Fluoranthene		440	1.0	20	58	12
129-00-0	Pyrene		340	1.0	20	58	20
56-55-3	Benzo(a)anthracene		240	1.0	20	58	7.4
218-01-9	Chrysene		280	1.0	20	58	7.7
205-99-2	Benzo(b)fluoranthene		340	1.0	20	58	6.4
207-08-9	Benzo(k)fluoranthene		220	1.0	20	58	5.5
50-32-8	Benzo(a)pyrene		260	1.0	20	58	6.0
193-39-5	Indeno(1,2,3-cd)pyrene		250	1.0	20	58	13
191-24-2	Benzo(g,h,i)perylene		170	1.0	20	58	9.7
53-70-3	Dibenzo(a,h)anthracene		100	1.0	20	58	11
7297-45-2	2-Methylnaphthalene-d10		71%				
81103-79-9	Fluorene-d10		77%				
1718-52-1	Pyrene-d10		63%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 02-NOV-2007 17:54
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 53.8

Lab ID: SA6036-10
Client ID: 2W-SD-SD53-0204
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	14	1.0	20	37	3.3
91-57-6	2-Methylnaphthalene	J	14	1.0	20	37	5.1
90-12-0	1-Methylnaphthalene	U	37	1.0	20	37	17
208-96-8	Acenaphthylene		50	1.0	20	37	2.5
83-32-9	Acenaphthene	U	37	1.0	20	37	2.7
86-73-7	Fluorene	J	23	1.0	20	37	3.0
85-01-8	Phenanthrene		200	1.0	20	37	8.0
120-12-7	Anthracene		58	1.0	20	37	4.7
206-44-0	Fluoranthene		360	1.0	20	37	7.4
129-00-0	Pyrene	E	630	1.0	20	37	13
56-55-3	Benzo(a)anthracene		350	1.0	20	37	4.7
218-01-9	Chrysene		320	1.0	20	37	4.9
205-99-2	Benzo(b)fluoranthene		340	1.0	20	37	4.1
207-08-9	Benzo(k)fluoranthene		220	1.0	20	37	3.5
50-32-8	Benzo(a)pyrene		350	1.0	20	37	3.8
193-39-5	Indeno(1,2,3-cd)pyrene		290	1.0	20	37	8.1
191-24-2	Benzo(g,h,i)perylene		200	1.0	20	37	6.2
53-70-3	Dibenzo(a,h)anthracene		130	1.0	20	37	7.0
7297-45-2	2-Methylnaphthalene-d10		82%				
81103-79-9	Fluorene-d10		77%				
1718-52-1	Pyrene-d10		72%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 06-NOV-2007 19:53
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 53.8

Lab ID: SA6036-10DL
Client ID: 2W-SD-SD53-0204
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	14	2.0	20	74	6.6
91-57-6	2-Methylnaphthalene	J	14	2.0	20	74	10
90-12-0	1-Methylnaphthalene	U	74	2.0	20	74	34
208-96-8	Acenaphthylene	J	49	2.0	20	74	4.9
83-32-9	Acenaphthene	J	7.8	2.0	20	74	5.4
86-73-7	Fluorene	J	22	2.0	20	74	6.1
85-01-8	Phenanthrene		210	2.0	20	74	16
120-12-7	Anthracene	J	59	2.0	20	74	9.5
206-44-0	Fluoranthene		380	2.0	20	74	15
129-00-0	Pyrene		710	2.0	20	74	26
56-55-3	Benzo(a)anthracene		340	2.0	20	74	9.4
218-01-9	Chrysene		310	2.0	20	74	9.8
205-99-2	Benzo(b)fluoranthene		350	2.0	20	74	8.2
207-08-9	Benzo(k)fluoranthene		230	2.0	20	74	7.0
50-32-8	Benzo(a)pyrene		340	2.0	20	74	7.7
193-39-5	Indeno(1,2,3-cd)pyrene		250	2.0	20	74	16
191-24-2	Benzo(g,h,i)perylene		190	2.0	20	74	12
53-70-3	Dibenzo(a,h)anthracene		120	2.0	20	74	14
7297-45-2	2-Methylnaphthalene-d10		84%				
81103-79-9	Fluorene-d10		76%				
1718-52-1	Pyrene-d10		73%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 02-NOV-2007 16:30
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 14.1

Lab ID: SA6036-8
Client ID: 2W-SD-SD54-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	140	1.0	20	140	13
91-57-6	2-Methylnaphthalene	U	140	1.0	20	140	20
90-12-0	1-Methylnaphthalene	U	140	1.0	20	140	65
208-96-8	Acenaphthylene	U	140	1.0	20	140	9.4
83-32-9	Acenaphthene	U	140	1.0	20	140	10
86-73-7	Fluorene	U	140	1.0	20	140	12
85-01-8	Phenanthrene	J	110	1.0	20	140	30
120-12-7	Anthracene	U	140	1.0	20	140	18
206-44-0	Fluoranthene		290	1.0	20	140	28
129-00-0	Pyrene		180	1.0	20	140	49
56-55-3	Benzo(a)anthracene	J	120	1.0	20	140	18
218-01-9	Chrysene		190	1.0	20	140	19
205-99-2	Benzo(b)fluoranthene		230	1.0	20	140	16
207-08-9	Benzo(k)fluoranthene		140	1.0	20	140	13
50-32-8	Benzo(a)pyrene		160	1.0	20	140	15
193-39-5	Indeno(1,2,3-cd)pyrene		220	1.0	20	140	31
191-24-2	Benzo(g,h,i)perylene		160	1.0	20	140	24
53-70-3	Dibenzo(a,h)anthracene	J	100	1.0	20	140	27
7297-45-2	2-Methylnaphthalene-d10		59%				
81103-79-9	Fluorene-d10		67%				
1718-52-1	Pyrene-d10		56%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 08-NOV-2007 14:29
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 23.2

Lab ID: SA6036-6RA
Client ID: 2W-SD-SD55-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	86	1.0	20	86	7.7
91-57-6	2-Methylnaphthalene	U	86	1.0	20	86	12
90-12-0	1-Methylnaphthalene	U	86	1.0	20	86	40
208-96-8	Acenaphthylene	J	10	1.0	20	86	5.7
83-32-9	Acenaphthene	U	86	1.0	20	86	6.3
86-73-7	Fluorene	J	7.6	1.0	20	86	7.1
85-01-8	Phenanthrene		140	1.0	20	86	18
120-12-7	Anthracene	J	16	1.0	20	86	11
206-44-0	Fluoranthene		370	1.0	20	86	17
129-00-0	Pyrene		260	1.0	20	86	30
56-55-3	Benzo(a)anthracene		140	1.0	20	86	11
218-01-9	Chrysene		180	1.0	20	86	11
205-99-2	Benzo(b)fluoranthene		310	1.0	20	86	9.5
207-08-9	Benzo(k)fluoranthene		150	1.0	20	86	8.0
50-32-8	Benzo(a)pyrene		190	1.0	20	86	8.9
193-39-5	Indeno(1,2,3-cd)pyrene		220	1.0	20	86	19
191-24-2	Benzo(g,h,i)perylene		160	1.0	20	86	14
53-70-3	Dibenzo(a,h)anthracene		92	1.0	20	86	16
7297-45-2	2-Methylnaphthalene-d10		63%				
81103-79-9	Fluorene-d10		72%				
1718-52-1	Pyrene-d10		57%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 02-NOV-2007 15:05
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 60.1

Lab ID: SA6036-4
Client ID: 2W-SD-SD56-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	4.0	1.0	20	33	3.0
91-57-6	2-Methylnaphthalene	U	33	1.0	20	33	4.6
90-12-0	1-Methylnaphthalene	U	33	1.0	20	33	15
208-96-8	Acenaphthylene	J	28	1.0	20	33	2.2
83-32-9	Acenaphthene	J	15	1.0	20	33	2.4
86-73-7	Fluorene	J	24	1.0	20	33	2.7
85-01-8	Phenanthrene	E	650	1.0	20	33	7.1
120-12-7	Anthracene		70	1.0	20	33	4.2
206-44-0	Fluoranthene	E	2100	1.0	20	33	6.6
129-00-0	Pyrene	E	1600	1.0	20	33	11
56-55-3	Benzo(a)anthracene	E	940	1.0	20	33	4.2
218-01-9	Chrysene	E	1000	1.0	20	33	4.4
205-99-2	Benzo(b)fluoranthene	E	1300	1.0	20	33	3.6
207-08-9	Benzo(k)fluoranthene	E	750	1.0	20	33	3.1
50-32-8	Benzo(a)pyrene	E	1100	1.0	20	33	3.4
193-39-5	Indeno(1,2,3-cd)pyrene	E	1000	1.0	20	33	7.2
191-24-2	Benzo(g,h,i)perylene	E	700	1.0	20	33	5.5
53-70-3	Dibenzo(a,h)anthracene		370	1.0	20	33	6.2
7297-45-2	2-Methylnaphthalene-d10		71%				
81103-79-9	Fluorene-d10		81%				
1718-52-1	Pyrene-d10		65%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 06-NOV-2007 19:10
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 60.1

Lab ID: SA6036-4DL
Client ID: 2W-SD-SD56-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	170	5.0	20	170	15
91-57-6	2-Methylnaphthalene	U	170	5.0	20	170	23
90-12-0	1-Methylnaphthalene	U	170	5.0	20	170	76
208-96-8	Acenaphthylene	J	29	5.0	20	170	11
83-32-9	Acenaphthene	J	18	5.0	20	170	12
86-73-7	Fluorene	J	25	5.0	20	170	14
85-01-8	Phenanthrene		860	5.0	20	170	36
120-12-7	Anthracene	J	83	5.0	20	170	21
206-44-0	Fluoranthene	E	2800	5.0	20	170	33
129-00-0	Pyrene		2200	5.0	20	170	57
56-55-3	Benzo(a)anthracene		1200	5.0	20	170	21
218-01-9	Chrysene		1400	5.0	20	170	22
205-99-2	Benzo(b)fluoranthene		1800	5.0	20	170	18
207-08-9	Benzo(k)fluoranthene		1100	5.0	20	170	16
50-32-8	Benzo(a)pyrene		1500	5.0	20	170	17
193-39-5	Indeno(1,2,3-cd)pyrene		1600	5.0	20	170	36
191-24-2	Benzo(g,h,i)perylene		1200	5.0	20	170	28
53-70-3	Dibenzo(a,h)anthracene		550	5.0	20	170	31
7297-45-2	2-Methylnaphthalene-d10		87%				
81103-79-9	Fluorene-d10		93%				
1718-52-1	Pyrene-d10		46%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 02-NOV-2007 14:23
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 62.7

Lab ID: SA6036-2
Client ID: 2W-SD-SD57-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	6.0	1.0	20	32	2.8
91-57-6	2-Methylnaphthalene	U	32	1.0	20	32	4.4
90-12-0	1-Methylnaphthalene	U	32	1.0	20	32	15
208-96-8	Acenaphthylene	J	22	1.0	20	32	2.1
83-32-9	Acenaphthene		61	1.0	20	32	2.3
86-73-7	Fluorene		130	1.0	20	32	2.6
85-01-8	Phenanthrene	E	3200	1.0	20	32	6.8
120-12-7	Anthracene		390	1.0	20	32	4.1
206-44-0	Fluoranthene	E	6500	1.0	20	32	6.4
129-00-0	Pyrene	E	4800	1.0	20	32	11
56-55-3	Benzo(a)anthracene	E	3500	1.0	20	32	4.0
218-01-9	Chrysene	E	3000	1.0	20	32	4.2
205-99-2	Benzo(b)fluoranthene	E	3600	1.0	20	32	3.5
207-08-9	Benzo(k)fluoranthene	E	1900	1.0	20	32	3.0
50-32-8	Benzo(a)pyrene	E	3000	1.0	20	32	3.3
193-39-5	Indeno(1,2,3-cd)pyrene	E	3000	1.0	20	32	6.9
191-24-2	Benzo(g,h,i)perylene	E	2000	1.0	20	32	5.3
53-70-3	Dibenzo(a,h)anthracene	E	1200	1.0	20	32	6.0
7297-45-2	2-Methylnaphthalene-d10		67%				
81103-79-9	Fluorene-d10		75%				
1718-52-1	Pyrene-d10		57%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 06-NOV-2007 18:28
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 62.7

Lab ID: SA6036-2DL
Client ID: 2W-SD-SD57-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	640	20	20	640	57
91-57-6	2-Methylnaphthalene	U	640	20	20	640	88
90-12-0	1-Methylnaphthalene	U	640	20	20	640	290
208-96-8	Acenaphthylene	U	640	20	20	640	42
83-32-9	Acenaphthene	J	64	20	20	640	46
86-73-7	Fluorene	J	120	20	20	640	52
85-01-8	Phenanthrene		4300	20	20	640	140
120-12-7	Anthracene	J	440	20	20	640	81
206-44-0	Fluoranthene		8400	20	20	640	130
129-00-0	Pyrene		8200	20	20	640	220
56-55-3	Benzo(a)anthracene		4000	20	20	640	80
218-01-9	Chrysene		4100	20	20	640	84
205-99-2	Benzo(b)fluoranthene		4600	20	20	640	70
207-08-9	Benzo(k)fluoranthene		2900	20	20	640	60
50-32-8	Benzo(a)pyrene		3500	20	20	640	66
193-39-5	Indeno(1,2,3-cd)pyrene		3500	20	20	640	140
191-24-2	Benzo(g,h,i)perylene		2600	20	20	640	100
53-70-3	Dibenzo(a,h)anthracene		1400	20	20	640	120
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 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 26-OCT-2007 22:23
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 33.7

Lab ID: SA6036-11
Client ID: 2W-FD-101807-01
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44926
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	5.0	1.0	1.7	5.0	1.7
58-89-9	gamma BHC	U	5.0	1.0	1.7	5.0	2.2
319-85-7	beta-BHC	U	5.0	1.0	1.7	5.0	2.2
319-86-8	delta-BHC	U	5.0	1.0	1.7	5.0	1.4
76-44-8	Heptachlor	U	5.0	1.0	1.7	5.0	2.0
309-00-2	Aldrin	U	5.0	1.0	1.7	5.0	2.1
1024-57-3	Heptachlor Epoxide	U	5.0	1.0	1.7	5.0	4.6
5103-74-2	gamma-Chlordane	U	5.0	1.0	1.7	5.0	2.5
5103-71-9	alpha-Chlordane	U	5.0	1.0	1.7	5.0	2.6
72-55-9	4,4'-DDE	J	3.4	1.0	3.3	9.8	2.4
959-98-8	Endosulfan I	U	5.0	1.0	1.7	5.0	1.7
60-57-1	Dieldrin	U	9.8	1.0	3.3	9.8	2.3
72-20-8	Endrin	U	9.8	1.0	3.3	9.8	4.0
72-54-8	4,4'-DDD	J	4.6	1.0	3.3	9.8	3.4
33213-65-9	Endosulfan II	U	9.8	1.0	3.3	9.8	1.8
50-29-3	4,4'-DDT	U	9.8	1.0	3.3	9.8	2.5
7421-36-3	Endrin Aldehyde	U	9.8	1.0	3.3	9.8	2.1
72-43-5	Methoxychlor	U	50	1.0	17	50	11
1031-07-8	Endosulfan sulfate	U	9.8	1.0	3.3	9.8	2.7
53494-70-5	Endrin Ketone	U	9.8	1.0	3.3	9.8	2.9
8001-35-2	Toxaphene	U	98	1.0	33	98	38
877-09-8	Tetrachloro-m-Xylene		59%				
2051-24-3	Decachlorobiphenyl		68%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 02-NOV-2007 18:18
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 16.6

Lab ID: SA6036-17RA
Client ID: 2W-SD-SD45-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44926
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	10	1.0	1.7	10	3.4
58-89-9	gamma BHC	U	10	1.0	1.7	10	4.4
319-85-7	beta-BHC	U	10	1.0	1.7	10	4.4
319-86-8	delta-BHC	U	10	1.0	1.7	10	2.8
76-44-8	Heptachlor	U	10	1.0	1.7	10	4.0
309-00-2	Aldrin	U	10	1.0	1.7	10	4.2
1024-57-3	Heptachlor Epoxide	U	10	1.0	1.7	10	9.4
5103-74-2	gamma-Chlordane	U	10	1.0	1.7	10	5.0
5103-71-9	alpha-Chlordane	U	10	1.0	1.7	10	5.2
72-55-9	4,4'-DDE	J	9.5	1.0	3.3	20	4.8
959-98-8	Endosulfan I	U	10	1.0	1.7	10	3.4
60-57-1	Dieldrin	U	20	1.0	3.3	20	4.6
72-20-8	Endrin	U	20	1.0	3.3	20	8.2
72-54-8	4,4'-DDD		39	1.0	3.3	20	6.8
33213-65-9	Endosulfan II	U	20	1.0	3.3	20	3.6
50-29-3	4,4'-DDT	U	20	1.0	3.3	20	5.0
7421-36-3	Endrin Aldehyde	U	20	1.0	3.3	20	4.2
72-43-5	Methoxychlor	U	100	1.0	17	100	22
1031-07-8	Endosulfan sulfate	U	20	1.0	3.3	20	5.4
53494-70-5	Endrin Ketone	U	20	1.0	3.3	20	5.8
8001-35-2	Toxaphene	U	200	1.0	33	200	78
877-09-8	Tetrachloro-m-Xylene		64%				
2051-24-3	Decachlorobiphenyl		77%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 05-NOV-2007 18:51
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 36.9

Lab ID: SA6036-18DL
Client ID: 2W-SD-SD45-0002
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG45073
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	46	10	1.7	46	15
58-89-9	gamma BHC	U	46	10	1.7	46	20
319-85-7	beta-BHC	U	46	10	1.7	46	20
319-86-8	delta-BHC	U	46	10	1.7	46	13
76-44-8	Heptachlor	U	46	10	1.7	46	18
309-00-2	Aldrin	U	46	10	1.7	46	19
1024-57-3	Heptachlor Epoxide	U	46	10	1.7	46	42
5103-74-2	gamma-Chlordane	U	46	10	1.7	46	22
5103-71-9	alpha-Chlordane	U	46	10	1.7	46	23
72-55-9	4,4'-DDE	J	180	10	3.3	89	22
959-98-8	Endosulfan I	U	46	10	1.7	46	15
60-57-1	Dieldrin	U	89	10	3.3	89	21
72-20-8	Endrin	U	89	10	3.3	89	37
72-54-8	4,4'-DDD		1200	10	3.3	89	31
33213-65-9	Endosulfan II	U	89	10	3.3	89	16
50-29-3	4,4'-DDT	J	79	10	3.3	89	22
7421-36-3	Endrin Aldehyde	U	89	10	3.3	89	19
72-43-5	Methoxychlor	U	460	10	17	460	99
1031-07-8	Endosulfan sulfate	U	89	10	3.3	89	24
53494-70-5	Endrin Ketone	U	89	10	3.3	89	26
8001-35-2	Toxaphene	U	890	10	33	890	350
877-09-8	Tetrachloro-m-Xylene		D				
2051-24-3	Decachlorobiphenyl		D				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 02-NOV-2007 19:12
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 42.0

Lab ID: SA6036-19
Client ID: 2W-SD-SD46-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG45073
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	4.0	1.0	1.7	4.0	1.3
58-89-9	gamma BHC	U	4.0	1.0	1.7	4.0	1.7
319-85-7	beta-BHC	U	4.0	1.0	1.7	4.0	1.7
319-86-8	delta-BHC	U	4.0	1.0	1.7	4.0	1.1
76-44-8	Heptachlor	U	4.0	1.0	1.7	4.0	1.6
309-00-2	Aldrin	U	4.0	1.0	1.7	4.0	1.7
1024-57-3	Heptachlor Epoxide	U	4.0	1.0	1.7	4.0	3.7
5103-74-2	gamma-Chlordane	U	4.0	1.0	1.7	4.0	2.0
5103-71-9	alpha-Chlordane	U	4.0	1.0	1.7	4.0	2.1
72-55-9	4,4'-DDE		40	1.0	3.3	7.8	1.9
959-98-8	Endosulfan I	U	4.0	1.0	1.7	4.0	1.3
60-57-1	Dieldrin	U	7.8	1.0	3.3	7.8	1.8
72-20-8	Endrin	U	7.8	1.0	3.3	7.8	3.2
72-54-8	4,4'-DDD		160	1.0	3.3	7.8	2.7
33213-65-9	Endosulfan II	U	7.8	1.0	3.3	7.8	1.4
50-29-3	4,4'-DDT		65	1.0	3.3	7.8	2.0
7421-36-3	Endrin Aldehyde	U	7.8	1.0	3.3	7.8	1.7
72-43-5	Methoxychlor	U	40	1.0	17	40	8.7
1031-07-8	Endosulfan sulfate	U	7.8	1.0	3.3	7.8	2.1
53494-70-5	Endrin Ketone	U	7.8	1.0	3.3	7.8	2.3
8001-35-2	Toxaphene	U	78	1.0	33	78	31
877-09-8	Tetrachloro-m-Xylene		71%				
2051-24-3	Decachlorobiphenyl		103%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 05-NOV-2007 19:18
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 58.4

Lab ID: SA6036-20DL
Client ID: 2W-SD-SD46-0204
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG45073
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	5.8	2.0	1.7	5.8	1.9
58-89-9	gamma BHC	U	5.8	2.0	1.7	5.8	2.5
319-85-7	beta-BHC	U	5.8	2.0	1.7	5.8	2.5
319-86-8	delta-BHC	U	5.8	2.0	1.7	5.8	1.6
76-44-8	Heptachlor	U	5.8	2.0	1.7	5.8	2.3
309-00-2	Aldrin	U	5.8	2.0	1.7	5.8	2.4
1024-57-3	Heptachlor Epoxide	U	5.8	2.0	1.7	5.8	5.4
5103-74-2	gamma-Chlordane	U	5.8	2.0	1.7	5.8	2.8
5103-71-9	alpha-Chlordane	U	5.8	2.0	1.7	5.8	3.0
72-55-9	4,4'-DDE	J	11	2.0	3.3	11	2.7
959-98-8	Endosulfan I	U	5.8	2.0	1.7	5.8	1.9
60-57-1	Dieldrin	U	11	2.0	3.3	11	2.6
72-20-8	Endrin	U	11	2.0	3.3	11	4.7
72-54-8	4,4'-DDD		180	2.0	3.3	11	3.9
33213-65-9	Endosulfan II	U	11	2.0	3.3	11	2.0
50-29-3	4,4'-DDT		16	2.0	3.3	11	2.8
7421-36-3	Endrin Aldehyde	U	11	2.0	3.3	11	2.4
72-43-5	Methoxychlor	U	58	2.0	17	58	12
1031-07-8	Endosulfan sulfate	U	11	2.0	3.3	11	3.1
53494-70-5	Endrin Ketone	U	11	2.0	3.3	11	3.3
8001-35-2	Toxaphene	U	110	2.0	33	110	44
877-09-8	Tetrachloro-m-Xylene		67%				
2051-24-3	Decachlorobiphenyl		90%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 02-NOV-2007 17:51
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 30.6

Lab ID: SA6036-16RA
Client ID: 2W-SD-SD49-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44926
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	5.6	1.0	1.7	5.6	1.8
58-89-9	gamma BHC	U	5.6	1.0	1.7	5.6	2.4
319-85-7	beta-BHC	U	5.6	1.0	1.7	5.6	2.4
319-86-8	delta-BHC	U	5.6	1.0	1.7	5.6	1.5
76-44-8	Heptachlor	U	5.6	1.0	1.7	5.6	2.2
309-00-2	Aldrin	U	5.6	1.0	1.7	5.6	2.3
1024-57-3	Heptachlor Epoxide	U	5.6	1.0	1.7	5.6	5.1
5103-74-2	gamma-Chlordane		14	1.0	1.7	5.6	2.7
5103-71-9	alpha-Chlordane		16	1.0	1.7	5.6	2.8
72-55-9	4,4'-DDE	J	11	1.0	3.3	11	2.6
959-98-8	Endosulfan I	U	5.6	1.0	1.7	5.6	1.8
60-57-1	Dieldrin	U	11	1.0	3.3	11	2.5
72-20-8	Endrin	U	11	1.0	3.3	11	4.5
72-54-8	4,4'-DDD		62	1.0	3.3	11	3.7
33213-65-9	Endosulfan II	U	11	1.0	3.3	11	2.0
50-29-3	4,4'-DDT		14	1.0	3.3	11	2.7
7421-36-3	Endrin Aldehyde	U	11	1.0	3.3	11	2.3
72-43-5	Methoxychlor	U	56	1.0	17	56	12
1031-07-8	Endosulfan sulfate	U	11	1.0	3.3	11	2.9
53494-70-5	Endrin Ketone	U	11	1.0	3.3	11	3.2
8001-35-2	Toxaphene	U	110	1.0	33	110	42
877-09-8	Tetrachloro-m-Xylene		69%				
2051-24-3	Decachlorobiphenyl		79%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 02-NOV-2007 17:24
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 20.7

Lab ID: SA6036-15RA
Client ID: 2W-SD-SD50-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44926
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	8.2	1.0	1.7	8.2	2.7
58-89-9	gamma BHC	U	8.2	1.0	1.7	8.2	3.5
319-85-7	beta-BHC	U	8.2	1.0	1.7	8.2	3.5
319-86-8	delta-BHC	U	8.2	1.0	1.7	8.2	2.2
76-44-8	Heptachlor	U	8.2	1.0	1.7	8.2	3.2
309-00-2	Aldrin	U	8.2	1.0	1.7	8.2	3.4
1024-57-3	Heptachlor Epoxide	U	8.2	1.0	1.7	8.2	7.6
5103-74-2	gamma-Chlordane		12	1.0	1.7	8.2	4.0
5103-71-9	alpha-Chlordane		11	1.0	1.7	8.2	4.2
72-55-9	4,4'-DDE	J	12	1.0	3.3	16	3.8
959-98-8	Endosulfan I	U	8.2	1.0	1.7	8.2	2.7
60-57-1	Dieldrin	U	16	1.0	3.3	16	3.7
72-20-8	Endrin	U	16	1.0	3.3	16	6.6
72-54-8	4,4'-DDD		79	1.0	3.3	16	5.5
33213-65-9	Endosulfan II	U	16	1.0	3.3	16	2.9
50-29-3	4,4'-DDT	J	27	1.0	3.3	16	4.0
7421-36-3	Endrin Aldehyde	U	16	1.0	3.3	16	3.4
72-43-5	Methoxychlor	U	82	1.0	17	82	18
1031-07-8	Endosulfan sulfate	U	16	1.0	3.3	16	4.3
53494-70-5	Endrin Ketone	U	16	1.0	3.3	16	4.7
8001-35-2	Toxaphene	U	160	1.0	33	160	63
877-09-8	Tetrachloro-m-Xylene		56%				
2051-24-3	Decachlorobiphenyl		68%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 02-NOV-2007 16:57
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 48.9

Lab ID: SA6036-14RA
Client ID: 2W-SD-SD50-0204
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44926
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	3.5	1.0	1.7	3.5	1.2
58-89-9	gamma BHC	U	3.5	1.0	1.7	3.5	1.5
319-85-7	beta-BHC	U	3.5	1.0	1.7	3.5	1.5
319-86-8	delta-BHC	U	3.5	1.0	1.7	3.5	0.95
76-44-8	Heptachlor	U	3.5	1.0	1.7	3.5	1.4
309-00-2	Aldrin	U	3.5	1.0	1.7	3.5	1.4
1024-57-3	Heptachlor Epoxide	U	3.5	1.0	1.7	3.5	3.2
5103-74-2	gamma-Chlordane	U	3.5	1.0	1.7	3.5	1.7
5103-71-9	alpha-Chlordane	U	3.5	1.0	1.7	3.5	1.8
72-55-9	4,4'-DDE	J	6.1	1.0	3.3	6.7	1.6
959-98-8	Endosulfan I	U	3.5	1.0	1.7	3.5	1.2
60-57-1	Dieldrin	U	6.7	1.0	3.3	6.7	1.6
72-20-8	Endrin	U	6.7	1.0	3.3	6.7	2.8
72-54-8	4,4'-DDD		22	1.0	3.3	6.7	2.3
33213-65-9	Endosulfan II	U	6.7	1.0	3.3	6.7	1.2
50-29-3	4,4'-DDT	J	4.5	1.0	3.3	6.7	1.7
7421-36-3	Endrin Aldehyde	U	6.7	1.0	3.3	6.7	1.4
72-43-5	Methoxychlor	U	35	1.0	17	35	7.5
1031-07-8	Endosulfan sulfate	U	6.7	1.0	3.3	6.7	1.8
53494-70-5	Endrin Ketone	U	6.7	1.0	3.3	6.7	2.0
8001-35-2	Toxaphene	U	67	1.0	33	67	26
877-09-8	Tetrachloro-m-Xylene		68%				
2051-24-3	Decachlorobiphenyl		91%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 02-NOV-2007 16:03
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 13.7

Lab ID: SA6036-12RA
Client ID: 2W-SD-SD51-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44926
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	12	1.0	1.7	12	4.1
58-89-9	gamma BHC	U	12	1.0	1.7	12	5.3
319-85-7	beta-BHC	U	12	1.0	1.7	12	5.3
319-86-8	delta-BHC	U	12	1.0	1.7	12	3.4
76-44-8	Heptachlor	U	12	1.0	1.7	12	4.8
309-00-2	Aldrin	U	12	1.0	1.7	12	5.1
1024-57-3	Heptachlor Epoxide	U	12	1.0	1.7	12	11
5103-74-2	gamma-Chlordane	U	12	1.0	1.7	12	6.1
5103-71-9	alpha-Chlordane	U	12	1.0	1.7	12	6.3
72-55-9	4,4'-DDE	J	13	1.0	3.3	24	5.8
959-98-8	Endosulfan I	U	12	1.0	1.7	12	4.1
60-57-1	Dieldrin	U	24	1.0	3.3	24	5.6
72-20-8	Endrin	U	24	1.0	3.3	24	9.9
72-54-8	4,4'-DDD		110	1.0	3.3	24	8.2
33213-65-9	Endosulfan II	U	24	1.0	3.3	24	4.4
50-29-3	4,4'-DDT	J	16	1.0	3.3	24	6.1
7421-36-3	Endrin Aldehyde	U	24	1.0	3.3	24	5.1
72-43-5	Methoxychlor	U	120	1.0	17	120	27
1031-07-8	Endosulfan sulfate	U	24	1.0	3.3	24	6.5
53494-70-5	Endrin Ketone	U	24	1.0	3.3	24	7.0
8001-35-2	Toxaphene	U	240	1.0	33	240	94
877-09-8	Tetrachloro-m-Xylene		64%				
2051-24-3	Decachlorobiphenyl		71%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 02-NOV-2007 16:30
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 37.3

Lab ID: SA6036-13DL
Client ID: 2W-SD-SD52-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44926
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	23	5.0	1.7	23	7.6
58-89-9	gamma BHC	U	23	5.0	1.7	23	9.8
319-85-7	beta-BHC	U	23	5.0	1.7	23	9.8
319-86-8	delta-BHC	U	23	5.0	1.7	23	6.3
76-44-8	Heptachlor	U	23	5.0	1.7	23	8.9
309-00-2	Aldrin	U	23	5.0	1.7	23	9.4
1024-57-3	Heptachlor Epoxide	U	23	5.0	1.7	23	21
5103-74-2	gamma-Chlordane	U	23	5.0	1.7	23	11
5103-71-9	alpha-Chlordane	U	23	5.0	1.7	23	12
72-55-9	4,4'-DDE	J	34	5.0	3.3	44	11
959-98-8	Endosulfan I	U	23	5.0	1.7	23	7.6
60-57-1	Dieldrin	U	44	5.0	3.3	44	10
72-20-8	Endrin	U	44	5.0	3.3	44	18
72-54-8	4,4'-DDD		340	5.0	3.3	44	15
33213-65-9	Endosulfan II	U	44	5.0	3.3	44	8.0
50-29-3	4,4'-DDT		420	5.0	3.3	44	11
7421-36-3	Endrin Aldehyde	U	44	5.0	3.3	44	9.4
72-43-5	Methoxychlor	U	230	5.0	17	230	49
1031-07-8	Endosulfan sulfate	U	44	5.0	3.3	44	12
53494-70-5	Endrin Ketone	U	44	5.0	3.3	44	13
8001-35-2	Toxaphene	U	440	5.0	33	440	170
877-09-8	Tetrachloro-m-Xylene		59%				
2051-24-3	Decachlorobiphenyl		74%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 26-OCT-2007 21:29
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 34.2

Lab ID: SA6036-9
Client ID: 2W-SD-SD53-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44926
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	5.0	1.0	1.7	5.0	1.6
58-89-9	gamma BHC	U	5.0	1.0	1.7	5.0	2.1
319-85-7	beta-BHC	U	5.0	1.0	1.7	5.0	2.1
319-86-8	delta-BHC	U	5.0	1.0	1.7	5.0	1.4
76-44-8	Heptachlor	U	5.0	1.0	1.7	5.0	2.0
309-00-2	Aldrin	U	5.0	1.0	1.7	5.0	2.0
1024-57-3	Heptachlor Epoxide	U	5.0	1.0	1.7	5.0	4.6
5103-74-2	gamma-Chlordane	U	5.0	1.0	1.7	5.0	2.4
5103-71-9	alpha-Chlordane	U	5.0	1.0	1.7	5.0	2.5
72-55-9	4,4'-DDE	J	3.0	1.0	3.3	9.6	2.3
959-98-8	Endosulfan I	U	5.0	1.0	1.7	5.0	1.6
60-57-1	Dieldrin	U	9.6	1.0	3.3	9.6	2.2
72-20-8	Endrin	U	9.6	1.0	3.3	9.6	4.0
72-54-8	4,4'-DDD	J	4.4	1.0	3.3	9.6	3.3
33213-65-9	Endosulfan II	U	9.6	1.0	3.3	9.6	1.8
50-29-3	4,4'-DDT	J	4.4	1.0	3.3	9.6	2.4
7421-36-3	Endrin Aldehyde	U	9.6	1.0	3.3	9.6	2.0
72-43-5	Methoxychlor	U	50	1.0	17	50	11
1031-07-8	Endosulfan sulfate	U	9.6	1.0	3.3	9.6	2.6
53494-70-5	Endrin Ketone	U	9.6	1.0	3.3	9.6	2.8
8001-35-2	Toxaphene	U	96	1.0	33	96	38
877-09-8	Tetrachloro-m-Xylene		56%				
2051-24-3	Decachlorobiphenyl		58%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 02-NOV-2007 15:36
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 53.8

Lab ID: SA6036-10DL
Client ID: 2W-SD-SD53-0204
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44926
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	32	10	1.7	32	10
58-89-9	gamma BHC	U	32	10	1.7	32	14
319-85-7	beta-BHC	U	32	10	1.7	32	14
319-86-8	delta-BHC	U	32	10	1.7	32	8.7
76-44-8	Heptachlor	U	32	10	1.7	32	12
309-00-2	Aldrin	U	32	10	1.7	32	13
1024-57-3	Heptachlor Epoxide	U	32	10	1.7	32	29
5103-74-2	gamma-Chlordane	U	32	10	1.7	32	16
5103-71-9	alpha-Chlordane	U	32	10	1.7	32	16
72-55-9	4,4'-DDE	J	19	10	3.3	61	15
959-98-8	Endosulfan I	U	32	10	1.7	32	10
60-57-1	Dieldrin	U	61	10	3.3	61	14
72-20-8	Endrin	U	61	10	3.3	61	25
72-54-8	4,4'-DDD	J	24	10	3.3	61	21
33213-65-9	Endosulfan II	U	61	10	3.3	61	11
50-29-3	4,4'-DDT	U	61	10	3.3	61	16
7421-36-3	Endrin Aldehyde	U	61	10	3.3	61	13
72-43-5	Methoxychlor	U	320	10	17	320	68
1031-07-8	Endosulfan sulfate	U	61	10	3.3	61	17
53494-70-5	Endrin Ketone	U	61	10	3.3	61	18
8001-35-2	Toxaphene	U	610	10	33	610	240
877-09-8	Tetrachloro-m-Xylene		D				
2051-24-3	Decachlorobiphenyl		D				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 26-OCT-2007 21:02
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 14.1

Lab ID: SA6036-8
Client ID: 2W-SD-SD54-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44926
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	12	1.0	1.7	12	4.0
58-89-9	gamma BHC	U	12	1.0	1.7	12	5.2
319-85-7	beta-BHC	U	12	1.0	1.7	12	5.2
319-86-8	delta-BHC	U	12	1.0	1.7	12	3.3
76-44-8	Heptachlor	U	12	1.0	1.7	12	4.7
309-00-2	Aldrin	U	12	1.0	1.7	12	5.0
1024-57-3	Heptachlor Epoxide	U	12	1.0	1.7	12	11
5103-74-2	gamma-Chlordane	U	12	1.0	1.7	12	5.9
5103-71-9	alpha-Chlordane	U	12	1.0	1.7	12	6.2
72-55-9	4,4'-DDE	J	6.4	1.0	3.3	23	5.7
959-98-8	Endosulfan I	U	12	1.0	1.7	12	4.0
60-57-1	Dieldrin	U	23	1.0	3.3	23	5.4
72-20-8	Endrin	U	23	1.0	3.3	23	9.7
72-54-8	4,4'-DDD	U	23	1.0	3.3	23	8.0
33213-65-9	Endosulfan II	U	23	1.0	3.3	23	4.3
50-29-3	4,4'-DDT	U	23	1.0	3.3	23	5.9
7421-36-3	Endrin Aldehyde	U	23	1.0	3.3	23	5.0
72-43-5	Methoxychlor	U	120	1.0	17	120	26
1031-07-8	Endosulfan sulfate	U	23	1.0	3.3	23	6.4
53494-70-5	Endrin Ketone	U	23	1.0	3.3	23	6.9
8001-35-2	Toxaphene	U	230	1.0	33	230	92
877-09-8	Tetrachloro-m-Xylene		41%				
2051-24-3	Decachlorobiphenyl		53%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 26-OCT-2007 20:34
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 23.2

Lab ID: SA6036-6
Client ID: 2W-SD-SD55-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44926
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	7.3	1.0	1.7	7.3	2.4
58-89-9	gamma BHC	U	7.3	1.0	1.7	7.3	3.2
319-85-7	beta-BHC	U	7.3	1.0	1.7	7.3	3.2
319-86-8	delta-BHC	U	7.3	1.0	1.7	7.3	2.0
76-44-8	Heptachlor	U	7.3	1.0	1.7	7.3	2.9
309-00-2	Aldrin	U	7.3	1.0	1.7	7.3	3.0
1024-57-3	Heptachlor Epoxide	U	7.3	1.0	1.7	7.3	6.7
5103-74-2	gamma-Chlordane	U	7.3	1.0	1.7	7.3	3.6
5103-71-9	alpha-Chlordane	U	7.3	1.0	1.7	7.3	3.7
72-55-9	4,4'-DDE	J	3.9	1.0	3.3	14	3.4
959-98-8	Endosulfan I	U	7.3	1.0	1.7	7.3	2.4
60-57-1	Dieldrin	U	14	1.0	3.3	14	3.3
72-20-8	Endrin	U	14	1.0	3.3	14	5.9
72-54-8	4,4'-DDD	U	14	1.0	3.3	14	4.9
33213-65-9	Endosulfan II	U	14	1.0	3.3	14	2.6
50-29-3	4,4'-DDT	U	14	1.0	3.3	14	3.6
7421-36-3	Endrin Aldehyde	U	14	1.0	3.3	14	3.0
72-43-5	Methoxychlor	U	73	1.0	17	73	16
1031-07-8	Endosulfan sulfate	U	14	1.0	3.3	14	3.9
53494-70-5	Endrin Ketone	U	14	1.0	3.3	14	4.2
8001-35-2	Toxaphene	U	140	1.0	33	140	56
877-09-8	Tetrachloro-m-Xylene		61%				
2051-24-3	Decachlorobiphenyl		73%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 26-OCT-2007 20:07
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 60.1

Lab ID: SA6036-4
Client ID: 2W-SD-SD56-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44926
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	2.8	1.0	1.7	2.8	0.94
58-89-9	gamma BHC		8.2	1.0	1.7	2.8	1.2
319-85-7	beta-BHC	U	2.8	1.0	1.7	2.8	1.2
319-86-8	delta-BHC	U	2.8	1.0	1.7	2.8	0.78
76-44-8	Heptachlor	U	2.8	1.0	1.7	2.8	1.1
309-00-2	Aldrin	U	2.8	1.0	1.7	2.8	1.2
1024-57-3	Heptachlor Epoxide	U	2.8	1.0	1.7	2.8	2.6
5103-74-2	gamma-Chlordane	U	2.8	1.0	1.7	2.8	1.4
5103-71-9	alpha-Chlordane	U	2.8	1.0	1.7	2.8	1.4
72-55-9	4,4'-DDE	J	2.7	1.0	3.3	5.5	1.3
959-98-8	Endosulfan I	U	2.8	1.0	1.7	2.8	0.94
60-57-1	Dieldrin	U	5.5	1.0	3.3	5.5	1.3
72-20-8	Endrin	U	5.5	1.0	3.3	5.5	2.3
72-54-8	4,4'-DDD	U	5.5	1.0	3.3	5.5	1.9
33213-65-9	Endosulfan II	U	5.5	1.0	3.3	5.5	1.00
50-29-3	4,4'-DDT	J	6.0	1.0	3.3	5.5	1.4
7421-36-3	Endrin Aldehyde	U	5.5	1.0	3.3	5.5	1.2
72-43-5	Methoxychlor	U	28	1.0	17	28	6.1
1031-07-8	Endosulfan sulfate	U	5.5	1.0	3.3	5.5	1.5
53494-70-5	Endrin Ketone	U	5.5	1.0	3.3	5.5	1.6
8001-35-2	Toxaphene	U	55	1.0	33	55	22
877-09-8	Tetrachloro-m-Xylene		66%				
2051-24-3	Decachlorobiphenyl		*126%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 27-OCT-2007 09:38
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 33.7

Lab ID: SA6036-11
Client ID: 2W-FD-101807-01
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44925
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	50	1.0	17	50	47
11104-28-2	Aroclor-1221	U	50	1.0	17	50	36
11141-16-5	Aroclor-1232	U	50	1.0	17	50	16
53469-21-9	Aroclor-1242	U	50	1.0	17	50	20
12672-29-6	Aroclor-1248	U	50	1.0	17	50	17
11097-69-1	Aroclor-1254	U	50	1.0	17	50	38
11096-82-5	Aroclor-1260	U	50	1.0	17	50	42
877-09-8	Tetrachloro-m-xylene		88%				
2051-24-3	Decachlorobiphenyl		68%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 03-NOV-2007 01:27
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 42.0

Lab ID: SA6036-19
Client ID: 2W-SD-SD46-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG45074
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	40	1.0	17	40	38
11104-28-2	Aroclor-1221	U	40	1.0	17	40	28
11141-16-5	Aroclor-1232	U	40	1.0	17	40	13
53469-21-9	Aroclor-1242	U	40	1.0	17	40	16
12672-29-6	Aroclor-1248	U	40	1.0	17	40	14
11097-69-1	Aroclor-1254	U	40	1.0	17	40	31
11096-82-5	Aroclor-1260		340	1.0	17	40	33
877-09-8	Tetrachloro-m-xylene		96%				
2051-24-3	Decachlorobiphenyl		83%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 03-NOV-2007 01:56
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 58.4

Lab ID: SA6036-20
Client ID: 2W-SD-SD46-0204
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG45074
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	29	1.0	17	29	27
11104-28-2	Aroclor-1221	U	29	1.0	17	29	20
11141-16-5	Aroclor-1232	U	29	1.0	17	29	9.1
53469-21-9	Aroclor-1242	U	29	1.0	17	29	11
12672-29-6	Aroclor-1248	U	29	1.0	17	29	9.8
11097-69-1	Aroclor-1254	U	29	1.0	17	29	22
11096-82-5	Aroclor-1260		220	1.0	17	29	24
877-09-8	Tetrachloro-m-xylene		86%				
2051-24-3	Decachlorobiphenyl		68%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 27-OCT-2007 12:35
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 16.6

Lab ID: SA6036-17
Client ID: 2W-SD-SD45-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44925
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	100	1.0	17	100	96
11104-28-2	Aroclor-1221	U	100	1.0	17	100	72
11141-16-5	Aroclor-1232	U	100	1.0	17	100	32
53469-21-9	Aroclor-1242	U	100	1.0	17	100	40
12672-29-6	Aroclor-1248	U	100	1.0	17	100	34
11097-69-1	Aroclor-1254	U	100	1.0	17	100	78
11096-82-5	Aroclor-1260	U	100	1.0	17	100	84
877-09-8	Tetrachloro-m-xylene		93%				
2051-24-3	Decachlorobiphenyl		66%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 03-NOV-2007 00:57
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 36.9

Lab ID: SA6036-18
Client ID: 2W-SD-SD45-0002
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG45074
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	46	1.0	17	46	43
11104-28-2	Aroclor-1221	U	46	1.0	17	46	32
11141-16-5	Aroclor-1232	U	46	1.0	17	46	14
53469-21-9	Aroclor-1242	U	46	1.0	17	46	18
12672-29-6	Aroclor-1248	U	46	1.0	17	46	15
11097-69-1	Aroclor-1254	U	46	1.0	17	46	35
11096-82-5	Aroclor-1260	U	46	1.0	17	46	38
877-09-8	Tetrachloro-m-xylene		81%				
2051-24-3	Decachlorobiphenyl		92%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 27-OCT-2007 12:06
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 30.6

Lab ID: SA6036-16
Client ID: 2W-SD-SD49-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44925
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	56	1.0	17	56	52
11104-28-2	Aroclor-1221	U	56	1.0	17	56	39
11141-16-5	Aroclor-1232	U	56	1.0	17	56	17
53469-21-9	Aroclor-1242	U	56	1.0	17	56	22
12672-29-6	Aroclor-1248	U	56	1.0	17	56	19
11097-69-1	Aroclor-1254	U	56	1.0	17	56	42
11096-82-5	Aroclor-1260	U	56	1.0	17	56	46
877-09-8	Tetrachloro-m-xylene		82%				
2051-24-3	Decachlorobiphenyl		62%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 27-OCT-2007 11:36
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 20.7

Lab ID: SA6036-15
Client ID: 2W-SD-SD50-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44925
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	82	1.0	17	82	77
11104-28-2	Aroclor-1221	U	82	1.0	17	82	58
11141-16-5	Aroclor-1232	U	82	1.0	17	82	26
53469-21-9	Aroclor-1242	U	82	1.0	17	82	32
12672-29-6	Aroclor-1248	U	82	1.0	17	82	28
11097-69-1	Aroclor-1254	U	82	1.0	17	82	63
11096-82-5	Aroclor-1260		370	1.0	17	82	68
877-09-8	Tetrachloro-m-xylene		75%				
2051-24-3	Decachlorobiphenyl		65%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 27-OCT-2007 11:07
Report Date: 11/08/2007
Matrix: SOIL
% Solids: 48.9

Lab ID: SA6036-14
Client ID: 2W-SD-SD50-0204
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44925
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	35	1.0	17	35	33
11104-28-2	Aroclor-1221	U	35	1.0	17	35	24
11141-16-5	Aroclor-1232	U	35	1.0	17	35	11
53469-21-9	Aroclor-1242	U	35	1.0	17	35	14
12672-29-6	Aroclor-1248	U	35	1.0	17	35	12
11097-69-1	Aroclor-1254	U	35	1.0	17	35	26
11096-82-5	Aroclor-1260	J	28	1.0	17	35	29
877-09-8	Tetrachloro-m-xylene		95%				
2051-24-3	Decachlorobiphenyl		77%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 27-OCT-2007 10:08
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 13.7

Lab ID: SA6036-12
Client ID: 2W-SD-SD51-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44925
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	120	1.0	17	120	120
11104-28-2	Aroclor-1221	U	120	1.0	17	120	87
11141-16-5	Aroclor-1232	U	120	1.0	17	120	38
53469-21-9	Aroclor-1242	U	120	1.0	17	120	49
12672-29-6	Aroclor-1248	U	120	1.0	17	120	41
11097-69-1	Aroclor-1254	U	120	1.0	17	120	94
11096-82-5	Aroclor-1260	U	120	1.0	17	120	100
877-09-8	Tetrachloro-m-xylene		82%				
2051-24-3	Decachlorobiphenyl		67%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 27-OCT-2007 10:37
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 37.3

Lab ID: SA6036-13
Client ID: 2W-SD-SD52-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44925
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	46	1.0	17	46	43
11104-28-2	Aroclor-1221	U	46	1.0	17	46	32
11141-16-5	Aroclor-1232	U	46	1.0	17	46	14
53469-21-9	Aroclor-1242	U	46	1.0	17	46	18
12672-29-6	Aroclor-1248	U	46	1.0	17	46	15
11097-69-1	Aroclor-1254	U	46	1.0	17	46	35
11096-82-5	Aroclor-1260	U	46	1.0	17	46	38
877-09-8	Tetrachloro-m-xylene		80%				
2051-24-3	Decachlorobiphenyl		62%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 27-OCT-2007 06:11
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 34.2

Lab ID: SA6036-9
Client ID: 2W-SD-SD53-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44925
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	50	1.0	17	50	47
11104-28-2	Aroclor-1221	U	50	1.0	17	50	35
11141-16-5	Aroclor-1232	U	50	1.0	17	50	16
53469-21-9	Aroclor-1242	U	50	1.0	17	50	20
12672-29-6	Aroclor-1248	U	50	1.0	17	50	17
11097-69-1	Aroclor-1254	U	50	1.0	17	50	38
11096-82-5	Aroclor-1260	U	50	1.0	17	50	41
877-09-8	Tetrachloro-m-xylene		82%				
2051-24-3	Decachlorobiphenyl		67%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 27-OCT-2007 09:09
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 53.8

Lab ID: SA6036-10
Client ID: 2W-SD-SD53-0204
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44925
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	32	1.0	17	32	30
11104-28-2	Aroclor-1221	U	32	1.0	17	32	22
11141-16-5	Aroclor-1232	U	32	1.0	17	32	9.8
53469-21-9	Aroclor-1242	U	32	1.0	17	32	12
12672-29-6	Aroclor-1248	U	32	1.0	17	32	11
11097-69-1	Aroclor-1254	U	32	1.0	17	32	24
11096-82-5	Aroclor-1260	U	32	1.0	17	32	26
877-09-8	Tetrachloro-m-xylene		87%				
2051-24-3	Decachlorobiphenyl		89%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 27-OCT-2007 05:42
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 14.1

Lab ID: SA6036-8
Client ID: 2W-SD-SD54-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44925
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	120	1.0	17	120	110
11104-28-2	Aroclor-1221	U	120	1.0	17	120	85
11141-16-5	Aroclor-1232	U	120	1.0	17	120	38
53469-21-9	Aroclor-1242	U	120	1.0	17	120	48
12672-29-6	Aroclor-1248	U	120	1.0	17	120	40
11097-69-1	Aroclor-1254	U	120	1.0	17	120	92
11096-82-5	Aroclor-1260	U	120	1.0	17	120	99
877-09-8	Tetrachloro-m-xylene		62%				
2051-24-3	Decachlorobiphenyl		54%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 27-OCT-2007 05:12
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 23.2

Lab ID: SA6036-6
Client ID: 2W-SD-SD55-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44925
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	73	1.0	17	73	69
11104-28-2	Aroclor-1221	U	73	1.0	17	73	52
11141-16-5	Aroclor-1232	U	73	1.0	17	73	23
53469-21-9	Aroclor-1242	U	73	1.0	17	73	29
12672-29-6	Aroclor-1248	U	73	1.0	17	73	24
11097-69-1	Aroclor-1254	U	73	1.0	17	73	56
11096-82-5	Aroclor-1260	U	73	1.0	17	73	60
877-09-8	Tetrachloro-m-xylene		98%				
2051-24-3	Decachlorobiphenyl		81%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 27-OCT-2007 04:43
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 60.1

Lab ID: SA6036-4
Client ID: 2W-SD-SD56-0001
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44925
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	28	1.0	17	28	27
11104-28-2	Aroclor-1221	U	28	1.0	17	28	20
11141-16-5	Aroclor-1232	U	28	1.0	17	28	8.8
53469-21-9	Aroclor-1242	U	28	1.0	17	28	11
12672-29-6	Aroclor-1248	U	28	1.0	17	28	9.5
11097-69-1	Aroclor-1254	U	28	1.0	17	28	22
11096-82-5	Aroclor-1260	U	28	1.0	17	28	23
877-09-8	Tetrachloro-m-xylene		*121%				
2051-24-3	Decachlorobiphenyl		115%				

APPENDIX C

REGIONAL FORMS

See Dv Report

EPA-NE
Data Validation Worksheet Cover Page - Page 1

Site Name _____
Reference No. _____

REGION I ORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name _____
Case/Project No. _____
SDG No. _____
No. of Samples/Matrix _____

SOW/Method No. _____
Sampling Date(s) _____
Shipping Date(s) _____
Date Rec'd by lab _____

Traffic Report Sample Nos. _____

Trip Blank No. _____
Equipment Blank No. _____
Bottle Blank No. _____
Field Duplicate Nos. _____

PES Nos. _____

The Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision _____ was used to evaluate the data and/or approved modifications to the EPA-NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attach modified criteria from EPA approved QAPjP or amendment to QAPjP).

A Tier II or Tier III evaluation was used to validate the data (circle one). If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc. that received partial Tier III validation

_____

The data were evaluated based upon the following parameters:

- Overall Evaluation of Data
- Data Completeness (CSF Audit - Tier I)
- Preservation & Technical Holding Times
- GC/MS & GC/ECD Instrument Performance Check
- Initial & Continuing Calibrations
- Blanks
- Surrogate Compounds
- Internal Standards
- Matrix Spike/Matrix Spike Duplicate
- Field Duplicates
- Sensitivity Check
- PE Samples/Accuracy Check
- Target Compound Identification
- Compound Quantitation and Reported Quantitation Limits
- TICs
- Semivolatile and Pesticide/PCB Cleanup
- System Performance

Region I Definitions and Qualifiers:

A - Acceptable Data
J - Numerical value associated with compound is an estimated quantity.
R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.
U - Compound not detected at that numerical sample quantitation limit.
UJ - The sample quantitation limit is an estimated quantity.
TB, BB, EB - Compound detected in aqueous trip blank, aqueous bottle blank, or aqueous equipment blank associated with soil/sediment samples.

Validator's Name _____ Company Name _____ Phone Number _____

Date Validation Started _____ Date Validation Completed _____

EPA-NE
Data Validation Worksheet Cover Page - Page 2

Check if all criteria are met and no hard copy worksheet provided. Indicate NA if worksheet is not applicable to analytical method. Note: there is no standard worksheet for System Performance, however, the validator must document all system performance issues in the Data Validation Memorandum.

VOA/SV worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	_____
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	_____
VOA/SV-II	GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)	_____
VOA/SV-III	INITIAL CALIBRATION	_____
VOA/SV-IV	CONTINUING CALIBRATION	_____
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	_____
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	_____
VOA-VI	VOA SURROGATE SPIKE RECOVERIES	_____
SV-VI	SV SURROGATE SPIKE RECOVERIES	_____
VOA/SV-VII	INTERNAL STANDARD PERFORMANCE	_____
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	_____
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	_____
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	_____
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	_____
VOA/SV-Pest/PCB-XII	TARGET COMPOUND IDENTIFICATION	_____
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	_____
VOA/SV-XIV	TENTATIVELY IDENTIFIED COMPOUNDS	_____
VOA/SV-XV	SEMIVOLATILE CLEANUP	_____
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	_____

Pest/PCB worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	_____
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	_____
Pest/PCB-IIA	GC/ECD INSTRUMENT PERFORMANCE CHECK-RESOLUTION	_____
Pest/PCB-IIB	GC/ECD INSTRUMENT PERFORMANCE CHECK-RETENTION TIMES	_____
Pest/PCB-IIC	GC/ECD INSTRUMENT PERFORMANCE CHECK-ACCURACY CHECK OF INITIAL CALIBRATION	_____
Pest/PCB-IID	GC/ECD INSTRUMENT PERFORMANCE CHECK-PESTICIDE DEGRADATION	_____
Pest/PCB-III	INITIAL CALIBRATION	_____
Pest/PCB-IV	CONTINUING CALIBRATION	_____
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	_____
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	_____
Pest/PCB-VI	SURROGATE COMPOUNDS: SPIKE RECOVERIES AND RETENTION TIME SHIFT	_____
Pest/PCB-VII	PESTICIDE CLEANUP	_____
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	_____
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	_____
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	_____
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	_____
Pest/PCB-XII	COMPOUND IDENTIFICATION	_____
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	_____
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	_____

I certify that all criteria were met for the worksheets checked above.

Signature:_____ Name:_____

Date: _____

The data validator generates a Data Validation Report, applicable to Data Validation Tiers II and III, that consists of the following components in the order specified below: (Refer to Section 11 for a description of each of the Data Validation Report components).

1. Organic Regional Data Assessment/Inorganic Regional Data Assessment (ORDA/IRDA) Form
2. Data Validation Memorandum
   a. Narrative
   b. Table I-Qualifier Recommendation Summary Table
   c. Table II-Overall Evaluation of Data
   d. Table III-Tentatively Identified Compounds
   e. Data Summary Tables
3. Standard Data Validation Worksheets
   a. Manual
   b. Automated Data Review Reports (i.e., CADRE)
4. Support Documentation
   a. Copy of non-CLP analytical method, e.g., DAS methods, modified EPA methods
   b. Copies of PES Score Reports/Vendor PES QC Acceptance Limits
   c. Copies of Telephone Logs/Communication Forms for:
      - RSCC communications
      - Requests for laboratory data resubmissions/clarifications
      - Communications with samplers resolving sampling problems
      - Communications with TPO/Lead Chemist to report contractually-deficient data for rejection/reduced payment
      - Communications with EPA Site Manager concerning possible data rejection
      - EPA Site Manager authorization for alternate DV tier
   d. Copies of data supporting recommendations for reduced payment resulting from CSF Audit and/or PE sample result evaluation
   e. Original data to support recommendations for data rejection/non-payment identified from Tier II or Tier III data validation
   f. Copies of field sampling notes and/or field report supplied by field sampler
   g. Copies of EPA-approved amendments to QAPjP and/or SAP describing modified criteria to be used for validating site data
5. CSF Completeness Evidence Audit
6. DQO Summary Form

The data validator is responsible for implementing all corrective actions required by the contractor Lead Chemist in response to EPA-NE data validation oversight findings.

~~OK~~ MDL 12-2707 NA

EPA-NE - Data Validation Worksheet

Overall Evaluation of Data - Data Validation Memorandum - Table II

VOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: _____ Date: _____

OK

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

SEMIVOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: _____ Date: _____

OK

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB

COMPLETE SDG FILE (CSF) AUDIT

Organic Fractions: _____

Missing Information	Date Lab Contacted	Date Received

Validator: _____ Date: _____

OK

Sampler:_____ Company:_____ Contacted: Yes No Date:_____

I. PRESERVATION AND HOLDING TIMES - Circle sample numbers with exceeded technical holding times or omitted preservation.
List all required preservation codes and circle omitted preservation codes.
Circle all exceeded technical holding times.
Identify extraction technique after "# of Days"/(*Extraction Code).

Sample No. (TR No.)	Matrix	Pres. Code	Date Sampled	VOA			BNA					PEST/PCB				
				Date Analyzed	# of Days from Samp. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action

Preservation Code:
1. Cool @ 4°C (± 2°)
2. Preserve with HCl to at least pH 2
3. Protect from light
4. Freeze
5. Room Temperature (Avoid excessive heat)

(*Extraction Code:)
L/L - Liquid/Liquid
SON - Sonication
SEP - Separatory Funnel
SOX - Soxhlet
SPE - Solid Phase Extraction

Action Code:
J - Estimate (J) Detected Values
UJ - Estimate (UJ) Non-Detected Values
R - Reject (R) Non-Detected Values

Validator: _____ Date: _____

OK

II. GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)

List all Instrument Performance Checks that are outside method QC tuning acceptance criteria.

Volatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action

Comments:

Semivolatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action

Comments:

If tuning compounds and criteria are different from those specified in CLP SOW OLM03.1, then the validator should include a copy of the method-specific tuning criteria with this worksheet.

Validator:_____ Date:_____

See DV Report

EPA-NE - Data Validation Worksheet
VOA/SV-III

III. INITIAL CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Instrument	Parameter	Matrix	Compound	% RSD	$\overline{RRF}$	Samples Affected	Action

Comments:

Validator: _____

Date: _____

See DV Report

EPA-NE - Data Validation Worksheet
VOA/SV-IV

IV. CONTINUING CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Date of CCAL	Instrument	Parameter	Matrix	Compound	%D	RRF	Samples Affected	Action

Comments:

Validator:_____ Date:_____

OK

EPA-NE - Data Validation Worksheet

VOA/SV - Pest/PCB-V-A

V. BLANK ANALYSIS

List the blank contamination below.

Sampler: _____ Company: _____

Concentration Level:_____

Contacted: Yes No Date:_____

1. Laboratory: Method, Storage and Instrument Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

2. Field: Equipment (Rinsate), Trip and Bottle Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

Validator:_____

Date:_____

OK

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-V-B

3. **Blank Actions** - List the maximum concentrations of blank compounds.

Compound	Type of Blank	Date Blank Sampled/Originated	Max. Conc. (units)	Action Level (units)	Sample QL	Samples Affected	Action

Comments: _____

_____

Validator: _____ Date: _____

N/A

EPA-NE - Data Validation Worksheet
VOA-VI

VI. VOA SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Volatile Method QC Acceptance Criteria				
	Toluene-d_8	BFB	DCE-d_4	Other:	
OLM03.2	Water 88-110 Soil 84-138	Water 86-115 Soil 59-113	Water 76-114 Soil 70-121		
OLC02.1	NA	80-120	NA		
Other:					
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

Validator:_____ Date:_____

See DV Report

VI. SV SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Base/Neutral Method QC Acceptance Criteria					
	NBZ-d_5	2-FBP	TPH-d_{14}	1,2-DCB-d_4*	Other:	
OLM03.2	Water Soil 35-114 23-120	Water Soil 43-116 30-115	Water Soil 33-141 18-137	Water Soil 16-110 20-130		
OLC02.1	40-110	30-110	20-140	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

Method	Acid Method QC Acceptance Criteria					
	Phenol-d_5	2-FP	2,4,6-TBP	2-CP-d_4*	Other:	
OLM03.2	Water Soil 10-110 24-113	Water Soil 21-110 25-121	Water Soil 10-123 19-122	Water Soil 33-110 20-130		
OLC02.1	15-115	15-110	15-130	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

* Advisory Surrogates - OLM03.2

Validator:_____ Date:_____

See DV Report

EPA-NE - Data Validation Worksheet
VOA/SV-VII

VII. INTERNAL STANDARD PERFORMANCE

List the internal standards that are outside the area count and retention time method QC acceptance criteria.
IS Area Count method QC acceptance criteria:_____
IS Retention Time method QC acceptance criteria:_____

Sample Number (TR#)	Date and Time Analyzed	Instrument	Parameter	IS Outside Area Count and/or RT Criteria	__IS Area	RT Shift	Acceptable Range (IS area or RT shift)	Action

Validator:_____ Date:_____

See Dv Report

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-VIII

VIII. MATRIX SPIKE/MATRIX SPIKE DUPLICATE - List all MS/MSD analytes that are outside method QC acceptance criteria. Use a separate worksheet for each MS/MSD pair.

Sample # _____ Matrix _____ Concentration Level _____

Parameter	Compound	MS %Rec	MSD %Rec	RPD	Method QC Limits		Concentration			% RSD	Action
					% Rec	RPD	Unspiked Sample	MS	MSD		

Validator: _____ Date: _____

OK

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-IX

IX. FIELD DUPLICATE PRECISION - List all field duplicate analytes that are outside criteria.

Use a separate worksheet for each field duplicate pair.

Sample Number _____ Duplicate Sample Number _____ Matrix _____

Parameter	Compound	Sample Conc.	Sample QL		Duplicate Conc.	Duplicate QL		RPD	QC Acceptance Criteria RPD or NA*	Action
			SQL	2xSQL		SQL	2xSQL			

* For instances where one duplicate result is ND (or reported less than the sample QL).

Does the MS/MSD data indicate acceptable laboratory precision? Y N

Comments: _____

_____

Sampler Name: _____ Contractor Name: _____ Date Contacted: _____

Reason for Contact and resolution obtained: _____

Validator: _____ Date: _____

OK

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-X

X. SENSITIVITY CHECK (Method Detection Limit Study)

List all compounds, surrogates, and internal standards that are outside the MDL criteria.

- Has an appropriate MDL study been submitted with seven replicates for each compound and matrix of interest? Y N
- Date of Preparation/Analysis: _____ Within 1 year? Y N
- Instrument I.D.: _____ Same as samples? Y N
- Column I.D.: _____ Same as samples? Y N

Matrix	Compound	MDL > QL	Method QC Limits < 80% or > 120%	IS Outside Area Count and/or RT Criteria	RSD > 20%	Samples Affected	Action

If an MDL study has not been submitted, use only the LFB results to evaluate data.

(Laboratory Fortified Blank) - List all LFB compounds, surrogates and internal standards that are outside criteria.

- Has an appropriate and complete LFB been submitted at the proper frequency? Y N
- Does it contain all target compounds at the method-required QLs? Y N
- Was the LFB spiked with a standard from a source (vendor) independent of the calibration standard? Y N

Matrix	Compound	Method QC Limits < 60% or > 140% Other:	IS Outside Area Count and/or RT Criteria	Samples Affected	Action

Validator: _____ Date: _____

See Dv Report

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XI

XI. ACCURACY CHECK (Performance Evaluation Results) - List all analytes that are outside criteria.

SDG No: _____ CASE: _____

Are more than one-half of the PES analytes within criteria for each parameter. Y N

PE Sample Number	Ampule Number	Parameter	Type of PES	Matrix	Analyte	Conc.	Region I EPA PES Scores*	Non-EPA PES Scores**	Samples Affected	Action

* For Region I PESs indicate the Region I PES Score Report Result: Action High; Action Low; TCL MISS; TCL CONTAMINANT; TIC HIT; TIC MISS; TIC CONTAMINANT

** For Non-EPA PESs indicate the Non-EPA PES Score: PES COMPOUND MISS; PES COMPOUND CONTAMINANT; PES COMPOUND HIT (% Recovery Limits)

Validator: _____ Date: _____

OK

XII. TARGET COMPOUND IDENTIFICATION - List the analytes that are outside the acceptance criteria.

Sample Number	Compound	___MS Ions	____RRT	Action

Validator: _____

Date: _____

OK - See DV Report

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XIII

XIII. SAMPLE QUANTITATION

Recalculate, from the raw data, the concentrations for one positive detect and one reported sample quantitation limit for a non-detect in a diluted sample or soil sample per fraction. (Note: Although Section XIII, C.1.a, requires that one calculation for each fraction in each sample be performed, the validator is only required to reproduce an example, for each fraction, of one positive detect and one sample quantitation limit calculation on this worksheet.)

Do all soil/sediment samples have % solids greater than 30%? Y N
If no, list sample numbers_____

Fraction		Calculation
VOA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
BNA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
Pesticide/PCB		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		

Validator:_____ Date:_____

OIL

XIV. TENTATIVELY IDENTIFIED COMPOUNDS (TICs)

List the 5 TICs having the highest concentration for each sample parameter.

Sample Number	Parameter	Compound	____RRT	__Est. Conc.	Action

Validator: _____

Date: _____

See DV Report

EPA-NE - Data Validation Worksheet
VOA/SV-XV

XV. SEMIVOLATILE CLEANUP - List all analytes that are outside method cleanup QC criteria.

Cleanup Procedure	Instrument # or Lot #	Date/Time GPC Calibrated or Check Solution Analyzed	Compound	% Rec	QC Limits	Samples Affected	Action

Did the GPC column meet; resolution requirements? Y or N
peak shape requirements? Y or N
retention time shift requirements? Y or N

Was the GPC calibration, Silica Gel cleanup checked at the method required frequency with correct compounds and concentrations? Y or N

Were all compounds less than QL for the GPC/Silica Gel/Acid-Partition blank? Y or N

Did the blank surrogate recoveries and IS area counts and RTs (if added) meet method QC acceptance criteria? Y or N

Comments:_____

Validator:_____ Date:_____

APPENDIX D

SUPPORT DOCUMENTATION

HOLDTIME

SDG SA6036

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	2W-SD-SD53-0204	SA6036-010	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
HG	MG/KG	2W-SD-SD57-0001	SA6036-002	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
HG	MG/KG	2W-SD-SD56-0001	SA6036-004	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
HG	MG/KG	2W-SD-SD45-0001	SA6036-017	NM	10/18/2007	10/30/2007	10/31/2007	12	1	13
HG	MG/KG	2W-SD-SD54-0001	SA6036-008	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
HG	MG/KG	2W-SD-SD53-0001	SA6036-009	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
HG	MG/KG	2W-SD-SD52-0001	SA6036-013	NM	10/18/2007	10/30/2007	10/31/2007	12	1	13
HG	MG/KG	2W-SD-SD51-0001	SA6036-012	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
HG	MG/KG	2W-FD-101807-01	SA6036-011	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
HG	MG/KG	2W-SD-SD50-0001	SA6036-015	NM	10/18/2007	10/30/2007	10/31/2007	12	1	13
HG	MG/KG	2W-SD-SD49-0001	SA6036-016	NM	10/18/2007	10/30/2007	10/31/2007	12	1	13
HG	MG/KG	2W-SD-SD46-0204	SA6036-020	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	MG/KG	2W-SD-SD46-0001	SA6036-019	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	MG/KG	2W-SD-SD45-0002	SA6036-018	NM	10/18/2007	10/30/2007	10/31/2007	12	1	13
HG	MG/KG	2W-SD-SD50-0204	SA6036-014	NM	10/18/2007	10/30/2007	10/31/2007	12	1	13

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	2W-SD-SD55-0001	SA6036-006	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
M	MG/KG	2W-SD-SD46-0204	SA6036-020	NM	10/19/2007	10/31/2007	11/3/2007	12	3	15
M	MG/KG	2W-SD-SD46-0001	SA6036-019	NM	10/19/2007	10/31/2007	11/4/2007	12	4	16
M	MG/KG	2W-SD-SD45-0002	SA6036-018	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD45-0001	SA6036-017	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD45-0001	SA6036-017	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-FD-101807-01	SA6036-011	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD49-0001	SA6036-016	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-FD-101807-01	SA6036-011	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD53-0001	SA6036-009	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD58-0001	SA6036-001	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD57-0001	SA6036-002	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD57-0001	SA6036-002	NM	10/18/2007	10/31/2007	11/2/2007	13	2	15
M	MG/KG	2W-SD-SD56-0001	SA6036-004	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD56-0001	SA6036-004	NM	10/18/2007	10/31/2007	11/2/2007	13	2	15
M	MG/KG	2W-SD-SD55-0001	SA6036-006	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD55-0001	SA6036-006	NM	10/18/2007	10/31/2007	11/2/2007	13	2	15
M	MG/KG	2W-SD-SD54-0001	SA6036-008	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	MG/KG	2W-SD-SD54-0001	SA6036-008	NM	10/18/2007	10/31/2007	11/2/2007	13	2	15
M	MG/KG	2W-SD-SD46-0204	SA6036-020	NM	10/19/2007	10/31/2007	11/4/2007	12	4	16
M	MG/KG	2W-SD-SD53-0204	SA6036-010	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD49-0001	SA6036-016	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD53-0001	SA6036-009	NM	10/18/2007	10/31/2007	11/2/2007	13	2	15
M	MG/KG	2W-SD-SD52-0001	SA6036-013	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD52-0001	SA6036-013	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD51-0001	SA6036-012	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD51-0001	SA6036-012	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD50-0204	SA6036-014	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD50-0204	SA6036-014	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD50-0001	SA6036-015	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD50-0001	SA6036-015	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD45-0002	SA6036-018	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD53-0204	SA6036-010	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD46-0001	SA6036-019	NM	10/19/2007	10/31/2007	11/3/2007	12	3	15
PH	PH	2W-SD-SD54-0001	SA6036-8	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD49-0001	SA6036-16	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PH	PH	2W-SD-SD55-0001	SA6036-6	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD53-0204	SA6036-10	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD53-0001	SA6036-9	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD52-0001	SA6036-13	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD51-0001	SA6036-12	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD46-0204	SA6036-20	NM	10/19/2007	10/23/2007	10/23/2007	4	0	4
PH	PH	2W-SD-SD50-0001	SA6036-15	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-FD-101807-01	SA6036-11	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD45-0001	SA6036-17	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD45-0002	SA6036-18	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD46-0001	SA6036-19	NM	10/19/2007	10/23/2007	10/23/2007	4	0	4
PH	PH	2W-SD-SD50-0204	SA6036-14	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD56-0001	SA6036-4	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
TOC	UG/GD	2W-SD-SD53-0204	SA6036-10	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD54-0001	SA6036-8	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD55-0001	SA6036-6	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD55-0002	SA6036-7	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD56-0001	SA6036-4	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TOC	UG/GD	2W-SD-SD56-0002	SA6036-5	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD57-0002	SA6036-3	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD53-0001	SA6036-9	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD50-0001	SA6036-15	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD57-0001	SA6036-2	NM	10/18/2007	11/6/2007	11/6/2007	19	0	19
TOC	UG/GD	2W-SD-SD46-0001	SA6036-19	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-FD-101807-01	SA6036-11	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD45-0001	SA6036-17	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD51-0001	SA6036-12	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD45-0002	SA6036-18	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD46-0204	SA6036-20	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-SD-SD49-0001	SA6036-16	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD50-0204	SA6036-14	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD52-0001	SA6036-13	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TS	%	2W-SD-SD55-0001	SA6036-6	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD57-0002	SA6036-3	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD52-0001	SA6036-13	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD56-0002	SA6036-5	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TS	%	2W-SD-SD55-0002	SA6036-7	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD58-0001	SA6036-1	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD54-0001	SA6036-8	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD53-0204	SA6036-10	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD53-0001	SA6036-9	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD57-0001	SA6036-2	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD50-0204	SA6036-14	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD50-0001	SA6036-15	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD49-0001	SA6036-16	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD46-0204	SA6036-20	NM	10/19/2007	10/23/2007	10/24/2007	4	1	5
TS	%	2W-SD-SD46-0001	SA6036-19	NM	10/19/2007	10/23/2007	10/24/2007	4	1	5
TS	%	2W-SD-SD45-0002	SA6036-18	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD45-0001	SA6036-17	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-FD-101807-01	SA6036-11	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD56-0001	SA6036-4	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD51-0001	SA6036-12	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
PAH	%	2W-SD-SD57-0001DL	SA6036-2DL	NM	10/18/2007	10/30/2007	11/6/2007	12	7	19
PAH	%	2W-SD-SD53-0001	SA6036-9	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PAH	%	2W-SD-SD53-0204	SA6036-10	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	%	2W-SD-SD53-0204DL	SA6036-10DL	NM	10/18/2007	10/30/2007	11/6/2007	12	7	19
PAH	%	2W-SD-SD54-0001	SA6036-8	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	%	2W-SD-SD55-0001RA	SA6036-6RA	NM	10/18/2007	10/30/2007	11/8/2007	12	9	21
PAH	%	2W-SD-SD56-0001	SA6036-4	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	%	2W-SD-SD52-0001	SA6036-13	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	%	2W-SD-SD57-0001	SA6036-2	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	%	2W-SD-SD49-0001RA	SA6036-16RA	NM	10/18/2007	10/30/2007	11/8/2007	12	9	21
PAH	%	2W-SD-SD56-0001DL	SA6036-4DL	NM	10/18/2007	10/30/2007	11/6/2007	12	7	19
PAH	%	2W-SD-SD45-0002	SA6036-18	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	%	2W-SD-SD50-0204RA	SA6036-14RA	NM	10/18/2007	10/30/2007	11/8/2007	12	9	21
PAH	%	2W-FD-101807-01	SA6036-11	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	%	2W-SD-SD50-0204	SA6036-14	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	%	2W-SD-SD45-0001RA	SA6036-17RA	NM	10/18/2007	10/30/2007	11/8/2007	12	9	21
PAH	%	2W-SD-SD46-0001	SA6036-19	NM	10/19/2007	10/30/2007	11/6/2007	11	7	18
PAH	%	2W-SD-SD46-0001DL	SA6036-19DL	NM	10/19/2007	10/30/2007	11/6/2007	11	7	18
PAH	%	2W-SD-SD46-0204	SA6036-20	NM	10/19/2007	10/30/2007	11/6/2007	11	7	18
PAH	%	2W-SD-SD46-0204DL	SA6036-20DL	NM	10/19/2007	10/30/2007	11/6/2007	11	7	18

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PAH	%	2W-SD-SD50-0001	SA6036-15	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	%	2W-SD-SD51-0001RA	SA6036-12RA	NM	10/18/2007	10/30/2007	11/8/2007	12	9	21
PAH	UG/KG	2W-SD-SD46-0001DL	SA6036-19DL	NM	10/19/2007	10/30/2007	11/6/2007	11	7	18
PAH	UG/KG	2W-SD-SD54-0001	SA6036-8	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	UG/KG	2W-FD-101807-01	SA6036-11	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	UG/KG	2W-SD-SD45-0001RA	SA6036-17RA	NM	10/18/2007	10/30/2007	11/8/2007	12	9	21
PAH	UG/KG	2W-SD-SD45-0002	SA6036-18	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	UG/KG	2W-SD-SD46-0001	SA6036-19	NM	10/19/2007	10/30/2007	11/6/2007	11	7	18
PAH	UG/KG	2W-SD-SD52-0001	SA6036-13	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	UG/KG	2W-SD-SD57-0001DL	SA6036-2DL	NM	10/18/2007	10/30/2007	11/6/2007	12	7	19
PAH	UG/KG	2W-SD-SD57-0001	SA6036-2	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	UG/KG	2W-SD-SD56-0001DL	SA6036-4DL	NM	10/18/2007	10/30/2007	11/6/2007	12	7	19
PAH	UG/KG	2W-SD-SD56-0001	SA6036-4	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	UG/KG	2W-SD-SD55-0001RA	SA6036-6RA	NM	10/18/2007	10/30/2007	11/8/2007	12	9	21
PAH	UG/KG	2W-SD-SD53-0204	SA6036-10	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	UG/KG	2W-SD-SD53-0001	SA6036-9	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	UG/KG	2W-SD-SD46-0204	SA6036-20	NM	10/19/2007	10/30/2007	11/6/2007	11	7	18
PAH	UG/KG	2W-SD-SD51-0001RA	SA6036-12RA	NM	10/18/2007	10/30/2007	11/8/2007	12	9	21

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PAH	UG/KG	2W-SD-SD50-0204RA	SA6036-14RA	NM	10/18/2007	10/30/2007	11/8/2007	12	9	21
PAH	UG/KG	2W-SD-SD50-0204	SA6036-14	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	UG/KG	2W-SD-SD50-0001	SA6036-15	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15
PAH	UG/KG	2W-SD-SD49-0001RA	SA6036-16RA	NM	10/18/2007	10/30/2007	11/8/2007	12	9	21
PAH	UG/KG	2W-SD-SD46-0204DL	SA6036-20DL	NM	10/19/2007	10/30/2007	11/6/2007	11	7	18
PAH	UG/KG	2W-SD-SD53-0204DL	SA6036-10DL	NM	10/18/2007	10/30/2007	11/6/2007	12	7	19
PCB	%	2W-SD-SD53-0204	SA6036-10	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	%	2W-SD-SD53-0001	SA6036-9	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	%	2W-FD-101807-01	SA6036-11	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	%	2W-SD-SD52-0001	SA6036-13	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	%	2W-SD-SD56-0001	SA6036-4	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	%	2W-SD-SD54-0001	SA6036-8	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	%	2W-SD-SD51-0001	SA6036-12	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	%	2W-SD-SD50-0204	SA6036-14	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	%	2W-SD-SD50-0001	SA6036-15	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	%	2W-SD-SD49-0001	SA6036-16	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	%	2W-SD-SD46-0204	SA6036-20	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15
PCB	%	2W-SD-SD46-0001	SA6036-19	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	%	2W-SD-SD45-0002	SA6036-18	NM	10/18/2007	10/30/2007	11/3/2007	12	4	16
PCB	%	2W-SD-SD45-0001	SA6036-17	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	%	2W-SD-SD55-0001	SA6036-6	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	UG/KG	2W-SD-SD46-0204	SA6036-20	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15
PCB	UG/KG	2W-SD-SD52-0001	SA6036-13	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	UG/KG	2W-SD-SD56-0001	SA6036-4	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	UG/KG	2W-SD-SD55-0001	SA6036-6	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	UG/KG	2W-SD-SD54-0001	SA6036-8	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	UG/KG	2W-SD-SD53-0204	SA6036-10	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	UG/KG	2W-SD-SD53-0001	SA6036-9	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	UG/KG	2W-SD-SD51-0001	SA6036-12	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	UG/KG	2W-SD-SD50-0204	SA6036-14	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	UG/KG	2W-SD-SD49-0001	SA6036-16	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	UG/KG	2W-SD-SD46-0001	SA6036-19	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15
PCB	UG/KG	2W-SD-SD45-0002	SA6036-18	NM	10/18/2007	10/30/2007	11/3/2007	12	4	16
PCB	UG/KG	2W-SD-SD45-0001	SA6036-17	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	UG/KG	2W-FD-101807-01	SA6036-11	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9
PCB	UG/KG	2W-SD-SD50-0001	SA6036-15	NM	10/18/2007	10/25/2007	10/27/2007	7	2	9

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	%	2W-SD-SD52-0001DL	SA6036-13DL	NM	10/18/2007	10/25/2007	11/2/2007	7	8	15
PEST	%	2W-FD-101807-01	SA6036-11	NM	10/18/2007	10/25/2007	10/26/2007	7	1	8
PEST	%	2W-SD-SD56-0001	SA6036-4	NM	10/18/2007	10/25/2007	10/26/2007	7	1	8
PEST	%	2W-SD-SD55-0001	SA6036-6	NM	10/18/2007	10/25/2007	10/26/2007	7	1	8
PEST	%	2W-SD-SD54-0001	SA6036-8	NM	10/18/2007	10/25/2007	10/26/2007	7	1	8
PEST	%	2W-SD-SD53-0204DL	SA6036-10DL	NM	10/18/2007	10/25/2007	11/2/2007	7	8	15
PEST	%	2W-SD-SD53-0001	SA6036-9	NM	10/18/2007	10/25/2007	10/26/2007	7	1	8
PEST	%	2W-SD-SD50-0204RA	SA6036-14RA	NM	10/18/2007	10/25/2007	11/2/2007	7	8	15
PEST	%	2W-SD-SD50-0001RA	SA6036-15RA	NM	10/18/2007	10/25/2007	11/2/2007	7	8	15
PEST	%	2W-SD-SD49-0001RA	SA6036-16RA	NM	10/18/2007	10/25/2007	11/2/2007	7	8	15
PEST	%	2W-SD-SD46-0204DL	SA6036-20DL	NM	10/19/2007	10/30/2007	11/5/2007	11	6	17
PEST	%	2W-SD-SD46-0001	SA6036-19	NM	10/19/2007	10/30/2007	11/2/2007	11	3	14
PEST	%	2W-SD-SD45-0001RA	SA6036-17RA	NM	10/18/2007	10/25/2007	11/2/2007	7	8	15
PEST	%	2W-SD-SD51-0001RA	SA6036-12RA	NM	10/18/2007	10/25/2007	11/2/2007	7	8	15
PEST	%	2W-SD-SD45-0002DL	SA6036-18DL	NM	10/18/2007	10/30/2007	11/5/2007	12	6	18
PEST	UG/KG	2W-SD-SD46-0001	SA6036-19	NM	10/19/2007	10/30/2007	11/2/2007	11	3	14
PEST	UG/KG	2W-SD-SD56-0001	SA6036-4	NM	10/18/2007	10/25/2007	10/26/2007	7	1	8
PEST	UG/KG	2W-SD-SD55-0001	SA6036-6	NM	10/18/2007	10/25/2007	10/26/2007	7	1	8

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	UG/KG	2W-SD-SD54-0001	SA6036-8	NM	10/18/2007	10/25/2007	10/26/2007	7	1	8
PEST	UG/KG	2W-SD-SD53-0204DL	SA6036-10DL	NM	10/18/2007	10/25/2007	11/2/2007	7	8	15
PEST	UG/KG	2W-SD-SD53-0001	SA6036-9	NM	10/18/2007	10/25/2007	10/26/2007	7	1	8
PEST	UG/KG	2W-SD-SD52-0001DL	SA6036-13DL	NM	10/18/2007	10/25/2007	11/2/2007	7	8	15
PEST	UG/KG	2W-SD-SD51-0001RA	SA6036-12RA	NM	10/18/2007	10/25/2007	11/2/2007	7	8	15
PEST	UG/KG	2W-SD-SD50-0204RA	SA6036-14RA	NM	10/18/2007	10/25/2007	11/2/2007	7	8	15
PEST	UG/KG	2W-SD-SD50-0001RA	SA6036-15RA	NM	10/18/2007	10/25/2007	11/2/2007	7	8	15
PEST	UG/KG	2W-SD-SD46-0204DL	SA6036-20DL	NM	10/19/2007	10/30/2007	11/5/2007	11	6	17
PEST	UG/KG	2W-SD-SD45-0002DL	SA6036-18DL	NM	10/18/2007	10/30/2007	11/5/2007	12	6	18
PEST	UG/KG	2W-SD-SD45-0001RA	SA6036-17RA	NM	10/18/2007	10/25/2007	11/2/2007	7	8	15
PEST	UG/KG	2W-FD-101807-01	SA6036-11	NM	10/18/2007	10/25/2007	10/26/2007	7	1	8
PEST	UG/KG	2W-SD-SD49-0001RA	SA6036-16RA	NM	10/18/2007	10/25/2007	11/2/2007	7	8	15

TETRA TECH NUS, INC. SAL0036 SAL0037 CHAIN OF CUSTODY | NUMBER 4596 | PAGE 1 OF 3

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
G00873	NSB NLON AREA A	A. BERNHARDT	412 921 7090	KATAHDIN / COLBY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
SJ Conti		S CONTI	412 921 7090	
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX #		

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 G G

PRESERVATIVE USED: 4°C 4°C 4°C 4°C 4°C 4°C

TYPE OF ANALYSIS: PAH/PEST/PCB (8oz) | METALS/PH/TOC 4oz | PAHS (ONLY) 4oz | METALS (ONLY) 4oz | TOC (ONLY) 4oz | CADMIUM (ONLY) 4oz | TOC (ONLY) 4oz

DATE YEAR 2007	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	PAH/PEST/PCB (8oz)	METALS/PH/TOC 4oz	PAHS (ONLY) 4oz	METALS (ONLY) 4oz	TOC (ONLY) 4oz	CADMIUM (ONLY) 4oz	TOC (ONLY) 4oz	COMMENTS
10/18	0830	2W-SD-SD58-0001	SD58	0	4"	SO	G	1					1			
"	0855	2W-SD-SD57-0001	SD57	0	4"	SO	G	2			1	1				
"	0855	2W-SD-SD57-0002	SD57	15"	20"	SO	G	1						1		
"	1010	2W-SD-SD56-0001	SD56	0	4"	SO	G	2	1	1						
"	1010	2W-SD-SD56-0002	SD56	24"	27"	SO	G	1						1		
"	1040	2W-SD-SD55-0001	SD55	0	6"	SO	G	2	1	1						
"	1040	2W-SD-SD55-0002	SD55	27"	30"	SO	G	1						1		
"	1320	2W-SD-SD54-0001	SD54	0	6"	SO	G	2	1	1						
"	1355	2W-SD-SD53-0001	SD53	0	6"	SO	G	4	2	2						DO MS/MSD (QC)
"	1345	2W-SD-SD53-0204	SD53	24"	48"	SO	G	2	1	1						
"	0000	2W-FD-101807-01	FD	—	—	SO	G	2	1	1						(QC)
"	1440	2W-SD-SD51-0001	SD51	0	6"	SO	G	2	1	1						
"	1530	2W-SD-SD52-0001	SD52	0	6"	SO	G	2	1	1						

1. RELINQUISHED BY SJ Conti	DATE 10/20/07	TIME 1000	1. RECEIVED BY FED EX	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 102207	TIME 1000
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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FORM NO. TtNUS-001

00001

TETRA TECH NUS, INC. SA60036 SA60037 CHAIN OF CUSTODY | NUMBER 4597 | PAGE 2 OF 3

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
G00873	NSB-NLON AREA A	A. BERNHARTD	412 921 7090	KATAHDIN / COLBY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
S Conti		S CONTI	412 921 7090	
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX #		

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 G G

PRESERVATIVE USED: 4°C 4°C 4°C 4°C 4°C 4°C

TYPE OF ANALYSIS

DATE YEAR 2007	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	PAH/PEST/PCB (8 OZ)	METALS/pH/TOC (4 OZ)	PAH (ONLY) (4 OZ)	TOC (ONLY) (4 OZ)					COMMENTS
10/18	1600	2W-SD-SD50-0204	SD50	24"	48"	SO	G	2	1	1							
10/18	1605	2W-SD-SD50-0001	SD50	0	4"	SO	G	2	1	1							
10/18	1630	2W-SD-SD49-0001	SD49	0	4"	SO	G	2	1	1							
10/18	1725	2W-SD-SD45-0001	SD45	0	4"	SO	G	2	1	1							
10/18	1730	2W-SD-SD45-0002	SD45	30"	40"	SO	G	2	1	1							
10/19	1020	2W-SD-SD46-0001	SD46	0	4"	SO	G	2	1	1							
10/19	1040	2W-SD-SD46-0204	SD46	24"	36"	SO	G	2	1	1							
10/19	1245	2W-SD-SD47-0001	SD47	0	6"	SO	G	2	1	1							
10/19	0000	2W-FD-101907-01	FD	—	—	SO	G	2	1	1							
10/19	1345	2W-SD-SD44-0001	SD44	0	4"	SO	G	2	1	1							
10/19	1400	2W-SD-SD44-0002	SD44	12"	24"	SO	G	1				1					
10/19	1430	2W-SD-SD43-0001	SD43	0	4"	SO	G	2	1	1							
10/19	1520	~~2W-SD-SD48-0001~~	~~SD48~~	~~0~~	~~4"~~	~~SO~~	~~G~~	~~2~~	~~1~~	~~1~~							
	1530	2W-SD-SD48-0204	SD48	24"	36"	SO	G	2	1	1							

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY: S Conti	10/20/07	1000	1. RECEIVED BY: FED EX		
2. RELINQUISHED BY			2. RECEIVED BY: [signature]	10/22/07	1000
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS

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

4/02R
FORM NO. TtNUS-001

100000

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 4595 | PAGE 3 OF 3

SA6030 SA6037

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
G00873	NSB-NLON AREA A	A BERNHARDT	412 921 7090	KATAHDIN / COLBY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
S Conti		S CONTI	412 921 7090	
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX #		

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G G G P

PRESERVATIVE USED: 4°C 4°C 4°C HNO3

TYPE OF ANALYSIS: PAHS, PEST/PCBS, METALS

DATE YEAR 2007	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	PAHS	PEST/PCBS	METALS						COMMENTS
10/19	0730	2W-RB-101907-01	RB	—	—	~~AQ~~ QC	G	5	2	2	1						OVER Auger SPOONS, BOWLS
10/19	0750	2W-FB-101907-01	FB	—	—	~~AQ~~ QC	G	5	2	2	1						DI WATER

1. RELINQUISHED BY S Conti	DATE 10/20/07	TIME 1000	1. RECEIVED BY FED EX	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 10 22 07	TIME 1000
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

G00000

Katahdin Analytical Services, Inc. — Sample Receipt Condition Report

Client: Tetra Tech	KAS PM: AJC	Sampled By: Client
Project:	KIMS Entry By: DD	Delivered By: FEDEX
KAS Work Order#: SAL0036 SAL0037	KIMS Review By: AJC	Received By: DD
SDG #:	Cooler: 1 of 3	Date/Time Rec.: 10/22/07 1000

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	X				
2. Chain of Custody present in cooler?	X				
3. Chain of Custody signed by client?	X				
4. Chain of Custody matches samples?	X				
5. Temperature Blanks present?	X				Temp (°C): 2.1
6. Samples received at < 6 °C w/o freezing? Ice or ice packs present? (Y) or N	X				Cooler temp. (°C): (if no temp blank)
7. Volatiles free of headspace? **Aqueous:** No bubble larger than a pea				X	
Soil/Sediment: Received in airtight container?				X	
Received in methanol?				X	
Methanol covering soil?				X	
8. Trip Blank present in cooler?				X	
9. Proper sample containers and volume?	X				
10. Samples within hold time upon receipt?	X				
11. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	X				
Sulfide - >9				X	
Cyanide – pH >12				X	
12. Corrective Action Report Filed?				✓	

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

Katahdin Analytical Services, Inc. **Sample Receipt Condition Report**

Client: Tetra Tech	KAS PM: AJC	Sampled By: Client
Project:	KIMS Entry By: DJ	Delivered By: FEDEX
KAS Work Order#: SA60036 SA60037	KIMS Review By: AC	Received By: DJ
SDG #:	Cooler: 2 of 3	Date/Time Rec.: 102207 1000

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	X				
2. Chain of Custody present in cooler?		X			(or wcs in cooler 1 of 3
3. Chain of Custody signed by client?	X				
4. Chain of Custody matches samples?	X				
5. Temperature Blanks present?	X				Temp (°C): 2.0
6. Samples received at < 6 °C w/o freezing? Ice or ice packs present? Y or N	X				Cooler temp. (°C): (if no temp blank)
7. Volatiles free of headspace? **Aqueous:** No bubble larger than a pea				X	
Soil/Sediment: Received in airtight container?				X	
Received in methanol?				X	
Methanol covering soil?				X	
8. Trip Blank present in cooler?				X	
9. Proper sample containers and volume?	X				
10. Samples within hold time upon receipt?	X				
11. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2		X			metals in cooler 1 of 3.
Sulfide - >9				X	
Cyanide – pH >12				X	
12. Corrective Action Report Filed?				✓	

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

Katahdin Analytical Services, Inc. **Sample Receipt Condition Report**

Client: Tetra Tech	KAS PM: ADL	Sampled By: Client
Project:	KIMS Entry By: DJ	Delivered By: FEDEX
KAS Work Order#: SA60036 SA60037	KIMS Review By: ADL	Received By: DJ
SDG #:	Cooler: 3 of 3	Date/Time Rec.: 10/22/07 1000

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	X				
2. Chain of Custody present in cooler?		X			COC was in cooler 1 of 3
3. Chain of Custody signed by client?	X				
4. Chain of Custody matches samples?	X				
5. Temperature Blanks present?		X			Temp (°C):
6. Samples received at < 6 °C w/o freezing? Ice or ice packs present? (Y) or N	X				Cooler temp. (°C): 5.9 (if no temp blank)
7. Volatiles free of headspace?					
Aqueous: No bubble larger than a pea				X	
Soil/Sediment: Received in airtight container?				X	
Received in methanol?				X	
Methanol covering soil?				X	
8. Trip Blank present in cooler?				X	
9. Proper sample containers and volume?	X				
10. Samples within hold time upon receipt?	X				
11. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2		X			metals in cooler 1 of 3.
Sulfide - >9				X	
Cyanide – pH >12				X	
12. Corrective Action Report Filed?				✓	

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

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO 439 NSB NEW LONDON
SA6036

Sample Receipt

The following samples were received on October 22, 2007 and were logged in under Katahdin Analytical Services work order number SA6036 for a hardcopy due date of November 8, 2007.

KATAHDIN Sample No.	TTNUS Sample Identification
SA6036-1	2W-SD-SD58-0001
SA6036-2	2W-SD-SD57-0001
SA6036-3	2W-SD-SD57-0002
SA6036-4	2W-SD-SD56-0001
SA6036-5	2W-SD-SD56-0002
SA6036-6	2W-SD-SD55-0001
SA6036-7	2W-SD-SD55-0002
SA6036-8	2W-SD-SD54-0001
SA6036-9	2W-SD-SD53-0001
SA6036-10	2W-SD-SD53-0204
SA6036-11	2W-FD-101807-01
SA6036-12	2W-SD-SD51-0001
SA6036-13	2W-SD-SD52-0001
SA6036-14	2W-SD-SD50-0204
SA6036-15	2W-SD-SD50-0001
SA6036-16	2W-SD-SD49-0001
SA6036-17	2W-SD-SD45-0001
SA6036-18	2W-SD-SD45-0002
SA6036-19	2W-SD-SD46-0001
SA6036-20	2W-SD-SD46-0204

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.

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

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

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

Organics Analysis

The samples of work order SA6036 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis. Sample SA6036-9 was used for the matrix spike (MS) and matrix spike duplicate (MSD), as requested by the client. Some manual integrations may have been performed due to split peaks and/or corrected baselines. All have been flagged with an "M" (software-generated) on the pertinent quantitation reports.

8082 Analysis

All samples and QC were put through a sulfur cleanup according to SW-846 method 3660 using the copper powder technique. The cleanup did not completely remove the sulfur. Consequently, some of the samples may have sulfur interference affecting the quantitation of target analytes.

Sample SA6036-4 had a high recovery for the surrogate TCX on channel A, which was outside of the laboratory established acceptance limits. Since the recovery for DCB was acceptable, as well as TCX on channel B, the sample was not reextracted.

The method blank WG44925-1 a high recovery for the surrogate TCX on channel A, which was outside of the laboratory established acceptance limits. Since the recovery for DCB was acceptable, as well as TCX on channel B, the associated samples were not reextracted.

Samples SA6036-11, 12, 13, 14, 16, 17, and 20 were manually integrated for Aroclor 1260 and/ or the surrogate DCB. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

The Form 7 for the calibration verification standard (CV) (files 6AJ3225, 6AJ4225, 6AJ3253, 6AJ4253, 6AK1021, and 6AK2021) are flagged for the surrogates TCX and/or DCB indicating that the %D is greater than the method acceptance limit of 15%. With the exception of DCB on channel A for file 6AJ3225 and 6AK1021, which were high, the %D's are actually within the method acceptance limits and should not be flagged, but due to software limitations the flagging could not be removed.

The CV (file 6AJ3225) had high responses for Aroclor 1260 and the surrogate DCB on channel A, which resulted in %D's that were outside of the method acceptance limits of 15%. Since the response was acceptable on channel B, the associated samples were not reanalyzed.

The CV (file 6AK1021) had high responses for Aroclor 1260 and the surrogate DCB on channel A, which resulted in %D's that were outside of the method acceptance limits of 15%. Since the responses were acceptable on channel B, the associated samples were not reanalyzed.

The closing CV (files 6AK1036 and 6AK2036) had high responses for Aroclor 1016 on both channels, and a high response for Aroclor 1260 on channel A, which resulted in %D's that were outside of the method acceptance limits of 15%.

8081 Analysis

Sample SA6036-10 was diluted due to matrix interference, sample viscosity or other matrix-related problem. Consequently, the sample PQL was elevated by a factor of 10.

Sample SA6036-4 had a high recovery for the surrogate DCB on channel B, which was outside of the laboratory established acceptance limits. Since the recovery for TCX was acceptable, as well as DCB on channel A, the sample was not reextracted.

Sample SA6036-8 had low recoveries for the surrogate TCX on channel A and DCB on channel B, which were outside of the laboratory established acceptance limits. Since the recovery for DCB was acceptable on channel A, and TCX was acceptable on channel B, the sample was not reextracted.

Sample SA6036-9 had a low recovery for the surrogate DCB on channel B, which was outside of the laboratory established acceptance limits. Since the recovery for TCX was acceptable, as well as DCB on channel A, the sample was not reextracted.

Samples SA6036-4, 6, 15, 16, 17, 18, and 19 were manually integrated for various target analytes. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Samples SA6036-4, 15RA, and 18DL had RPD's for 4,4'-DDT or 4,4'-DDE that were outside of the method acceptance limits of 40%. These analytes were flagged with a "J" qualifier on the report of analysis (ROA).

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

The closing CV (files 8AJ5032 and 8AJ6032) had low responses for most of the target analytes on both channels, and the surrogate DCB on channel B, which resulted in %D's that were outside of the method acceptance limits of 15%. Since these low responses could be attributable to sample(s) that were analyzed prior to the CV, the associated samples were not reanalyzed.

The CV (files 8AK1003 and 8AK2003) had high responses for endrin ketone on both channels and endosulfan sulfate on channel A, which resulted in %D's that were outside of the method acceptance limits of 15%. Since a high response would indicate a high bias, and the associated samples did not have these target analytes detected above the MDL, the samples were not reanalyzed.

The CV (files 8AK1008 and 8AK2008) had high responses for endosulfan sulfate and endrin ketone on both channels, which resulted in %D's that were outside of the method acceptance

limits of 15%. Since a high response would indicate a high bias, and the associated samples did not have these target analytes detected above the MDL, the samples were not reanalyzed.

The closing CV (files 8AK1020 and 8AK2020) had low and high responses for several target analytes on both channels, which resulted in %D's that were outside of the method acceptance limits of 15%. Since these low responses could be attributable to sample(s) that were analyzed prior to the CV, the associated samples were not reanalyzed.

The CV (files 8AK1035 and 8AK2035) had a high response for endrin ketone on both channels, which resulted in %D's that were outside of the method acceptance limits of 15%. Since a high response would indicate a high bias, and the associated samples did not have these target analytes detected above the MDL, the samples were not reanalyzed.

The closing CV (files 8AK1045 and 8AK2045) had low and high responses for several target analytes on both channels, which resulted in %D's that were outside of the method acceptance limits of 15%. Since these low responses could be attributable to sample(s) that were analyzed prior to the CV, the associated samples were not reanalyzed.

8270C SIM Analysis

All samples were manually integrated for one or more target analytes. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

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

The calibration verification standard (CV) (file R5876) had a low response for the calibration check compound (CCC) fluoranthene, which resulted in a %D that was outside the method acceptance limit of 20%.

Samples SA6036-2, 4 and 10 had high responses for one ore more internal standards that resulted in %D's which were outside the laboratory acceptance limit of -50% to +100% of the response of the internal standard of the daily calibration verification standard. Since these samples were analyzed at a dilution and had acceptable internal standard responses, they were not reanalyzed undiluted.

Sample SA6036-9 had a high response for one internal standard that resulted in a %D which was outside the laboratory acceptance limit of -50% to +100% of the response of the internal standard of the daily calibration verification standard. Since this is the sample used for the matrix spike/matrix spike duplicate, WG45069-3 and 4, which also had high responses for the same internal standard, the sample was not reanalyzed.

Sample SA6036-14 had a high response for one internal standard that resulted in a %D which was outside the laboratory acceptance limit of -50% to +100% of the response of the internal standard of the daily calibration verification standard. The sample was reanalyzed and had similar issues confirming a matrix effect. The results for both analyses are reported.

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

Metals Analysis

The samples of Work Order SA6036 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Soil-matrix Katahdin Sample Nos. SA6036-(1, 2, 4, 6, and 8-20) were digested for ICP analysis on 10/31/07 (QC Batch XJ31ICS0) in accordance with USEPA Method 3050B. Katahdin Sample No. SA6036-9 was prepared with duplicate matrix-spiked aliquots. The measured calcium concentration of the preparation blank that was digested in this batch is greater than the laboratory's reporting limit for that analyte. However, because the measured calcium concentrations of all associated samples are more than ten times that of the preparation blank, no corrective action was required.

ICP analyses of Work Order SA6036 sample digestates were performed using a Thermo iCAP 6500 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.

Analysis of Mercury by Cold Vapor Atomic Absorption (CVAA)

Soil-matrix Katahdin Sample Nos. SA6036-(2, 4, 6, and 8-12) were digested for mercury analysis on 10/29/07 (QC Batch XJ29HGS0) in accordance with USEPA Method 7471A. Katahdin Sample No. SA6036-9 was prepared with duplicate matrix-spiked aliquots.

Soil-matrix Katahdin Sample Nos. SA6036-(13-20) were digested for mercury analysis on 10/30/07 (QC Batch XJ30HGS0) in accordance with USEPA Method 7471A. Katahdin Sample No. SA6036-13 was prepared with duplicate matrix-spiked aliquots.

Mercury analyses of Work Order SA6036 sample digestates were performed using a Cetac M6100 automated mercury analyzer. All samples were analyzed within holding times and all analytical run QC criteria were met.

Matrix QC Summary

The recoveries of antimony, magnesium, and silver are outside the laboratory's acceptance limits (75% - 125% recovery of the added element, if the native concentration is less than four times the amount added) in one or both of the matrix-spiked aliquots of Katahdin Sample No. SA6036-9. The recoveries of all of these elements are within the laboratory's acceptance limits in a post-digestion matrix spike of this sample. The matrix-spike duplicate analysis of this sample is outside the laboratory's acceptance limit (<20% relative difference between duplicate matrix-spiked aliquots) for magnesium.

The recovery of mercury is within the laboratory's acceptance limits (75% - 125% recovery of the added element, if the native concentration is less than four times the amount added) in both of the matrix-spiked aliquots of Katahdin Sample No. SA6036-13. The matrix-spike duplicate analysis of this sample is within the laboratory's acceptance limit (<20% relative difference between duplicate matrix-spiked aliquots) for mercury.

The serial dilution analyses of Katahdin Sample Nos. SA6036-(9 and 13) are within the laboratory's acceptance limit (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the IDL) for all elements.

Wet Chemistry Analysis

The samples of Work Order SA6036 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for TOC in soil were performed according to "Determination of Total Organic Carbon in Sediment", Lloyd Kahn, USEPA Region II, 7/88.

Analyses for total solids were performed according to "U.S. EPA Contract Laboratory Program Statement of Work for Inorganic Analysis", SOW 7/88.

Analyses for pH (soil) were performed according to "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

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 holding times. All quality control criteria were met, with the following exception:

The matrix spike recovery for TOC in the matrix spike aliquot of Katahdin Sample No. SA6036-9 is outside the laboratory's acceptance limits of 75% - 125%.

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert. No. E87604

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

Leslie Dimond 11.14.07

Leslie Dimond
Quality Assurance Officer

FORM 2
SOIL SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Level:(low/med) LOW

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	WG45069-BLANK	WG45069-1	88	85	92						0
02	WG45069-LCS	WG45069-2	87	80	103						0
03	2W-SD-SD53-0001MS	WG45069-3	79	82	67						0
04	2W-SD-SD53-0001MSD	WG45069-4	86	90	83						0
05	2W-SD-SD57-0001	SA6036-2	67	75	57						0
06	2W-SD-SD56-0001	SA6036-4	71	81	65						0
07	2W-SD-SD54-0001	SA6036-8	59	67	56						0
08	2W-SD-SD53-0001	SA6036-9	71	77	63						0
09	2W-SD-SD53-0204	SA6036-10	82	77	72						0
10	2W-FD-101807-01	SA6036-11	69	74	68						0
11	2W-SD-SD52-0001	SA6036-13	72	75	71						0
12	2W-SD-SD50-0204	SA6036-14	79	81	76						0
13	2W-SD-SD50-0001	SA6036-15	51	64	59						0
14	2W-SD-SD45-0002	SA6036-18	69	50	69						0
15	2W-SD-SD57-0001	SA6036-2DL	D	D	D						0
16	2W-SD-SD56-0001	SA6036-4DL	87	93	46						0
17	2W-SD-SD53-0204	SA6036-10DL	84	76	73						0
18	2W-SD-SD46-0001	SA6036-19DL	68	68	51						0
19	2W-SD-SD46-0204	SA6036-20DL	74	69	80						0
20	2W-SD-SD46-0001	SA6036-19	64	67	59						0
21	2W-SD-SD46-0204	SA6036-20	77	76	70						0
22	2W-SD-SD55-0001	SA6036-6RA	63	72	57						0
23	2W-SD-SD51-0001	SA6036-12RA	66	68	64						0
24	2W-SD-SD50-0204	SA6036-14RA	81	84	73						0
25	2W-SD-SD49-0001	SA6036-16RA	54	66	61						0
26	2W-SD-SD45-0001	SA6036-17RA	62	65	66						0
27											
28											

		QC LIMITS
S1	= 2-Methylnaphthalene-d1	(27-128)
S2	= Fluorene-d10	(34-140)
S3	= Pyrene-d10	(20-174)

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

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 11/01/07
Report Date: 11/13/2007
Matrix: SOIL

Lab ID: WG45069-2
Client ID: WG45069-LCS
SDG: SA6036
Extracted by:
Extraction Method: SW846 3520
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.	%REC.	QC. LIMITS
Naphthalene	67	NA	52	78	33-103
2-Methylnaphthalene	67	NA	90	134	66-136
1-Methylnaphthalene	67	NA	58	87	30-150
Acenaphthylene	67	NA	51	77	50-115
Acenaphthene	67	NA	51	77	44-102
Fluorene	67	NA	56	84	48-120
Phenanthrene	67	NA	57	85	39-132
Anthracene	67	NA	57	85	42-117
Fluoranthene	67	NA	55	82	32-154
Pyrene	67	NA	71	107	36-108
Benzo(a)anthracene	67	NA	74	111	37-153
Chrysene	67	NA	61	91	28-121
Benzo(b)fluoranthene	67	NA	64	96	37-147
Benzo(k)fluoranthene	67	NA	46	69	46-114
Benzo(a)pyrene	67	NA	66	98	47-109
Indeno(1,2,3-cd)pyrene	67	NA	84	126	16-137
Benzo(g,h,i)perylene	67	NA	64	96	10-110
Dibenzo(a,h)anthracene	67	NA	90	* 135	24-130

FORM III SV-2

R5800.D

KATAHDIN ANALYTICAL SERVICES
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 11/02/07
Report Date: 11/12/2007
Matrix: SOIL

Lab ID: WG45069-3 & WG45069-4
Client ID: 2W-SD-SD53-0001MS & 2W-SD-SD53-0001MSD
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

COMPOUND	MS SPIKE	MSD SPIKE	SAMPLE CONC.	MS CONC.	MSD CONC.	MS %REC.	MSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
Naphthalene	195	195	0.00	152	155	78	79	2	50	33-103
2-Methylnaphthalene	195	195	0.00	204	211	104	108	3	50	66-136
1-Methylnaphthalene	195	195	0.00	145	150	74	77	3	50	30-150
Acenaphthylene	195	195	20	168	180	76	82	7	50	50-115
Acenaphthene	195	195	5.2	151	161	75	80	6	50	44-102
Fluorene	195	195	9.0	171	183	83	89	7	50	48-120
Phenanthrene	195	195	171	369	393	102	114	6	50	39-132
Anthracene	195	195	28	180	197	78	86	9	50	42-117
Fluoranthene	195	195	444	753	681	* 158	121	10	50	32-154
Pyrene	195	195	345	547	646	104	* 154	16	50	36-108
Benzo(a)anthracene	195	195	245	422	452	91	106	7	50	37-153
Chrysene	195	195	284	436	456	78	88	4	50	28-121
Benzo(b)fluoranthene	195	195	335	548	551	109	111	0.5	50	37-147
Benzo(k)fluoranthene	195	195	216	372	376	80	82	1	50	46-114
Benzo(a)pyrene	195	195	261	444	479	94	* 112	8	50	47-109
Indeno(1,2,3-cd)pyrene	195	195	246	452	530	106	* 146	16	50	16-137
Benzo(g,h,i)perylene	195	195	170	324	373	79	104	14	50	10-110
Dibenzo(a,h)anthracene	195	195	100	286	338	95	122	17	50	24-130

FORM III SV-2

R5806.D & R5807.D

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG45069-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab File ID: R5799 Lab Sample ID: WG45069-1

Instrument ID: GCMS-R Date Extracted:

Matrix: (soil/water) SOIL Date Analyzed: 11/01/07

Level:(low/med) LOW Time Analyzed: 1707

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	WG45069-LCS	WG45069-2	R5800	11/01/07	1749
02	2W-SD-SD53-0001MS	WG45069-3	R5806	11/02/07	1259
03	2W-SD-SD53-0001MSD	WG45069-4	R5807	11/02/07	1341
04	2W-SD-SD57-0001	SA6036-2	R5808	11/02/07	1423
05	2W-SD-SD56-0001	SA6036-4	R5809	11/02/07	1505
06	2W-SD-SD54-0001	SA6036-8	R5811	11/02/07	1630
07	2W-SD-SD53-0001	SA6036-9	R5812	11/02/07	1712
08	2W-SD-SD53-0204	SA6036-10	R5813	11/02/07	1754
09	2W-FD-101807-01	SA6036-11	R5814	11/02/07	1838
10	2W-SD-SD52-0001	SA6036-13	R5816	11/02/07	2003
11	2W-SD-SD50-0204	SA6036-14	R5817	11/02/07	2047
12	2W-SD-SD50-0001	SA6036-15	R5818	11/02/07	2131
13	2W-SD-SD45-0002	SA6036-18	R5821	11/02/07	2343
14	2W-SD-SD57-0001	SA6036-2DL	R5850	11/06/07	1828
15	2W-SD-SD56-0001	SA6036-4DL	R5851	11/06/07	1910
16	2W-SD-SD53-0204	SA6036-10DL	R5852	11/06/07	1953
17	2W-SD-SD46-0001	SA6036-19DL	R5853	11/06/07	2036
18	2W-SD-SD46-0204	SA6036-20DL	R5854	11/06/07	2120
19	2W-SD-SD46-0001	SA6036-19	R5855	11/06/07	2204
20	2W-SD-SD46-0204	SA6036-20	R5856	11/06/07	2248
21	2W-SD-SD55-0001	SA6036-6RA	R5880	11/08/07	1429
22	2W-SD-SD51-0001	SA6036-12RA	R5881	11/08/07	1512
23	2W-SD-SD50-0204	SA6036-14RA	R5882	11/08/07	1555
24	2W-SD-SD49-0001	SA6036-16RA	R5883	11/08/07	1638
25	2W-SD-SD45-0001	SA6036-17RA	R5884	11/08/07	1720
26					
27					
28					
29					
30					

COMMENTS:

FORM IVSV

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 01-NOV-2007 17:07
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 100

Lab ID: WG45069-1
Client ID: WG45069-Blank
SDG: SA6036
Extracted by:
Extraction Method: SW846 3520
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45069
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	20	1.0	20	20	1.8
91-57-6	2-Methylnaphthalene	U	20	1.0	20	20	2.8
90-12-0	1-Methylnaphthalene	U	20	1.0	20	20	9.2
208-96-8	Acenaphthylene	U	20	1.0	20	20	1.3
83-32-9	Acenaphthene	U	20	1.0	20	20	1.5
86-73-7	Fluorene	U	20	1.0	20	20	1.6
85-01-8	Phenanthrene	U	20	1.0	20	20	4.3
120-12-7	Anthracene	U	20	1.0	20	20	2.6
206-44-0	Fluoranthene	U	20	1.0	20	20	4.0
129-00-0	Pyrene	U	20	1.0	20	20	6.9
56-55-3	Benzo(a)anthracene	U	20	1.0	20	20	2.5
218-01-9	Chrysene	U	20	1.0	20	20	2.6
205-99-2	Benzo(b)fluoranthene	U	20	1.0	20	20	2.2
207-08-9	Benzo(k)fluoranthene	U	20	1.0	20	20	1.9
50-32-8	Benzo(a)pyrene	U	20	1.0	20	20	2.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	20	1.0	20	20	4.3
191-24-2	Benzo(g,h,i)perylene	U	20	1.0	20	20	3.3
53-70-3	Dibenzo(a,h)anthracene	U	20	1.0	20	20	3.8
7297-45-2	2-Methylnaphthalene-d10		88%				
81103-79-9	Fluorene-d10		85%				
1718-52-1	Pyrene-d10		92%				

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab File ID: RD442 DFTPP Injection Date: 10/29/07

Instrument ID: GCMS-R DFTPP Injection Time: 1057

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	30.6
68	Less than 2.0% of mass 69	0.6 (1.9)1
69	Less than 100.0% of mass 198	31.5
70	Less than 2.0% of mass 69	0.1 (0.4)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	6.9
275	10.0 - 30.0% of mass 198	26.6
365	1.0 - 100.0% of mass 198	3.2
441	0.0 - 100.0% of mass 443	10.6 (73.3)2
442	40.0 - 100.0% of mass 198	74.3
443	17.0 - 23.0% of mass 442	14.4 (19.4)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		SSTD0.20R1029	R5744	10/29/07	1212
02		SSTD0.50R1029	R5745	10/29/07	1255
03		SSTD1.00R1029	R5746	10/29/07	1338
04		SSTD3.00R1029	R5747	10/29/07	1421
05		SSTD6.00R1029	R5748	10/29/07	1504
06		SSTD10.0R1029	R5749	10/29/07	1546
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

FORM V SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab File ID: RD446 DFTPP Injection Date: 11/01/07

Instrument ID: GCMS-R DFTPP Injection Time: 0852

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	42.4
68	Less than 2.0% of mass 69	0.7 (1.8)1
69	Less than 100.0% of mass 198	40.2
70	Less than 2.0% of mass 69	0.1 (0.3)1
127	40.0 - 60.0% of mass 198	50.8
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	6.8
275	10.0 - 30.0% of mass 198	24.7
365	1.0 - 100.0% of mass 198	3.3
441	0.0 - 100.0% of mass 443	10.0 (71.5)2
442	40.0 - 100.0% of mass 198	71.5
443	17.0 - 23.0% of mass 442	14.1 (19.7)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		SSTD1.00R1101	R5788	11/01/07	0912
02	WG45069-BLANK	WG45069-1	R5799	11/01/07	1707
03	WG45069-LCS	WG45069-2	R5800	11/01/07	1749
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

FORM V SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab File ID: RD447 DFTPP Injection Date: 11/02/07

Instrument ID: GCMS-R DFTPP Injection Time: 1151

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	43.1
68	Less than 2.0% of mass 69	0.6 (1.5)1
69	Less than 100.0% of mass 198	40.4
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	50.5
197	Less than 1.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	24.4
365	1.0 - 100.0% of mass 198	3.4
441	0.0 - 100.0% of mass 443	10.8 (74.3)2
442	40.0 - 100.0% of mass 198	76.0
443	17.0 - 23.0% of mass 442	14.5 (19.1)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00R1102	R5805	11/02/07	1210
02	2W-SD-SD53-0001MS	WG45069-3	R5806	11/02/07	1259
03	2W-SD-SD53-0001MSD	WG45069-4	R5807	11/02/07	1341
04	2W-SD-SD57-0001	SA6036-2	R5808	11/02/07	1423
05	2W-SD-SD56-0001	SA6036-4	R5809	11/02/07	1505
06	2W-SD-SD54-0001	SA6036-8	R5811	11/02/07	1630
07	2W-SD-SD53-0001	SA6036-9	R5812	11/02/07	1712
08	2W-SD-SD53-0204	SA6036-10	R5813	11/02/07	1754
09	2W-FD-101807-01	SA6036-11	R5814	11/02/07	1838
10	2W-SD-SD52-0001	SA6036-13	R5816	11/02/07	2003
11	2W-SD-SD50-0204	SA6036-14	R5817	11/02/07	2047
12	2W-SD-SD50-0001	SA6036-15	R5818	11/02/07	2131
13	2W-SD-SD45-0002	SA6036-18	R5821	11/02/07	2343
14					
15					
16					
17					
18					
19					
20					

FORM V SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab File ID: RD449 DFTPP Injection Date: 11/06/07

Instrument ID: GCMS-R DFTPP Injection Time: 1224

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	44.3
68	Less than 2.0% of mass 69	0.8 (1.8)1
69	Less than 100.0% of mass 198	41.9
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	40.0 - 60.0% of mass 198	51.7
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	6.8
275	10.0 - 30.0% of mass 198	24.8
365	1.0 - 100.0% of mass 198	3.1
441	0.0 - 100.0% of mass 443	10.7 (76.3)2
442	40.0 - 100.0% of mass 198	72.1
443	17.0 - 23.0% of mass 442	14.0 (19.4)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		SSTD1.00R1106	R5842	11/06/07	1243
02	2W-SD-SD57-0001	SA6036-2DL	R5850	11/06/07	1828
03	2W-SD-SD56-0001	SA6036-4DL	R5851	11/06/07	1910
04	2W-SD-SD53-0204	SA6036-10DL	R5852	11/06/07	1953
05	2W-SD-SD46-0001	SA6036-19DL	R5853	11/06/07	2036
06	2W-SD-SD46-0204	SA6036-20DL	R5854	11/06/07	2120
07	2W-SD-SD46-0001	SA6036-19	R5855	11/06/07	2204
08	2W-SD-SD46-0204	SA6036-20	R5856	11/06/07	2248
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

FORM V SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab File ID: RD451 DFTPP Injection Date: 11/08/07

Instrument ID: GCMS-R DFTPP Injection Time: 1116

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	42.7
68	Less than 2.0% of mass 69	0.6 (1.4)1
69	Less than 100.0% of mass 198	40.2
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	50.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	24.4
365	1.0 - 100.0% of mass 198	3.2
441	0.0 - 100.0% of mass 443	10.1 (73.9)2
442	40.0 - 100.0% of mass 198	70.7
443	17.0 - 23.0% of mass 442	13.6 (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		SSTD1.00R1108	R5876	11/08/07	1135
02	2W-SD-SD55-0001	SA6036-6RA	R5880	11/08/07	1429
03	2W-SD-SD51-0001	SA6036-12RA	R5881	11/08/07	1512
04	2W-SD-SD50-0204	SA6036-14RA	R5882	11/08/07	1555
05	2W-SD-SD49-0001	SA6036-16RA	R5883	11/08/07	1638
06	2W-SD-SD45-0001	SA6036-17RA	R5884	11/08/07	1720
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

FORM V SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GCMS-R Calibration Date(s): 10/29/07 10/29/07

Column: RTX5-MS ID: 0.25 (mm) Calibration Time(s): 1212 1546

LAB FILE ID: RF0.2: R5744 RF0.5: R5745 RF1: R5746
RF3: R5747 RF6: R5748 RF10: R5749

COMPOUND	RF0.2	RF0.5	RF1	RF3	RF6	RF10	CURVE	COEFFICENTS A0	A1	%RSD OR R^2	MAX %RSD OR R^2
Naphthalene	0.974	0.897	0.856	0.769	0.740	0.651	AVRG		0.81451648	14.353	15.000
2-Methylnaphthalene	0.493	0.512	0.541	0.522	0.475	0.431	AVRG		0.49583647	7.850	15.000
1-Methylnaphthalene	0.614	0.564	0.554	0.516	0.457	0.418	AVRG		0.52053593	13.932	15.000
Acenaphthylene	1.349	1.369	1.456	1.421	1.486	1.457	AVRG		1.42325118	3.801	15.000
Acenaphthene	1.086	0.974	1.021	0.962	1.010	0.972	AVRG		1.00428711	4.591	15.000
Fluorene	0.948	0.996	1.102	1.063	1.160	1.121	AVRG		1.06501276	7.527	15.000
Phenanthrene	0.900	0.909	0.914	0.944	1.004	0.983	AVRG		0.94215878	4.540	15.000
Anthracene	0.944	0.968	0.926	0.940	0.991	0.985	AVRG		0.95899687	2.759	15.000
Fluoranthene	0.776	0.796	0.790	0.839	0.931	0.927	AVRG		0.84309360	8.298	15.000
Pyrene	12877	33643	78921	274060	530530	1096300	LINR	-0.3344882	0.66186492	0.99501	0.99000
Benzo(a)anthracene	0.708	0.716	0.730	0.772	0.842	0.870	AVRG		0.77309211	8.910	15.000
Chrysene	1.263	1.241	1.118	1.000	1.036	0.980	AVRG		1.10633739	11.078	15.000
Benzo(b)fluoranthene	0.895	0.996	0.911	1.006	1.173	1.253	AVRG		1.03900034	13.885	15.000
Benzo(k)fluoranthene	2.029	2.099	1.971	1.625	1.785	1.707	AVRG		1.86941068	10.215	15.000
Benzo(a)pyrene	0.841	0.826	0.832	0.902	1.043	1.053	AVRG		0.91625476	11.508	15.000
Indeno(1,2,3-cd)pyrene	0.539	0.572	0.516	0.576	0.681	0.624	AVRG		0.58474401	10.242	15.000
Benzo(g,h,i)perylene	0.785	0.736	0.742	0.742	0.781	0.650	AVRG		0.73916672	6.569	15.000
Dibenzo(a,h)anthracene	1116	2558	5065	28440	69761	143630	LINR	0.17551153	2.06706709	0.99636	0.99000
2-Methylnaphthalene-d10	0.410	0.403	0.402	0.379	0.330	0.315	AVRG		0.37338600	10.962	15.000
Fluorene-d10	1.077	1.093	1.196	1.151	1.202	1.174	AVRG		1.14868262	4.603	15.000
Pyrene-d10	9989	25064	58056	203340	400840	849420	LINR	-0.2827855	0.85909217	0.99723	0.99000

Average %RSD test result.

Calculate Average %RSD: 10.46548271
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 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GCMS-R Calibration Date: 11/01/07 Time: 0912

Lab File ID: R5788 Init. Calib. Date(s): 10/29/07 10/29/07

Init. Calib. Times: 1212 1546

GC Column: RTX5-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	0.8140000	0.8523700	0.8523700	0.01	4.71	100.00	AVRG
2-Methylnaphthalene	0.4960000	0.5438500	0.5438500	0.01	9.65	100.00	AVRG
1-Methylnaphthalene	0.5200000	0.5458800	0.5458800	0.01	4.98	100.00	AVRG
Acenaphthylene	1.4230000	1.3705000	1.3705000	0.01	-3.69	100.00	AVRG
Acenaphthene	1.0040000	0.9365800	0.9365800	0.01	-6.72	20.00	AVRG
Fluorene	1.0650000	1.0424000	1.0424000	0.01	-2.12	100.00	AVRG
Phenanthrene	0.9420000	1.0066000	1.0066000	0.01	6.86	100.00	AVRG
Anthracene	0.9590000	0.9598300	0.9598300	0.01	0.09	100.00	AVRG
Fluoranthene	0.8430000	0.8805600	0.8805600	0.01	4.46	20.00	AVRG
Pyrene	0.8886800	1.0000000	1.7470000	0.01	-11.13	100.00	LINR
Benzo(a)anthracene	0.7730000	0.9345000	0.9345000	0.01	20.89	100.00	AVRG
Chrysene	1.1060000	1.0802000	1.0802000	0.01	-2.33	100.00	AVRG
Benzo(b)fluoranthene	1.0390000	1.0494000	1.0494000	0.01	1.00	100.00	AVRG
Benzo(k)fluoranthene	1.8690000	1.4051000	1.4051000	0.01	-24.82	100.00	AVRG
Benzo(a)pyrene	0.9160000	0.9309800	0.9309800	0.01	1.64	20.00	AVRG
Indeno(1,2,3-cd)pyrene	0.5850000	0.7294900	0.7294900	0.01	24.70	100.00	AVRG
Benzo(g,h,i)perylene	0.7390000	0.7757300	0.7757300	0.01	4.97	100.00	AVRG
Dibenzo(a,h)anthracene	1.1728000	1.0000000	0.4994500	0.01	17.28	100.00	LINR
2-Methylnaphthalene-d10	0.3730000	0.4065000	0.4065000	0.01	8.98	100.00	AVRG
Fluorene-d10	1.1490000	1.1383000	1.1383000	0.01	-0.93	100.00	AVRG
Pyrene-d10	0.9155600	1.0000000	1.3291000	0.01	-8.44	100.00	LINR

FORM VII SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GCMS-R Calibration Date: 11/02/07 Time: 1210

Lab File ID: R5805 Init. Calib. Date(s): 10/29/07 10/29/07

Init. Calib. Times: 1212 1546

GC Column: RTX5-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	0.8140000	0.8346800	0.8346800	0.01	2.54	100.00	AVRG
2-Methylnaphthalene	0.4960000	0.4879500	0.4879500	0.01	-1.62	100.00	AVRG
1-Methylnaphthalene	0.5200000	0.4874800	0.4874800	0.01	-6.25	100.00	AVRG
Acenaphthylene	1.4230000	1.2837000	1.2837000	0.01	-9.79	100.00	AVRG
Acenaphthene	1.0040000	0.9033500	0.9033500	0.01	-10.02	20.00	AVRG
Fluorene	1.0650000	0.9549300	0.9549300	0.01	-10.34	100.00	AVRG
Phenanthrene	0.9420000	0.9942800	0.9942800	0.01	5.55	100.00	AVRG
Anthracene	0.9590000	0.9258500	0.9258500	0.01	-3.46	100.00	AVRG
Fluoranthene	0.8430000	0.8138200	0.8138200	0.01	-3.46	20.00	AVRG
Pyrene	0.8668200	1.0000000	1.7140000	0.01	-13.32	100.00	LINR
Benzo(a)anthracene	0.7730000	0.7930300	0.7930300	0.01	2.59	100.00	AVRG
Chrysene	1.1060000	1.0264000	1.0264000	0.01	-7.20	100.00	AVRG
Benzo(b)fluoranthene	1.0390000	1.0962000	1.0962000	0.01	5.50	100.00	AVRG
Benzo(k)fluoranthene	1.8690000	1.5717000	1.5717000	0.01	-15.91	100.00	AVRG
Benzo(a)pyrene	0.9160000	0.8976400	0.8976400	0.01	-2.00	20.00	AVRG
Indeno(1,2,3-cd)pyrene	0.5850000	0.5583500	0.5583500	0.01	-4.56	100.00	AVRG
Benzo(g,h,i)perylene	0.7390000	0.6855400	0.6855400	0.01	-7.23	100.00	AVRG
Dibenzo(a,h)anthracene	0.9152700	1.0000000	0.3748600	0.01	-8.47	100.00	LINR
2-Methylnaphthalene-d10	0.3730000	0.3659400	0.3659400	0.01	-1.89	100.00	AVRG
Fluorene-d10	1.1490000	1.0533000	1.0533000	0.01	-8.33	100.00	AVRG
Pyrene-d10	0.8857000	1.0000000	1.2943000	0.01	-11.43	100.00	LINR

FORM VII SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GCMS-R Calibration Date: 11/06/07 Time: 1243

Lab File ID: R5842 Init. Calib. Date(s): 10/29/07 10/29/07

Init. Calib. Times: 1212 1546

GC Column: RTX5-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	0.8140000	0.8206800	0.8206800	0.01	0.82	100.00	AVRG
2-Methylnaphthalene	0.4960000	0.5049100	0.5049100	0.01	1.80	100.00	AVRG
1-Methylnaphthalene	0.5200000	0.4997800	0.4997800	0.01	-3.89	100.00	AVRG
Acenaphthylene	1.4230000	1.4024000	1.4024000	0.01	-1.45	100.00	AVRG
Acenaphthene	1.0040000	0.9424600	0.9424600	0.01	-6.13	20.00	AVRG
Fluorene	1.0650000	1.0152000	1.0152000	0.01	-4.68	100.00	AVRG
Phenanthrene	0.9420000	0.9932000	0.9932000	0.01	5.44	100.00	AVRG
Anthracene	0.9590000	0.9599400	0.9599400	0.01	0.10	100.00	AVRG
Fluoranthene	0.8430000	0.8110200	0.8110200	0.01	-3.79	20.00	AVRG
Pyrene	0.9680100	1.0000000	1.8668000	0.01	-3.20	100.00	LINR
Benzo(a)anthracene	0.7730000	0.9341800	0.9341800	0.01	20.85	100.00	AVRG
Chrysene	1.1060000	1.0705000	1.0705000	0.01	-3.21	100.00	AVRG
Benzo(b)fluoranthene	1.0390000	1.1428000	1.1428000	0.01	9.99	100.00	AVRG
Benzo(k)fluoranthene	1.8690000	1.3876000	1.3876000	0.01	-25.76	100.00	AVRG
Benzo(a)pyrene	0.9160000	1.0242000	1.0242000	0.01	11.81	20.00	AVRG
Indeno(1,2,3-cd)pyrene	0.5850000	0.5708100	0.5708100	0.01	-2.42	100.00	AVRG
Benzo(g,h,i)perylene	0.7390000	0.7900500	0.7900500	0.01	6.91	100.00	AVRG
Dibenzo(a,h)anthracene	1.0682000	1.0000000	0.4488400	0.01	6.82	100.00	LINR
2-Methylnaphthalene-d10	0.3730000	0.3698300	0.3698300	0.01	-0.85	100.00	AVRG
Fluorene-d10	1.1490000	1.0725000	1.0725000	0.01	-6.66	100.00	AVRG
Pyrene-d10	0.9442900	1.0000000	1.3625000	0.01	-5.57	100.00	LINR

FORM VII SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GCMS-R Calibration Date: 11/08/07 Time: 1135

Lab File ID: R5876 Init. Calib. Date(s): 10/29/07 10/29/07

Init. Calib. Times: 1212 1546

GC Column: RTX5-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	0.8140000	0.8155000	0.8155000	0.01	0.18	100.00	AVRG	
2-Methylnaphthalene	0.4960000	0.5225800	0.5225800	0.01	5.36	100.00	AVRG	
1-Methylnaphthalene	0.5200000	0.5144400	0.5144400	0.01	-1.07	100.00	AVRG	
Acenaphthylene	1.4230000	1.6232000	1.6232000	0.01	14.07	100.00	AVRG	
Acenaphthene	1.0040000	1.0375000	1.0375000	0.01	3.34	20.00	AVRG	
Fluorene	1.0650000	1.1046000	1.1046000	0.01	3.72	100.00	AVRG	
Phenanthrene	0.9420000	0.9880000	0.9880000	0.01	4.88	100.00	AVRG	
Anthracene	0.9590000	0.9528500	0.9528500	0.01	-0.64	100.00	AVRG	
Fluoranthene	0.8430000	0.6410600	0.6410600	0.01	-23.96	20.00	AVRG	<-
Pyrene	1.0971000	1.0000000	2.0619000	0.01	9.71	100.00	LINR	
Benzo(a)anthracene	0.7730000	1.0082000	1.0082000	0.01	30.43	100.00	AVRG	
Chrysene	1.1060000	1.0791000	1.0791000	0.01	-2.43	100.00	AVRG	
Benzo(b)fluoranthene	1.0390000	1.1413000	1.1413000	0.01	9.85	100.00	AVRG	
Benzo(k)fluoranthene	1.8690000	1.3188000	1.3188000	0.01	-29.44	100.00	AVRG	
Benzo(a)pyrene	0.9160000	0.9678900	0.9678900	0.01	5.66	20.00	AVRG	
Indeno(1,2,3-cd)pyrene	0.5850000	0.5744600	0.5744600	0.01	-1.80	100.00	AVRG	
Benzo(g,h,i)perylene	0.7390000	0.7669100	0.7669100	0.01	3.78	100.00	AVRG	
Dibenzo(a,h)anthracene	1.3188000	1.0000000	0.5700800	0.01	31.88	100.00	LINR	
2-Methylnaphthalene-d10	0.3730000	0.3831100	0.3831100	0.01	2.71	100.00	AVRG	
Fluorene-d10	1.1490000	1.1600000	1.1600000	0.01	0.96	100.00	AVRG	
Pyrene-d10	1.0176000	1.0000000	1.4478000	0.01	1.76	100.00	LINR	

FORM VII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab File ID (Standard): R5788 Date Analyzed: 11/01/07

Instrument ID: GCMS-R Time Analyzed: 0912

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD		18729	8.40	77402	11.29	41986	15.50
UPPER LIMIT		37458	8.90	154804	11.79	83972	16.00
LOWER LIMIT		9365	7.90	38701	10.79	20993	15.00
CLIENT SAMPLE ID	LAB SAMPLE ID						
01 WG45069-BLANK	WG45069-1	21433	8.41	89590	11.30	46722	15.52
02 WG45069-LCS	WG45069-2	19955	8.41	82825	11.30	43430	15.52
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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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab File ID (Standard): R5788 Date Analyzed: 11/01/07

Instrument ID: GCMS-R Time Analyzed: 0912

	IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD	57160	19.00	32339	25.36	18891	28.54
UPPER LIMIT	114320	19.50	64678	25.86	37782	29.04
LOWER LIMIT	28580	18.50	16170	24.86	9446	28.04

	CLIENT SAMPLE ID	LAB SAMPLE ID						
01	WG45069-BLANK	WG45069-1	66591	19.02	30004	25.39	20128	28.58
02	WG45069-LCS	WG45069-2	60519	19.02	24082	25.39	12840	28.58
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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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab File ID (Standard): R5805 Date Analyzed: 11/02/07

Instrument ID: GCMS-R Time Analyzed: 1210

	IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD	24534	8.36	92453	11.25	44236	15.47
UPPER LIMIT	49068	8.86	184906	11.75	88472	15.97
LOWER LIMIT	12267	7.86	46227	10.75	22118	14.97

	CLIENT SAMPLE ID	LAB SAMPLE ID						
01	2W-SD-SD53-0001MS	WG45069-3	32517	8.36	116442	11.25	58833	15.47
02	2W-SD-SD53-0001MSD	WG45069-4	34358	8.36	127408	11.25	63344	15.47
03	2W-SD-SD57-0001	SA6036-2	33212	8.36	118803	11.25	55664	15.47
04	2W-SD-SD56-0001	SA6036-4	32711	8.36	127474	11.25	67235	15.47
05	2W-SD-SD54-0001	SA6036-8	28480	8.36	96530	11.25	41731	15.47
06	2W-SD-SD53-0001	SA6036-9	30989	8.36	118494	11.25	58157	15.47
07	2W-SD-SD53-0204	SA6036-10	28996	8.36	110282	11.25	55192	15.47
08	2W-FD-101807-01	SA6036-11	32258	8.36	125386	11.25	60929	15.47
09	2W-SD-SD52-0001	SA6036-13	30988	8.36	116148	11.25	55871	15.47
10	2W-SD-SD50-0204	SA6036-14	32440	8.36	126161	11.25	65526	15.47
11	2W-SD-SD50-0001	SA6036-15	31730	8.36	118643	11.25	55522	15.47
12	2W-SD-SD45-0002	SA6036-18	28822	8.37	110082	11.25	72659	15.47
13								
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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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab File ID (Standard): R5805 Date Analyzed: 11/02/07

Instrument ID: GCMS-R Time Analyzed: 1210

	IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD	56151	18.94	30661	25.32	13699	28.50
UPPER LIMIT	112302	19.44	61322	25.82	27398	29.00
LOWER LIMIT	28076	18.44	15331	24.82	6850	28.00

	CLIENT SAMPLE ID	LAB SAMPLE ID						
01	2W-SD-SD53-0001MS	WG45069-3	88991	18.94	60730	25.32	37702*	28.50
02	2W-SD-SD53-0001MSD	WG45069-4	87746	18.95	45802	25.32	29270*	28.50
03	2W-SD-SD57-0001	SA6036-2	74622	18.94	48222	25.32	33742*	28.51
04	2W-SD-SD56-0001	SA6036-4	103871	18.94	63114*	25.32	44892*	28.50
05	2W-SD-SD54-0001	SA6036-8	46089	18.96	26763	25.32	20839	28.50
06	2W-SD-SD53-0001	SA6036-9	78429	18.94	48461	25.32	28947*	28.50
07	2W-SD-SD53-0204	SA6036-10	65945	18.96	37486	25.32	28238*	28.51
08	2W-FD-101807-01	SA6036-11	79547	18.96	41621	25.32	26143	28.50
09	2W-SD-SD52-0001	SA6036-13	69332	18.96	33397	25.32	19004	28.50
10	2W-SD-SD50-0204	SA6036-14	87481	18.96	48592	25.32	33154*	28.51
11	2W-SD-SD50-0001	SA6036-15	66345	18.96	35564	25.32	23151	28.50
12	2W-SD-SD45-0002	SA6036-18	68971	18.96	32951	25.33	23002	28.52
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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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab File ID (Standard): R5842 Date Analyzed: 11/06/07

Instrument ID: GCMS-R Time Analyzed: 1243

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD		29626	8.33	118135	11.22	56665	15.43
UPPER LIMIT		59252	8.83	236270	11.72	113330	15.93
LOWER LIMIT		14813	7.83	59068	10.72	28333	14.93
CLIENT SAMPLE ID	LAB SAMPLE ID						
01 2W-SD-SD57-0001	SA6036-2DL	29086	8.33	111746	11.22	52601	15.43
02 2W-SD-SD56-0001	SA6036-4DL	26504	8.33	100143	11.22	50115	15.43
03 2W-SD-SD53-0204	SA6036-10DL	32147	8.33	127905	11.22	78118	15.43
04 2W-SD-SD46-0001	SA6036-19DL	30073	8.33	109284	11.22	52188	15.43
05 2W-SD-SD46-0204	SA6036-20DL	29183	8.33	99373	11.22	46717	15.43
06 2W-SD-SD46-0001	SA6036-19	32685	8.34	127134	11.22	61557	15.43
07 2W-SD-SD46-0204	SA6036-20	34208	8.33	123960	11.22	63882	15.43
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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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab File ID (Standard): R5842 Date Analyzed: 11/06/07

Instrument ID: GCMS-R Time Analyzed: 1243

	IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD	71162	18.93	33931	25.29	19704	28.47
UPPER LIMIT	142324	19.43	67862	25.79	39408	28.97
LOWER LIMIT	35581	18.43	16966	24.79	9852	27.97

	CLIENT SAMPLE ID	LAB SAMPLE ID						
01	2W-SD-SD57-0001	SA6036-2DL	58111	18.93	24658	25.29	17275	28.47
02	2W-SD-SD56-0001	SA6036-4DL	63038	18.93	37586	25.29	26681	28.47
03	2W-SD-SD53-0204	SA6036-10DL	99447	18.93	52356	25.29	30770	28.48
04	2W-SD-SD46-0001	SA6036-19DL	57959	18.93	30483	25.29	23107	28.47
05	2W-SD-SD46-0204	SA6036-20DL	44949	18.93	17344	25.29	12969	28.48
06	2W-SD-SD46-0001	SA6036-19	79820	18.93	36835	25.29	25384	28.48
07	2W-SD-SD46-0204	SA6036-20	75942	18.93	43203	25.29	32061	28.48
08								
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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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab File ID (Standard): R5876 Date Analyzed: 11/08/07

Instrument ID: GCMS-R Time Analyzed: 1135

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD		14111	8.26	57086	11.15	27410	15.36
UPPER LIMIT		28222	8.76	114172	11.65	54820	15.86
LOWER LIMIT		7056	7.76	28543	10.65	13705	14.86
	CLIENT SAMPLE ID	LAB SAMPLE ID					
01	2W-SD-SD55-0001	SA6036-6RA	18293	8.27	74331	11.15	37809	15.36
02	2W-SD-SD51-0001	SA6036-12RA	18043	8.27	72575	11.15	39216	15.37
03	2W-SD-SD50-0204	SA6036-14RA	18698	8.27	74798	11.15	42634	15.37
04	2W-SD-SD49-0001	SA6036-16RA	20363	8.27	79776	11.15	40011	15.37
05	2W-SD-SD45-0001	SA6036-17RA	18994	8.27	74035	11.15	39151	15.37
06								
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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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab File ID (Standard): R5876 Date Analyzed: 11/08/07

Instrument ID: GCMS-R Time Analyzed: 1135

	IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD	37971	18.85	15621	25.20	10421	28.39
UPPER LIMIT	75942	19.35	31242	25.70	20842	28.89
LOWER LIMIT	18986	18.35	7811	24.70	5211	27.89

	CLIENT SAMPLE ID	LAB SAMPLE ID						
01	2W-SD-SD55-0001	SA6036-6RA	51787	18.85	29448	25.22	20192	28.41
02	2W-SD-SD51-0001	SA6036-12RA	51600	18.85	28947	25.22	17408	28.40
03	2W-SD-SD50-0204	SA6036-14RA	62920	18.85	37904*	25.23	24012*	28.42
04	2W-SD-SD49-0001	SA6036-16RA	53071	18.85	26641	25.22	16940	28.41
05	2W-SD-SD45-0001	SA6036-17RA	50958	18.87	23567	25.22	14505	28.41
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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

SRV: [Fluoranthene] = 1100 ug/kg as reported by the laboratory.

Data File: \\Target_server\GG\chem\gcms-r.i\R110607.b\R5853.D
Report Date: 12-Nov-2007 14:00

Katahdin Analytical Services

Data file : \\Target_server\GG\chem\gcms-r.i\R110607.b\R5853.D
Lab Smp Id: SA6036-19DL
Client Smp ID: 2W-SD-SD46-0001
Inj Date : 06-NOV-2007 20:36
MS Autotune Date: 02-JUL-2007 15:09
Operator : JCG
Inst ID: gcms-r.i
Smp Info : SA6036-19DL
Misc Info : SW846 M8270C
Comment :
Method : \\target_server\gg\chem\gcms-r.i\R110607.b\rsim047.m
Meth Date : 06-Nov-2007 13:26 cgomez
Quant Type: ISTD
Cal Date : 29-OCT-2007 15:46
Cal File: R5749.D
Als bottle: 13
Dil Factor: 2.00000
Integrator: HP RTE
Compound Sublist: tetrat439001.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo)*1000*(100/(100 - M)) * CpndVariabl

Name	Value	Description
DF	2.000	Dilution Factor
Vt	0.00100	Volume of final extract (L)
Vo	0.03000	Sample Weight (Kg)
M	58.015	% Moisture
Cpnd Variable		Local Compound Variable

$\frac{417270}{57959} \cdot \frac{0.8\ ug/ml}{0.847} = \frac{6.832\ ug/ml \cdot 0.001L \cdot 1000ml/L}{0.03Kg \cdot 0.42} = \frac{542\ ug}{Kg} \cdot 2 = \boxed{1084\ ug/Kg}$

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)
* 1 1,4-Dichlorobenzene-D4	152	8.330	8.330	(1.000)	30073	0.80000	
* 3 Naphthalene-D8	136	11.217	11.218	(1.000)	109284	0.80000	
$ 6 2-Methylnaphthalene-d10	150	12.831	12.832	(1.144)	34464	0.67568	107
11 Acenaphthylene	152	15.042	15.042	(0.975)	30878	0.33257	52.8(a)
* 12 Acenaphthene-D10	164	15.429	15.429	(1.000)	52188	0.80000	
13 Acenaphthene	153	15.503	15.503	(1.005)	4822	0.07360	11.7(a)
$ 14 Fluorene-d10	176	16.645	16.645	(1.079)	50590	0.67512	107
15 Fluorene	166	16.719	16.719	(1.084)	9268	0.13340	21.2(a)
* 19 Phenanthrene-D10	188	18.926	18.925	(1.000)	57959	0.80000	
20 Phenanthrene	178	18.981	18.980	(1.003)	169480	2.48292	394
21 Anthracene	178	19.073	19.091	(1.008)	32635	0.46972	74.6(a)
24 Fluoranthene	202	21.816	21.817	(1.153)	417270	6.83141	1080
$ 25 Pyrene-d10	212	22.296	22.296	(0.882)	32633	0.50952	80.9
26 Pyrene	202	22.324	22.325	(0.883)	391269	6.52878	1040
27 Benzo(a)anthracene	228	25.246	25.246	(0.998)	118425	4.02017	638
* 28 Chrysene-D12	240	25.288	25.288	(1.000)	30483	0.80000	
29 Chrysene	228	25.344	25.345	(1.002)	172375	4.08902	649
31 Benzo(b)fluoranthene	252	27.690	27.690	(0.973)	124385	4.14475	658(M)
32 Benzo(k)fluoranthene	252	27.728	27.740	(0.974)	155313	2.87640	457(M)
33 Benzo(a)pyrene	252	28.349	28.349	(0.996)	97652	3.68987	586
* 34 Perylene-D12	264	28.469	28.470	(1.000)	23107	0.80000	
35 Indeno(1,2,3-cd)pyrene	276	30.471	30.472	(1.070)	61319	3.63058	576(H)

NSB NEW LONDON
SOIL DATA
SA6036

FRACTION	CHEMICAL	2W-FD-101807-01	UNITS	2W-SD-SD53-0001	RPD	D
PAH	ACENAPHTHENE	4.5 J	UG/KG	5.2 J	14.43	0.70
PAH	ACENAPHTHYLENE	19 J	UG/KG	20 J	5.13	1.00
PAH	ANTHRACENE	24 J	UG/KG	28 J	15.38	4.00
PAH	BENZO(A)ANTHRACENE	260	UG/KG	240	8.00	20.00
PAH	BENZO(A)PYRENE	270	UG/KG	260 J	3.77	10.00
PAH	BENZO(B)FLUORANTHENE	350	UG/KG	340 J	2.90	10.00
PAH	BENZO(G,H,I)PERYLENE	170	UG/KG	170 J	0.00	0.00
PAH	BENZO(K)FLUORANTHENE	180	UG/KG	220 J	20.00	40.00
PAH	CHRYSENE	300	UG/KG	280	6.90	20.00
PAH	DIBENZO(A,H)ANTHRACENE	98 J	UG/KG	100 J	2.02	2.00
PAH	FLUORANTHENE	440	UG/KG	440	0.00	0.00
PAH	FLUORENE	8.4 J	UG/KG	9 J	6.90	0.60
PAH	INDENO(1,2,3-CD)PYRENE	250	UG/KG	250 J	0.00	0.00
PAH	PHENANTHRENE	180	UG/KG	170	5.71	10.00
PAH	PYRENE	400	UG/KG	340	16.22	60.00

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

FORM 2
SOIL PESTICIDE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column(1): ZB-MULTIRESIDUE-1ID: 0.53 (mm) GC Column(2): ZB-MULTIRESIDUE-2ID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	DCB1 REC#	DCB2 REC#	OTHR (1)	OTHR (2)	TOT OUT
01	WG44926-BLANK	WG44926-1	67	72	83	82			0
02	WG44926-LCS	WG44926-2	62	66	85	84			0
03	2W-SD-SD53-0001MS	WG44926-3	60	65	74	68			0
04	2W-SD-SD53-0001MSD	WG44926-4	63	65	74	68			0
05	2W-SD-SD56-0001	SA6036-4	63	66	126*	72			1
06	2W-SD-SD55-0001	SA6036-6	59	61	63	73			0
07	2W-SD-SD54-0001	SA6036-8	39*	41	53	42*			2
08	2W-SD-SD53-0001	SA6036-9	56	55	58	51*			1
09	2W-FD-101807-01	SA6036-11	58	59	68	56			0
10	WG45073-BLANK	WG45073-1	66	69	90	92			0
11	WG45073-LCS	WG45073-2	76	77	96	95			0
12	WG45073-LCSD	WG45073-3	76	77	95	97			0
13	2W-SD-SD53-0204	SA6036-10DL	D	D	D	D			0
14	2W-SD-SD51-0001	SA6036-12RA	60	64	71	68			0
15	2W-SD-SD52-0001	SA6036-13DL	59	52	74	63			0
16	2W-SD-SD50-0204	SA6036-14RA	68	66	91	76			0
17	2W-SD-SD50-0001	SA6036-15RA	54	56	68	59			0
18	2W-SD-SD49-0001	SA6036-16RA	67	69	79	75			0
19	2W-SD-SD45-0001	SA6036-17RA	61	64	77	65			0
20	2W-SD-SD46-0001	SA6036-19	71	70	103	69			0
21	2W-SD-SD45-0002	SA6036-18DL	D	D	D	D			0
22	2W-SD-SD46-0204	SA6036-20DL	67	67	90	73			0
23									
24									
25									
26									
27									
28									

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-Xylene (41-116)
S2 (DCB) = Decachlorobiphenyl (52-119)

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

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/25/07
Analysis Date: 10/26/07
Report Date: 11/07/2007
Matrix: SOIL

Lab ID: WG44926-2
Client ID: WG44926-LCS
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44926
Units: ug/Kgdrywt

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.	%REC.	QC. LIMITS
alpha-BHC	17	NA	13	76	47-127
gamma BHC	17	NA	24	* 142	54-115
beta-BHC	17	NA	16	94	53-119
delta-BHC	17	NA	14	85	65-120
Heptachlor	17	NA	13	77	57-114
Aldrin	17	NA	13	78	59-116
Heptachlor Epoxide	17	NA	14	85	59-119
gamma-Chlordane	17	NA	14	86	57-118
alpha-Chlordane	17	NA	14	85	60-117
4,4'-DDE	17	NA	14	84	59-119
Endosulfan I	17	NA	7.4	45	20- 87
Dieldrin	17	NA	14	82	56-116
Endrin	17	NA	14	85	52-127
4,4'-DDD	17	NA	14	85	62-117
Endosulfan II	17	NA	9.3	56	29- 91
4,4'-DDT	17	NA	15	88	60-117
Endrin Aldehyde	17	NA	8.9	54	35-109
Methoxychlor	17	NA	16	94	41-177
Endosulfan sulfate	17	NA	15	89	57-136
Endrin Ketone	17	NA	15	92	54-142

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/30/07
Analysis Date: 11/02/07
Report Date: 11/07/2007
Matrix: SOIL

Lab ID: WG45073-2 & WG45073-3
Client ID: WG45073-LCS & WG45073-LCSD
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG45073
Units: ug/Kgdrywt

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
alpha-BHC	17	17	NA	15	15	88	90	3	50	47-127
gamma BHC	17	17	NA	15	15	88	88	0.0	50	54-115
beta-BHC	17	17	NA	17	17	102	101	0.6	50	53-119
delta-BHC	17	17	NA	18	18	106	109	3	50	65-120
Heptachlor	17	17	NA	14	14	87	86	1	50	57-114
Aldrin	17	17	NA	15	15	88	89	2	50	59-116
Heptachlor Epoxide	17	17	NA	16	16	95	98	3	50	59-119
gamma-Chlordane	17	17	NA	16	16	96	98	2	50	57-118
alpha-Chlordane	17	17	NA	16	16	94	95	1	50	60-117
4,4'-DDE	17	17	NA	15	16	92	95	4	50	59-119
Endosulfan I	17	17	NA	8.6	8.9	52	53	3	50	20- 87
Dieldrin	17	17	NA	15	16	91	95	4	50	56-116
Endrin	17	17	NA	15	16	92	95	4	50	52-127
4,4'-DDD	17	17	NA	15	15	89	91	3	50	62-117
Endosulfan II	17	17	NA	11	11	64	68	7	50	29- 91
4,4'-DDT	17	17	NA	16	17	94	101	7	50	60-117
Endrin Aldehyde	17	17	NA	13	14	80	82	1	50	35-109
Methoxychlor	17	17	NA	16	16	96	97	1	50	41-177
Endosulfan sulfate	17	17	NA	19	20	112	117	4	50	57-136
Endrin Ketone	17	17	NA	21	22	124	130	5	50	54-142

FORM III PEST-2

8AK1005.d & 8AK1006.d

KATAHDIN ANALYTICAL SERVICES
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 10/26/07
Report Date: 11/07/2007
Matrix: SOIL

Lab ID: WG44926-3 & WG44926-4
Client ID: 2W-SD-SD53-0001MS & 2W-SD-SD53-0001MSD
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44926
Units: ug/Kgdrywt

COMPOUND	MS SPIKE	MSD SPIKE	SAMPLE CONC.	MS CONC.	MSD CONC.	MS %REC.	MSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
alpha-BHC	49	49	0.00	32	34	65	71	8	50	47-127
gamma BHC	49	49	0.00	36	50	74	104	34	50	54-115
beta-BHC	49	49	0.00	32	36	66	73	10	50	53-119
delta-BHC	49	49	0.00	37	37	75	75	0.5	50	65-120
Heptachlor	49	49	0.00	35	39	72	79	9	50	57-114
Aldrin	49	49	0.00	34	35	69	72	4	50	59-116
Heptachlor Epoxide	49	49	0.00	34	34	70	69	0.9	50	59-119
gamma-Chlordane	49	49	0.00	39	39	79	79	0.2	50	57-118
alpha-Chlordane	49	49	0.00	35	35	72	72	0.8	50	60-117
4,4'-DDE	49	49	3.0	37	37	70	69	2	50	59-119
Endosulfan I	49	49	0.00	18	18	38	38	0.0	50	20- 87
Dieldrin	49	49	0.00	41	42	84	86	3	50	56-116
Endrin	49	49	0.00	36	35	73	72	0.8	50	52-127
4,4'-DDD	49	49	4.4	39	43	70	80	11	50	62-117
Endosulfan II	49	49	0.00	22	22	44	45	2	50	29- 91
4,4'-DDT	49	49	4.4	39	35	71	62	12	50	60-117
Endrin Aldehyde	49	49	0.00	31	31	63	64	1	50	35-109
Methoxychlor	49	49	0.00	42	38	86	78	10	50	41-177
Endosulfan sulfate	49	49	0.00	39	39	79	80	2	50	57-136
Endrin Ketone	49	49	0.00	37	38	76	77	2	50	54-142

FORM III PEST-2

8AJ5023.d & 8AJ5024.d

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 10/18/07 10/18/07

Instrument ID: GC08

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 19.05 TCX: 4.59

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		EVAL	10/18/07	1419		
02		INDAB 0.005	10/18/07	1446	19.05	4.65
03		INDAB 0.01	10/18/07	1513	19.05	4.65
04		INDAB 0.025	10/18/07	1540	19.05	4.65
05		INDAB 0.05	10/18/07	1607	19.05	4.65
06		INDAB 0.1	10/18/07	1634	19.05	4.65
07		INDAB 0.25	10/18/07	1701	19.05	4.65
08		IND 0.05	10/18/07	1728		
09		TOX 1.0	10/18/07	1755		
10		EVAL	10/26/07	1724		
11		INDAB 0.05	10/26/07	1751	19.03	4.63
12	WG44926-BLAN	WG44926-1	10/26/07	1818	19.02	4.63
13	WG44926-LCS	WG44926-2	10/26/07	1846	19.02	4.63
14	2W-SD-SD53-0	WG44926-3 MS	10/26/07	1913	19.02	4.63
15	2W-SD-SD53-0	WG44926-4 MSD	10/26/07	1940	19.02	4.65
16	2W-SD-SD56-0	SA6036-4	10/26/07	2007	19.02	4.65
17	2W-SD-SD55-0	SA6036-6	10/26/07	2034	19.03	4.65
18	2W-SD-SD54-0	SA6036-8	10/26/07	2102	19.02	4.65
19	2W-SD-SD53-0	SA6036-9	10/26/07	2129	19.02	4.65
20	2W-FD-101807	SA6036-11	10/26/07	2223	19.02	4.65

QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)

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

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 10/18/07 10/18/07

Instrument ID: GC08

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 19.05 TCX: 4.59

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		INDAB 0.1	10/26/07	2318	19.02	4.65
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)

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

FORM VIII PEST

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 10/18/07 10/18/07

Instrument ID: GC08

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 19.37 TCX: 4.59

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		EVAL	10/18/07	1419		
02		INDAB 0.005	10/18/07	1446	19.35	4.58
03		INDAB 0.01	10/18/07	1513	19.37	4.58
04		INDAB 0.025	10/18/07	1540	19.37	4.58
05		INDAB 0.05	10/18/07	1607	19.37	4.58
06		INDAB 0.1	10/18/07	1634	19.37	4.58
07		INDAB 0.25	10/18/07	1701	19.37	4.58
08		IND 0.05	10/18/07	1728		
09		TOX 1.0	10/18/07	1755		
10		EVAL	10/26/07	1724		
11		INDAB 0.05	10/26/07	1751	19.34	4.57
12	WG44926-BLAN	WG44926-1	10/26/07	1818	19.34	4.57
13	WG44926-LCS	WG44926-2	10/26/07	1846	19.33	4.57
14	2W-SD-SD53-0	WG44926-3	10/26/07	1913	19.34	4.58
15	2W-SD-SD53-0	WG44926-4	10/26/07	1940	19.34	4.58
16	2W-SD-SD56-0	SA6036-4	10/26/07	2007	19.34	4.58
17	2W-SD-SD55-0	SA6036-6	10/26/07	2034	19.34	4.58
18	2W-SD-SD54-0	SA6036-8	10/26/07	2102	19.34	4.58
19	2W-SD-SD53-0	SA6036-9	10/26/07	2129	19.34	4.58
20	2W-FD-101807	SA6036-11	10/26/07	2223	19.34	4.58

QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)

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

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 10/18/07 10/18/07

Instrument ID: GC08

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 19.37 TCX: 4.59

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		INDAB 0.1	10/26/07	2318	19.34	4.58
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)

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

FORM VIII PEST

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date(s): 10/18/07 10/18/07

Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Calibration Time(s): 1446 1822

LAB FILE ID: RF0.005: 8AJ3233 RF0.01: 8AJ3234 RF0.025: 8AJ3235
RF0.05: 8AJ3241 RF0.1: 8AJ3237 RF0.25: 8AJ3238

COMPOUND	RF0.005	RF0.01	RF0.025	RF0.05	RF0.1	RF0.25	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
alpha-BHC	7911	17522	49763	103350	200380	462180	2ORDR	1.125e-003	4.594e-007	1.709e-013	0.99995	0.99000
gamma BHC	7737	17017	46191	95807	181520	408060	2ORDR	9.344e-004	4.924e-007	2.89e-013	0.99995	0.99000
beta-BHC	4575	9056	22200	44067	83164	188220	2ORDR	-6.92e-005	1.096e-006	1.239e-012	0.99999	0.99000
delta-BHC	7154	14911	40483	86949	166580	387290	2ORDR	9.958e-004	5.557e-007	2.252e-013	0.99992	0.99000
Heptachlor	7869	15893	39624	81291	152300	340910	2ORDR	3.408e-004	5.874e-007	4.252e-013	0.99997	0.99000
Aldrin	5945	13213	35723	76020	144960	328220	2ORDR	1.132e-003	6.216e-007	4.162e-013	0.99993	0.99000
Heptachlor Epoxide	6468	13117	33902	68708	129160	295080	2ORDR	2.609e-004	7.064e-007	4.748e-013	0.99996	0.99000
gamma-Chlordane	5918	12062	31026	63716	121770	278420	2ORDR	4.973e-004	7.539e-007	5.108e-013	0.99998	0.99000
alpha-Chlordane	5854	12070	30334	61912	117330	268600	2ORDR	2.847e-004	7.824e-007	5.488e-013	0.99998	0.99000
4,4'-DDE	4298	8663	24885	53502	105050	251320	2ORDR	1.199e-003	9.061e-007	3.33e-013	0.99992	0.99000
Endosulfan I	5365	10930	28484	57949	111160	257990	2ORDR	3.974e-004	8.379e-007	5.027e-013	0.99998	0.99000
Dieldrin	4541	9597	25637	55812	111820	256280	2ORDR	1.552e-003	8.288e-007	5.465e-013	0.99984	0.99000
Endrin	3917	8225	22054	47932	94713	222790	2ORDR	1.252e-003	9.964e-007	5.377e-013	0.99991	0.99000
4,4'-DDD	2755	5584	16326	36434	72139	182170	2ORDR	1.343e-003	1.366e-006	-5.12e-015	0.99988	0.99000
Endosulfan II	4404	8705	23029	47084	90709	209740	2ORDR	5.206e-004	1.024e-006	7.871e-013	0.99998	0.99000
4,4'-DDT	3011	6150	17184	37700	78255	191160	2ORDR	1.676e-003	1.252e-006	2.409e-013	0.99983	0.99000
Endrin Aldehyde	3836	7424	18974	38682	70098	164290	2ORDR	-3.14e-004	1.317e-006	1.267e-012	0.99979	0.99000
Methoxychlor	2045	4104	10674	21096	40827	98560	2ORDR	-5.25e-005	2.367e-006	1.736e-012	0.99998	0.99000
Endosulfan sulfate	3622	7090	18974	38496	74361	176750	2ORDR	3.28e-004	1.28e-006	7.53e-013	0.99998	0.99000
Endrin Ketone	4135	8479	22405	47382	90364	207240	2ORDR	8.079e-004	1.014e-006	9.105e-013	0.99994	0.99000
Toxaphene				14875			2ORDR	0.00000000	6.723e-005	0.00000000	1.00000	0.99000
(2)				20904			2ORDR	0.00000000	4.784e-005	0.00000000	1.00000	0.99000
(3)				22101			2ORDR	0.00000000	4.525e-005	0.00000000	1.00000	0.99000
(4)				26596			2ORDR	0.00000000	3.76e-005	0.00000000	1.00000	0.99000
(5)				21725			2ORDR	0.00000000	4.603e-005	0.00000000	1.00000	0.99000
(6)				13082			2ORDR	0.00000000	7.644e-005	0.00000000	1.00000	0.99000
(7)				13557			2ORDR	0.00000000	7.376e-005	0.00000000	1.00000	0.99000
(8)				35052			2ORDR	0.00000000	2.853e-005	0.00000000	1.00000	0.99000
(9)				19033			2ORDR	0.00000000	5.254e-005	0.00000000	1.00000	0.99000
(10)				12995			2ORDR	0.00000000	7.695e-005	0.00000000	1.00000	0.99000
Tetrachloro-m-Xylene	7340	14528	35862	70605	131220	292520	2ORDR	-1.19e-004	6.795e-007	6.011e-013	0.99998	0.99000
Decachlorobiphenyl	4890	9145	21862	40772	72624	160140	2ORDR	-1.12e-003	1.2e-006	2.31e-012	0.99982	0.99000

FORM VI PESTICIDE

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date(s): 10/18/07 10/18/07

Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Calibration Time(s): 1446 1822

LAB FILE ID: RF0.005: 8AJ4233 RF0.01: 8AJ4234 RF0.025: 8AJ4235
RF0.05: 8AJ4241 RF0.1: 8AJ4237 RF0.25: 8AJ4238

COMPOUND	RF0.005	RF0.01	RF0.025	RF0.05	RF0.1	RF0.25	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
alpha-BHC	5640	12664	37669	83637	167020	400210	2ORDR	1.806e-003	5.696e-007	1.26e-013	0.99986	0.99000
gamma BHC	5327	11929	35034	77762	154870	361580	2ORDR	1.888e-003	6.019e-007	2.324e-013	0.99984	0.99000
beta-BHC	3586	7032	18012	36847	71303	166010	2ORDR	3.764e-004	1.316e-006	1.128e-012	0.99998	0.99000
delta-BHC	4239	9404	28940	67408	138240	334830	2ORDR	2.402e-003	6.949e-007	1.32e-013	0.99972	0.99000
Heptachlor	6613	13461	35792	74968	145380	342400	2ORDR	7.123e-004	6.487e-007	2.317e-013	0.99996	0.99000
Aldrin	5017	10595	30106	66033	133500	319540	2ORDR	1.627e-003	7.178e-007	1.85e-013	0.99987	0.99000
Heptachlor Epoxide	4958	10071	26800	58133	115600	269770	2ORDR	1.278e-003	8.137e-007	3.999e-013	0.99989	0.99000
gamma-Chlordane	4629	9753	25711	55302	111660	268570	2ORDR	1.183e-003	8.663e-007	2.228e-013	0.99992	0.99000
alpha-Chlordane	4859	9809	26679	55862	108960	263110	2ORDR	6.839e-004	8.827e-007	2.467e-013	0.99996	0.99000
4,4'-DDE	3383	6973	20040	45519	94484	240270	2ORDR	1.843e-003	1.058e-006	-1.06e-013	0.99981	0.99000
Endosulfan I	4057	8639	22951	49727	99194	237870	2ORDR	1.183e-003	9.687e-007	3.238e-013	0.99992	0.99000
Dieldrin	3570	7432	20858	47031	96565	245240	2ORDR	1.628e-003	1.034e-006	-8.66e-014	0.99985	0.99000
Endrin	2953	5957	16819	36985	79225	196060	2ORDR	1.955e-003	1.255e-006	4.844e-014	0.99972	0.99000
4,4'-DDD	2091	4153	12489	28562	63817	165380	2ORDR	2.626e-003	1.599e-006	-6.34e-013	0.99950	0.99000
Endosulfan II	3264	6899	18587	39085	79785	195660	2ORDR	1.087e-003	1.232e-006	2.024e-013	0.99994	0.99000
4,4'-DDT	2292	4831	14057	32198	69402	183110	2ORDR	2.182e-003	1.475e-006	-6.7e-013	0.99972	0.99000
Endrin Aldehyde	3013	6037	15328	32224	62937	152720	2ORDR	4.227e-004	1.541e-006	6.088e-013	0.99997	0.99000
Methoxychlor	1592	3270	8752	18485	37883	92489	2ORDR	1.125e-003	2.592e-006	1.059e-012	0.99992	0.99000
Endosulfan sulfate	2886	5680	15330	32484	66203	165670	2ORDR	9.447e-004	1.505e-006	-1.11e-014	0.99995	0.99000
Endrin Ketone	3073	6397	18125	40231	80043	193820	2ORDR	1.482e-003	1.202e-006	4.14e-013	0.99988	0.99000
Toxaphene				14148			2ORDR	0.00000000	7.068e-005	0.00000000	1.00000	0.99000
(2)				11810			2ORDR	0.00000000	8.467e-005	0.00000000	1.00000	0.99000
(3)				10048			2ORDR	0.00000000	9.952e-005	0.00000000	1.00000	0.99000
(4)				23205			2ORDR	0.00000000	4.309e-005	0.00000000	1.00000	0.99000
(5)				8974			2ORDR	0.00000000	1.114e-004	0.00000000	1.00000	0.99000
(6)				13232			2ORDR	0.00000000	7.557e-005	0.00000000	1.00000	0.99000
(7)				27123			2ORDR	0.00000000	3.687e-005	0.00000000	1.00000	0.99000
(8)				7972			2ORDR	0.00000000	1.254e-004	0.00000000	1.00000	0.99000
(9)				13101			2ORDR	0.00000000	7.633e-005	0.00000000	1.00000	0.99000
(10)				8561			2ORDR	0.00000000	1.168e-004	0.00000000	1.00000	0.99000
Tetrachloro-m-Xylene	5480	10861	27743	55904	105990	245790	2ORDR	9.386e-005	8.773e-007	5.683e-013	0.99997	0.99000
Decachlorobiphenyl	4694	9259	22545	44146	81803	182500	2ORDR	-2.67e-004	1.091e-006	1.536e-012	0.99997	0.99000

FORM VI PESTICIDE

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 10/18/07 Time: 1728

Lab File ID: 8AJ3239 Init. Calib. Date(s): 10/18/07 10/18/07

Init. Calib. Times: 1446 1822

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

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Endosulfan I	4.91e-002	5.e-002	1168400.0	0.01	-1.80	15.00	2RDR
gamma BHC	4.68e-002	5.e-002	1787900.0	0.01	-6.40	15.00	2RDR
beta-BHC	4.83e-002	5.e-002	896400.00	0.01	-3.40	15.00	2RDR
delta-BHC	4.99e-002	5.e-002	752880.00	0.01	-0.20	15.00	2RDR
Heptachlor	4.53e-002	5.e-002	1611100.0	0.01	-9.40	15.00	2RDR
Aldrin	4.64e-002	5.e-002	1493800.0	0.01	-7.20	15.00	2RDR
Heptachlor Epoxide	4.79e-002	5.e-002	1220800.0	0.01	-4.20	15.00	2RDR
gamma-Chlordane	4.91e-002	5.e-002	1132200.0	0.01	-1.80	15.00	2RDR
alpha-Chlordane	4.79e-002	5.e-002	1177700.0	0.01	-4.20	15.00	2RDR
4,4'-DDE	4.73e-002	5.e-002	951960.00	0.01	-5.40	15.00	2RDR
alpha-BHC	4.78e-002	5.e-002	2063900.0	0.01	-4.40	15.00	2RDR
Dieldrin	4.76e-002	5.e-002	1105100.0	0.01	-4.80	15.00	2RDR
Endrin	4.61e-002	5.e-002	939200.00	0.01	-7.80	15.00	2RDR
4,4'-DDD	4.8e-002	5.e-002	723760.00	0.01	-4.00	15.00	2RDR
Endosulfan II	4.96e-002	5.e-002	620620.00	0.01	-0.80	15.00	2RDR
4,4'-DDT	4.76e-002	5.e-002	716960.00	0.01	-4.80	15.00	2RDR
Endrin Aldehyde	5.05e-002	5.e-002	754760.00	0.01	1.00	15.00	2RDR
Methoxychlor	4.79e-002	5.e-002	450160.00	0.01	-4.20	15.00	2RDR
Endosulfan sulfate	4.91e-002	5.e-002	625660.00	0.01	-1.80	15.00	2RDR
Endrin Ketone	5.06e-002	5.e-002	944120.00	0.01	1.20	15.00	2RDR

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 10/18/07 Time: 1728

Lab File ID: 8AJ4239 Init. Calib. Date(s): 10/18/07 10/18/07

Init. Calib. Times: 1446 1822

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	4.7e-002	5.e-002	857800.00	0.01	-6.00	15.00	2RDR
gamma BHC	4.64e-002	5.e-002	1440200.0	0.01	-7.20	15.00	2RDR
beta-BHC	4.83e-002	5.e-002	706920.00	0.01	-3.40	15.00	2RDR
delta-BHC	4.98e-002	5.e-002	1346200.0	0.01	-0.40	15.00	2RDR
Heptachlor	4.75e-002	5.e-002	1407700.0	0.01	-5.00	15.00	2RDR
Aldrin	4.85e-002	5.e-002	1285700.0	0.01	-3.00	15.00	2RDR
Heptachlor Epoxide	4.62e-002	5.e-002	1074700.0	0.01	-7.60	15.00	2RDR
gamma-Chlordane	4.84e-002	5.e-002	1074500.0	0.01	-3.20	15.00	2RDR
alpha-Chlordane	4.83e-002	5.e-002	1063900.0	0.01	-3.40	15.00	2RDR
Endosulfan I	4.83e-002	5.e-002	958280.00	0.01	-3.40	15.00	2RDR
alpha-BHC	4.75e-002	5.e-002	1577400.0	0.01	-5.00	15.00	2RDR
Dieldrin	4.83e-002	5.e-002	906660.00	0.01	-3.40	15.00	2RDR
Endrin	4.6e-002	5.e-002	701280.00	0.01	-8.00	15.00	2RDR
4,4'-DDD	4.44e-002	5.e-002	528260.00	0.01	-11.20	15.00	2RDR
Endosulfan II	4.98e-002	5.e-002	785260.00	0.01	-0.40	15.00	2RDR
4,4'-DDT	4.72e-002	5.e-002	619300.00	0.01	-5.60	15.00	2RDR
Endrin Aldehyde	5.12e-002	5.e-002	650780.00	0.01	2.40	15.00	2RDR
Endosulfan sulfate	4.83e-002	5.e-002	629640.00	0.01	-3.40	15.00	2RDR
Methoxychlor	4.76e-002	5.e-002	355960.00	0.01	-4.80	15.00	2RDR
Endrin Ketone	5.01e-002	5.e-002	798660.00	0.01	0.20	15.00	2RDR

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 10/26/07 Time: 1751

Lab File ID: 8AJ5020 Init. Calib. Date(s): 10/18/07 10/18/07

Init. Calib. Times: 1446 1822

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

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
alpha-BHC	4.67e-002	5.e-002	1919100.0	0.01	-6.60	15.00	2RDR
gamma BHC	4.48e-002	5.e-002	1697100.0	0.01	-10.40	15.00	2RDR
Heptachlor	4.33e-002	5.e-002	1393400.0	0.01	-13.40	15.00	2RDR
beta-BHC	4.72e-002	5.e-002	825180.00	0.01	-5.60	15.00	2RDR
Aldrin	4.74e-002	5.e-002	1421800.0	0.01	-5.20	15.00	2RDR
delta-BHC	4.55e-002	5.e-002	1552400.0	0.01	-9.00	15.00	2RDR
Heptachlor Epoxide	4.67e-002	5.e-002	1260400.0	0.01	-6.60	15.00	2RDR
Endosulfan I	4.7e-002	5.e-002	1078100.0	0.01	-6.00	15.00	2RDR
4,4'-DDE	4.84e-002	5.e-002	1022000.0	0.01	-3.20	15.00	2RDR
Dieldrin	4.71e-002	5.e-002	1061800.0	0.01	-5.80	15.00	2RDR
Endrin	4.51e-002	5.e-002	859840.00	0.01	-9.80	15.00	2RDR
4,4'-DDD	5.01e-002	5.e-002	714220.00	0.01	0.20	15.00	2RDR
Endosulfan II	4.83e-002	5.e-002	901900.00	0.01	-3.40	15.00	2RDR
4,4'-DDT	4.62e-002	5.e-002	705940.00	0.01	-7.60	15.00	2RDR
Endrin Aldehyde	4.88e-002	5.e-002	720520.00	0.01	-2.40	15.00	2RDR
Endosulfan sulfate	4.77e-002	5.e-002	725680.00	0.01	-4.60	15.00	2RDR
Methoxychlor	4.55e-002	5.e-002	379980.00	0.01	-9.00	15.00	2RDR
alpha-Chlordane	4.93e-002	5.e-002	1201500.0	0.01	-1.40	15.00	2RDR
gamma-Chlordane	4.61e-002	5.e-002	1163600.0	0.01	-7.80	15.00	2RDR
Endrin Ketone	4.76e-002	5.e-002	887900.00	0.01	-4.80	15.00	2RDR
Tetrachloro-m-Xylene	4.52e-002	5.e-002	1271600.0	0.01	-9.60	15.00	2RDR
Decachlorobiphenyl	4.94e-002	5.e-002	782960.00	0.01	-1.20	15.00	2RDR

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 10/26/07 Time: 1751

Lab File ID: 8AJ6020 Init. Calib. Date(s): 10/18/07 10/18/07

Init. Calib. Times: 1446 1822

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
alpha-BHC	4.88e-002	5.e-002	1622100.0	0.01	-2.40	15.00	2RDR
gamma BHC	4.58e-002	5.e-002	1419100.0	0.01	-8.40	15.00	2RDR
Heptachlor	4.7e-002	5.e-002	1393000.0	0.01	-6.00	15.00	2RDR
beta-BHC	4.83e-002	5.e-002	706640.00	0.01	-3.40	15.00	2RDR
Aldrin	4.8e-002	5.e-002	1270900.0	0.01	-4.00	15.00	2RDR
delta-BHC	4.55e-002	5.e-002	1225300.0	0.01	-9.00	15.00	2RDR
Heptachlor Epoxide	4.98e-002	5.e-002	1158700.0	0.01	-0.40	15.00	2RDR
Endosulfan I	4.9e-002	5.e-002	971220.00	0.01	-2.00	15.00	2RDR
4,4'-DDE	4.74e-002	5.e-002	865680.00	0.01	-5.20	15.00	2RDR
Dieldrin	4.78e-002	5.e-002	896140.00	0.01	-4.40	15.00	2RDR
Endrin	4.5e-002	5.e-002	684760.00	0.01	-10.00	15.00	2RDR
4,4'-DDD	4.85e-002	5.e-002	580900.00	0.01	-3.00	15.00	2RDR
Endosulfan II	4.86e-002	5.e-002	766660.00	0.01	-2.80	15.00	2RDR
4,4'-DDT	4.48e-002	5.e-002	585000.00	0.01	-10.40	15.00	2RDR
Endrin Aldehyde	4.99e-002	5.e-002	634460.00	0.01	-0.20	15.00	2RDR
Endosulfan sulfate	4.78e-002	5.e-002	622360.00	0.01	-4.40	15.00	2RDR
Methoxychlor	4.58e-002	5.e-002	342720.00	0.01	-8.40	15.00	2RDR
alpha-Chlordane	5.02e-002	5.e-002	1103800.0	0.01	0.40	15.00	2RDR
gamma-Chlordane	4.93e-002	5.e-002	1095000.0	0.01	-1.40	15.00	2RDR
Endrin Ketone	4.88e-002	5.e-002	776960.00	0.01	-2.40	15.00	2RDR
Tetrachloro-m-Xylene	5.02e-002	5.e-002	1102000.0	0.01	0.40	15.00	2RDR
Decachlorobiphenyl	4.96e-002	5.e-002	861020.00	0.01	-0.80	15.00	2RDR

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 10/26/07 Time: 2318

Lab File ID: 8AJ5032 Init. Calib. Date(s): 10/18/07 10/18/07

Init. Calib. Times: 1446 1822

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

COMPOUND	RRF or AMOUNT	RRF0.1000 or AMOUNT	CCAL RRF0.1000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	8.51e-002	0.1000000	1720100.0	0.01	-14.90	15.00	2RDR	
gamma BHC	7.63e-002	0.1000000	1413200.0	0.01	-23.70	15.00	2RDR	<-
Heptachlor	8.19e-002	0.1000000	1271100.0	0.01	-18.10	15.00	2RDR	<-
beta-BHC	8.04e-002	0.1000000	681910.00	0.01	-19.60	15.00	2RDR	<-
Aldrin	8.67e-002	0.1000000	1268500.0	0.01	-13.30	15.00	2RDR	
delta-BHC	7.e-002	0.1000000	1184200.0	0.01	-30.00	15.00	2RDR	<-
Heptachlor Epoxide	8.33e-002	0.1000000	1094300.0	0.01	-16.70	15.00	2RDR	<-
Endosulfan I	8.48e-002	0.1000000	952560.00	0.01	-15.20	15.00	2RDR	<-
4,4'-DDE	8.84e-002	0.1000000	930780.00	0.01	-11.60	15.00	2RDR	
Dieldrin	8.39e-002	0.1000000	936160.00	0.01	-16.10	15.00	2RDR	<-
Endrin	8.32e-002	0.1000000	788460.00	0.01	-16.80	15.00	2RDR	<-
4,4'-DDD	0.1152900	0.1000000	834480.00	0.01	15.29	15.00	2RDR	<-
Endosulfan II	8.39e-002	0.1000000	768950.00	0.01	-16.10	15.00	2RDR	<-
4,4'-DDT	3.87e-002	0.1000000	294200.00	0.01	-61.30	15.00	2RDR	<-
Endrin Aldehyde	8.2e-002	0.1000000	591660.00	0.01	-18.00	15.00	2RDR	<-
Endosulfan sulfate	7.04e-002	0.1000000	531200.00	0.01	-29.60	15.00	2RDR	<-
Methoxychlor	4.79e-002	0.1000000	199770.00	0.01	-52.10	15.00	2RDR	<-
alpha-Chlordane	8.39e-002	0.1000000	998760.00	0.01	-16.10	15.00	2RDR	<-
gamma-Chlordane	8.44e-002	0.1000000	1040200.0	0.01	-15.60	15.00	2RDR	<-
Endrin Ketone	6.97e-002	0.1000000	642410.00	0.01	-30.30	15.00	2RDR	<-
Tetrachloro-m-Xylene	8.58e-002	0.1000000	1154600.0	0.01	-14.20	15.00	2RDR	
Decachlorobiphenyl	8.69e-002	0.1000000	651820.00	0.01	-13.10	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 10/26/07 Time: 2318

Lab File ID: 8AJ6032 Init. Calib. Date(s): 10/18/07 10/18/07

Init. Calib. Times: 1446 1822

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.1000 or AMOUNT	CCAL RRF0.1000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	8.37e-002	0.1000000	1394800.0	0.01	-16.30	15.00	2RDR	<-
gamma BHC	7.55e-002	0.1000000	1170100.0	0.01	-24.50	15.00	2RDR	<-
Heptachlor	7.39e-002	0.1000000	1086300.0	0.01	-26.10	15.00	2RDR	<-
beta-BHC	7.9e-002	0.1000000	569780.00	0.01	-21.00	15.00	2RDR	<-
Aldrin	8.22e-002	0.1000000	1091800.0	0.01	-17.80	15.00	2RDR	<-
delta-BHC	6.92e-002	0.1000000	944730.00	0.01	-30.80	15.00	2RDR	<-
Heptachlor Epoxide	8.37e-002	0.1000000	966540.00	0.01	-16.30	15.00	2RDR	<-
Endosulfan I	8.4e-002	0.1000000	831740.00	0.01	-16.00	15.00	2RDR	<-
4,4'-DDE	8.76e-002	0.1000000	817400.00	0.01	-12.40	15.00	2RDR	
Dieldrin	8.55e-002	0.1000000	816700.00	0.01	-14.50	15.00	2RDR	
Endrin	8.19e-002	0.1000000	635300.00	0.01	-18.10	15.00	2RDR	<-
4,4'-DDD	0.1102400	0.1000000	691940.00	0.01	10.24	15.00	2RDR	
Endosulfan II	7.92e-002	0.1000000	627620.00	0.01	-20.80	15.00	2RDR	<-
4,4'-DDT	3.51e-002	0.1000000	225140.00	0.01	-64.90	15.00	2RDR	<-
Endrin Aldehyde	7.71e-002	0.1000000	488360.00	0.01	-22.90	15.00	2RDR	<-
Endosulfan sulfate	6.62e-002	0.1000000	433870.00	0.01	-33.80	15.00	2RDR	<-
Methoxychlor	4.3e-002	0.1000000	160510.00	0.01	-57.00	15.00	2RDR	<-
alpha-Chlordane	8.15e-002	0.1000000	893420.00	0.01	-18.50	15.00	2RDR	<-
gamma-Chlordane	8.32e-002	0.1000000	924730.00	0.01	-16.80	15.00	2RDR	<-
Endrin Ketone	6.61e-002	0.1000000	528220.00	0.01	-33.90	15.00	2RDR	<-
Tetrachloro-m-Xylene	8.7e-002	0.1000000	934580.00	0.01	-13.00	15.00	2RDR	
Decachlorobiphenyl	7.97e-002	0.1000000	669390.00	0.01	-20.30	15.00	2RDR	<-

FORM VII PEST

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 10/30/07 10/30/07

Instrument ID: GC08

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 18.99 TCX: 4.65

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		EVAL	10/30/07	1451		
02		INDAB 0.005	10/30/07	1618	18.99	4.63
03		INDAB 0.01	10/30/07	1645	18.99	4.63
04		INDAB 0.025	10/30/07	1712	18.99	4.63
05		INDAB 0.05	10/30/07	1739	19.01	4.63
06		INDAB 0.1	10/30/07	1806	18.99	4.62
07		INDAB 0.25	10/30/07	1833	18.99	4.62
08		IND 0.05	10/30/07	1900		
09		TOX 1.0	10/30/07	1928		
10		EVAL	11/02/07	1035		
11		INDAB 0.05	11/02/07	1102	18.99	4.63
12	WG45073-BLAN	WG45073-1	11/02/07	1321	18.99	4.63
13	WG45073-LCS	WG45073-2	11/02/07	1348	18.99	4.63
14	WG45073-LCSD	WG45073-3	11/02/07	1415	19.01	4.63
15		INDAB 0.1	11/02/07	1509	18.99	4.63
16	2W-SD-SD53-0	SA6036-10DL	11/02/07	1536	18.99	4.62
17	2W-SD-SD51-0	SA6036-12RA	11/02/07	1603	18.99	4.63
18	2W-SD-SD52-0	SA6036-13DL	11/02/07	1630	18.99	4.63
19	2W-SD-SD50-0	SA6036-14RA	11/02/07	1657	18.99	4.63
20	2W-SD-SD50-0	SA6036-15RA	11/02/07	1724	19.01	4.63

QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)

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

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 10/30/07 10/30/07

Instrument ID: GC08

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 18.99 TCX: 4.65

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01	2W-SD-SD49-0	SA6036-16RA	11/02/07	1751	18.99	4.65
02	2W-SD-SD45-0	SA6036-17RA	11/02/07	1818	19.01	4.65
03	2W-SD-SD46-0	SA6036-19	11/02/07	1912	19.02	4.65
04		INDAB 0.05	11/02/07	2034	19.01	4.65
05		EVAL	11/05/07	1339		
06		INDAB 0.1	11/05/07	1824	19.01	4.63
07	2W-SD-SD45-0	SA6036-18DL	11/05/07	1851		
08	2W-SD-SD46-0	SA6036-20DL	11/05/07	1918	19.01	4.63
09		INDAB 0.05	11/05/07	2255	19.01	4.65
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)

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

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 10/30/07 10/30/07

Instrument ID: GC08

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 19.31 TCX: 4.58

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01		EVAL	10/30/07	1451		
02		INDAB 0.005	10/30/07	1618	19.30	4.57
03		INDAB 0.01	10/30/07	1645	19.31	4.57
04		INDAB 0.025	10/30/07	1712	19.31	4.57
05		INDAB 0.05	10/30/07	1739	19.31	4.57
06		INDAB 0.1	10/30/07	1806	19.31	4.57
07		INDAB 0.25	10/30/07	1833	19.30	4.57
08		IND 0.05	10/30/07	1900		
09		TOX 1.0	10/30/07	1928		
10		EVAL	11/02/07	1035		
11		INDAB 0.05	11/02/07	1102	19.30	4.57
12	WG45073-BLAN	WG45073-1	11/02/07	1321	19.30	4.57
13	WG45073-LCS	WG45073-2	11/02/07	1348	19.30	4.57
14	WG45073-LCSD	WG45073-3	11/02/07	1415	19.31	4.57
15		INDAB 0.1	11/02/07	1509	19.31	4.57
16	2W-SD-SD53-0	SA6036-10DL	11/02/07	1536	19.30	4.57
17	2W-SD-SD51-0	SA6036-12RA	11/02/07	1603	19.30	4.57
18	2W-SD-SD52-0	SA6036-13DL	11/02/07	1630	19.30	4.57
19	2W-SD-SD50-0	SA6036-14RA	11/02/07	1657	19.30	4.57
20	2W-SD-SD50-0	SA6036-15RA	11/02/07	1724	19.30	4.58

QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)

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

FORM VIII PEST

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 10/30/07 10/30/07

Instrument ID: GC08

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
DCB: 19.31 TCX: 4.58

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DCB RT #	TCX RT #
01	2W-SD-SD49-0	SA6036-16RA	11/02/07	1751	19.30	4.58
02	2W-SD-SD45-0	SA6036-17RA	11/02/07	1818	19.31	4.58
03	2W-SD-SD46-0	SA6036-19	11/02/07	1912	19.31	4.58
04		INDAB 0.05	11/02/07	2034	19.31	4.58
05		EVAL	11/05/07	1339		
06		INDAB 0.1	11/05/07	1824	19.31	4.57
07	2W-SD-SD45-0	SA6036-18DL	11/05/07	1851		
08	2W-SD-SD46-0	SA6036-20DL	11/05/07	1918	19.31	4.57
09		INDAB 0.05	11/05/07	2255	19.31	4.58
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)
TCX = Tetrachloro-m-Xylene (+/- 0.07 MINUTES)

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

FORM VIII PEST

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date(s): 10/30/07 10/30/07

Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Calibration Time(s): 1618 1955

LAB FILE ID: RF0.005: 8AJ5047 RF0.01: 8AJ5048 RF0.025: 8AJ5049
RF0.05: 8AJ5055 RF0.1: 8AJ5051 RF0.25: 8AJ5052

COMPOUND	RF0.005	RF0.01	RF0.025	RF0.05	RF0.1	RF0.25	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
alpha-BHC	6490	13948	40124	85404	169090	391940	2ORDR	1.469e-003	5.496e-007	2.15e-013	0.99991	0.99000
gamma BHC	6269	13305	37771	75426	162420	377740	2ORDR	1.711e-003	5.896e-007	1.774e-013	0.99966	0.99000
beta-BHC	3937	7497	18380	36872	73457	168280	2ORDR	3.813e-004	1.278e-006	1.216e-012	0.99995	0.99000
delta-BHC	5034	10003	29584	60653	133790	325900	2ORDR	1.947e-003	7.415e-007	5.766e-014	0.99961	0.99000
Heptachlor	6811	14212	35879	72161	138500	321780	2ORDR	2.043e-004	6.749e-007	3.154e-013	0.99999	0.99000
Aldrin	5340	10929	30831	66596	131800	309460	2ORDR	1.374e-003	7.137e-007	2.89e-013	0.99990	0.99000
Heptachlor Epoxide	5416	11063	29307	59059	112480	265280	2ORDR	2.14e-004	8.368e-007	3.959e-013	0.99996	0.99000
gamma-Chlordane	5001	10109	25826	52892	109150	255860	2ORDR	9.958e-004	8.798e-007	3.626e-013	0.99987	0.99000
alpha-Chlordane	4965	10363	26941	54107	105420	242080	2ORDR	5.35e-004	8.799e-007	6.215e-013	0.99999	0.99000
4,4'-DDE	3704	7535	21569	47395	97848	232560	2ORDR	1.857e-003	9.797e-007	3.724e-013	0.99979	0.99000
Endosulfan I	4484	9040	23754	48818	101100	236510	2ORDR	1.174e-003	9.471e-007	4.407e-013	0.99985	0.99000
Dieldrin	3863	7896	22347	48497	97701	235540	2ORDR	1.426e-003	9.868e-007	2.895e-013	0.99990	0.99000
Endrin	3498	6958	19305	42518	87970	211980	2ORDR	1.693e-003	1.104e-006	3.164e-013	0.99981	0.99000
4,4'-DDD	2417	4994	14165	30540	67276	166140	2ORDR	2.141e-003	1.484e-006	3.68e-014	0.99959	0.99000
Endosulfan II	3633	7237	19128	39736	81321	191140	2ORDR	1.117e-003	1.177e-006	6.482e-013	0.99989	0.99000
4,4'-DDT	2554	5155	14404	31715	69679	173440	2ORDR	2.159e-003	1.439e-006	-6.38e-014	0.99959	0.99000
Endrin Aldehyde	3158	6139	15489	31069	62257	145450	2ORDR	4.492e-004	1.532e-006	1.26e-012	0.99997	0.99000
Methoxychlor	1805	3465	9045	18729	37243	89656	2ORDR	5.657e-004	2.604e-006	1.985e-012	0.99998	0.99000
Endosulfan sulfate	2563	4918	13100	26086	57920	141490	2ORDR	1.387e-003	1.733e-006	1.539e-013	0.99959	0.99000
Endrin Ketone	2806	5356	14756	29870	63597	153830	2ORDR	1.238e-003	1.552e-006	4.17e-013	0.99980	0.99000
Toxaphene				13033			2ORDR	0.00000000	7.673e-005	0.00000000	1.00000	0.99000
(2)				13050			2ORDR	0.00000000	7.663e-005	0.00000000	1.00000	0.99000
(3)				19299			2ORDR	0.00000000	5.182e-005	0.00000000	1.00000	0.99000
(4)				23679			2ORDR	0.00000000	4.223e-005	0.00000000	1.00000	0.99000
(5)				18981			2ORDR	0.00000000	5.268e-005	0.00000000	1.00000	0.99000
(6)				10864			2ORDR	0.00000000	9.205e-005	0.00000000	1.00000	0.99000
(7)				11548			2ORDR	0.00000000	8.66e-005	0.00000000	1.00000	0.99000
(8)				28299			2ORDR	0.00000000	3.534e-005	0.00000000	1.00000	0.99000
(9)				15863			2ORDR	0.00000000	6.304e-005	0.00000000	1.00000	0.99000
(10)				10873			2ORDR	0.00000000	9.197e-005	0.00000000	1.00000	0.99000
Tetrachloro-m-Xylene	6317	12553	30608	60564	114840	256450	2ORDR	4.126e-005	7.844e-007	7.422e-013	1.00000	0.99000
Decachlorobiphenyl	3710	7178	17657	33156	64034	140550	2ORDR	-9.1e-005	1.394e-006	2.736e-012	0.99998	0.99000

FORM VI PESTICIDE

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date(s): 10/30/07 10/30/07

Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Calibration Time(s): 1618 1955

LAB FILE ID: RF0.005: 8AJ6047 RF0.01: 8AJ6048 RF0.025: 8AJ6049
RF0.05: 8AJ6055 RF0.1: 8AJ6051 RF0.25: 8AJ6052

COMPOUND	RF0.005	RF0.01	RF0.025	RF0.05	RF0.1	RF0.25	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
alpha-BHC	4275	9827	30360	69029	144330	346370	2ORDR	2.497e-003	6.649e-007	1.417e-013	0.99969	0.99000
gamma BHC	4921	10238	29552	63193	138730	332830	2ORDR	2.252e-003	7.056e-007	1.139e-013	0.99954	0.99000
beta-BHC	2921	5559	14424	30392	63099	149380	2ORDR	1.199e-003	1.533e-006	8.768e-013	0.99983	0.99000
delta-BHC	3235	6734	20902	47203	109030	275760	2ORDR	3.09e-003	9.275e-007	-1.21e-013	0.99923	0.99000
Heptachlor	5813	11316	30407	62782	135280	318340	2ORDR	1.609e-003	7.168e-007	1.968e-013	0.99965	0.99000
Aldrin	4314	9044	25889	56622	125210	302050	2ORDR	2.437e-003	7.847e-007	1.122e-013	0.99947	0.99000
Heptachlor Epoxide	4350	8925	23838	49946	108190	255770	2ORDR	1.789e-003	8.985e-007	2.768e-013	0.99962	0.99000
gamma-Chlordane	4163	8454	22701	47597	102540	247280	2ORDR	1.633e-003	9.604e-007	1.742e-013	0.99970	0.99000
alpha-Chlordane	4060	8340	22478	48843	100080	241790	2ORDR	1.424e-003	9.716e-007	2.315e-013	0.99987	0.99000
4,4'-DDE	2997	6255	17777	39171	89561	225670	2ORDR	2.601e-003	1.132e-006	-1.65e-013	0.99935	0.99000
Endosulfan I	3541	7425	20177	42698	91620	220320	2ORDR	1.754e-003	1.07e-006	2.54e-013	0.99971	0.99000
Dieldrin	3054	6375	17982	40061	89569	224710	2ORDR	2.447e-003	1.125e-006	-1.1e-013	0.99948	0.99000
Endrin	2677	5336	14658	33187	75050	190580	2ORDR	2.501e-003	1.355e-006	-3.04e-013	0.99939	0.99000
4,4'-DDD	1878	3737	11044	25047	58203	155210	2ORDR	2.823e-003	1.788e-006	-1.27e-012	0.99931	0.99000
Endosulfan II	2775	5674	15731	33709	71688	175650	2ORDR	1.698e-003	1.38e-006	1.871e-013	0.99978	0.99000
4,4'-DDT	1993	4033	11864	27543	64182	168350	2ORDR	3.064e-003	1.607e-006	-8.44e-013	0.99920	0.99000
Endrin Aldehyde	2587	4919	13032	26851	55435	137470	2ORDR	7.785e-004	1.8e-006	9.019e-014	0.99994	0.99000
Methoxychlor	1502	2850	7661	16234	34911	87361	2ORDR	1.429e-003	2.888e-006	-5.15e-013	0.99977	0.99000
Endosulfan sulfate	1946	3874	10569	21816	50277	130980	2ORDR	1.909e-003	2.068e-006	-1.35e-012	0.99946	0.99000
Endrin Ketone	2103	4000	11363	24458	55822	145410	2ORDR	2.19e-003	1.853e-006	-1.03e-012	0.99948	0.99000
Toxaphene				12037			2ORDR	0.00000000	8.308e-005	0.00000000	1.00000	0.99000
(2)				5860			2ORDR	0.00000000	1.706e-004	0.00000000	1.00000	0.99000
(3)				8122			2ORDR	0.00000000	1.231e-004	0.00000000	1.00000	0.99000
(4)				19054			2ORDR	0.00000000	5.248e-005	0.00000000	1.00000	0.99000
(5)				6849			2ORDR	0.00000000	1.46e-004	0.00000000	1.00000	0.99000
(6)				10366			2ORDR	0.00000000	9.647e-005	0.00000000	1.00000	0.99000
(7)				21163			2ORDR	0.00000000	4.725e-005	0.00000000	1.00000	0.99000
(8)				5697			2ORDR	0.00000000	1.755e-004	0.00000000	1.00000	0.99000
(9)				9042			2ORDR	0.00000000	1.106e-004	0.00000000	1.00000	0.99000
(10)				4684			2ORDR	0.00000000	2.135e-004	0.00000000	1.00000	0.99000
Tetrachloro-m-Xylene	4716	9274	23952	47378	96191	222250	2ORDR	6.523e-004	9.847e-007	6.149e-013	0.99992	0.99000
Decachlorobiphenyl	3764	7469	18697	36497	70740	159770	2ORDR	1.467e-004	1.297e-006	1.671e-012	1.00000	0.99000

FORM VI PESTICIDE

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 10/30/07 Time: 1900

Lab File ID: 8AJ5053 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

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

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Endosulfan I	4.9e-002	5.e-002	987760.00	0.01	-2.00	15.00	2RDR
gamma BHC	4.84e-002	5.e-002	1548900.0	0.01	-3.20	15.00	2RDR
beta-BHC	4.84e-002	5.e-002	725940.00	0.01	-3.20	15.00	2RDR
delta-BHC	5.3e-002	5.e-002	1369600.0	0.01	6.00	15.00	2RDR
Heptachlor	4.94e-002	5.e-002	1410000.0	0.01	-1.20	15.00	2RDR
Aldrin	4.99e-002	5.e-002	1325400.0	0.01	-0.20	15.00	2RDR
Heptachlor Epoxide	5.06e-002	5.e-002	1172600.0	0.01	1.20	15.00	2RDR
gamma-Chlordane	5.e-002	5.e-002	1090100.0	0.01	0.00	15.00	2RDR
alpha-Chlordane	4.99e-002	5.e-002	1080100.0	0.01	-0.20	15.00	2RDR
4,4'-DDE	4.69e-002	5.e-002	904580.00	0.01	-6.20	15.00	2RDR
alpha-BHC	4.94e-002	5.e-002	1688000.0	0.01	-1.20	15.00	2RDR
Dieldrin	4.96e-002	5.e-002	961880.00	0.01	-0.80	15.00	2RDR
Endrin	4.74e-002	5.e-002	819120.00	0.01	-5.20	15.00	2RDR
4,4'-DDD	4.73e-002	5.e-002	607400.00	0.01	-5.40	15.00	2RDR
Endosulfan II	4.99e-002	5.e-002	810240.00	0.01	-0.20	15.00	2RDR
4,4'-DDT	4.84e-002	5.e-002	644200.00	0.01	-3.20	15.00	2RDR
Endrin Aldehyde	5.18e-002	5.e-002	653320.00	0.01	3.60	15.00	2RDR
Methoxychlor	4.91e-002	5.e-002	367440.00	0.01	-1.80	15.00	2RDR
Endosulfan sulfate	5.04e-002	5.e-002	564300.00	0.01	0.80	15.00	2RDR
Endrin Ketone	5.14e-002	5.e-002	641140.00	0.01	2.80	15.00	2RDR

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 10/30/07 Time: 1900

Lab File ID: 8AJ6053 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	4.75e-002	5.e-002	798020.00	0.01	-5.00	15.00	2RDR
gamma BHC	4.85e-002	5.e-002	1297100.0	0.01	-3.00	15.00	2RDR
beta-BHC	4.8e-002	5.e-002	600060.00	0.01	-4.00	15.00	2RDR
delta-BHC	5.23e-002	5.e-002	1069200.0	0.01	4.60	15.00	2RDR
Heptachlor	4.81e-002	5.e-002	1275300.0	0.01	-3.80	15.00	2RDR
Aldrin	4.88e-002	5.e-002	1171800.0	0.01	-2.40	15.00	2RDR
Heptachlor Epoxide	4.85e-002	5.e-002	1022900.0	0.01	-3.00	15.00	2RDR
gamma-Chlordane	4.98e-002	5.e-002	994680.00	0.01	-0.40	15.00	2RDR
alpha-Chlordane	4.82e-002	5.e-002	952420.00	0.01	-3.60	15.00	2RDR
Endosulfan I	4.93e-002	5.e-002	880620.00	0.01	-1.40	15.00	2RDR
alpha-BHC	4.85e-002	5.e-002	1364900.0	0.01	-3.00	15.00	2RDR
Dieldrin	4.85e-002	5.e-002	822600.00	0.01	-3.00	15.00	2RDR
Endrin	4.72e-002	5.e-002	664720.00	0.01	-5.60	15.00	2RDR
4,4'-DDD	4.6e-002	5.e-002	491920.00	0.01	-8.00	15.00	2RDR
Endosulfan II	4.98e-002	5.e-002	694560.00	0.01	-0.40	15.00	2RDR
4,4'-DDT	4.73e-002	5.e-002	558380.00	0.01	-5.40	15.00	2RDR
Endrin Aldehyde	5.15e-002	5.e-002	562700.00	0.01	3.00	15.00	2RDR
Endosulfan sulfate	4.95e-002	5.e-002	467140.00	0.01	-1.00	15.00	2RDR
Methoxychlor	4.92e-002	5.e-002	331680.00	0.01	-1.60	15.00	2RDR
Endrin Ketone	5.18e-002	5.e-002	544020.00	0.01	3.60	15.00	2RDR

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 11/02/07 Time: 1102

Lab File ID: 8AK1003 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

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

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.18e-002	5.e-002	1771200.0	0.01	3.60	15.00	2RDR	
gamma BHC	4.73e-002	5.e-002	1512500.0	0.01	-5.40	15.00	2RDR	
Heptachlor	5.33e-002	5.e-002	1520800.0	0.01	6.60	15.00	2RDR	
beta-BHC	5.e-002	5.e-002	749740.00	0.01	0.00	15.00	2RDR	
Aldrin	5.05e-002	5.e-002	1339800.0	0.01	1.00	15.00	2RDR	
delta-BHC	5.31e-002	5.e-002	1372600.0	0.01	6.20	15.00	2RDR	
Heptachlor Epoxide	5.32e-002	5.e-002	1231500.0	0.01	6.40	15.00	2RDR	
Endosulfan I	5.01e-002	5.e-002	1008900.0	0.01	0.20	15.00	2RDR	
4,4'-DDE	4.94e-002	5.e-002	952820.00	0.01	-1.20	15.00	2RDR	
Dieldrin	5.1e-002	5.e-002	990180.00	0.01	2.00	15.00	2RDR	
Endrin	4.85e-002	5.e-002	838400.00	0.01	-3.00	15.00	2RDR	
4,4'-DDD	4.91e-002	5.e-002	632440.00	0.01	-1.80	15.00	2RDR	
Endosulfan II	5.1e-002	5.e-002	828240.00	0.01	2.00	15.00	2RDR	
4,4'-DDT	5.04e-002	5.e-002	671620.00	0.01	0.80	15.00	2RDR	
Endrin Aldehyde	5.32e-002	5.e-002	670760.00	0.01	6.40	15.00	2RDR	
Endosulfan sulfate	5.8e-002	5.e-002	651780.00	0.01	16.00	15.00	2RDR	<-
Methoxychlor	5.07e-002	5.e-002	379900.00	0.01	1.40	15.00	2RDR	
alpha-Chlordane	5.19e-002	5.e-002	1123900.0	0.01	3.80	15.00	2RDR	
gamma-Chlordane	5.e-002	5.e-002	1088700.0	0.01	0.00	15.00	2RDR	
Endrin Ketone	6.2e-002	5.e-002	775480.00	0.01	24.00	15.00	2RDR	<-
Tetrachloro-m-Xylene	5.04e-002	5.e-002	1213500.0	0.01	0.80	15.00	2RDR	
Decachlorobiphenyl	5.34e-002	5.e-002	716700.00	0.01	6.80	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 11/02/07 Time: 1102

Lab File ID: 8AK2003 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.04e-002	5.e-002	1419000.0	0.01	0.80	15.00	2RDR	
gamma BHC	5.09e-002	5.e-002	1363200.0	0.01	1.80	15.00	2RDR	
Heptachlor	5.e-002	5.e-002	1326400.0	0.01	0.00	15.00	2RDR	
beta-BHC	4.93e-002	5.e-002	615940.00	0.01	-1.40	15.00	2RDR	
Aldrin	4.93e-002	5.e-002	1183400.0	0.01	-1.40	15.00	2RDR	
delta-BHC	5.51e-002	5.e-002	1130700.0	0.01	10.20	15.00	2RDR	
Heptachlor Epoxide	5.08e-002	5.e-002	1073100.0	0.01	1.60	15.00	2RDR	
Endosulfan I	5.07e-002	5.e-002	905640.00	0.01	1.40	15.00	2RDR	
4,4'-DDE	4.88e-002	5.e-002	820640.00	0.01	-2.40	15.00	2RDR	
Dieldrin	4.98e-002	5.e-002	844640.00	0.01	-0.40	15.00	2RDR	
Endrin	4.78e-002	5.e-002	673280.00	0.01	-4.40	15.00	2RDR	
4,4'-DDD	4.9e-002	5.e-002	525920.00	0.01	-2.00	15.00	2RDR	
Endosulfan II	5.02e-002	5.e-002	699900.00	0.01	0.40	15.00	2RDR	
4,4'-DDT	4.77e-002	5.e-002	563540.00	0.01	-4.60	15.00	2RDR	
Endrin Aldehyde	5.26e-002	5.e-002	575220.00	0.01	5.20	15.00	2RDR	
Endosulfan sulfate	5.76e-002	5.e-002	547820.00	0.01	15.20	15.00	2RDR	<-
Methoxychlor	4.95e-002	5.e-002	333620.00	0.01	-1.00	15.00	2RDR	
alpha-Chlordane	5.08e-002	5.e-002	1004700.0	0.01	1.60	15.00	2RDR	
gamma-Chlordane	5.07e-002	5.e-002	1012600.0	0.01	1.40	15.00	2RDR	
Endrin Ketone	6.25e-002	5.e-002	663280.00	0.01	25.00	15.00	2RDR	<-
Tetrachloro-m-Xylene	5.17e-002	5.e-002	1006000.0	0.01	3.40	15.00	2RDR	
Decachlorobiphenyl	5.31e-002	5.e-002	777260.00	0.01	6.20	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 11/02/07 Time: 1509

Lab File ID: 8AK1008 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

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

COMPOUND	RRF or AMOUNT	RRF0.1000 or AMOUNT	CCAL RRF0.1000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	0.1019500	0.1000000	1713300.0	0.01	1.95	15.00	2RDR	
gamma BHC	0.1041300	0.1000000	1654800.0	0.01	4.13	15.00	2RDR	
Heptachlor	0.1075100	0.1000000	1486800.0	0.01	7.51	15.00	2RDR	
beta-BHC	9.71e-002	0.1000000	709120.00	0.01	-2.90	15.00	2RDR	
Aldrin	0.1013800	0.1000000	1329600.0	0.01	1.38	15.00	2RDR	
delta-BHC	0.1123700	0.1000000	1472300.0	0.01	12.37	15.00	2RDR	
Heptachlor Epoxide	0.1049200	0.1000000	1184800.0	0.01	4.92	15.00	2RDR	
Endosulfan I	0.1044000	0.1000000	1039700.0	0.01	4.40	15.00	2RDR	
4,4'-DDE	0.1008300	0.1000000	974230.00	0.01	0.83	15.00	2RDR	
Dieldrin	0.1044200	0.1000000	1013600.0	0.01	4.42	15.00	2RDR	
Endrin	9.9e-002	0.1000000	860660.00	0.01	-1.00	15.00	2RDR	
4,4'-DDD	0.1019200	0.1000000	671160.00	0.01	1.92	15.00	2RDR	
Endosulfan II	0.1043400	0.1000000	838030.00	0.01	4.34	15.00	2RDR	
4,4'-DDT	0.1051700	0.1000000	718300.00	0.01	5.17	15.00	2RDR	
Endrin Aldehyde	0.1051900	0.1000000	649100.00	0.01	5.19	15.00	2RDR	
Endosulfan sulfate	0.1204600	0.1000000	682770.00	0.01	20.46	15.00	2RDR	<-
Methoxychlor	0.1003400	0.1000000	372610.00	0.01	0.34	15.00	2RDR	
alpha-Chlordane	0.1051500	0.1000000	1103000.0	0.01	5.15	15.00	2RDR	
gamma-Chlordane	0.1041700	0.1000000	1121000.0	0.01	4.17	15.00	2RDR	
Endrin Ketone	0.1269500	0.1000000	793240.00	0.01	26.95	15.00	2RDR	<-
Tetrachloro-m-Xylene	9.74e-002	0.1000000	1122600.0	0.01	-2.60	15.00	2RDR	
Decachlorobiphenyl	0.1077400	0.1000000	682040.00	0.01	7.74	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 11/02/07 Time: 1509

Lab File ID: 8AK2008 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.1000 or AMOUNT	CCAL RRF0.1000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	0.1029100	0.1000000	1464400.0	0.01	2.91	15.00	2RDR	
gamma BHC	0.1060800	0.1000000	1438200.0	0.01	6.08	15.00	2RDR	
Heptachlor	0.1044800	0.1000000	1382700.0	0.01	4.48	15.00	2RDR	
beta-BHC	0.1051700	0.1000000	653650.00	0.01	5.17	15.00	2RDR	
Aldrin	0.1031900	0.1000000	1261200.0	0.01	3.19	15.00	2RDR	
delta-BHC	0.1141600	0.1000000	1216800.0	0.01	14.16	15.00	2RDR	
Heptachlor Epoxide	0.1050400	0.1000000	1111000.0	0.01	5.04	15.00	2RDR	
Endosulfan I	0.1039900	0.1000000	934980.00	0.01	3.99	15.00	2RDR	
4,4'-DDE	0.1042300	0.1000000	909810.00	0.01	4.23	15.00	2RDR	
Dieldrin	0.1046800	0.1000000	916820.00	0.01	4.68	15.00	2RDR	
Endrin	0.1014000	0.1000000	742150.00	0.01	1.40	15.00	2RDR	
4,4'-DDD	0.1008800	0.1000000	571730.00	0.01	0.88	15.00	2RDR	
Endosulfan II	9.98e-002	0.1000000	704210.00	0.01	-0.20	15.00	2RDR	
4,4'-DDT	9.69e-002	0.1000000	603090.00	0.01	-3.10	15.00	2RDR	
Endrin Aldehyde	0.1038300	0.1000000	570940.00	0.01	3.83	15.00	2RDR	
Endosulfan sulfate	0.1205400	0.1000000	596690.00	0.01	20.54	15.00	2RDR	<-
Methoxychlor	9.18e-002	0.1000000	314750.00	0.01	~~-8.20~~	15.00	2RDR	
alpha-Chlordane	0.1047800	0.1000000	1038100.0	0.01	4.78	15.00	2RDR	
gamma-Chlordane	0.1034900	0.1000000	1041000.0	0.01	3.49	15.00	2RDR	
Endrin Ketone	0.1294100	0.1000000	715160.00	0.01	29.41	15.00	2RDR	<-
Tetrachloro-m-Xylene	0.1040900	0.1000000	989330.00	0.01	4.09	15.00	2RDR	
Decachlorobiphenyl	0.1071500	0.1000000	752260.00	0.01	7.15	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 11/02/07 Time: 2034

Lab File ID: 8AK1020 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

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

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	4.89e-002	5.e-002	1671900.0	0.01	-2.20	15.00	2RDR	
gamma-BHC	3.77e-002	5.e-002	1200600.0	0.01	-24.60	15.00	2RDR	<-
Heptachlor	3.05e-002	5.e-002	879300.00	0.01	-39.00	15.00	2RDR	<-
beta-BHC	4.11e-002	5.e-002	619600.00	0.01	-17.80	15.00	2RDR	<-
Aldrin	4.69e-002	5.e-002	1243800.0	0.01	-6.20	15.00	2RDR	
delta-BHC	4.17e-002	5.e-002	1069000.0	0.01	-16.60	15.00	2RDR	<-
Heptachlor Epoxide	4.64e-002	5.e-002	1076300.0	0.01	-7.20	15.00	2RDR	
Endosulfan I	4.71e-002	5.e-002	948760.00	0.01	-5.80	15.00	2RDR	
4,4'-DDE	4.64e-002	5.e-002	894160.00	0.01	-7.20	15.00	2RDR	
Dieldrin	4.64e-002	5.e-002	900420.00	0.01	-7.20	15.00	2RDR	
Endrin	3.73e-002	5.e-002	639900.00	0.01	-25.40	15.00	2RDR	<-
4,4'-DDD	6.04e-002	5.e-002	784760.00	0.01	20.80	15.00	2RDR	<-
Endosulfan II	4.56e-002	5.e-002	740340.00	0.01	-8.80	15.00	2RDR	
4,4'-DDT	7.55e-003	5.e-002	75020.000	0.01	-84.90	15.00	2RDR	<-
Endrin Aldehyde	4.64e-002	5.e-002	585460.00	0.01	-7.20	15.00	2RDR	
Endosulfan sulfate	3.46e-002	5.e-002	382180.00	0.01	-30.80	15.00	2RDR	<-
Methoxychlor	9.19e-003	5.e-002	66100.000	0.01	-81.62	15.00	2RDR	<-
alpha-Chlordane	4.48e-002	5.e-002	972940.00	0.01	-10.40	15.00	2RDR	
gamma-Chlordane	4.67e-002	5.e-002	1018700.0	0.01	-6.60	15.00	2RDR	
Endrin Ketone	2.76e-002	5.e-002	337740.00	0.01	-44.80	15.00	2RDR	<-
Tetrachloro-m-Xylene	4.96e-002	5.e-002	1195500.0	0.01	-0.80	15.00	2RDR	
Decachlorobiphenyl	4.77e-002	5.e-002	644180.00	0.01	-4.60	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 11/02/07 Time: 2034

Lab File ID: 8AK2020 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	4.64e-002	5.e-002	1301700.0	0.01	-7.20	15.00	2RDR	
gamma BHC	3.59e-002	5.e-002	947300.00	0.01	-28.20	15.00	2RDR	<-
Heptachlor	2.78e-002	5.e-002	724760.00	0.01	-44.40	15.00	2RDR	<-
beta-BHC	3.82e-002	5.e-002	476440.00	0.01	-23.60	15.00	2RDR	<-
Aldrin	4.25e-002	5.e-002	1013100.0	0.01	-15.00	15.00	2RDR	
delta-BHC	3.89e-002	5.e-002	775400.00	0.01	-22.20	15.00	2RDR	<-
Heptachlor Epoxide	4.26e-002	5.e-002	897080.00	0.01	-14.80	15.00	2RDR	
Endosulfan I	4.35e-002	5.e-002	773400.00	0.01	-13.00	15.00	2RDR	
4,4'-DDE	4.33e-002	5.e-002	722600.00	0.01	-13.40	15.00	2RDR	
Dieldrin	4.27e-002	5.e-002	718140.00	0.01	-14.60	15.00	2RDR	
Endrin	3.35e-002	5.e-002	459700.00	0.01	-33.00	15.00	2RDR	<-
4,4'-DDD	6.67e-002	5.e-002	734060.00	0.01	33.40	15.00	2RDR	<-
Endosulfan II	4.25e-002	5.e-002	589500.00	0.01	-15.00	15.00	2RDR	
4,4'-DDT	7.56e-003	5.e-002	56060.000	0.01	-84.88	15.00	2RDR	<-
Endrin Aldehyde	4.5e-002	5.e-002	490860.00	0.01	-10.00	15.00	2RDR	
Endosulfan sulfate	3.27e-002	5.e-002	300240.00	0.01	-34.60	15.00	2RDR	<-
Methoxychlor	8.41e-003	5.e-002	48380.000	0.01	-83.18	15.00	2RDR	<-
alpha-Chlordane	4.4e-002	5.e-002	866540.00	0.01	-12.00	15.00	2RDR	
gamma-Chlordane	4.32e-002	5.e-002	858580.00	0.01	-13.60	15.00	2RDR	
Endrin Ketone	2.32e-002	5.e-002	227740.00	0.01	-53.60	15.00	2RDR	<-
Tetrachloro-m-Xylene	4.78e-002	5.e-002	930860.00	0.01	-4.40	15.00	2RDR	
Decachlorobiphenyl	4.58e-002	5.e-002	675120.00	0.01	-8.40	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 11/05/07 Time: 1824

Lab File ID: 8AK1035 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

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

COMPOUND	RRF or AMOUNT	RRF0.1000 or AMOUNT	CCAL RRF0.1000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
alpha-BHC	0.1064800	0.1000000	1785900.0	0.01	6.48	15.00	2RDR
gamma BHC	9.85e-002	0.1000000	1568300.0	0.01	-1.50	15.00	2RDR
Heptachlor	0.1057900	0.1000000	1464300.0	0.01	5.79	15.00	2RDR
beta-BHC	0.1027900	0.1000000	748030.00	0.01	2.79	15.00	2RDR
Aldrin	0.1056600	0.1000000	1383600.0	0.01	5.66	15.00	2RDR
delta-BHC	0.1051400	0.1000000	1376900.0	0.01	5.14	15.00	2RDR
Heptachlor Epoxide	0.1052400	0.1000000	1188200.0	0.01	5.24	15.00	2RDR
Endosulfan I	0.1022700	0.1000000	1019200.0	0.01	2.27	15.00	2RDR
4,4'-DDE	0.1024200	0.1000000	989280.00	0.01	2.42	15.00	2RDR
Dieldrin	0.1053300	0.1000000	1022300.0	0.01	5.33	15.00	2RDR
Endrin	0.1039100	0.1000000	902870.00	0.01	3.91	15.00	2RDR
4,4'-DDD	0.1022800	0.1000000	673580.00	0.01	2.28	15.00	2RDR
Endosulfan II	0.1008100	0.1000000	810560.00	0.01	0.81	15.00	2RDR
4,4'-DDT	0.1046800	0.1000000	714890.00	0.01	4.68	15.00	2RDR
Endrin Aldehyde	0.1005400	0.1000000	621630.00	0.01	0.54	15.00	2RDR
Endosulfan sulfate	0.1129100	0.1000000	639740.00	0.01	12.91	15.00	2RDR
Methoxychlor	0.1042300	0.1000000	386730.00	0.01	4.23	15.00	2RDR
alpha-Chlordane	9.88e-002	0.1000000	1040300.0	0.01	-1.20	15.00	2RDR
gamma-Chlordane	0.1010900	0.1000000	1088800.0	0.01	1.09	15.00	2RDR
Endrin Ketone	0.1199400	0.1000000	749840.00	0.01	19.94	15.00	2RDR <-
Tetrachloro-m-Xylene	0.1023300	0.1000000	1173800.0	0.01	2.33	15.00	2RDR
Decachlorobiphenyl	0.1000800	0.1000000	638390.00	0.01	0.08	15.00	2RDR

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 11/05/07 Time: 1824

Lab File ID: 8AK2035 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.1000 or AMOUNT	CCAL RRF0.1000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	0.1044100	0.1000000	1485600.0	0.01	4.41	15.00	2RDR	
gamma BHC	0.1003200	0.1000000	1360100.0	0.01	0.32	15.00	2RDR	
Heptachlor	9.79e-002	0.1000000	1297200.0	0.01	-2.10	15.00	2RDR	
beta-BHC	9.93e-002	0.1000000	618070.00	0.01	-0.70	15.00	2RDR	
Aldrin	9.82e-002	0.1000000	1199600.0	0.01	-1.80	15.00	2RDR	
delta-BHC	0.1080400	0.1000000	1148700.0	0.01	8.04	15.00	2RDR	
Heptachlor Epoxide	9.72e-002	0.1000000	1029000.0	0.01	-2.80	15.00	2RDR	
Endosulfan I	9.93e-002	0.1000000	892760.00	0.01	-0.70	15.00	2RDR	
4,4'-DDE	9.93e-002	0.1000000	865070.00	0.01	-0.70	15.00	2RDR	
Dieldrin	0.1001200	0.1000000	875610.00	0.01	0.12	15.00	2RDR	
Endrin	9.9e-002	0.1000000	723820.00	0.01	-1.00	15.00	2RDR	
4,4'-DDD	9.78e-002	0.1000000	553160.00	0.01	-2.20	15.00	2RDR	
Endosulfan II	9.99e-002	0.1000000	705010.00	0.01	-0.10	15.00	2RDR	
4,4'-DDT	0.1004700	0.1000000	626740.00	0.01	0.47	15.00	2RDR	
Endrin Aldehyde	0.1001600	0.1000000	550660.00	0.01	0.16	15.00	2RDR	
Endosulfan sulfate	0.1123200	0.1000000	553730.00	0.01	12.32	15.00	2RDR	
Methoxychlor	9.48e-002	0.1000000	325210.00	0.01	-5.20	15.00	2RDR	
alpha-Chlordane	9.94e-002	0.1000000	985010.00	0.01	-0.60	15.00	2RDR	
gamma-Chlordane	9.74e-002	0.1000000	979770.00	0.01	-2.60	15.00	2RDR	
Endrin Ketone	0.1176000	0.1000000	646190.00	0.01	17.60	15.00	2RDR	<-
Tetrachloro-m-Xylene	0.1023100	0.1000000	973260.00	0.01	2.31	15.00	2RDR	
Decachlorobiphenyl	0.1001900	0.1000000	707090.00	0.01	0.19	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 11/05/07 Time: 2255

Lab File ID: 8AK1045 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

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

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.05e-002	5.e-002	1726200.0	0.01	1.00	15.00	2RDR	
gamma BHC	3.85e-002	5.e-002	1225600.0	0.01	-23.00	15.00	2RDR	<-
Heptachlor	3.35e-002	5.e-002	964760.00	0.01	-33.00	15.00	2RDR	<-
beta-BHC	4.25e-002	5.e-002	640180.00	0.01	-15.00	15.00	2RDR	
Aldrin	4.91e-002	5.e-002	1301800.0	0.01	-1.80	15.00	2RDR	
delta-BHC	4.01e-002	5.e-002	1024600.0	0.01	-19.80	15.00	2RDR	<-
Heptachlor Epoxide	4.8e-002	5.e-002	1113200.0	0.01	-4.00	15.00	2RDR	
Endosulfan I	4.87e-002	5.e-002	981560.00	0.01	-2.60	15.00	2RDR	
4,4'-DDE	4.72e-002	5.e-002	909800.00	0.01	-5.60	15.00	2RDR	
Dieldrin	4.79e-002	5.e-002	929840.00	0.01	-4.20	15.00	2RDR	
Endrin	4.05e-002	5.e-002	696600.00	0.01	-19.00	15.00	2RDR	<-
4,4'-DDD	6.55e-002	5.e-002	853520.00	0.01	31.00	15.00	2RDR	<-
Endosulfan II	4.69e-002	5.e-002	761820.00	0.01	-6.20	15.00	2RDR	
4,4'-DDT	9.08e-003	5.e-002	96180.000	0.01	-81.84	15.00	2RDR	<-
Endrin Aldehyde	4.91e-002	5.e-002	619380.00	0.01	-1.80	15.00	2RDR	
Endosulfan sulfate	3.37e-002	5.e-002	372380.00	0.01	-32.60	15.00	2RDR	<-
Methoxychlor	1.13e-002	5.e-002	82020.000	0.01	-77.40	15.00	2RDR	<-
alpha-Chlordane	4.71e-002	5.e-002	1022400.0	0.01	-5.80	15.00	2RDR	
gamma-Chlordane	4.84e-002	5.e-002	1053900.0	0.01	-3.20	15.00	2RDR	
Endrin Ketone	3.02e-002	5.e-002	371680.00	0.01	-39.60	15.00	2RDR	<-
Tetrachloro-m-Xylene	5.16e-002	5.e-002	1242400.0	0.01	3.20	15.00	2RDR	
Decachlorobiphenyl	4.77e-002	5.e-002	644060.00	0.01	-4.60	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC08 Calibration Date: 11/05/07 Time: 2255

Lab File ID: 8AK2045 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	4.62e-002	5.e-002	1297000.0	0.01	-7.60	15.00	2RDR	
gamma BHC	3.82e-002	5.e-002	1010900.0	0.01	-23.60	15.00	2RDR	<-
Heptachlor	3.05e-002	5.e-002	798200.00	0.01	-39.00	15.00	2RDR	<-
beta-BHC	4.1e-002	5.e-002	511480.00	0.01	-18.00	15.00	2RDR	<-
Aldrin	4.46e-002	5.e-002	1067400.0	0.01	-10.80	15.00	2RDR	
delta-BHC	3.83e-002	5.e-002	763640.00	0.01	-23.40	15.00	2RDR	<-
Heptachlor Epoxide	4.48e-002	5.e-002	943780.00	0.01	-10.40	15.00	2RDR	
Endosulfan I	4.45e-002	5.e-002	791100.00	0.01	-11.00	15.00	2RDR	
4,4'-DDE	4.44e-002	5.e-002	742800.00	0.01	-11.20	15.00	2RDR	
Dieldrin	4.42e-002	5.e-002	744660.00	0.01	-11.60	15.00	2RDR	
Endrin	3.71e-002	5.e-002	514180.00	0.01	-25.80	15.00	2RDR	<-
4,4'-DDD	7.01e-002	5.e-002	774300.00	0.01	40.20	15.00	2RDR	<-
Endosulfan II	4.39e-002	5.e-002	608660.00	0.01	-12.20	15.00	2RDR	
4,4'-DDT	8.63e-003	5.e-002	69420.000	0.01	-82.74	15.00	2RDR	<-
Endrin Aldehyde	4.63e-002	5.e-002	504980.00	0.01	-7.40	15.00	2RDR	
Endosulfan sulfate	3.04e-002	5.e-002	277640.00	0.01	-39.20	15.00	2RDR	<-
Methoxychlor	1.04e-002	5.e-002	62440.000	0.01	-79.20	15.00	2RDR	<-
alpha-Chlordane	4.59e-002	5.e-002	904960.00	0.01	-8.20	15.00	2RDR	
gamma-Chlordane	4.5e-002	5.e-002	896000.00	0.01	-10.00	15.00	2RDR	
Endrin Ketone	2.5e-002	5.e-002	247700.00	0.01	-50.00	15.00	2RDR	<-
Tetrachloro-m-Xylene	4.98e-002	5.e-002	969440.00	0.01	-0.40	15.00	2RDR	
Decachlorobiphenyl	4.71e-002	5.e-002	693400.00	0.01	-5.80	15.00	2RDR	

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG44926-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab Sample ID: WG44926-1 Lab File ID: 8AJ5021

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3550

Sulfur Cleanup: (Y/N) Y Date Extracted: 10/25/07

Date Analyzed (1): 10/26/07 Date Analyzed (2): 10/26/07

Time Analyzed (1): 1818 Time Analyzed (2): 1818

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column (1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE-2 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	WG44926-LCS	WG44926-2	8AJ5022	10/26/07	10/26/07
02	2W-SD-SD53-0001MS	WG44926-3	8AJ5023	10/26/07	10/26/07
03	2W-SD-SD53-0001MSD	WG44926-4	8AJ5024	10/26/07	10/26/07
04	2W-SD-SD56-0001	SA6036-4	8AJ5025	10/26/07	10/26/07
05	2W-SD-SD55-0001	SA6036-6	8AJ5026	10/26/07	10/26/07
06	2W-SD-SD54-0001	SA6036-8	8AJ5027	10/26/07	10/26/07
07	2W-SD-SD53-0001	SA6036-9	8AJ5028	10/26/07	10/26/07
08	2W-FD-101807-01	SA6036-11	8AJ5030	10/26/07	10/26/07
09	2W-SD-SD53-0204	SA6036-10DL	8AK1009	11/02/07	11/02/07
10	2W-SD-SD51-0001	SA6036-12RA	8AK1010	11/02/07	11/02/07
11	2W-SD-SD52-0001	SA6036-13DL	8AK1011	11/02/07	11/02/07
12	2W-SD-SD50-0204	SA6036-14RA	8AK1012	11/02/07	11/02/07
13	2W-SD-SD50-0001	SA6036-15RA	8AK1013	11/02/07	11/02/07
14	2W-SD-SD49-0001	SA6036-16RA	8AK1014	11/02/07	11/02/07
15	2W-SD-SD45-0001	SA6036-17RA	8AK1015	11/02/07	11/02/07
16					
17					
18					
19					
20					
21					
22					
23					
24					

COMMENTS:

FORM IV PEST

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/25/07
Analysis Date: 26-OCT-2007 18:18
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 100

Lab ID: WG44926-1
Client ID: WG44926-Blank
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44926
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	1.7	1.0	1.7	1.7	0.57
58-89-9	gamma BHC	U	1.7	1.0	1.7	1.7	0.73
319-85-7	beta-BHC	U	1.7	1.0	1.7	1.7	0.73
319-86-8	delta-BHC	U	1.7	1.0	1.7	1.7	0.47
76-44-8	Heptachlor	U	1.7	1.0	1.7	1.7	0.67
309-00-2	Aldrin	U	1.7	1.0	1.7	1.7	0.70
1024-57-3	Heptachlor Epoxide	U	1.7	1.0	1.7	1.7	1.6
5103-74-2	gamma-Chlordane	U	1.7	1.0	1.7	1.7	0.83
5103-71-9	alpha-Chlordane	U	1.7	1.0	1.7	1.7	0.87
72-55-9	4,4'-DDE	U	3.3	1.0	3.3	3.3	0.80
959-98-8	Endosulfan I	U	1.7	1.0	1.7	1.7	0.57
60-57-1	Dieldrin	U	3.3	1.0	3.3	3.3	0.77
72-20-8	Endrin	U	3.3	1.0	3.3	3.3	1.4
72-54-8	4,4'-DDD	U	3.3	1.0	3.3	3.3	1.1
33213-65-9	Endosulfan II	U	3.3	1.0	3.3	3.3	0.60
50-29-3	4,4'-DDT	U	3.3	1.0	3.3	3.3	0.83
7421-36-3	Endrin Aldehyde	U	3.3	1.0	3.3	3.3	0.70
72-43-5	Methoxychlor	U	17	1.0	17	17	3.7
1031-07-8	Endosulfan sulfate	U	3.3	1.0	3.3	3.3	0.90
53494-70-5	Endrin Ketone	U	3.3	1.0	3.3	3.3	0.97
8001-35-2	Toxaphene	U	33	1.0	33	33	13
877-09-8	Tetrachloro-m-Xylene		72%				
2051-24-3	Decachlorobiphenyl		83%				

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG45073-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab Sample ID: WG45073-1 Lab File ID: 8AK1004

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3550

Sulfur Cleanup: (Y/N) Y Date Extracted: 10/30/07

Date Analyzed (1): 11/02/07 Date Analyzed (2): 11/02/07

Time Analyzed (1): 1321 Time Analyzed (2): 1321

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column (1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE-2 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	WG45073-LCS	WG45073-2	8AK1005	11/02/07	11/02/07
02	WG45073-LCSD	WG45073-3	8AK1006	11/02/07	11/02/07
03	2W-SD-SD46-0001	SA6036-19	8AK1017	11/02/07	11/02/07
04	2W-SD-SD45-0002	SA6036-18DL	8AK1036	11/05/07	11/05/07
05	2W-SD-SD46-0204	SA6036-20DL	8AK1037	11/05/07	11/05/07
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

COMMENTS:

FORM IV PEST

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/30/07
Analysis Date: 02-NOV-2007 13:21
Report Date: 11/07/2007
Matrix: SOIL
% Solids: 100

Lab ID: WG45073-1
Client ID: WG45073-Blank
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG45073
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	1.7	1.0	1.7	1.7	0.57
58-89-9	gamma BHC	U	1.7	1.0	1.7	1.7	0.73
319-85-7	beta-BHC	U	1.7	1.0	1.7	1.7	0.73
319-86-8	delta-BHC	U	1.7	1.0	1.7	1.7	0.47
76-44-8	Heptachlor	U	1.7	1.0	1.7	1.7	0.67
309-00-2	Aldrin	U	1.7	1.0	1.7	1.7	0.70
1024-57-3	Heptachlor Epoxide	U	1.7	1.0	1.7	1.7	1.6
5103-74-2	gamma-Chlordane	U	1.7	1.0	1.7	1.7	0.83
5103-71-9	alpha-Chlordane	U	1.7	1.0	1.7	1.7	0.87
72-55-9	4,4'-DDE	U	3.3	1.0	3.3	3.3	0.80
959-98-8	Endosulfan I	U	1.7	1.0	1.7	1.7	0.57
60-57-1	Dieldrin	U	3.3	1.0	3.3	3.3	0.77
72-20-8	Endrin	U	3.3	1.0	3.3	3.3	1.4
72-54-8	4,4'-DDD	U	3.3	1.0	3.3	3.3	1.1
33213-65-9	Endosulfan II	U	3.3	1.0	3.3	3.3	0.60
50-29-3	4,4'-DDT	U	3.3	1.0	3.3	3.3	0.83
7421-36-3	Endrin Aldehyde	U	3.3	1.0	3.3	3.3	0.70
72-43-5	Methoxychlor	U	17	1.0	17	17	3.7
1031-07-8	Endosulfan sulfate	U	3.3	1.0	3.3	3.3	0.90
53494-70-5	Endrin Ketone	U	3.3	1.0	3.3	3.3	0.97
8001-35-2	Toxaphene	U	33	1.0	33	33	13
877-09-8	Tetrachloro-m-Xylene		69%				
2051-24-3	Decachlorobiphenyl		92%				

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-FD-101807-01

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-11 Date(s) Analyzed: 10/26/07 10/26/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.14	9.07	9.21	3.45	
	2	9.15	9.08	9.22	3.30	4.4
4,4'-DDD	1	10.65	10.56	10.70	4.14	
	2	10.90	10.80	10.94	4.64	11.4
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD45-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-17RA Date(s) Analyzed: 11/02/07 11/02/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.13	9.07	9.21	8.37	
	2	9.13	9.07	9.21	9.54	13.1
4,4'-DDD	1	10.62	10.56	10.70	39.4	
	2	10.83	10.79	10.93	34.3	13.8
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD45-0002

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-18DL Date(s) Analyzed: 11/05/07 11/05/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.14	9.07	9.21	180	
	2	9.13	9.07	9.21	119	40.8
4,4'-DDD	1	10.62	10.56	10.70	1180	
	2	10.85	10.79	10.93	1120	5.2
4,4'-DDT	1	11.61	11.55	11.69	74.0	
	2	11.70	11.63	11.77	78.6	6.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD46-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-19 Date(s) Analyzed: 11/02/07 11/02/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.14	9.07	9.21	40.5	
	2	9.14	9.07	9.21	38.0	6.4
4,4'-DDD	1	10.63	10.56	10.70	157	
	2	10.85	10.79	10.93	142	10.0
4,4'-DDT	1	11.62	11.55	11.69	60.0	
	2	11.70	11.63	11.77	65.3	8.4
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD46-0204

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-20DL Date(s) Analyzed: 11/05/07 11/05/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.13	9.07	9.21	10.7	
	2	9.13	9.07	9.21	9.28	14.2
4,4'-DDD	1	10.62	10.56	10.70	176	
	2	10.83	10.79	10.93	165	6.4
4,4'-DDT	1	11.61	11.55	11.69	11.2	
	2	11.69	11.63	11.77	16.5	38.3
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD49-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-16RA Date(s) Analyzed: 11/02/07 11/02/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
gamma-Chlordane	1	8.47	8.42	8.56	14.2	
	2	8.51	8.44	8.58	10.9	26.3
alpha-Chlordane	1	8.66	8.60	8.74	15.8	
	2	8.67	8.62	8.76	15.1	4.5
4,4'-DDE	1	9.13	9.07	9.21	10.6	
	2	9.13	9.07	9.21	10.4	1.9
4,4'-DDD	1	10.62	10.56	10.70	61.9	
	2	10.85	10.79	10.93	52.0	17.4
4,4'-DDT	1	11.61	11.55	11.69	14.0	
	2	11.70	11.63	11.77	14.2	1.4
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD50-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-15RA Date(s) Analyzed: 11/02/07 11/02/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
gamma-Chlordane	1	8.47	8.42	8.56	12.3	
	2	8.50	8.44	8.58	9.34	27.4
alpha-Chlordane	1	8.66	8.60	8.74	9.46	
	2	8.67	8.62	8.76	11.0	15.0
4,4'-DDE	1	9.13	9.07	9.21	11.9	
	2	9.13	9.07	9.21	11.5	3.4
4,4'-DDD	1	10.62	10.56	10.70	79.0	
	2	10.83	10.79	10.93	59.6	28.0
4,4'-DDT	1	11.59	11.55	11.69	16.9	
	2	11.69	11.63	11.77	26.8	45.3
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD50-0204

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-14RA Date(s) Analyzed: 11/02/07 11/02/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.13	9.07	9.21	6.10	
	2	9.13	9.07	9.21	5.42	11.8
4,4'-DDD	1	10.62	10.56	10.70	22.4	
	2	10.83	10.79	10.93	20.4	9.3
4,4'-DDT	1	11.62	11.55	11.69	3.34	
	2	11.67	11.63	11.77	4.54	30.4
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD51-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-12RA Date(s) Analyzed: 11/02/07 11/02/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.13	9.07	9.21	13.2	
	2	9.13	9.07	9.21	11.2	16.4
4,4'-DDD	1	10.61	10.56	10.70	110	
	2	10.83	10.79	10.93	105	4.6
4,4'-DDT	1	11.59	11.55	11.69	16.0	
	2	11.69	11.63	11.77	15.3	4.5
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD52-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-13DL Date(s) Analyzed: 11/02/07 11/02/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.13	9.07	9.21	33.5	
	2	9.13	9.07	9.21	34.2	2.1
4,4'-DDD	1	10.62	10.56	10.70	335	
	2	10.83	10.79	10.93	335	0.0
4,4'-DDT	1	11.61	11.55	11.69	416	
	2	11.70	11.63	11.77	393	5.7
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD53-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-9 Date(s) Analyzed: 10/26/07 10/26/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.14	9.07	9.21	2.97	
	2	9.15	9.08	9.22	2.99	0.7
4,4'-DDD	1	10.65	10.56	10.70	3.56	
	2	10.90	10.80	10.94	4.43	21.8
4,4'-DDT	1	11.65	11.55	11.69	3.07	
	2	11.71	11.66	11.80	4.40	35.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD53-0204

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-10DL Date(s) Analyzed: 11/02/07 11/02/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.11	9.07	9.21	16.6	
	2	9.11	9.07	9.21	19.2	14.5
4,4'-DDD	1	10.61	10.56	10.70	22.9	
	2	10.82	10.79	10.93	24.3	5.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD54-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-8 Date(s) Analyzed: 10/26/07 10/26/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.14	9.07	9.21	6.43	
	2	9.15	9.08	9.22	6.33	1.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD55-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-6 Date(s) Analyzed: 10/26/07 10/26/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.15	9.07	9.21	3.54	
	2	9.15	9.08	9.22	3.91	9.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD56-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-4 Date(s) Analyzed: 10/26/07 10/26/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
gamma BHC	1	5.69	5.68	5.78	7.34	
	2	5.93	5.85	5.95	8.24	11.6
4,4'-DDE	1	9.14	9.07	9.21	2.67	
	2	9.14	9.08	9.22	2.15	21.6
4,4'-DDT	1	11.63	11.55	11.69	5.99	
	2	11.71	11.66	11.80	3.59	50.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

SRV: [4,4-DDD] = 160 ug/Kg as reported by the lab.

Data File: \\Target_server\GG\chem\gc08.i\GC08AK01A1.b\8AK1017.d
Report Date: 07-Nov-2007 01:18

Katahdin Analytical Services

Data file : \\Target_server\GG\chem\gc08.i\GC08AK01A1.b\8AK1017.d
Lab Smp Id: SA6036-19 Client Smp ID: 2W-SD-SD46-0001
Inj Date : 02-NOV-2007 19:12
Operator : SJC Inst ID: gc08.i
Smp Info : PSTA293A.M,GC08AK01A1.B,1,SA6036-19
Misc Info : SW846 8081A
Comment :
Method : \\TARGET_SERVER\GG\chem\gc08.i\GC08AK01A1.B\PSTA293A.m
Meth Date : 05-Nov-2007 11:01 scolby Quant Type: ESTD
Cal Date : 30-OCT-2007 19:55 Cal File: 8AJ5055.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8081.sub
Target Version: 4.12
Processing Host: TARGET03

Concentration Formula: Amt * DF * 1000*Vt *(1/Vo)*(100/(100-M)) * CpndVariab

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Volume of final extract (L)
Vo	0.03000	Sample Weight
M	58.015	% Moisture
Cpnd Variable		Local Compound Variable

$A2 = 3.68\times10^{-14}$
$A1 = 1.484\times10^{-6}$
$A0 = 2.141\times10^{-3}$
$R^2 = 0.99959$

$[((0.99959\cdot(3.68\times10^{-14}))+((131570\cdot(1.484\times10^{-6}))+(1.343\times10^{-3})] = 0.197\ ug/mL$

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kgdrywt)
$ 5 Tetrachloro-m-Xylene	4.646	4.646	0.000	83404	0.07062	56.1
20 4,4'-DDE	9.140	9.140	0.000	49223	0.05098	40.5
25 4,4'-DDD	10.633	10.633	0.000	131570	0.19805	157
28 4,4'-DDT	11.620	11.620	0.000	51196	0.07564	60.0
$ 35 Decachlorobiphenyl	19.020	19.006	0.014	65335	0.10270	81.5(M)

MS 11/06/07

QC Flag Legend

M - Compound response manually integrated.

~~A2 = (-5.12×10^-15)~~
~~A1 = (1.366×10^-6)~~
~~A0 = (1.343×10^-3)~~
~~R^2 = 0.99966~~
= MDL 12-27-07

$$\frac{\frac{0.197\ ug}{mL}\cdot\frac{1000\ mL}{1\ L}\cdot\frac{0.01\ L}{1}}{0.03\ Kg\cdot 0.42} = 156\ ug/Kg$$

FORM 2
SOIL PCB SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column(1): ZB-MULTIRESIDUE-1ID: 0.53 (mm) GC Column(2): ZB-MULTIRESIDUE-2ID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	DCB1 REC#	DCB2 REC#	OTHR (1)	OTHR (2)	TOT OUT
01	WG44925-BLANK	WG44925-1	117*	90	109	102			1
02	WG44925-LCS	WG44925-2	107	84	106	98			0
03	2W-SD-SD53-0001MS	WG44925-3	90	75	73	71			0
04	2W-SD-SD53-0001MSD	WG44925-4	100	83	81	78			0
05	2W-SD-SD56-0001	SA6036-4	121*	99	115	99			1
06	2W-SD-SD55-0001	SA6036-6	98	82	77	81			0
07	2W-SD-SD54-0001	SA6036-8	62	55	52	54			0
08	2W-SD-SD53-0001	SA6036-9	82	70	67	64			0
09	2W-SD-SD53-0204	SA6036-10	87	74	89	83			0
10	2W-FD-101807-01	SA6036-11	88	75	68	60			0
11	2W-SD-SD51-0001	SA6036-12	82	72	67	63			0
12	2W-SD-SD52-0001	SA6036-13	80	68	62	58			0
13	2W-SD-SD50-0204	SA6036-14	95	80	77	76			0
14	2W-SD-SD50-0001	SA6036-15	75	67	65	63			0
15	2W-SD-SD49-0001	SA6036-16	82	71	62	59			0
16	2W-SD-SD45-0001	SA6036-17	93	79	66	64			0
17	WG45074-BLANK	WG45074-1	88	82	125	118			0
18	WG45074-LCS	WG45074-2	101	82	104	99			0
19	WG45074-LCSD	WG45074-3	100	81	112	103			0
20	2W-SD-SD45-0002	SA6036-18	81	69	92	85			0
21	2W-SD-SD46-0001	SA6036-19	96	82	82	83			0
22	2W-SD-SD46-0204	SA6036-20	86	73	68	65			0
23									
24									
25									
26									
27									
28									

		ADVISORY QC LIMITS
S1 (TCX)	= Tetrachloro-m-xylene	(41-116)
S2 (DCB)	= Decachlorobiphenyl	(31-128)

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

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/25/07
Analysis Date: 10/26/07
Report Date: 11/05/2007
Matrix: SOIL

Lab ID: WG44925-2
Client ID: WG44925-LCS
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44925
Units: ug/Kgdrywt

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.	%REC.	QC. LIMITS
Aroclor-1016	167	NA	168	101	71-114
Aroclor-1260	167	NA	185	111	77-119

FORM III PEST-2

6AJ3219.d

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/30/07
Analysis Date: 11/03/07
Report Date: 11/05/2007
Matrix: SOIL

Lab ID: WG45074-2 & WG45074-3
Client ID: WG45074-LCS & WG45074-LCSD
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG45074
Units: ug/Kgdrywt

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
Aroclor-1016	167	167	NA	162	162	97	97	0.0	50	71-114
Aroclor-1260	167	167	NA	174	180	104	108	3	50	77-119

FORM III PEST-2

6AK1029.d & 6AK1030.d

KATAHDIN ANALYTICAL SERVICES
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/18/07
Received Date: 10/22/07
Extraction Date: 10/25/07
Analysis Date: 10/27/07
Report Date: 11/08/2007
Matrix: SOIL

Lab ID: WG44925-3 & WG44925-4
Client ID: 2W-SD-SD53-0001MS & 2W-SD-SD53-0001MSD
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44925
Units: ug/Kgdrywt

COMPOUND	MS SPIKE	MSD SPIKE	SAMPLE CONC.	MS CONC.	MSD CONC.	MS %REC.	MSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
Aroclor-1016	488	488	0.00	418	450	86	92	7	50	71-114
Aroclor-1260	488	488	0.00	403	427	83	88	6	50	77-119

FORM III SV-2

6AJ3233.d & 6AJ3234.d

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG44925-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab Sample ID: WG44925-1 Lab File ID: 6AJ3218

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3550

Sulfur Cleanup: (Y/N) Y Date Extracted: 10/25/07

Date Analyzed (1): 10/26/07 Date Analyzed (2): 10/26/07

Time Analyzed (1): 2020 Time Analyzed (2): 2020

Instrument ID (1): GC06 Instrument ID (2): GC06

GC Column (1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE-2 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	WG44925-LCS	WG44925-2	6AJ3219	10/26/07	10/26/07
02	2W-SD-SD53-0001MS	WG44925-3	6AJ3233	10/27/07	10/27/07
03	2W-SD-SD53-0001MSD	WG44925-4	6AJ3234	10/27/07	10/27/07
04	2W-SD-SD56-0001	SA6036-4	6AJ3235	10/27/07	10/27/07
05	2W-SD-SD55-0001	SA6036-6	6AJ3236	10/27/07	10/27/07
06	2W-SD-SD54-0001	SA6036-8	6AJ3237	10/27/07	10/27/07
07	2W-SD-SD53-0001	SA6036-9	6AJ3238	10/27/07	10/27/07
08	2W-SD-SD53-0204	SA6036-10	6AJ3244	10/27/07	10/27/07
09	2W-FD-101807-01	SA6036-11	6AJ3245	10/27/07	10/27/07
10	2W-SD-SD51-0001	SA6036-12	6AJ3246	10/27/07	10/27/07
11	2W-SD-SD52-0001	SA6036-13	6AJ3247	10/27/07	10/27/07
12	2W-SD-SD50-0204	SA6036-14	6AJ3248	10/27/07	10/27/07
13	2W-SD-SD50-0001	SA6036-15	6AJ3249	10/27/07	10/27/07
14	2W-SD-SD49-0001	SA6036-16	6AJ3250	10/27/07	10/27/07
15	2W-SD-SD45-0001	SA6036-17	6AJ3251	10/27/07	10/27/07
16					
17					
18					
19					
20					
21					
22					
23					
24					

COMMENTS:

FORM IV PEST

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/25/07
Analysis Date: 26-OCT-2007 20:20
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 100

Lab ID: WG44925-1
Client ID: WG44925-Blank
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44925
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	17	1.0	17	17	16
11104-28-2	Aroclor-1221	U	17	1.0	17	17	12
11141-16-5	Aroclor-1232	U	17	1.0	17	17	5.3
53469-21-9	Aroclor-1242	U	17	1.0	17	17	6.7
12672-29-6	Aroclor-1248	U	17	1.0	17	17	5.7
11097-69-1	Aroclor-1254	U	17	1.0	17	17	13
11096-82-5	Aroclor-1260	U	17	1.0	17	17	14
877-09-8	Tetrachloro-m-xylene		*117%				
2051-24-3	Decachlorobiphenyl		109%				

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG45074-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Lab Sample ID: WG45074-1 Lab File ID: 6AK1028

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3550

Sulfur Cleanup: (Y/N) Y Date Extracted: 10/30/07

Date Analyzed (1): 11/02/07 Date Analyzed (2): 11/02/07

Time Analyzed (1): 2328 Time Analyzed (2): 2328

Instrument ID (1): GC06 Instrument ID (2): GC06

GC Column (1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE-2 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	WG45074-LCS	WG45074-2	6AK1029	11/02/07	11/02/07
02	WG45074-LCSD	WG45074-3	6AK1030	11/03/07	11/03/07
03	2W-SD-SD45-0002	SA6036-18	6AK1031	11/03/07	11/03/07
04	2W-SD-SD46-0001	SA6036-19	6AK1032	11/03/07	11/03/07
05	2W-SD-SD46-0204	SA6036-20	6AK1033	11/03/07	11/03/07
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

COMMENTS:

FORM IV PEST

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/30/07
Analysis Date: 02-NOV-2007 23:28
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 100

Lab ID: WG45074-1
Client ID: WG45074-Blank
SDG: SA6036
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG45074
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	17	1.0	17	17	16
11104-28-2	Aroclor-1221	U	17	1.0	17	17	12
11141-16-5	Aroclor-1232	U	17	1.0	17	17	5.3
53469-21-9	Aroclor-1242	U	17	1.0	17	17	6.7
12672-29-6	Aroclor-1248	U	17	1.0	17	17	5.7
11097-69-1	Aroclor-1254	U	17	1.0	17	17	13
11096-82-5	Aroclor-1260	U	17	1.0	17	17	14
877-09-8	Tetrachloro-m-xylene		88%				
2051-24-3	Decachlorobiphenyl		125%				

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date(s): 10/24/07 10/25/07

Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Calibration Time(s): 1915 0606

LAB FILE ID: RF0.05: 6AJ3174 RF0.1: 6AJ3175 RF0.25: 6AJ3176
RF1: 6AJ3177 RF2.5: 6AJ3178 RF10: 6AJ3179

COMPOUND	RF0.05	RF0.1	RF0.25	RF1	RF2.5	RF10	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
Aroclor-1016	1773	3138	7657	27142	57385	177030	2ORDR	-2.44e-002	3.695e-005	1.112e-010	0.99992	0.99000
(2)	1200	2162	5547	20771	45631	146720	2ORDR	-1.42e-002	4.828e-005	1.362e-010	0.99996	0.99000
(3)	3638	6500	16299	61040	132720	425430	2ORDR	-1.68e-002	1.654e-005	1.647e-011	0.99994	0.99000
(4)	2346	3255	8582	29544	63535	205950	2ORDR	-3.19e-002	3.502e-005	6.652e-011	0.99991	0.99000
(5)	1308	2337	6047	23980	54604	182480	2ORDR	-5.91e-003	4.161e-005	7.247e-011	0.99998	0.99000
Aroclor-1221				13412			2ORDR	0.00000000	7.456e-005	0.00000000	1.00000	0.99000
(2)				9383			2ORDR	0.00000000	1.066e-004	0.00000000	1.00000	0.99000
(3)				30133			2ORDR	0.00000000	3.319e-005	0.00000000	1.00000	0.99000
(4)				5011			2ORDR	0.00000000	1.996e-004	0.00000000	1.00000	0.99000
Aroclor-1232				8627			2ORDR	0.00000000	1.159e-004	0.00000000	1.00000	0.99000
(2)				23431			2ORDR	0.00000000	4.268e-005	0.00000000	1.00000	0.99000
(3)				12251			2ORDR	0.00000000	8.163e-005	0.00000000	1.00000	0.99000
(4)				27307			2ORDR	0.00000000	3.662e-005	0.00000000	1.00000	0.99000
(5)				10228			2ORDR	0.00000000	9.777e-005	0.00000000	1.00000	0.99000
Aroclor-1242	1458	2776	6519	22494	48734	150860	2ORDR	-2.42e-002	4.399e-005	1.49e-010	0.99996	0.99000
(2)	977	1914	4669	16870	37953	122400	2ORDR	-1.49e-002	5.861e-005	1.897e-010	0.99998	0.99000
(3)	2972	5657	13801	49240	109420	355360	2ORDR	-1.98e-002	2.041e-005	2.191e-011	0.99996	0.99000
(4)	1807	2921	6892	24150	53213	173650	2ORDR	-2.86e-002	4.225e-005	8.93e-011	0.99995	0.99000
(5)	1081	2052	5106	19259	45035	150910	2ORDR	-6.97e-003	5.092e-005	1.02e-010	1.00000	0.99000
Aroclor-1248				32282			2ORDR	0.00000000	3.098e-005	0.00000000	1.00000	0.99000
(2)				27991			2ORDR	0.00000000	3.573e-005	0.00000000	1.00000	0.99000
(3)				32026			2ORDR	0.00000000	3.122e-005	0.00000000	1.00000	0.99000
(4)				25779			2ORDR	0.00000000	3.879e-005	0.00000000	1.00000	0.99000
(5)				20478			2ORDR	0.00000000	4.883e-005	0.00000000	1.00000	0.99000
Aroclor-1254	2532	4483	10024	34741	77095	249880	2ORDR	-2.88e-002	2.91e-005	4.42e-011	0.99996	0.99000
(2)	3251	6114	14907	55097	124570	408420	2ORDR	-1.41e-002	1.808e-005	1.578e-011	0.99998	0.99000
(3)	3734	7020	17130	64275	145350	482340	2ORDR	-1.37e-002	1.561e-005	1.069e-011	0.99998	0.99000
(4)	2501	4696	11986	50231	119200	414530	2ORDR	3.299e-003	1.959e-005	1.091e-011	0.99999	0.99000
(5)	2910	5510	13496	50906	116520	385990	2ORDR	-1.05e-002	1.948e-005	1.673e-011	0.99999	0.99000
Aroclor-1260	2840	4980	12137	43868	95981	313610	2ORDR	-2.33e-002	2.331e-005	2.759e-011	0.99994	0.99000
(2)	3856	6708	16429	59661	130120	423120	2ORDR	-2.28e-002	1.712e-005	1.553e-011	0.99994	0.99000
(3)	3273	5889	15075	58068	130910	436520	2ORDR	-1.07e-002	1.733e-005	1.283e-011	0.99997	0.99000
(4)	5226	9172	23880	91781	207800	715440	2ORDR	-1.27e-002	1.115e-005	3.981e-012	0.99996	0.99000
(5)	2987	5306	13576	53943	121190	414630	2ORDR	-1.07e-002	1.899e-005	1.244e-011	0.99996	0.99000
Tetrachloro-m-xylene	464	1122	4316	20464	51059	146380	2ORDR	1.021e-003	7.714e-007	4.013e-012	0.99986	0.99000
Decachlorobiphenyl	1088	1983	5092	19683	44219	134720	2ORDR	-1.28e-005	9.534e-007	3.945e-012	1.00000	0.99000

FORM VI PCB

Report Date: 31-Oct-2007 10:48

Calibration History

Method : \\Target_server\GG\chem\gc06.i\GC06AJ24A1.b\PCBA082A.m
Start Cal Date: 24-OCT-2007 19:15
End Cal Date : 25-OCT-2007 06:06
Last Cal Level: 3
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.05000		
25-OCT-2007 03:38	AR1254	6AJ3174.d
25-OCT-2007 00:10	AR1242	6AJ3167.d
24-OCT-2007 19:15	AR1660	6AJ3157.d
Cal Level: 2 , Cal Amount: 0.10000		
25-OCT-2007 04:07	AR1254	6AJ3175.d
25-OCT-2007 00:40	AR1242	6AJ3168.d
24-OCT-2007 19:44	AR1660	6AJ3158.d
Cal Level: 3 , Cal Amount: 0.25000		
25-OCT-2007 04:37	AR1254	6AJ3176.d
25-OCT-2007 01:09	AR1242	6AJ3169.d
24-OCT-2007 20:13	AR1660	6AJ3159.d
Cal Level: 4 , Cal Amount: 1.00000		
25-OCT-2007 05:07	AR1254	6AJ3177.d
25-OCT-2007 03:08	AR1248	6AJ3173.d
25-OCT-2007 01:39	AR1242	6AJ3170.d
24-OCT-2007 23:40	AR1232	6AJ3166.d
24-OCT-2007 23:11	AR1221	6AJ3165.d
24-OCT-2007 20:43	AR1660	6AJ3160.d
Cal Level: 5 , Cal Amount: 2.50000		
25-OCT-2007 05:36	AR1254	6AJ3178.d
25-OCT-2007 02:09	AR1242	6AJ3171.d
24-OCT-2007 21:13	AR1660	6AJ3161.d
Cal Level: 6 , Cal Amount: 10.00000		
25-OCT-2007 06:06	AR1254	6AJ3179.d
25-OCT-2007 02:38	AR1242	6AJ3172.d
24-OCT-2007 21:42	AR1660	6AJ3162.d

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date(s): 10/24/07 10/25/07

Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Calibration Time(s): 1915 0606

LAB FILE ID: RF0.05: 6AJ4174 RF0.1: 6AJ4175 RF0.25: 6AJ4176
RF1: 6AJ4177 RF2.5: 6AJ4178 RF10: 6AJ4179

COMPOUND	RF0.05	RF0.1	RF0.25	RF1	RF2.5	RF10	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
Aroclor-1016	2177	3849	9008	32303	67732	209600	2ORDR	-2.71e-002	3.136e-005	7.868e-011	0.99991	0.99000
(2)	1686	2964	7204	27157	58932	190360	2ORDR	-1.9e-002	3.749e-005	7.959e-011	0.99994	0.99000
(3)	4001	7003	17123	64510	139720	447900	2ORDR	-1.84e-002	1.571e-005	1.487e-011	0.99994	0.99000
(4)	1831	3221	7856	29339	63709	206930	2ORDR	-2.03e-002	3.484e-005	6.567e-011	0.99994	0.99000
(5)	1514	2685	6628	26538	59331	197930	2ORDR	-1.e-002	3.817e-005	6.271e-011	0.99996	0.99000
Aroclor-1221				14781			2ORDR	0.00000000	6.765e-005	0.00000000	1.00000	0.99000
(2)				10299			2ORDR	0.00000000	9.71e-005	0.00000000	1.00000	0.99000
(3)				32695			2ORDR	0.00000000	3.059e-005	0.00000000	1.00000	0.99000
(4)				5707			2ORDR	0.00000000	1.752e-004	0.00000000	1.00000	0.99000
Aroclor-1232				24606			2ORDR	0.00000000	4.064e-005	0.00000000	1.00000	0.99000
(2)				14601			2ORDR	0.00000000	6.849e-005	0.00000000	1.00000	0.99000
(3)				28590			2ORDR	0.00000000	3.498e-005	0.00000000	1.00000	0.99000
(4)				13118			2ORDR	0.00000000	7.623e-005	0.00000000	1.00000	0.99000
(5)				11218			2ORDR	0.00000000	8.914e-005	0.00000000	1.00000	0.99000
Aroclor-1242	1762	3316	7575	25617	55411	171450	2ORDR	-2.84e-002	3.876e-005	1.151e-010	0.99995	0.99000
(2)	1337	2540	6134	21793	48675	155700	2ORDR	-1.81e-002	4.543e-005	1.215e-010	0.99998	0.99000
(3)	3170	5956	14452	51222	113670	365040	2ORDR	-2.e-002	1.949e-005	2.181e-011	0.99997	0.99000
(4)	1432	2774	6671	23387	52371	169260	2ORDR	-2.01e-002	4.261e-005	9.806e-011	0.99997	0.99000
(5)	1194	2332	5684	20949	48365	161600	2ORDR	-1.19e-002	4.731e-005	9.064e-011	0.99999	0.99000
Aroclor-1248				33255			2ORDR	0.00000000	3.007e-005	0.00000000	1.00000	0.99000
(2)				30960			2ORDR	0.00000000	3.23e-005	0.00000000	1.00000	0.99000
(3)				34629			2ORDR	0.00000000	2.888e-005	0.00000000	1.00000	0.99000
(4)				28498			2ORDR	0.00000000	3.509e-005	0.00000000	1.00000	0.99000
(5)				21323			2ORDR	0.00000000	4.69e-005	0.00000000	1.00000	0.99000
Aroclor-1254	2773	5106	12138	42947	95887	309010	2ORDR	-2.08e-002	2.322e-005	2.98e-011	0.99997	0.99000
(2)	3414	6450	15525	56832	127990	420060	2ORDR	-1.64e-002	1.761e-005	1.485e-011	0.99998	0.99000
(3)	4268	7914	18895	68424	153090	505280	2ORDR	-2.01e-002	1.478e-005	9.998e-012	0.99997	0.99000
(4)	2690	5114	12885	52838	123710	423760	2ORDR	-1.54e-004	1.87e-005	1.156e-011	0.99999	0.99000
(5)	3388	6079	14680	53675	120810	399140	2ORDR	-1.81e-002	1.875e-005	1.591e-011	0.99997	0.99000
Aroclor-1260	3237	5604	13193	48313	104340	339040	2ORDR	-2.55e-002	2.132e-005	2.437e-011	0.99993	0.99000
(2)	3835	6604	15838	58042	125340	408790	2ORDR	-2.51e-002	1.778e-005	1.65e-011	0.99992	0.99000
(3)	3364	5930	14889	57652	127240	429700	2ORDR	-1.62e-002	1.792e-005	1.254e-011	0.99994	0.99000
(4)	5387	9628	24685	93875	211660	717050	2ORDR	-1.35e-002	1.084e-005	4.36e-012	0.99997	0.99000
(5)	3164	5716	14682	57119	129670	438290	2ORDR	-9.48e-003	1.766e-005	1.181e-011	0.99997	0.99000
Tetrachloro-m-xylene	1107	2035	5407	24100	56110	185580	2ORDR	2.122e-004	8.015e-007	1.482e-012	0.99999	0.99000
Decachlorobiphenyl	1200	2176	5527	20486	44650	132600	2ORDR	-1.4e-004	9.165e-007	4.471e-012	0.99999	0.99000

FORM VI PCB

Report Date: 31-Oct-2007 11:09

Calibration History

Method : \\Target_server\GG\chem\gc06.i\GC06AJ24B1.b\PCBB082A.m
Start Cal Date: 24-OCT-2007 19:15
End Cal Date : 25-OCT-2007 06:06
Last Cal Level: 3
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.05000		
25-OCT-2007 03:38	AR1254	6AJ4174.d
25-OCT-2007 00:10	AR1242	6AJ4167.d
24-OCT-2007 19:15	AR1660	6AJ4157.d
Cal Level: 2 , Cal Amount: 0.10000		
25-OCT-2007 04:07	AR1254	6AJ4175.d
25-OCT-2007 00:40	AR1242	6AJ4168.d
24-OCT-2007 19:44	AR1660	6AJ4158.d
Cal Level: 3 , Cal Amount: 0.25000		
25-OCT-2007 04:37	AR1254	6AJ4176.d
25-OCT-2007 01:09	AR1242	6AJ4169.d
24-OCT-2007 20:13	AR1660	6AJ4159.d
Cal Level: 4 , Cal Amount: 1.00000		
25-OCT-2007 05:07	AR1254	6AJ4177.d
25-OCT-2007 03:08	AR1248	6AJ4173.d
25-OCT-2007 01:39	AR1242	6AJ4170.d
24-OCT-2007 23:40	AR1232	6AJ4166.d
24-OCT-2007 23:11	AR1221	6AJ4165.d
24-OCT-2007 20:43	AR1660	6AJ4160.d
Cal Level: 5 , Cal Amount: 2.50000		
25-OCT-2007 05:36	AR1254	6AJ4178.d
25-OCT-2007 02:09	AR1242	6AJ4171.d
24-OCT-2007 21:13	AR1660	6AJ4161.d
Cal Level: 6 , Cal Amount: 10.00000		
25-OCT-2007 06:06	AR1254	6AJ4179.d
25-OCT-2007 02:38	AR1242	6AJ4172.d
24-OCT-2007 21:42	AR1660	6AJ4162.d

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 10/24/07 Time: 2212

Lab File ID: 6AJ3163 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

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

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Aroclor-1016	0.9662100	1.0000000	24937.000	0.01	-3.38	15.00	2RDR
(2)	0.9576300	1.0000000	19099.000	0.01	-4.24	15.00	2RDR
(3)	0.9635400	1.0000000	56131.000	0.01	-3.65	15.00	2RDR
(4)	1.0268000	1.0000000	28668.000	0.01	2.68	15.00	2RDR
(5)	0.9430200	1.0000000	21963.000	0.01	-5.70	15.00	2RDR
Average %D: -2.860							

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 10/24/07 Time: 2212

Lab File ID: 6AJ4163 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Aroclor-1016	0.9610600	1.0000000	29398.000	0.01	-3.89	15.00	2RDR
(2)	0.9599100	1.0000000	24843.000	0.01	-4.01	15.00	2RDR
(3)	0.9591100	1.0000000	58983.000	0.01	-4.09	15.00	2RDR
(4)	0.9646700	1.0000000	26939.000	0.01	-3.53	15.00	2RDR
(5)	0.9478700	1.0000000	24175.000	0.01	-5.21	15.00	2RDR
Average %D: -4.150							

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 10/24/07 Time: 2241

Lab File ID: 6AJ3164 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

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

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Aroclor-1260	1.0082000	1.0000000	42140.000	0.01	0.82	15.00	2RDR
(2)	1.0182000	1.0000000	57777.000	0.01	1.82	15.00	2RDR
(3)	1.0624000	1.0000000	59302.000	0.01	6.24	15.00	2RDR
(4)	0.9001900	1.0000000	79619.000	0.01	-9.98	15.00	2RDR
(5)	0.9181200	1.0000000	47436.000	0.01	-8.19	15.00	2RDR
Average %D: -1.860							

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 10/24/07 Time: 2241

Lab File ID: 6AJ4164 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Aroclor-1260	0.9951400	1.0000000	45551.000	0.01	-0.49	15.00	2RDR
(2)	0.9882900	1.0000000	54306.000	0.01	-1.17	15.00	2RDR
(3)	1.0703000	1.0000000	58302.000	0.01	7.03	15.00	2RDR
(4)	0.8878700	1.0000000	80538.000	0.01	-11.21	15.00	2RDR
(5)	0.9063200	1.0000000	50165.000	0.01	-9.37	15.00	2RDR
Average %D: -3.040							

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 10/26/07 Time: 1724

Lab File ID: 6AJ3213 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

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

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Aroclor-1016	1.1393000	1.0000000	28967.000	0.01	13.93	15.00	2RDR
(2)	1.1264000	1.0000000	22229.000	0.01	12.64	15.00	2RDR
(3)	1.1436000	1.0000000	65837.000	0.01	14.36	15.00	2RDR
(4)	1.1419000	1.0000000	31617.000	0.01	14.19	15.00	2RDR
(5)	1.1108000	1.0000000	25685.000	0.01	11.08	15.00	2RDR
Average %D: 13.240							
Aroclor-1260	1.1435000	1.0000000	47388.000	0.01	14.35	15.00	2RDR
(2)	1.1363000	1.0000000	63987.000	0.01	13.63	15.00	2RDR
(3)	1.1283000	1.0000000	62787.000	0.01	12.83	15.00	2RDR
(4)	1.1308000	1.0000000	99068.000	0.01	13.08	15.00	2RDR
(5)	1.0936000	1.0000000	56090.000	0.01	9.36	15.00	2RDR
Average %D: 12.650							
Tetrachloro-m-xylene	1.99e-002	2.e-002	1096400.0	0.01	-0.50	15.00	2RDR
Decachlorobiphenyl	2.15e-002	2.e-002	1037600.0	0.01	7.50	15.00	2RDR

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 10/26/07 Time: 1724

Lab File ID: 6AJ4213 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Aroclor-1016	1.0565000	1.0000000	31985.000	0.01	5.65	15.00	2RDR
(2)	1.0515000	1.0000000	27006.000	0.01	5.15	15.00	2RDR
(3)	1.0400000	1.0000000	63538.000	0.01	4.00	15.00	2RDR
(4)	1.0435000	1.0000000	28952.000	0.01	4.35	15.00	2RDR
(5)	1.0281000	1.0000000	26082.000	0.01	2.81	15.00	2RDR
Average %D: 4.3900							
Aroclor-1260	1.0490000	1.0000000	47799.000	0.01	4.90	15.00	2RDR
(2)	1.0306000	1.0000000	56412.000	0.01	3.06	15.00	2RDR
(3)	1.0616000	1.0000000	57796.000	0.01	6.16	15.00	2RDR
(4)	1.0524000	1.0000000	94714.000	0.01	5.24	15.00	2RDR
(5)	1.0402000	1.0000000	57238.000	0.01	4.02	15.00	2RDR
Average %D: 4.6800							
Tetrachloro-m-xylene	2.04e-002	2.e-002	1205200.0	0.01	2.00	15.00	2RDR
Decachlorobiphenyl	2.02e-002	2.e-002	1008800.0	0.01	1.00	15.00	2RDR

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 10/26/07 Time: 2347

Lab File ID: 6AJ3225 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

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

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	0.2875000	0.2500000	32948.000	0.01	15.00	15.00	2RDR	
(2)	0.2783800	0.2500000	23840.000	0.01	11.35	15.00	2RDR	
(3)	0.2710400	0.2500000	68448.000	0.01	8.42	15.00	2RDR	
(4)	0.2802400	0.2500000	35068.000	0.01	12.10	15.00	2RDR	
(5)	0.2666300	0.2500000	25904.000	0.01	6.65	15.00	2RDR	
Average %D: 10.720								
Aroclor-1260	0.2973400	0.2500000	54148.000	0.01	18.94	15.00	2RDR	<-
(2)	0.2953000	0.2500000	73100.000	0.01	18.12	15.00	2RDR	<-
(3)	0.2869600	0.2500000	67824.000	0.01	14.78	15.00	2RDR	
(4)	0.2873800	0.2500000	106650.00	0.01	14.95	15.00	2RDR	
(5)	0.2777100	0.2500000	60160.000	0.01	11.08	15.00	2RDR	
Average %D: 15.560								
Tetrachloro-m-xylene	5.29e-003	5.e-003	1076400.0	0.01	5.80	15.00	2RDR	<-
Decachlorobiphenyl	5.85e-003	5.e-003	1199200.0	0.01	17.00	15.00	2RDR	<-

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 10/26/07 Time: 2347

Lab File ID: 6AJ4225 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	0.2712300	0.2500000	37180.000	0.01	8.49	15.00	2RDR	
(2)	0.2665200	0.2500000	29988.000	0.01	6.61	15.00	2RDR	
(3)	0.2598600	0.2500000	69684.000	0.01	3.94	15.00	2RDR	
(4)	0.2667100	0.2500000	32456.000	0.01	6.68	15.00	2RDR	
(5)	0.2553600	0.2500000	27504.000	0.01	2.14	15.00	2RDR	
Average %D: 5.5600								
Aroclor-1260	0.2790900	0.2500000	56260.000	0.01	11.64	15.00	2RDR	
(2)	0.2827800	0.2500000	68168.000	0.01	13.11	15.00	2RDR	
(3)	0.2826200	0.2500000	65932.000	0.01	13.05	15.00	2RDR	
(4)	0.2737100	0.2500000	104860.00	0.01	9.48	15.00	2RDR	
(5)	0.2722000	0.2500000	63124.000	0.01	8.88	15.00	2RDR	
Average %D: 11.240								
Tetrachloro-m-xylene	4.72e-003	5.e-003	1114600.0	0.01	-5.60	15.00	2RDR	<-
Decachlorobiphenyl	5.56e-003	5.e-003	1208400.0	0.01	11.20	15.00	2RDR	<-

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 10/27/07 Time: 0711

Lab File ID: 6AJ3240 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

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

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	1.1216000	1.0000000	28558.000	0.01	12.16	15.00	2RDR	
(2)	1.1245000	1.0000000	22194.000	0.01	12.45	15.00	2RDR	
(3)	1.1269000	1.0000000	64942.000	0.01	12.69	15.00	2RDR	
(4)	1.1276000	1.0000000	31252.000	0.01	12.76	15.00	2RDR	
(5)	1.1161000	1.0000000	25803.000	0.01	11.61	15.00	2RDR	
Average %D: 12.330								
Aroclor-1260	1.1651000	1.0000000	48223.000	0.01	16.51	15.00	2RDR	<-
(2)	1.1565000	1.0000000	65042.000	0.01	15.65	15.00	2RDR	<-
(3)	1.1524000	1.0000000	64058.000	0.01	15.24	15.00	2RDR	<-
(4)	1.1241000	1.0000000	98502.000	0.01	12.41	15.00	2RDR	
(5)	1.0809000	1.0000000	55468.000	0.01	8.09	15.00	2RDR	
Average %D: 13.580								
Tetrachloro-m-xylene	1.95e-002	2.e-002	1075400.0	0.01	-2.50	15.00	2RDR	
Decachlorobiphenyl	2.08e-002	2.e-002	1007800.0	0.01	4.00	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 10/27/07 Time: 0711

Lab File ID: 6AJ4240 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Aroclor-1016	1.0726000	1.0000000	32426.000	0.01	7.26	15.00	2RDR
(2)	1.0936000	1.0000000	28012.000	0.01	9.36	15.00	2RDR
(3)	1.0823000	1.0000000	65938.000	0.01	8.23	15.00	2RDR
(4)	1.0926000	1.0000000	30218.000	0.01	9.26	15.00	2RDR
(5)	1.0788000	1.0000000	27304.000	0.01	7.88	15.00	2RDR
Average %D: 8.4000							
Aroclor-1260	1.1072000	1.0000000	50254.000	0.01	10.72	15.00	2RDR
(2)	1.0898000	1.0000000	59416.000	0.01	8.98	15.00	2RDR
(3)	1.0913000	1.0000000	59325.000	0.01	9.13	15.00	2RDR
(4)	1.0606000	1.0000000	95416.000	0.01	6.06	15.00	2RDR
(5)	0.9942200	1.0000000	54815.000	0.01	-0.58	15.00	2RDR
Average %D: 6.8600							
Tetrachloro-m-xylene	2.07e-002	2.e-002	1225200.0	0.01	3.50	15.00	2RDR
Decachlorobiphenyl	2.06e-002	2.e-002	1027600.0	0.01	3.00	15.00	2RDR

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 10/27/07 Time: 1334

Lab File ID: 6AJ3253 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

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

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	0.2902200	0.2500000	33228.000	0.01	16.09	15.00	2RDR	<-
(2)	0.2770800	0.2500000	23736.000	0.01	10.83	15.00	2RDR	
(3)	0.2749300	0.2500000	69356.000	0.01	9.97	15.00	2RDR	
(4)	0.2865000	0.2500000	35760.000	0.01	14.60	15.00	2RDR	
(5)	0.2647100	0.2500000	25724.000	0.01	5.88	15.00	2RDR	
Average %D: 11.480								
Aroclor-1260	0.2867400	0.2500000	52384.000	0.01	14.70	15.00	2RDR	
(2)	0.2824800	0.2500000	70200.000	0.01	12.99	15.00	2RDR	
(3)	0.2701400	0.2500000	64036.000	0.01	8.06	15.00	2RDR	
(4)	0.2649300	0.2500000	98740.000	0.01	5.97	15.00	2RDR	
(5)	0.2509400	0.2500000	54624.000	0.01	0.38	15.00	2RDR	
Average %D: 8.4000								
Tetrachloro-m-xylene	5.16e-003	5.e-003	1044600.0	0.01	3.20	15.00	2RDR	<-
Decachlorobiphenyl	4.74e-003	5.e-003	977800.00	0.01	-5.20	15.00	2RDR	<-

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 10/27/07 Time: 1334

Lab File ID: 6AJ4253 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	0.2732700	0.2500000	37428.000	0.01	9.31	15.00	2RDR	
(2)	0.2642000	0.2500000	29748.000	0.01	5.68	15.00	2RDR	
(3)	0.2622000	0.2500000	70260.000	0.01	4.88	15.00	2RDR	
(4)	0.2641300	0.2500000	32168.000	0.01	5.65	15.00	2RDR	
(5)	0.2554400	0.2500000	27512.000	0.01	2.18	15.00	2RDR	
Average %D: 5.5200								
Aroclor-1260	0.2705100	0.2500000	54700.000	0.01	8.20	15.00	2RDR	
(2)	0.2698000	0.2500000	65336.000	0.01	7.92	15.00	2RDR	
(3)	0.2694800	0.2500000	63064.000	0.01	7.79	15.00	2RDR	
(4)	0.2529700	0.2500000	97356.000	0.01	1.19	15.00	2RDR	
(5)	0.2414100	0.2500000	56288.000	0.01	-3.44	15.00	2RDR	
Average %D: 4.3200								
Tetrachloro-m-xylene	4.74e-003	5.e-003	1119200.0	0.01	-5.20	15.00	2RDR	<-
Decachlorobiphenyl	5.48e-003	5.e-003	1192600.0	0.01	9.60	15.00	2RDR	<-

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 11/02/07 Time: 2000

Lab File ID: 6AK1021 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

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

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	0.2839000	0.2500000	32576.000	0.01	13.56	15.00	2RDR	
(2)	0.2847700	0.2500000	24352.000	0.01	13.91	15.00	2RDR	
(3)	0.2795200	0.2500000	70428.000	0.01	11.81	15.00	2RDR	
(4)	0.2990800	0.2500000	37148.000	0.01	19.63	15.00	2RDR	<-
(5)	0.2751000	0.2500000	26700.000	0.01	10.04	15.00	2RDR	
Average %D: 13.800								
Aroclor-1260	0.3025200	0.2500000	55008.000	0.01	21.01	15.00	2RDR	<-
(2)	0.2986800	0.2500000	73864.000	0.01	19.47	15.00	2RDR	<-
(3)	0.2914900	0.2500000	68844.000	0.01	16.60	15.00	2RDR	<-
(4)	0.2853900	0.2500000	105950.00	0.01	14.16	15.00	2RDR	
(5)	0.2821900	0.2500000	61084.000	0.01	12.88	15.00	2RDR	
Average %D: 16.840								
Tetrachloro-m-xylene	5.12e-003	5.e-003	1033800.0	0.01	2.40	15.00	2RDR	<-
Decachlorobiphenyl	5.87e-003	5.e-003	1204600.0	0.01	17.40	15.00	2RDR	<-

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 11/02/07 Time: 2000

Lab File ID: 6AK2021 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	0.2738900	0.2500000	37504.000	0.01	9.56	15.00	2RDR	
(2)	0.2587900	0.2500000	29188.000	0.01	3.52	15.00	2RDR	
(3)	0.2612800	0.2500000	70032.000	0.01	4.51	15.00	2RDR	
(4)	0.2586700	0.2500000	31560.000	0.01	3.47	15.00	2RDR	
(5)	0.2455600	0.2500000	26500.000	0.01	-1.78	15.00	2RDR	
Average %D: 3.8400								
Aroclor-1260	0.2788900	0.2500000	56224.000	0.01	11.56	15.00	2RDR	
(2)	0.2786500	0.2500000	67268.000	0.01	11.46	15.00	2RDR	
(3)	0.2777800	0.2500000	64876.000	0.01	11.11	15.00	2RDR	
(4)	0.2643800	0.2500000	101480.00	0.01	5.75	15.00	2RDR	
(5)	0.2730700	0.2500000	63316.000	0.01	9.23	15.00	2RDR	
Average %D: 9.8400								
Tetrachloro-m-xylene	4.52e-003	5.e-003	1065000.0	0.01	-9.60	15.00	2RDR	<-
Decachlorobiphenyl	5.56e-003	5.e-003	1208600.0	0.01	11.20	15.00	2RDR	<-

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 11/03/07 Time: 0325

Lab File ID: 6AK1036 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

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

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	1.2644000	1.0000000	31829.000	0.01	26.44	15.00	2RDR	<-
(2)	1.2492000	1.0000000	24476.000	0.01	24.92	15.00	2RDR	<-
(3)	1.2672000	1.0000000	72407.000	0.01	26.72	15.00	2RDR	<-
(4)	1.2780000	1.0000000	35066.000	0.01	27.80	15.00	2RDR	<-
(5)	1.2188000	1.0000000	28060.000	0.01	21.88	15.00	2RDR	<-
Average %D: 25.550								
Aroclor-1260	1.2494000	1.0000000	51456.000	0.01	24.94	15.00	2RDR	<-
(2)	1.2430000	1.0000000	69549.000	0.01	24.30	15.00	2RDR	<-
(3)	1.2331000	1.0000000	68296.000	0.01	23.31	15.00	2RDR	<-
(4)	1.2284000	1.0000000	107220.00	0.01	22.84	15.00	2RDR	<-
(5)	1.1798000	1.0000000	60308.000	0.01	17.98	15.00	2RDR	<-
Average %D: 22.680								
Tetrachloro-m-xylene	1.86e-002	2.e-002	1027000.0	0.01	-7.00	15.00	2RDR	
Decachlorobiphenyl	2.27e-002	2.e-002	1091900.0	0.01	13.50	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

Instrument ID: GC06 Calibration Date: 11/03/07 Time: 0325

Lab File ID: 6AK2036 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	1.1711000	1.0000000	35112.000	0.01	17.11	15.00	2RDR	<-
(2)	1.1784000	1.0000000	30025.000	0.01	17.84	15.00	2RDR	<-
(3)	1.1736000	1.0000000	71081.000	0.01	17.36	15.00	2RDR	<-
(4)	1.1836000	1.0000000	32554.000	0.01	18.36	15.00	2RDR	<-
(5)	1.1716000	1.0000000	29528.000	0.01	17.16	15.00	2RDR	<-
Average %D: 17.570								
Aroclor-1260	1.1720000	1.0000000	52974.000	0.01	17.20	15.00	2RDR	<-
(2)	1.1454000	1.0000000	62225.000	0.01	14.54	15.00	2RDR	
(3)	1.1488000	1.0000000	62284.000	0.01	14.88	15.00	2RDR	
(4)	1.1517000	1.0000000	103200.00	0.01	15.17	15.00	2RDR	<-
(5)	1.1379000	1.0000000	62357.000	0.01	13.79	15.00	2RDR	
Average %D: 15.120								
Tetrachloro-m-xylene	2.15e-002	2.e-002	1267200.0	0.01	7.50	15.00	2RDR	
Decachlorobiphenyl	2.09e-002	2.e-002	1041400.0	0.01	4.50	15.00	2RDR	

FORM VII PEST

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 10/24/07 10/25/07

Instrument ID: GC06

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.28 DCB: 17.08

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		AR1660 0.05	10/24/07	1915	4.27	17.08
02		AR1660 0.1	10/24/07	1944	4.27	17.07
03		AR1660 0.25	10/24/07	2013	4.27	17.07
04		AR1660 1.0	10/24/07	2043	4.27	17.07
05		AR1660 2.5	10/24/07	2113	4.27	17.07
06		AR1660 10	10/24/07	2142	4.27	17.07
07		AR1016 1.0	10/24/07	2212		
08		AR1260 1.0	10/24/07	2241		
09		AR1221 1.0	10/24/07	2311		
10		AR1232 1.0	10/24/07	2340		
11		AR1242 1.0	10/25/07	0139		
12		AR1248 1.0	10/25/07	0308		
13		AR1254 1.0	10/25/07	0507		
14		AR1660 1.0	10/26/07	1724	4.29	17.09
15	WG44925-BLAN	WG44925-1	10/26/07	2020	4.27	17.07
16	WG44925-LCS	WG44925-2	10/26/07	2050	4.27	17.07
17		AR1660 0.25	10/26/07	2347	4.27	17.07
18	2W-SD-SD53-0	WG44925-3	10/27/07	0344	4.27	17.07
19	2W-SD-SD53-0	WG44925-4	10/27/07	0413	4.27	17.07
20	2W-SD-SD56-0	SA6036-4	10/27/07	0443	4.27	17.07

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

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

FORM VIII PEST

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 10/24/07 10/25/07

Instrument ID: GC06

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.28 DCB: 17.08

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	2W-SD-SD55-0	SA6036-6	10/27/07	0512	4.27	17.07
02	2W-SD-SD54-0	SA6036-8	10/27/07	0542	4.27	17.07
03	2W-SD-SD53-0	SA6036-9	10/27/07	0611	4.27	17.07
04		AR1660 1.0	10/27/07	0711	4.27	17.07
05	2W-SD-SD53-0	SA6036-10	10/27/07	0909	4.27	17.07
06	2W-FD-101807	SA6036-11	10/27/07	0938	4.27	17.07
07	2W-SD-SD51-0	SA6036-12	10/27/07	1008	4.27	17.07
08	2W-SD-SD52-0	SA6036-13	10/27/07	1037	4.27	17.07
09	2W-SD-SD50-0	SA6036-14	10/27/07	1107	4.27	17.07
10	2W-SD-SD50-0	SA6036-15	10/27/07	1136	4.27	17.07
11	2W-SD-SD49-0	SA6036-16	10/27/07	1206	4.27	17.07
12	2W-SD-SD45-0	SA6036-17	10/27/07	1235	4.27	17.08
13		AR1660 0.25	10/27/07	1334	4.27	17.07
14		AR1660 0.25	11/02/07	2000	4.27	17.05
15	WG45074-BLAN	WG45074-1	11/02/07	2328	4.26	17.05
16	WG45074-LCS	WG45074-2	11/02/07	2358	4.26	17.05
17	WG45074-LCSD	WG45074-3	11/03/07	0027	4.26	17.05
18	2W-SD-SD45-0	SA6036-18	11/03/07	0057	4.26	17.06
19	2W-SD-SD46-0	SA6036-19	11/03/07	0127	4.26	17.06
20	2W-SD-SD46-0	SA6036-20	11/03/07	0156	4.26	17.05

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

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

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 10/24/07 10/25/07

Instrument ID: GC06

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.28 DCB: 17.08

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		AR1660 1.0	11/03/07	0325	4.26	17.05
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

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

FORM VIII PEST

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 10/24/07 10/25/07

Instrument ID: GC06

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.51 DCB: 17.63

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		AR1660 0.05	10/24/07	1915	4.51	17.63
02		AR1660 0.1	10/24/07	1944	4.51	17.63
03		AR1660 0.25	10/24/07	2013	4.51	17.63
04		AR1660 1.0	10/24/07	2043	4.50	17.63
05		AR1660 2.5	10/24/07	2113	4.50	17.62
06		AR1660 10	10/24/07	2142	4.50	17.62
07		AR1016 1.0	10/24/07	2212		
08		AR1260 1.0	10/24/07	2241		
09		AR1221 1.0	10/24/07	2311		
10		AR1232 1.0	10/24/07	2340		
11		AR1242 1.0	10/25/07	0139		
12		AR1248 1.0	10/25/07	0308		
13		AR1254 1.0	10/25/07	0507		
14		AR1660 1.0	10/26/07	1724	4.52	17.64
15	WG44925-BLAN	WG44925-1	10/26/07	2020	4.50	17.62
16	WG44925-LCS	WG44925-2	10/26/07	2050	4.50	17.62
17		AR1660 0.25	10/26/07	2347	4.50	17.62
18	2W-SD-SD53-0	WG44925-3	10/27/07	0344	4.50	17.62
19	2W-SD-SD53-0	WG44925-4	10/27/07	0413	4.50	17.62
20	2W-SD-SD56-0	SA6036-4	10/27/07	0443	4.50	17.62

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

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

FORM VIII PEST

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 10/24/07 10/25/07

Instrument ID: GC06

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.51 DCB: 17.63

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	2W-SD-SD55-0	SA6036-6	10/27/07	0512	4.50	17.62
02	2W-SD-SD54-0	SA6036-8	10/27/07	0542	4.50	17.62
03	2W-SD-SD53-0	SA6036-9	10/27/07	0611	4.50	17.62
04		AR1660 1.0	10/27/07	0711	4.50	17.62
05	2W-SD-SD53-0	SA6036-10	10/27/07	0909	4.50	17.62
06	2W-FD-101807	SA6036-11	10/27/07	0938	4.50	17.61
07	2W-SD-SD51-0	SA6036-12	10/27/07	1008	4.50	17.61
08	2W-SD-SD52-0	SA6036-13	10/27/07	1037	4.50	17.61
09	2W-SD-SD50-0	SA6036-14	10/27/07	1107	4.50	17.61
10	2W-SD-SD50-0	SA6036-15	10/27/07	1136	4.50	17.62
11	2W-SD-SD49-0	SA6036-16	10/27/07	1206	4.50	17.63
12	2W-SD-SD45-0	SA6036-17	10/27/07	1235	4.50	17.63
13		AR1660 0.25	10/27/07	1334	4.50	17.62
14		AR1660 0.25	11/02/07	2000	4.49	17.60
15	WG45074-BLAN	WG45074-1	11/02/07	2328	4.48	17.60
16	WG45074-LCS	WG45074-2	11/02/07	2358	4.48	17.60
17	WG45074-LCSD	WG45074-3	11/03/07	0027	4.48	17.60
18	2W-SD-SD45-0	SA6036-18	11/03/07	0057	4.49	17.60
19	2W-SD-SD46-0	SA6036-19	11/03/07	0127	4.48	17.60
20	2W-SD-SD46-0	SA6036-20	11/03/07	0156	4.49	17.60

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

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

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6036

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 10/24/07 10/25/07

Instrument ID: GC06

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.51 DCB: 17.63

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		AR1660 1.0	11/03/07	0325	4.48	17.60
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

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

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD46-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-19 Date(s) Analyzed: 11/03/07 11/03/07

Instrument ID (1): GC06 Instrument ID (2): GC06

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	11.18	11.13	11.27	291		
Aroclor-1260	2	12.47	12.43	12.57	358		
	3	13.98	13.93	14.07	354		
COLUMN 1	4	14.59	14.55	14.69	339		
	5					335	
	1	11.71	11.67	11.81	265		
	2	12.25	12.20	12.34	270		
	3	14.41	14.37	14.51	354		
COLUMN 2	4	15.22	15.18	15.32	412		
	5					325	3.0
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD46-0204

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-20 Date(s) Analyzed: 11/03/07 11/03/07

Instrument ID (1): GC06 Instrument ID (2): GC06

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	11.18	11.13	11.27	176		
Aroclor-1260	2	12.47	12.43	12.57	193		
	3	13.98	13.93	14.07	185		
COLUMN 1	4	14.60	14.55	14.69	259		
	5					203	
	1	11.71	11.67	11.81	186		
	2	12.25	12.20	12.34	162		
	3	13.04	12.98	13.12	298		
COLUMN 2	4	14.41	14.37	14.51	173		
	5	15.23	15.18	15.32	282	220	8.0
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD50-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-15 Date(s) Analyzed: 10/27/07 10/27/07

Instrument ID (1): GC06 Instrument ID (2): GC06

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
Aroclor-1260 COLUMN 1	1	11.19	11.13	11.27	305		
	2	12.48	12.43	12.57	337		
	3	13.99	13.93	14.07	407		
	4	14.60	14.55	14.69	416		
	5					366	
COLUMN 2	1	11.73	11.67	11.81	296		
	2	12.26	12.20	12.34	271		
	3	13.05	12.98	13.12	406		
	4	14.43	14.37	14.51	387		
	5	15.24	15.18	15.32	417	355	3.0
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD50-0204

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6036

Lab Sample ID: SA6036-14 Date(s) Analyzed: 10/27/07 10/27/07

Instrument ID (1): GC06 Instrument ID (2): GC06

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
Aroclor-1260 COLUMN 1	1	11.19	11.13	11.27	12.6		
	2	12.48	12.43	12.57	32.4		
	3	13.98	13.93	14.07	28.9		
	4	14.61	14.55	14.69	37.0		
	5					27.7	
COLUMN 2	1	11.73	11.67	11.81	19.5		
	2	12.26	12.20	12.34	19.6		
	3	13.04	12.98	13.12	34.9		
	4	14.43	14.37	14.51	23.9		
	5	15.25	15.18	15.32	43.9	28.4	2.5
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

SRV: [Aroclor-1260] = 340 ug/Kg as reported by the lab.

Data File: \\Target_server\GG\chem\gc06.i\GC06AK01A1.b\6AK1032.d
Report Date: 05-Nov-2007 14:10

Katahdin Analytical Services

Data file : \\Target_server\GG\chem\gc06.i\GC06AK01A1.b\6AK1032.d
Lab Smp Id: SA6036-19 Client Smp ID: 2W-SD-SD46-0001
Inj Date : 03-NOV-2007 01:27
Operator : SJC Inst ID: gc06.i
Smp Info : PCBA082A.M,GC06AK01A1.B,1,SA6036-19
Misc Info : SW846 8082
Comment :
Method : \\TARGET_SERVER\GG\chem\gc06.i\GC06AK01A1.B\PCBA082A.m
Meth Date : 05-Nov-2007 10:17 scolby Quant Type: ESTD
Cal Date : 25-OCT-2007 04:37 Cal File: 6AJ3176.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: SW8082.sub
Target Version: 4.12 Sample Matrix: SOIL
Processing Host: TARGET03

Concentration Formula: Amt * DF * 1000*Vt*(100/(100-M))/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Volume of final extract (L)(1000 low, 20
M	58.015	% Moisture
Vo	0.03000	Sample Weight
Cpnd Variable		Local Compound Variable

Peak 1 ✓: $[((2.759\times10^{-11})\cdot(0.9994))+((2.331\times10^{-5})\cdot(16411))+(-2.33\times10^{-2})] = \boxed{0.36\ \frac{ug}{mL}}$

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/mL)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 3 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.260	4.280	-0.020	84974	0.09555	75.8		
9 Aroclor-1260					CAS #: 11096-82-5		
Peak 1 → 11.179	11.203	-0.024	16411	0.36672	291	80.00- 120.00	100.00
11.882	11.882	0.000	0	0.000	0.000	94.69- 142.03	0.00
12.471	12.496	-0.025	26109	0.45068	358	89.28- 133.92	159.09
13.975	14.002	-0.027	40548	0.44591	354	72.48- 108.72	247.08
14.591	14.618	-0.027	22711	0.42700	339	0.00- 0.00	138.39
Average of Peak Concentrations =					335		
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
17.056	17.082	-0.026	67112	0.08174	64.9		

$$\frac{0.36\ \frac{ug}{mL}\cdot\frac{1000mL}{1L}\cdot 0.01L}{0.03\ Kg\cdot 0.42} = \boxed{285\ ug/Kg}$$

[Ave peak] ✓ = (291+358+354+339)/4 = $\boxed{335.5\ ug/Kg}$

NSB NEW LONDON
SOIL DATA
SA6036

FRACTION	CHEMICAL	2W-FD-101807-01	UNITS	2W-SD-SD53-0001	RPD	D
PEST/PCB	4,4'-DDD	4.6 J	UG/KG	4.4 J	4.44	0.20
PEST/PCB	4,4'-DDE	3.4 J	UG/KG	3 J	12.50	0.40
PEST/PCB	4,4'-DDT 9.8	ND	UG/KG	4.4 J	NC	NC -70L

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.
ND = Compound not detected.
NC = Statistic not calculated

Tetra Tech NUS

INTERNAL CORRESPONDENCE

TO: A. BERNHARDT **DATE:** JANUARY 16, 2008

FROM: TERRI L. SOLOMON **COPIES:** DV FILE

SUBJECT: INORGANIC DATA VALIDATION – TAL METALS, pH, TOTAL ORGANIC CARBON, TOTAL SOLIDS
CTO – 439 NSB NEW LONDON
SAMPLE DELIVERY GROUP (SDG) – SA6036

SAMPLES: 20/Soils/

2W-FD-101807-01	2W-SD-SD45-0001	2W-SD-SD45-0002
2W-SD-SD46-0001	2W-SD-SD46-0204	2W-SD-SD49-0001
2W-SD-SD50-0001	2W-SD-SD50-0204	2W-SD-SD51-0001
2W-SD-SD52-0001	2W-SD-SD53-0001	2W-SD-SD53-0204
2W-SD-SD54-0001	2W-SD-SD55-0001	2W-SD-SD55-0002
2W-SD-SD56-0001	2W-SD-SD56-0002	2W-SD-SD57-0001
2W-SD-SD57-0002	2W-SD-SD58-0001	

Overview

The sample set for NSB New London, CTO 439, SDG SA6036 consists of twenty (20) aqueous environmental samples. One (1) field duplicate pair (2W-SD-SD53-0001 / 2W-FD-101807-01) was included within this SDG.

All samples, with the exception of 2W-SD-058-0001, 2W-SD-SD55-0002, 2W-SD-SD56-0002 and 2W-SD-SD57-0002 were analyzed for target analyte list (TAL) metals. All samples with the exception of 2W-SD-SD55-0002, 2W-SD-SD56-0002 and 2W-SD-SD57-0001, 2W-SD-SD57-002 and 2W-SD-SD58-0001 were analyzed for total organic carbon, total solids and pH. Samples 2W-SD-SD55-0002, 2W-SD-SD56-0002 and 2W-SD-SD57-0001 and 2W-SD-SD57-002 were analyzed for total organic carbon and total solids. Sample 2W-SD-SD58-0001 was analyzed for cadmium and total solids. The samples were collected by Tetra Tech NUS on October 18 and 19, 2007 and analyzed by Katahdin Analytical Services under Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. TAL metals analyses were conducted using SW-846 method 8260B. Mercury analyses were conducted using 7470A. Total organic carbon analyses were conducted using Lloyd Kahn method. Total solids analyses were conducted using EPA SOW 788 and pH analyses were conducted using SW-846 method 9045C.

All samples in this SDG were validated to EPA Region I Tier II protocol.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Verification Results
• Laboratory Method/Preparation Blank Analyses
• ICP Interference Check Sample Results
• Matrix Spike/Matrix Spike Duplicate Results
* • Laboratory Control Sample Duplicate Results

* • ICP Serial Dilution Results
* • Field Duplicate Results
* • Detection Limits
* • Sample Quantitation

* - All quality control criteria were met for this parameter.

Laboratory Method/Preparation Blank Analyses

The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Antimony(1)	1.60 ug/L	0.8 mg/kg
Calcium(4)	5.02 mg/kg	25.1 mg/kg
Chromium(4)	0.117 mg/kg	0.585 mg/kg
Cobalt(2)	0.27 ug/L	0.135 mg/kg
Copper(4)	0.321 mg/kg	1.605 mg/kg
Iron(3)	32.04 ug/L	16.02 mg/kg
Iron(4)	2.750 mg/kg	13.75 mg/kg
Magnesium(4)	1.468 mg/kg	7.34 mg/kg
Manganese(4)	0.154 mg/kg	0.77 mg/kg
Selenium(1)	2.13 ug/L	1.065 mg/kg
Silver(1)	0.68 ug/L	0.34 mg/kg
Silver(2)	0.49 ug/L	0.245 mg/kg
Sodium(4)	12.650 mg/kg	63.25 mg/kg
Vanadium(1)	0.42 ug/L	0.21 mg/kg
Vanadium(2)	0.49 ug/L	0.245 mg/kg
Zinc(4)	0.346 mg/kg	1.73 mg/kg

(1) Maximum concentration present affecting samples 2W-SD-SD54-0001, 2W-SD-SD53-0204, 2W-SD-SD51-0001, 2W-SD-SD52-0001, 2W-SD-SD50-0204, 2W-SD-SD45-0002 and 2W-SD-SD46-0204.
(2) Maximum concentration present affecting samples 2W-SD-SD57-0001, 2W-SD-SD56-0001, 2W-SD-SD55-0001, 2W-SD-SD53-0001, 2W-SD-SD50-0001, 2W-SD-SD49-0001, 2W-SD-SD45-0001, 2W-SD-SD46-0001 and 2W-FD-101807-01.
(3) Maximum concentration present affecting samples 2W-SD-SD57-0001, 2W-SD-SD55-0001, 2W-SD-SD53-0001, 2W-SD-SD50-0001, 2W-SD-SD49-0001, 2W-SD-SD45-0001 and 2W-FD-101807-01.
(4) Maximum concentration present in a soil preparation blank.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive results less than the blank action level for antimony, selenium and silver were qualified "U" as a result of laboratory blank contamination.

ICP Interference Analysis

The interfering analyte iron was present in samples 2W-FD-101807-01 and 2W-SD-SD53-0001 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, antimony, arsenic, cadmium, chromium, cobalt, copper, lead, manganese, nickel, selenium, silver, sodium, thallium, vanadium and zinc were present in the ICS solution at a concentration that exceeded 2X the absolute value of the Method

Detection Limit (MDL). Interference effects exist for antimony, arsenic, cadmium, cobalt, copper, nickel, silver and sodium in the affected samples. The positive results reported for arsenic, cobalt, copper, nickel and sodium were qualified as estimated, "J". The nondetected results reported for antimony, cadmium and silver were qualified as estimated, "UJ".

The interfering analyte iron was present in sample 2W-SD-SD45-0001 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, antimony, arsenic, cadmium, chromium, cobalt, copper, lead, manganese, nickel, selenium, silver, sodium, thallium, vanadium and zinc were present in the ICS solution at a concentration that exceeded 2X the absolute value of the Method Detection Limit (MDL). Interference effects exist for arsenic, cadmium, chromium, cobalt, copper, lead, nickel, silver, sodium and thallium in the affected sample. The positive results reported for arsenic, chromium, copper, lead, nickel, sodium and thallium were qualified as estimated, "J". The nondetected results reported for cadmium, cobalt and silver were rejected for a more severe noncompliance.

The interfering analyte iron was present in samples 2W-SD-SD45-0002, 2W-SD-SD46-0204, 2W-SD-SD50-0204 and 2W-SD-SD53-0204 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, antimony, cadmium, chromium, cobalt, copper, lead, manganese, nickel, silver, sodium, thallium, and zinc were present in the ICS solution at a concentration that exceeded 2X the absolute value of the Method Detection Limit (MDL). Interference effects exist for cadmium, silver and thallium in the affected samples. The positive results reported for cadmium and thallium were qualified as estimated, "J". The positive results reported for silver were qualified for blank contamination.

The interfering analyte iron was present in sample 2W-SD-SD46-0001 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, copper, sodium and zinc were present in the ICS solution at a concentration that exceeded 2X the absolute value of the Method Detection Limit (MDL). No interference effects exist for copper, sodium and zinc in the affected sample.

The interfering analyte iron was present in sample 2W-SD-SD49-0001 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, antimony, arsenic, cadmium, chromium, cobalt, copper, lead, manganese, nickel, selenium, silver, sodium, thallium, vanadium and zinc were present in the ICS solution at a concentration that exceeded 2X the absolute value of the Method Detection Limit (MDL). Interference effects exist for arsenic, cadmium, chromium, cobalt, nickel, silver and sodium in the affected sample. The positive results reported for arsenic, cadmium, chromium, cobalt, nickel and sodium were qualified as estimated, "J". The nondetected result reported for silver was qualified as estimated, "UJ".

The interfering analyte iron was present in sample 2W-SD-SD50-0001 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, antimony, arsenic, cadmium, chromium, cobalt, copper, lead, manganese, nickel, selenium, silver, sodium, thallium, vanadium and zinc were present in the ICS solution at a concentration that exceeded 2X the absolute value of the Method Detection Limit (MDL). Interference effects exist for antimony, arsenic, cadmium, chromium, cobalt, copper, nickel, selenium, silver and sodium in the affected sample. The positive results reported for arsenic, chromium, cobalt, copper, nickel, selenium and sodium were qualified as estimated, "J". The nondetected results reported for antimony, cadmium and silver were rejected for a more severe noncompliance

The interfering analyte iron was present in sample 2W-SD-SD51-0001 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, antimony, cadmium, chromium, cobalt, copper, lead, manganese, nickel, silver, sodium, thallium and zinc were present in the ICS solution at a concentration that

exceeded 2X the absolute value of the Method Detection Limit (MDL). Interference effects exist for cadmium, cobalt, nickel and silver in the affected sample. The positive results reported for cadmium, cobalt and nickel were qualified as estimated, "J". The nondetected result reported for silver was rejected for a more severe noncompliance.

The interfering analyte iron was present in sample 2W-SD-SD52-0001 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, antimony, cadmium, chromium, cobalt, copper, lead, manganese, nickel, silver, sodium, thallium and zinc were present in the ICS solution at a concentration that exceeded 2X the absolute value of the Method Detection Limit (MDL). Interference effects exist for cadmium, cobalt and silver in the affected sample. The positive results reported for cadmium and cobalt were qualified as estimated, "J". The nondetected result reported for silver was qualified as estimated, "UJ".

The interfering analyte iron was present in sample 2W-SD-SD54-0001 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, antimony, cadmium, chromium, cobalt, copper, lead, manganese, nickel, silver, sodium, thallium and zinc were present in the ICS solution at a concentration that exceeded 2X the absolute value of the Method Detection Limit (MDL). Interference effects exist for cadmium, cobalt, nickel, silver and zinc in the affected sample. The positive results reported for cadmium, cobalt, nickel and zinc were qualified as estimated, "J". The nondetected result reported for silver was rejected for a more severe noncompliance.

The interfering analyte iron was present in sample 2W-SD-SD55-0001 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, antimony, arsenic, cadmium, chromium, cobalt, copper, lead, manganese, nickel, selenium, silver, sodium, thallium, vanadium and zinc were present in the ICS solution at a concentration that exceeded 2X the absolute value of the Method Detection Limit (MDL). Interference effects exist for arsenic, cadmium, cobalt, copper, nickel, silver, sodium and zinc in the affected sample. The positive results reported for arsenic, copper, nickel, sodium and zinc were qualified as estimated, "J". The nondetected results reported for cadmium, cobalt and silver were rejected for a more severe noncompliance.

The interfering analyte iron was present in sample 2W-SD-SD56-0001 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, copper, sodium and zinc were present in the ICS solution at a concentration that exceeded 2X the absolute value of the Method Detection Limit (MDL). Interference effects exist for sodium in the affected sample. The positive result reported for sodium was qualified as estimated, "J".

The interfering analyte iron was present in sample 2W-SD-SD57-0001 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, antimony, arsenic, cadmium, chromium, cobalt, copper, lead, manganese, nickel, selenium, silver, sodium, thallium, vanadium and zinc were present in the ICS solution at a concentration that exceeded 2X the absolute value of the Method Detection Limit (MDL). Interference effects exist for antimony, arsenic, cadmium, cobalt, nickel, silver and sodium in the affected sample. The positive results reported for arsenic, cadmium, cobalt nickel, and sodium were qualified as estimated, "J". The nondetected results reported for antimony and silver were qualified as estimated, "UJ".

Matrix Spike / Matrix Spike Duplicate Results

The matrix spike / matrix spike duplicate percent recoveries for antimony and silver were < 75% quality control limit. The positive and nondetected results reported for antimony and silver were qualified as estimated, "J" and "UJ", respectively.

The matrix spike / matrix spike duplicate percent recoveries for magnesium and total organic carbon were > 125% quality control limit. The positive results reported for magnesium were qualified as estimated, "J".

The matrix spike / matrix spike duplicate relative percent difference (RPD) for magnesium was > 20% quality control limit.. No validation actions are required for matrix spike / matrix spike duplicate RPD noncompliances.

Notes

The percent solids were < 30% for samples 2W-SD-SD45-0001, 2W-SD-SD50-0001, 2W-SD-SD51-0001, 2W-SD-SD54-0001 and 2W-SD-SD55-0001. The positive results reported in the affected samples were qualified as estimated, "J". The nondetected results reported in the affected samples were qualified as rejected, "UR".

Positive results reported for antimony and thallium that were < 2X the instrument detection limit (IDL) were qualified as estimated, "J", as a result of uncertainty near the detection limit.

Executive Summary

Laboratory Performance: Several analytes were present in the laboratory method / preparation blanks.

Other Factors Affecting Data Quality: The interfering analyte iron was present in several samples. The matrix spike / matrix spike duplicate percent recoveries for antimony and silver were < 75% quality control limit. The matrix spike / matrix spike duplicate percent recoveries for magnesium and total organic carbon were > 125% quality control limit.

The data for these analyses were reviewed with reference to the EPA Region I, " National Functional Guidelines for Inorganic Review", February 1989 and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", January 2006.

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 DOD QSM."

Terri L. Solomon

Tetra Tech NUS
Terri L. Solomon
Environmental Scientist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C – Regional Worksheets
4. Appendix D – Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS-GFAA MSA's r < 0.995 / ICP PDS Recovery Noncompliance
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O - Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DOT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: M

nsample	2W-FD-101807-01	nsample	2W-SD-SD45-0001	nsample	2W-SD-SD45-0002
samp_date	10/18/2007	samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-011	lab_id	SA6036-017	lab_id	SA6036-018
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/KG	units	MG/KG	units	MG/KG
Pct_Solids	33.7	Pct_Solids	16.6	Pct_Solids	36.9
DUP_OF:	2W-SD-SD53-0001	DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	15200		
ANTIMONY	0.66	UJ	DK
ARSENIC	29.2	J	K
BARIUM	40		
BERYLLIUM	1		
CADMIUM	0.08	UJ	K
CALCIUM	2470		
CHROMIUM	39.6		
COBALT	2.4	J	K
COPPER	57.2	J	K
IRON	198000		
LEAD	61.4		
MAGNESIUM	2660	J	D
MANGANESE	205		
MERCURY	0.21		
NICKEL	17.7	J	K
POTASSIUM	1430		
SELENIUM	5.3	U	A
SILVER	0.35	UJ	DK
SODIUM	323	J	K
THALLIUM	0.54	U	
VANADIUM	51.2		
ZINC	125		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	3690	J	Y
ANTIMONY	2.3	U	A
ARSENIC	16.9	J	KY
BARIUM	314	J	Y
BERYLLIUM	0.63	J	Y
CADMIUM	0.15	UR	Y
CALCIUM	4740	J	Y
CHROMIUM	10.7	J	KY
COBALT	0.4	UR	Y
COPPER	25.4	J	KY
IRON	300000	J	Y
LEAD	14	J	KY
MAGNESIUM	887	J	DY
MANGANESE	636	J	Y
MERCURY	0.1	J	Y
NICKEL	15.7	J	KY
POTASSIUM	625	J	Y
SELENIUM	9	U	A
SILVER	0.71	UR	Y
SODIUM	653	J	KY
THALLIUM	1.1	J	KPY
VANADIUM	30.6	J	Y
ZINC	342	J	Y

Parameter	Result	Val Qual	Qual Code
ALUMINUM	23300		
ANTIMONY	0.15	UJ	D
ARSENIC	12.4		
BARIUM	83.9		
BERYLLIUM	1.6		
CADMIUM	2.5	J	K
CALCIUM	4050		
CHROMIUM	66.6		
COBALT	9.1		
COPPER	60.6		
IRON	36500		
LEAD	51.3		
MAGNESIUM	6940	J	D
MANGANESE	326		
MERCURY	0.28		
NICKEL	28.7		
POTASSIUM	4030		
SELENIUM	0.28	U	A
SILVER	0.18	U	A
SODIUM	2320		
THALLIUM	0.64	J	K
VANADIUM	54.7		
ZINC	200		

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: M

nsample	2W-SD-SD46-0001	nsample	2W-SD-SD46-0204	nsample	2W-SD-SD49-0001
samp_date	10/19/2007	samp_date	10/19/2007	samp_date	10/18/2007
lab_id	SA6036-019	lab_id	SA6036-020	lab_id	SA6036-016
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/KG	units	MG/KG	units	MG/KG
Pct_Solids	42.0	Pct_Solids	58.4	Pct_Solids	30.6
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	23800		
ANTIMONY	0.31	UJ	D
ARSENIC	17.4		
BARIUM	152		
BERYLLIUM	0.91		
CADMIUM	0.3		
CALCIUM	4230		
CHROMIUM	39.7		
COBALT	13.7		
COPPER	97.2		
IRON	57700		
LEAD	78.5		
MAGNESIUM	10100	J	D
MANGANESE	579		
MERCURY	0.27		
NICKEL	33.4		
POTASSIUM	3960		
SELENIUM	1.4	U	A
SILVER	0.16	UJ	D
SODIUM	571		
THALLIUM	0.25	U	
VANADIUM	69.1		
ZINC	320		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	17600		
ANTIMONY	0.11	UJ	D
ARSENIC	9.5		
BARIUM	75.6		
BERYLLIUM	0.51		
CADMIUM	0.76	J	K
CALCIUM	3160		
CHROMIUM	44.8		
COBALT	6.9		
COPPER	42		
IRON	22300		
LEAD	51.1		
MAGNESIUM	5960	J	D
MANGANESE	242		
MERCURY	0.24		
NICKEL	21.1		
POTASSIUM	3260		
SELENIUM	0.3	U	A
SILVER	0.11	U	A
SODIUM	944		
THALLIUM	0.68	J	K
VANADIUM	48.6		
ZINC	98.5		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	3840		
ANTIMONY	2	U	A
ARSENIC	14.6	J	K
BARIUM	176		
BERYLLIUM	0.31		
CADMIUM	1.2	J	K
CALCIUM	3580		
CHROMIUM	8.5	J	K
COBALT	5.6	J	K
COPPER	92.3	J	K
IRON	109000		
LEAD	39.2		
MAGNESIUM	1520	J	D
MANGANESE	389		
MERCURY	0.13		
NICKEL	28.3	J	K
POTASSIUM	916		
SELENIUM	3.4	U	A
SILVER	0.22	UJ	DK
SODIUM	208	J	K
THALLIUM	0.34	U	
VANADIUM	24.1		
ZINC	646		

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: M

nsample	2W-SD-SD50-0001	nsample	2W-SD-SD50-0204	nsample	2W-SD-SD51-0001
samp_date	10/18/2007	samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-015	lab_id	SA6036-014	lab_id	SA6036-012
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/KG	units	MG/KG	units	MG/KG
Pct_Solids	20.7	Pct_Solids	48.9	Pct_Solids	13.7
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	8280	J	Y
ANTIMONY	1.25	UR	Y
ARSENIC	43.6	J	KY
BARIUM	394	J	Y
BERYLLIUM	0.61	J	Y
CADMIUM	0.14	UR	Y
CALCIUM	5660	J	Y
CHROMIUM	20.7	J	KY
COBALT	4	J	KY
COPPER	64	J	KY
IRON	315000	J	Y
LEAD	54	J	Y
MAGNESIUM	2210	J	DY
MANGANESE	1220	J	Y
MERCURY	0.29	J	Y
NICKEL	28.8	J	KY
POTASSIUM	987	J	Y
SELENIUM	9.8	J	KY
SILVER	0.66	UR	Y
SODIUM	769	J	KY
THALLIUM	1.02	UR	Y
VANADIUM	114	J	Y
ZINC	447	J	Y

Parameter	Result	Val Qual	Qual Code
ALUMINUM	18400		
ANTIMONY	0.14	UJ	D
ARSENIC	10.7		
BARIUM	62.7		
BERYLLIUM	0.68		
CADMIUM	0.96	J	K
CALCIUM	3970		
CHROMIUM	57.4		
COBALT	7.8		
COPPER	35.6		
IRON	28500		
LEAD	31.5		
MAGNESIUM	6890	J	D
MANGANESE	306		
MERCURY	0.35		
NICKEL	23.9		
POTASSIUM	4020		
SELENIUM	0.35	U	A
SILVER	0.12	U	A
SODIUM	1570		
THALLIUM	0.79	J	K
VANADIUM	49		
ZINC	93.7		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	8520	J	Y
ANTIMONY	0.86	U	A
ARSENIC	13.9	J	Y
BARIUM	107	J	Y
BERYLLIUM	1.6	J	Y
CADMIUM	1.2	J	KY
CALCIUM	3370	J	Y
CHROMIUM	16.3	J	Y
COBALT	5.6	J	KY
COPPER	36.1	J	Y
IRON	83600	J	Y
LEAD	24.6	J	Y
MAGNESIUM	682	J	DY
MANGANESE	326	J	Y
MERCURY	0.12	J	Y
NICKEL	25.9	J	KY
POTASSIUM	525	J	Y
SELENIUM	0.84	UR	Y
SILVER	0.26	UR	Y
SODIUM	847	J	Y
THALLIUM	0.4	UR	Y
VANADIUM	38.9	J	Y
ZINC	82.4	J	Y

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: M

nsample	2W-SD-SD52-0001	nsample	2W-SD-SD53-0001	nsample	2W-SD-SD53-0204
samp_date	10/18/2007	samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-013	lab_id	SA6036-009	lab_id	SA6036-010
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/KG	units	MG/KG	units	MG/KG
Pct_Solids	37.3	Pct_Solids	34.2	Pct_Solids	53.8
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	26500		
ANTIMONY	0.27	U	A
ARSENIC	13.5		
BARIUM	51.2		
BERYLLIUM	1.3		
CADMIUM	1.1	J	K
CALCIUM	2160		
CHROMIUM	63.6		
COBALT	5.5	J	K
COPPER	96.7		
IRON	46100		
LEAD	119		
MAGNESIUM	4380	J	D
MANGANESE	208		
MERCURY	0.31		
NICKEL	23.5		
POTASSIUM	2380		
SELENIUM	0.61	U	A
SILVER	0.11	UJ	DK
SODIUM	431		
THALLIUM	0.17	U	
VANADIUM	52.9		
ZINC	60.6		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	17100		
ANTIMONY	0.86	UJ	DK
ARSENIC	28.2	J	K
BARIUM	48.5		
BERYLLIUM	1.1		
CADMIUM	0.1	UJ	K
CALCIUM	2660		
CHROMIUM	47.3		
COBALT	2.7	J	K
COPPER	57.3	J	K
IRON	199000		
LEAD	65.8		
MAGNESIUM	3340	J	D
MANGANESE	231		
MERCURY	0.2		
NICKEL	19.2	J	K
POTASSIUM	1810		
SELENIUM	6.6	U	A
SILVER	0.45	UJ	DK
SODIUM	344	J	K
THALLIUM	0.7	U	
VANADIUM	57.3		
ZINC	138		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	18300		
ANTIMONY	0.1	UJ	D
ARSENIC	10.4		
BARIUM	58.7		
BERYLLIUM	0.61		
CADMIUM	1.1	J	K
CALCIUM	3410		
CHROMIUM	79.5		
COBALT	7.3		
COPPER	50.4		
IRON	27800		
LEAD	55.5		
MAGNESIUM	7730	J	D
MANGANESE	278		
MERCURY	0.47		
NICKEL	22.5		
POTASSIUM	4320		
SELENIUM	0.77	U	A
SILVER	0.29	U	A
SODIUM	4060		
THALLIUM	0.82	J	K
VANADIUM	45.1		
ZINC	99.2		

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: M

nsample	2W-SD-SD54-0001	nsample	2W-SD-SD55-0001	nsample	2W-SD-SD56-0001
samp_date	10/18/2007	samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-008	lab_id	SA6036-006	lab_id	SA6036-004
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/KG	units	MG/KG	units	MG/KG
Pct_Solids	14.1	Pct_Solids	23.2	Pct_Solids	60.1
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	10200	J	Y
ANTIMONY	1.2	U	A
ARSENIC	24.3	J	Y
BARIUM	44.4	J	Y
BERYLLIUM	1.1	J	Y
CADMIUM	0.88	J	KY
CALCIUM	2730	J	Y
CHROMIUM	36.8	J	Y
COBALT	1.1	J	KY
COPPER	55	J	Y
IRON	130000	J	Y
LEAD	48	J	Y
MAGNESIUM	1180	J	DY
MANGANESE	149	J	Y
MERCURY	0.26	J	Y
NICKEL	15.9	J	KY
POTASSIUM	728	J	Y
SELENIUM	1	U	A
SILVER	0.24	UR	Y
SODIUM	739	J	Y
THALLIUM	0.37	UR	Y
VANADIUM	63.6	J	Y
ZINC	39.7	J	KY

Parameter	Result	Val Qual	Qual Code
ALUMINUM	10700	J	Y
ANTIMONY	1.3	U	A
ARSENIC	52.5	J	KY
BARIUM	13.7	J	Y
BERYLLIUM	1.4	J	Y
CADMIUM	0.1	UR	Y
CALCIUM	1760	J	Y
CHROMIUM	51.2	J	Y
COBALT	0.27	UR	Y
COPPER	41.2	J	KY
IRON	249000	J	Y
LEAD	33.4	J	Y
MAGNESIUM	726	J	DY
MANGANESE	89.2	J	Y
MERCURY	0.23	J	Y
NICKEL	15.2	J	KY
POTASSIUM	434	J	Y
SELENIUM	7.8	U	A
SILVER	0.47	UR	Y
SODIUM	967	J	KY
THALLIUM	0.73	UR	Y
VANADIUM	60.6	J	Y
ZINC	80.1	J	KY

Parameter	Result	Val Qual	Qual Code
ALUMINUM	11800		
ANTIMONY	0.17	UJ	D
ARSENIC	7.3		
BARIUM	59.3		
BERYLLIUM	0.31		
CADMIUM	0.02	U	
CALCIUM	2040		
CHROMIUM	29.2		
COBALT	4.4		
COPPER	20		
IRON	37300		
LEAD	58.4		
MAGNESIUM	3760	J	D
MANGANESE	402		
MERCURY	0.1		
NICKEL	12.4		
POTASSIUM	2070		
SELENIUM	1.3	U	A
SILVER	0.09	UJ	K
SODIUM	202	J	K
THALLIUM	0.14	U	
VANADIUM	34.7		
ZINC	78.6		

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: M

nsample	2W-SD-SD57-0001	nsample	2W-SD-SD58-0001
samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-002	lab_id	SA6036-001
qc_type	NM	qc_type	NM
units	MG/KG	units	MG/KG
Pct_Solids	62.7	Pct_Solids	57.2
DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	5470		
ANTIMONY	0.16	UJ	DK
ARSENIC	4.3	J	K
BARIUM	47.7		
BERYLLIUM	0.27		
CADMIUM	1.1	J	K
CALCIUM	1730		
CHROMIUM	9.5		
COBALT	4.9	J	K
COPPER	19.2		
IRON	37900		
LEAD	159		
MAGNESIUM	2240	J	D
MANGANESE	469		
MERCURY	0.02		
NICKEL	11.2	J	K
POTASSIUM	1140		
SELENIUM	1.2	U	A
SILVER	0.08	UJ	DK
SODIUM	149	J	K
THALLIUM	0.13	U	
VANADIUM	22.9		
ZINC	339		

Parameter	Result	Val Qual	Qual Code
CADMIUM	0.03	U	

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: MISC

nsample	2W-FD-101807-01	nsample	2W-SD-SD45-0001	nsample	2W-SD-SD45-0002
samp_date	10/18/2007	samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-11	lab_id	SA6036-17	lab_id	SA6036-18
qc_type	NM	qc_type	NM	qc_type	NM
Pct_Solids	33.7	Pct_Solids	16.6	Pct_Solids	36.9
DUP_OF:	2W-SD-SD53-0001	DUP_OF:		DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	5.3		
TOTAL ORGANIC CARBON	MG/KG	190000	J	D
TOTAL SOLIDS	%	34		

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	5.9		
TOTAL ORGANIC CARBON	MG/KG	270000	J	DY
TOTAL SOLIDS	%	16		

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	6.7		
TOTAL ORGANIC CARBON	MG/KG	81000	J	D
TOTAL SOLIDS	%	37		

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: MISC

nsample	2W-SD-SD46-0001
samp_date	10/19/2007
lab_id	SA6036-19
qc_type	NM
Pct_Solids	42.0
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	6.4		
TOTAL ORGANIC CARBON	MG/KG	86000	J	D
TOTAL SOLIDS	%	42		

nsample	2W-SD-SD46-0204
samp_date	10/19/2007
lab_id	SA6036-20
qc_type	NM
Pct_Solids	58.4
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	6.6		
TOTAL ORGANIC CARBON	MG/KG	40000	J	D
TOTAL SOLIDS	%	58		

nsample	2W-SD-SD49-0001
samp_date	10/18/2007
lab_id	SA6036-16
qc_type	NM
Pct_Solids	30.6
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	6.2		
TOTAL ORGANIC CARBON	MG/KG	130000	J	D
TOTAL SOLIDS	%	30		

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: MISC

nsample	2W-SD-SD50-0001
samp_date	10/18/2007
lab_id	SA6036-15
qc_type	NM
Pct_Solids	20.7
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	6.2		
TOTAL ORGANIC CARBON	MG/KG	200000	J	DY
TOTAL SOLIDS	%	21		

nsample	2W-SD-SD50-0204
samp_date	10/18/2007
lab_id	SA6036-14
qc_type	NM
Pct_Solids	48.9
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	6.9		
TOTAL ORGANIC CARBON	MG/KG	45000	J	D
TOTAL SOLIDS	%	49		

nsample	2W-SD-SD51-0001
samp_date	10/18/2007
lab_id	SA6036-12
qc_type	NM
Pct_Solids	13.7
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	5.3		
TOTAL ORGANIC CARBON	MG/KG	440000	J	DY
TOTAL SOLIDS	%	14		

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: MISC

nsample	2W-SD-SD52-0001
samp_date	10/18/2007
lab_id	SA6036-13
qc_type	NM
Pct_Solids	37.3
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	5.6		
TOTAL ORGANIC CARBON	MG/KG	250000	J	D
TOTAL SOLIDS	%	37		

nsample	2W-SD-SD53-0001
samp_date	10/18/2007
lab_id	SA6036-9
qc_type	NM
Pct_Solids	34.2
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	5.1		
TOTAL ORGANIC CARBON	MG/KG	200000	J	D
TOTAL SOLIDS	%	34		

nsample	2W-SD-SD53-0204
samp_date	10/18/2007
lab_id	SA6036-10
qc_type	NM
Pct_Solids	53.8
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	7.2		
TOTAL ORGANIC CARBON	MG/KG	57000	J	D
TOTAL SOLIDS	%	54		

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: MISC

nsample	2W-SD-SD54-0001
samp_date	10/18/2007
lab_id	SA6036-8
qc_type	NM
Pct_Solids	14.1
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	4.8		
TOTAL ORGANIC CARBON	MG/KG	370000	J	DY
TOTAL SOLIDS	%	14		

nsample	2W-SD-SD55-0001
samp_date	10/18/2007
lab_id	SA6036-6
qc_type	NM
Pct_Solids	23.2
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	4.5		
TOTAL ORGANIC CARBON	MG/KG	220000	J	DY
TOTAL SOLIDS	%	23		

nsample	2W-SD-SD55-0002
samp_date	10/18/2007
lab_id	SA6036-7
qc_type	NM
Pct_Solids	52.1
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
TOTAL ORGANIC CARBON	MG/KG	56000	J	D
TOTAL SOLIDS	%	52		

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: MISC

nsample	2W-SD-SD56-0001
samp_date	10/18/2007
lab_id	SA6036-4
qc_type	NM
Pct_Solids	60.1
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	5.9		
TOTAL ORGANIC CARBON	MG/KG	38000	J	D
TOTAL SOLIDS	%	60		

nsample	2W-SD-SD56-0002
samp_date	10/18/2007
lab_id	SA6036-5
qc_type	NM
Pct_Solids	58.7
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
TOTAL ORGANIC CARBON	MG/KG	39000	J	D
TOTAL SOLIDS	%	59		

nsample	2W-SD-SD57-0001
samp_date	10/18/2007
lab_id	SA6036-2
qc_type	NM
Pct_Solids	62.7
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
TOTAL ORGANIC CARBON	MG/KG	24000	J	D
TOTAL SOLIDS	%	63		

PROJ_NO: 00873

SDG: SA6036 MEDIA: SOIL DATA FRACTION: MISC

nsample	2W-SD-SD57-0002	nsample	2W-SD-SD58-0001
samp_date	10/18/2007	samp_date	10/18/2007
lab_id	SA6036-3	lab_id	SA6036-1
qc_type	NM	qc_type	NM
Pct_Solids	55.9	Pct_Solids	57.2
DUP_OF:		DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
TOTAL ORGANIC CARBON	MG/KG	50000	J	D
TOTAL SOLIDS	%	56		

Parameter	units	Result	Val Qual	Qual Code
TOTAL SOLIDS	%	57		

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-FD-101807-01

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 33.7 **Lab Sample ID:** SA6036-011

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	15200			P	1	75	4.78
7440-36-0	ANTIMONY, TOTAL	0.66	U	N	P	3	6.0	0.66
7440-38-2	ARSENIC, TOTAL	29.2			P	3	6.0	0.63
7440-39-3	BARIUM, TOTAL	40.0			P	1	1.2	0.11
7440-41-7	BERYLLIUM, TOTAL	1.0	B		P	1	1.2	0.03
7440-43-9	CADMIUM, TOTAL	0.08	U		P	3	7.5	0.08
7440-70-2	CALCIUM, TOTAL	2470			P	1	12	1.94
7440-47-3	CHROMIUM, TOTAL	39.6			P	1	3.8	0.07
7440-48-4	COBALT, TOTAL	2.4	B		P	3	23	0.20
7440-50-8	COPPER, TOTAL	57.2			P	1	6.3	0.06
7439-89-6	IRON, TOTAL	198000			P	3	75	3.92
7439-92-1	LEAD, TOTAL	61.4			P	3	3.8	0.69
7439-95-4	MAGNESIUM, TOTAL	2660		N*	P	3	38	3.70
7439-96-5	MANGANESE, TOTAL	205			P	3	3.8	0.43
7439-97-6	MERCURY, TOTAL	0.21			CV	1	0.097	0.01
7440-02-0	NICKEL, TOTAL	17.7	B		P	3	30	0.31
7440-09-7	POTASSIUM, TOTAL	1430			P	1	250	21.63
7782-49-2	SELENIUM, TOTAL	5.3	B		P	3	7.5	1.13
7440-22-4	SILVER, TOTAL	0.35	U	N	P	3	11	0.35
7440-23-5	SODIUM, TOTAL	323			P	1	250	3.27
7440-28-0	THALLIUM, TOTAL	0.54	U		P	3	11	0.54
7440-62-2	VANADIUM, TOTAL	51.2			P	3	19	0.22
7440-66-6	ZINC, TOTAL	125			P	1	6.3	0.06

Bottle ID: B

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD45-0001

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 16.6 **Lab Sample ID:** SA6036-017

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	3690			P	1	120	7.30
7440-36-0	ANTIMONY, TOTAL	2.3	B	N	P	4	12	1.34
7440-38-2	ARSENIC, TOTAL	16.9			P	4	12	1.28
7440-39-3	BARIUM, TOTAL	314			P	1	1.9	0.17
7440-41-7	BERYLLIUM, TOTAL	0.63	B		P	1	1.9	0.05
7440-43-9	CADMIUM, TOTAL	0.15	U		P	4	15	0.15
7440-70-2	CALCIUM, TOTAL	4740			P	1	19	2.96
7440-47-3	CHROMIUM, TOTAL	10.7	B		P	4	23	0.43
7440-48-4	COBALT, TOTAL	0.40	U		P	4	46	0.40
7440-50-8	COPPER, TOTAL	25.4			P	1	9.6	0.08
7439-89-6	IRON, TOTAL	300000			P	4	150	7.99
7439-92-1	LEAD, TOTAL	14.0			P	4	7.7	1.40
7439-95-4	MAGNESIUM, TOTAL	887		N*	P	4	77	7.53
7439-96-5	MANGANESE, TOTAL	636			P	4	7.7	0.88
7439-97-6	MERCURY, TOTAL	0.10	B		CV	1	0.20	0.02
7440-02-0	NICKEL, TOTAL	15.7	B		P	4	61	0.63
7440-09-7	POTASSIUM, TOTAL	625			P	1	380	33.04
7782-49-2	SELENIUM, TOTAL	9.0	B		P	4	15	2.30
7440-22-4	SILVER, TOTAL	0.71	U	N	P	4	23	0.71
7440-23-5	SODIUM, TOTAL	653			P	1	380	4.99
7440-28-0	THALLIUM, TOTAL	1.1	B		P	4	23	1.09
7440-62-2	VANADIUM, TOTAL	30.6	B		P	4	38	0.45
7440-66-6	ZINC, TOTAL	342			P	1	9.6	0.09

Bottle ID: B

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD45-0002

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 36.9 **Lab Sample ID:** SA6036-018

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	23300			P	1	51	3.22
7440-36-0	ANTIMONY, TOTAL	0.15	U	N	P	1	1.4	0.15
7440-38-2	ARSENIC, TOTAL	12.4			P	1	1.4	0.14
7440-39-3	BARIUM, TOTAL	83.9			P	1	0.85	0.08
7440-41-7	BERYLLIUM, TOTAL	1.6			P	1	0.85	0.02
7440-43-9	CADMIUM, TOTAL	2.5			P	1	1.7	0.02
7440-70-2	CALCIUM, TOTAL	4050			P	1	8.5	1.30
7440-47-3	CHROMIUM, TOTAL	66.6			P	1	2.5	0.05
7440-48-4	COBALT, TOTAL	9.1			P	1	5.1	0.04
7440-50-8	COPPER, TOTAL	60.6			P	1	4.2	0.04
7439-89-6	IRON, TOTAL	36500			P	1	17	0.88
7439-92-1	LEAD, TOTAL	51.3			P	1	0.85	0.15
7439-95-4	MAGNESIUM, TOTAL	6940		N*	P	1	8.5	0.83
7439-96-5	MANGANESE, TOTAL	326			P	1	0.85	0.10
7439-97-6	MERCURY, TOTAL	0.28			CV	1	0.077	0.01
7440-02-0	NICKEL, TOTAL	28.7			P	1	6.8	0.07
7440-09-7	POTASSIUM, TOTAL	4030			P	1	170	14.57
7782-49-2	SELENIUM, TOTAL	0.28	B		P	1	1.7	0.25
7440-22-4	SILVER, TOTAL	0.18	B	N	P	1	2.5	0.08
7440-23-5	SODIUM, TOTAL	2320			P	1	170	2.20
7440-28-0	THALLIUM, TOTAL	0.64	B		P	1	2.5	0.12
7440-62-2	VANADIUM, TOTAL	54.7			P	1	4.2	0.05
7440-66-6	ZINC, TOTAL	200			P	1	4.2	0.04

Bottle ID: A

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD46-0001

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 42.0 **Lab Sample ID:** SA6036-019

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	23800			P	1	53	3.38
7440-36-0	ANTIMONY, TOTAL	0.31	U	N	P	2	2.8	0.31
7440-38-2	ARSENIC, TOTAL	17.4			P	2	2.8	0.30
7440-39-3	BARIUM, TOTAL	152			P	1	0.89	0.08
7440-41-7	BERYLLIUM, TOTAL	0.91			P	1	0.89	0.02
7440-43-9	CADMIUM, TOTAL	0.30	B		P	2	3.6	0.04
7440-70-2	CALCIUM, TOTAL	4230			P	1	8.9	1.37
7440-47-3	CHROMIUM, TOTAL	39.7			P	2	5.3	0.10
7440-48-4	COBALT, TOTAL	13.7			P	2	11	0.09
7440-50-8	COPPER, TOTAL	97.2			P	1	4.4	0.04
7439-89-6	IRON, TOTAL	57700			P	1	18	0.92
7439-92-1	LEAD, TOTAL	78.5			P	2	1.8	0.32
7439-95-4	MAGNESIUM, TOTAL	10100		N*	P	2	18	1.74
7439-96-5	MANGANESE, TOTAL	579			P	2	1.8	0.20
7439-97-6	MERCURY, TOTAL	0.27			CV	1	0.076	0.01
7440-02-0	NICKEL, TOTAL	33.4			P	2	14	0.15
7440-09-7	POTASSIUM, TOTAL	3960			P	1	180	15.29
7782-49-2	SELENIUM, TOTAL	1.4	B		P	2	3.6	0.53
7440-22-4	SILVER, TOTAL	0.16	U	N	P	2	5.3	0.16
7440-23-5	SODIUM, TOTAL	571			P	1	180	2.31
7440-28-0	THALLIUM, TOTAL	0.25	U		P	2	5.3	0.25
7440-62-2	VANADIUM, TOTAL	69.1			P	2	8.9	0.10
7440-66-6	ZINC, TOTAL	320			P	1	4.4	0.04

Bottle ID: B

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD46-0204

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 58.4 **Lab Sample ID:** SA6036-020

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	17600			P	1	39	2.47
7440-36-0	ANTIMONY, TOTAL	0.11	U	N	P	1	1.0	0.11
7440-38-2	ARSENIC, TOTAL	9.5			P	1	1.0	0.11
7440-39-3	BARIUM, TOTAL	75.6			P	1	0.65	0.06
7440-41-7	BERYLLIUM, TOTAL	0.51	B		P	1	0.65	0.02
7440-43-9	CADMIUM, TOTAL	0.76	B		P	1	1.3	0.01
7440-70-2	CALCIUM, TOTAL	3160			P	1	6.5	1.00
7440-47-3	CHROMIUM, TOTAL	44.8			P	1	1.9	0.04
7440-48-4	COBALT, TOTAL	6.9			P	1	3.9	0.03
7440-50-8	COPPER, TOTAL	42.0			P	1	3.2	0.03
7439-89-6	IRON, TOTAL	22300			P	1	13	0.68
7439-92-1	LEAD, TOTAL	51.1			P	1	0.65	0.12
7439-95-4	MAGNESIUM, TOTAL	5960		N*	P	1	6.5	0.64
7439-96-5	MANGANESE, TOTAL	242			P	1	0.65	0.07
7439-97-6	MERCURY, TOTAL	0.24			CV	1	0.049	0.01
7440-02-0	NICKEL, TOTAL	21.1			P	1	5.2	0.05
7440-09-7	POTASSIUM, TOTAL	3260			P	1	130	11.16
7782-49-2	SELENIUM, TOTAL	0.30	B		P	1	1.3	0.19
7440-22-4	SILVER, TOTAL	0.11	B	N	P	1	1.9	0.06
7440-23-5	SODIUM, TOTAL	944			P	1	130	1.69
7440-28-0	THALLIUM, TOTAL	0.68	B		P	1	1.9	0.09
7440-62-2	VANADIUM, TOTAL	48.6			P	1	3.2	0.04
7440-66-6	ZINC, TOTAL	98.5			P	1	3.2	0.03

Bottle ID: A

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD49-0001

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 30.6 **Lab Sample ID:** SA6036-016

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	3840			P	1	71	4.51
7440-36-0	ANTIMONY, TOTAL	2.0	B	N	P	2	3.8	0.41
7440-38-2	ARSENIC, TOTAL	14.6			P	2	3.8	0.39
7440-39-3	BARIUM, TOTAL	176			P	1	1.2	0.11
7440-41-7	BERYLLIUM, TOTAL	0.31	B		P	1	1.2	0.03
7440-43-9	CADMIUM, TOTAL	1.2	B		P	2	4.7	0.05
7440-70-2	CALCIUM, TOTAL	3580			P	1	12	1.83
7440-47-3	CHROMIUM, TOTAL	8.5			P	2	7.1	0.13
7440-48-4	COBALT, TOTAL	5.6	B		P	2	14	0.12
7440-50-8	COPPER, TOTAL	92.3			P	1	5.9	0.05
7439-89-6	IRON, TOTAL	109000			P	2	47	2.47
7439-92-1	LEAD, TOTAL	39.2			P	2	2.4	0.43
7439-95-4	MAGNESIUM, TOTAL	1520		N*	P	2	24	2.32
7439-96-5	MANGANESE, TOTAL	389			P	2	2.4	0.27
7439-97-6	MERCURY, TOTAL	0.13			CV	1	0.10	0.01
7440-02-0	NICKEL, TOTAL	28.3			P	2	19	0.19
7440-09-7	POTASSIUM, TOTAL	916			P	1	240	20.39
7782-49-2	SELENIUM, TOTAL	3.4	B		P	2	4.7	0.71
7440-22-4	SILVER, TOTAL	0.22	U	N	P	2	7.1	0.22
7440-23-5	SODIUM, TOTAL	208	B		P	1	240	3.08
7440-28-0	THALLIUM, TOTAL	0.34	U		P	2	7.1	0.34
7440-62-2	VANADIUM, TOTAL	24.1			P	2	12	0.14
7440-66-6	ZINC, TOTAL	646			P	1	5.9	0.05

Bottle ID: A

Comments:

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD50-0001

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 20.7 **Lab Sample ID:** SA6036-015

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	8280			P	1	110	6.84
7440-36-0	ANTIMONY, TOTAL	1.25	U	N	P	4	12	1.25
7440-38-2	ARSENIC, TOTAL	43.6			P	4	12	1.20
7440-39-3	BARIUM, TOTAL	394			P	1	1.8	0.16
7440-41-7	BERYLLIUM, TOTAL	0.61	B		P	1	1.8	0.04
7440-43-9	CADMIUM, TOTAL	0.14	U		P	4	14	0.14
7440-70-2	CALCIUM, TOTAL	5660			P	1	18	2.77
7440-47-3	CHROMIUM, TOTAL	20.7	B		P	4	22	0.40
7440-48-4	COBALT, TOTAL	4.0	B		P	4	43	0.37
7440-50-8	COPPER, TOTAL	64.0			P	1	9.0	0.08
7439-89-6	IRON, TOTAL	315000			P	4	140	7.49
7439-92-1	LEAD, TOTAL	54.0			P	4	7.2	1.31
7439-95-4	MAGNESIUM, TOTAL	2210		N*	P	4	72	7.06
7439-96-5	MANGANESE, TOTAL	1220			P	4	7.2	0.82
7439-97-6	MERCURY, TOTAL	0.29			CV	1	0.12	0.01
7440-02-0	NICKEL, TOTAL	28.8	B		P	4	58	0.59
7440-09-7	POTASSIUM, TOTAL	987			P	1	360	30.97
7782-49-2	SELENIUM, TOTAL	9.8	B		P	4	14	2.16
7440-22-4	SILVER, TOTAL	0.66	U	N	P	4	22	0.66
7440-23-5	SODIUM, TOTAL	769			P	1	360	4.68
7440-28-0	THALLIUM, TOTAL	1.02	U		P	4	22	1.02
7440-62-2	VANADIUM, TOTAL	114			P	4	36	0.42
7440-66-6	ZINC, TOTAL	447			P	1	9.0	0.08

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD50-0204

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 48.9 **Lab Sample ID:** SA6036-014

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	18400			P	1	48	3.01
7440-36-0	ANTIMONY, TOTAL	0.14	U	N	P	1	1.3	0.14
7440-38-2	ARSENIC, TOTAL	10.7			P	1	1.3	0.13
7440-39-3	BARIUM, TOTAL	62.7			P	1	0.79	0.07
7440-41-7	BERYLLIUM, TOTAL	0.68	B		P	1	0.79	0.02
7440-43-9	CADMIUM, TOTAL	0.96	B		P	1	1.6	0.02
7440-70-2	CALCIUM, TOTAL	3970			P	1	7.9	1.22
7440-47-3	CHROMIUM, TOTAL	57.4			P	1	2.4	0.04
7440-48-4	COBALT, TOTAL	7.8			P	1	4.8	0.04
7440-50-8	COPPER, TOTAL	35.6			P	1	4.0	0.03
7439-89-6	IRON, TOTAL	28500			P	1	16	0.82
7439-92-1	LEAD, TOTAL	31.5			P	1	0.79	0.14
7439-95-4	MAGNESIUM, TOTAL	6890		N*	P	1	7.9	0.78
7439-96-5	MANGANESE, TOTAL	306			P	1	0.79	0.09
7439-97-6	MERCURY, TOTAL	0.35			CV	1	0.065	0.01
7440-02-0	NICKEL, TOTAL	23.9			P	1	6.3	0.06
7440-09-7	POTASSIUM, TOTAL	4020			P	1	160	13.63
7782-49-2	SELENIUM, TOTAL	0.35	B		P	1	1.6	0.24
7440-22-4	SILVER, TOTAL	0.12	B	N	P	1	2.4	0.07
7440-23-5	SODIUM, TOTAL	1570			P	1	160	2.06
7440-28-0	THALLIUM, TOTAL	0.79	B		P	1	2.4	0.11
7440-62-2	VANADIUM, TOTAL	49.0			P	1	4.0	0.05
7440-66-6	ZINC, TOTAL	93.7			P	1	4.0	0.04

Bottle ID: A

Comments:

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD51-0001

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 13.7 **Lab Sample ID:** SA6036-012

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	8520			P	1	170	10.63
7440-36-0	ANTIMONY, TOTAL	0.86	B	N	P	1	4.5	0.49
7440-38-2	ARSENIC, TOTAL	13.9			P	1	4.5	0.46
7440-39-3	BARIUM, TOTAL	107			P	1	2.8	0.25
7440-41-7	BERYLLIUM, TOTAL	1.6	B		P	1	2.8	0.07
7440-43-9	CADMIUM, TOTAL	1.2	B		P	1	5.6	0.06
7440-70-2	CALCIUM, TOTAL	3370			P	1	28	4.31
7440-47-3	CHROMIUM, TOTAL	16.3			P	1	8.4	0.16
7440-48-4	COBALT, TOTAL	5.6	B		P	1	17	0.15
7440-50-8	COPPER, TOTAL	36.1			P	1	14	0.12
7439-89-6	IRON, TOTAL	83600			P	1	56	2.91
7439-92-1	LEAD, TOTAL	24.6			P	1	2.8	0.51
7439-95-4	MAGNESIUM, TOTAL	682		N*	P	1	28	2.74
7439-96-5	MANGANESE, TOTAL	326			P	1	2.8	0.32
7439-97-6	MERCURY, TOTAL	0.12	B		CV	1	0.24	0.02
7440-02-0	NICKEL, TOTAL	25.9			P	1	22	0.23
7440-09-7	POTASSIUM, TOTAL	525	B		P	1	560	48.14
7782-49-2	SELENIUM, TOTAL	0.84	U		P	1	5.6	0.84
7440-22-4	SILVER, TOTAL	0.26	U	N	P	1	8.4	0.26
7440-23-5	SODIUM, TOTAL	847			P	1	560	7.28
7440-28-0	THALLIUM, TOTAL	0.40	U		P	1	8.4	0.40
7440-62-2	VANADIUM, TOTAL	38.9			P	1	14	0.16
7440-66-6	ZINC, TOTAL	82.4			P	1	14	0.13

Bottle ID: A

Comments:

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD52-0001

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 37.3 **Lab Sample ID:** SA6036-013

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	26500			P	1	70	4.43
7440-36-0	ANTIMONY, TOTAL	0.27	B	N	P	1	1.9	0.20
7440-38-2	ARSENIC, TOTAL	13.5			P	1	1.9	0.19
7440-39-3	BARIUM, TOTAL	51.2			P	1	1.2	0.11
7440-41-7	BERYLLIUM, TOTAL	1.3			P	1	1.2	0.03
7440-43-9	CADMIUM, TOTAL	1.1	B		P	1	2.3	0.02
7440-70-2	CALCIUM, TOTAL	2160			P	1	12	1.80
7440-47-3	CHROMIUM, TOTAL	63.6			P	1	3.5	0.07
7440-48-4	COBALT, TOTAL	5.5	B		P	1	7.0	0.06
7440-50-8	COPPER, TOTAL	96.7			P	1	5.8	0.05
7439-89-6	IRON, TOTAL	46100			P	1	23	1.21
7439-92-1	LEAD, TOTAL	119			P	1	1.2	0.21
7439-95-4	MAGNESIUM, TOTAL	4380		N*	P	1	12	1.14
7439-96-5	MANGANESE, TOTAL	208			P	1	1.2	0.13
7439-97-6	MERCURY, TOTAL	0.31			CV	1	0.080	0.01
7440-02-0	NICKEL, TOTAL	23.5			P	1	9.3	0.10
7440-09-7	POTASSIUM, TOTAL	2380			P	1	230	20.07
7782-49-2	SELENIUM, TOTAL	0.61	B		P	1	2.3	0.35
7440-22-4	SILVER, TOTAL	0.11	U	N	P	1	3.5	0.11
7440-23-5	SODIUM, TOTAL	431			P	1	230	3.03
7440-28-0	THALLIUM, TOTAL	0.17	U		P	1	3.5	0.17
7440-62-2	VANADIUM, TOTAL	52.9			P	1	5.8	0.07
7440-66-6	ZINC, TOTAL	60.6			P	1	5.8	0.05

Bottle ID: A

Comments:

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD53-0001

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 34.2 **Lab Sample ID:** SA6036-009

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	17100			P	1	74	4.67
7440-36-0	ANTIMONY, TOTAL	0.86	U	N	P	4	7.9	0.86
7440-38-2	ARSENIC, TOTAL	28.2			P	4	7.9	0.82
7440-39-3	BARIUM, TOTAL	48.5			P	1	1.2	0.11
7440-41-7	BERYLLIUM, TOTAL	1.1	B		P	1	1.2	0.03
7440-43-9	CADMIUM, TOTAL	0.10	U		P	4	9.8	0.10
7440-70-2	CALCIUM, TOTAL	2660			P	1	12	1.89
7440-47-3	CHROMIUM, TOTAL	47.3			P	4	15	0.28
7440-48-4	COBALT, TOTAL	2.7	B		P	4	30	0.26
7440-50-8	COPPER, TOTAL	57.3			P	1	6.1	0.05
7439-89-6	IRON, TOTAL	199000			P	4	98	5.11
7439-92-1	LEAD, TOTAL	65.8			P	4	4.9	0.90
7439-95-4	MAGNESIUM, TOTAL	3340		N*	P	4	49	4.82
7439-96-5	MANGANESE, TOTAL	231			P	4	4.9	0.56
7439-97-6	MERCURY, TOTAL	0.20			CV	1	0.091	0.01
7440-02-0	NICKEL, TOTAL	19.2	B		P	4	39	0.40
7440-09-7	POTASSIUM, TOTAL	1810			P	1	240	21.15
7782-49-2	SELENIUM, TOTAL	6.6	B		P	4	9.8	1.48
7440-22-4	SILVER, TOTAL	0.45	U	N	P	4	15	0.45
7440-23-5	SODIUM, TOTAL	344			P	1	240	3.20
7440-28-0	THALLIUM, TOTAL	0.70	U		P	4	15	0.70
7440-62-2	VANADIUM, TOTAL	57.3			P	4	24	0.29
7440-66-6	ZINC, TOTAL	138			P	1	6.1	0.06

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD53-0204

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 53.8 **Lab Sample ID:** SA6036-010

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	18300			P	1	34	2.18
7440-36-0	ANTIMONY, TOTAL	0.10	U	N	P	1	0.92	0.10
7440-38-2	ARSENIC, TOTAL	10.4			P	1	0.92	0.10
7440-39-3	BARIUM, TOTAL	58.7			P	1	0.57	0.05
7440-41-7	BERYLLIUM, TOTAL	0.61			P	1	0.57	0.01
7440-43-9	CADMIUM, TOTAL	1.1			P	1	1.1	0.01
7440-70-2	CALCIUM, TOTAL	3410			P	1	5.7	0.88
7440-47-3	CHROMIUM, TOTAL	79.5			P	1	1.7	0.03
7440-48-4	COBALT, TOTAL	7.3			P	1	3.4	0.03
7440-50-8	COPPER, TOTAL	50.4			P	1	2.9	0.03
7439-89-6	IRON, TOTAL	27800			P	1	11	0.60
7439-92-1	LEAD, TOTAL	55.5			P	1	0.57	0.10
7439-95-4	MAGNESIUM, TOTAL	7730		N*	P	1	5.7	0.56
7439-96-5	MANGANESE, TOTAL	278			P	1	0.57	0.07
7439-97-6	MERCURY, TOTAL	0.47			CV	1	0.061	0.01
7440-02-0	NICKEL, TOTAL	22.5			P	1	4.6	0.05
7440-09-7	POTASSIUM, TOTAL	4320			P	1	110	9.87
7782-49-2	SELENIUM, TOTAL	0.77	B		P	1	1.1	0.17
7440-22-4	SILVER, TOTAL	0.29	B	N	P	1	1.7	0.05
7440-23-5	SODIUM, TOTAL	4060			P	1	110	1.49
7440-28-0	THALLIUM, TOTAL	0.82	B		P	1	1.7	0.08
7440-62-2	VANADIUM, TOTAL	45.1			P	1	2.9	0.03
7440-66-6	ZINC, TOTAL	99.2			P	1	2.9	0.03

Bottle ID: A

Comments:

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD54-0001

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 14.1 **Lab Sample ID:** SA6036-008

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	10200			P	1	160	9.92
7440-36-0	ANTIMONY, TOTAL	1.2	B	N	P	1	4.2	0.45
7440-38-2	ARSENIC, TOTAL	24.3			P	1	4.2	0.43
7440-39-3	BARIUM, TOTAL	44.4			P	1	2.6	0.24
7440-41-7	BERYLLIUM, TOTAL	1.1	B		P	1	2.6	0.06
7440-43-9	CADMIUM, TOTAL	0.88	B		P	1	5.2	0.05
7440-70-2	CALCIUM, TOTAL	2730			P	1	26	4.02
7440-47-3	CHROMIUM, TOTAL	36.8			P	1	7.8	0.15
7440-48-4	COBALT, TOTAL	1.1	B		P	1	16	0.14
7440-50-8	COPPER, TOTAL	55.0			P	1	13	0.11
7439-89-6	IRON, TOTAL	130000			P	1	52	2.72
7439-92-1	LEAD, TOTAL	48.0			P	1	2.6	0.48
7439-95-4	MAGNESIUM, TOTAL	1180		N*	P	1	26	2.56
7439-96-5	MANGANESE, TOTAL	149			P	1	2.6	0.30
7439-97-6	MERCURY, TOTAL	0.26			CV	1	0.24	0.02
7440-02-0	NICKEL, TOTAL	15.9	B		P	1	21	0.21
7440-09-7	POTASSIUM, TOTAL	728			P	1	520	44.91
7782-49-2	SELENIUM, TOTAL	1.0	B		P	1	5.2	0.78
7440-22-4	SILVER, TOTAL	0.24	U	N	P	1	7.8	0.24
7440-23-5	SODIUM, TOTAL	739			P	1	520	6.79
7440-28-0	THALLIUM, TOTAL	0.37	U		P	1	7.8	0.37
7440-62-2	VANADIUM, TOTAL	63.6			P	1	13	0.15
7440-66-6	ZINC, TOTAL	39.7			P	1	13	0.12

Bottle ID: A

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD55-0001

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 23.2 **Lab Sample ID:** SA6036-006

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	10700			P	1	100	6.50
7440-36-0	ANTIMONY, TOTAL	1.3	B	N	P	3	8.2	0.89
7440-38-2	ARSENIC, TOTAL	52.5			P	3	8.2	0.85
7440-39-3	BARIUM, TOTAL	13.7			P	1	1.7	0.15
7440-41-7	BERYLLIUM, TOTAL	1.4	B		P	1	1.7	0.04
7440-43-9	CADMIUM, TOTAL	0.10	U		P	3	10	0.10
7440-70-2	CALCIUM, TOTAL	1760			P	1	17	2.63
7440-47-3	CHROMIUM, TOTAL	51.2			P	3	15	0.29
7440-48-4	COBALT, TOTAL	0.27	U		P	3	31	0.27
7440-50-8	COPPER, TOTAL	41.2			P	1	8.5	0.08
7439-89-6	IRON, TOTAL	249000			P	3	100	5.33
7439-92-1	LEAD, TOTAL	33.4			P	3	5.1	0.93
7439-95-4	MAGNESIUM, TOTAL	726		N*	P	3	51	5.03
7439-96-5	MANGANESE, TOTAL	89.2			P	3	5.1	0.58
7439-97-6	MERCURY, TOTAL	0.23			CV	1	0.14	0.01
7440-02-0	NICKEL, TOTAL	15.2	B		P	3	41	0.42
7440-09-7	POTASSIUM, TOTAL	434			P	1	340	29.41
7782-49-2	SELENIUM, TOTAL	7.8	B		P	3	10	1.54
7440-22-4	SILVER, TOTAL	0.47	U	N	P	3	15	0.47
7440-23-5	SODIUM, TOTAL	967			P	1	340	4.45
7440-28-0	THALLIUM, TOTAL	0.73	U		P	3	15	0.73
7440-62-2	VANADIUM, TOTAL	60.6			P	3	26	0.30
7440-66-6	ZINC, TOTAL	80.1			P	1	8.5	0.08

Bottle ID: A

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD56-0001

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 60.1 **Lab Sample ID:** SA6036-004

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	11800			P	1	30	1.90
7440-36-0	ANTIMONY, TOTAL	0.17	U	N	P	2	1.6	0.17
7440-38-2	ARSENIC, TOTAL	7.3			P	2	1.6	0.17
7440-39-3	BARIUM, TOTAL	59.3			P	1	0.50	0.05
7440-41-7	BERYLLIUM, TOTAL	0.31	B		P	1	0.50	0.01
7440-43-9	CADMIUM, TOTAL	0.02	U		P	2	2.0	0.02
7440-70-2	CALCIUM, TOTAL	2040			P	1	5.0	0.77
7440-47-3	CHROMIUM, TOTAL	29.2			P	2	3.0	0.06
7440-48-4	COBALT, TOTAL	4.4	B		P	2	6.0	0.05
7440-50-8	COPPER, TOTAL	20.0			P	1	2.5	0.02
7439-89-6	IRON, TOTAL	37300			P	1	10	0.52
7439-92-1	LEAD, TOTAL	58.4			P	2	1.0	0.18
7439-95-4	MAGNESIUM, TOTAL	3760		N*	P	2	10	0.98
7439-96-5	MANGANESE, TOTAL	402			P	2	1.0	0.11
7439-97-6	MERCURY, TOTAL	0.1			CV	1	0.050	0.01
7440-02-0	NICKEL, TOTAL	12.4			P	2	8.0	0.08
7440-09-7	POTASSIUM, TOTAL	2070			P	1	100	8.61
7782-49-2	SELENIUM, TOTAL	1.3	B		P	2	2.0	0.30
7440-22-4	SILVER, TOTAL	0.09	U	N	P	2	3.0	0.09
7440-23-5	SODIUM, TOTAL	202			P	1	100	1.30
7440-28-0	THALLIUM, TOTAL	0.14	U		P	2	3.0	0.14
7440-62-2	VANADIUM, TOTAL	34.7			P	2	5.0	0.06
7440-66-6	ZINC, TOTAL	78.6			P	1	2.5	0.02

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD57-0001

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 62.7 **Lab Sample ID:** SA6036-002

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	5470			P	1	27	1.73
7440-36-0	ANTIMONY, TOTAL	0.16	U	N	P	2	1.4	0.16
7440-38-2	ARSENIC, TOTAL	4.3			P	2	1.4	0.15
7440-39-3	BARIUM, TOTAL	47.7			P	1	0.46	0.04
7440-41-7	BERYLLIUM, TOTAL	0.27	B		P	1	0.46	0.01
7440-43-9	CADMIUM, TOTAL	1.1	B		P	2	1.8	0.02
7440-70-2	CALCIUM, TOTAL	1730			P	1	4.6	0.70
7440-47-3	CHROMIUM, TOTAL	9.5			P	2	2.7	0.05
7440-48-4	COBALT, TOTAL	4.9	B		P	2	5.5	0.05
7440-50-8	COPPER, TOTAL	19.2			P	1	2.3	0.02
7439-89-6	IRON, TOTAL	37900			P	2	18	0.95
7439-92-1	LEAD, TOTAL	159			P	2	0.91	0.17
7439-95-4	MAGNESIUM, TOTAL	2240		N*	P	2	9.1	0.89
7439-96-5	MANGANESE, TOTAL	469			P	2	0.91	0.10
7439-97-6	MERCURY, TOTAL	0.02	B		CV	1	0.046	0.01
7440-02-0	NICKEL, TOTAL	11.2			P	2	7.3	0.07
7440-09-7	POTASSIUM, TOTAL	1140			P	1	91	7.83
7782-49-2	SELENIUM, TOTAL	1.2	B		P	2	1.8	0.27
7440-22-4	SILVER, TOTAL	0.08	U	N	P	2	2.7	0.08
7440-23-5	SODIUM, TOTAL	149			P	1	91	1.18
7440-28-0	THALLIUM, TOTAL	0.13	U		P	2	2.7	0.13
7440-62-2	VANADIUM, TOTAL	22.9			P	2	4.6	0.05
7440-66-6	ZINC, TOTAL	339			P	1	2.3	0.02

Bottle ID: B

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD58-0001

Matrix: SOIL **SDG Name:** SA6036

Percent Solids: 57.2 **Lab Sample ID:** SA6036-001

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7440-43-9	CADMIUM, TOTAL	0.03	U		P	2	3.3	0.03

Bottle ID: A

Comments:

FORM I - IN

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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: SA6036-11
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-FD-101807-01	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	190000 ug/gdrywt	1200	LLOYDKAHN	WG45098	30-OCT-07 16:03:27	N/A	N/A	CP	
Total Solids	34. %	1	CLP SOW 788	WG44867	24-OCT-07 10:28:00	CLP SOW 788	23-OCT-07	JF	
pH(Soil)	5.3 pH	.1	SW846 9045C	WG44966	23-OCT-07 16:12:00	SW846 9045C	23-OCT-07	JF	

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: SA6036-17
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD45-0001	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	270000 ug/gdrywt	2400	LLOYDKAHN	WG45098	30-OCT-07 17:16:15	N/A	N/A	CP	
Total Solids	16. %	1	CLP SOW 788	WG44867	24-OCT-07 10:34:00	CLP SOW 788	23-OCT-07	JF	
pH(Soil)	5.9 pH	.1	SW846 9045C	WG44966	23-OCT-07 16:44:00	SW846 9045C	23-OCT-07	JF	

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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: SA6036-18
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD45-0002	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	81000 ug/gdrywt	1100	LLOYDKAHN	WG45098	30-OCT-07 17:25:41	N/A	N/A	CP	
Total Solids	37. %	1	CLP SOW 788	WG44867	24-OCT-07 10:35:00	CLP SOW 788	23-OCT-07	JF	
pH(Soil)	6.7 pH	.1	SW846 9045C	WG44966	23-OCT-07 16:46:00	SW846 9045C	23-OCT-07	JF	

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Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SA6036-19
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD46-0001	SL	19-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	86000 ug/gdrywt	950	LLOYDKAHN	WG45151	31-OCT-07 09:32:06	N/A	N/A	KR	
Total Solids	42. %	1	CLP SOW 788	WG44867	24-OCT-07 10:36:00	CLP SOW 788	23-OCT-07	JF	
pH(Soil)	6.4 pH	.1	SW846 9045C	WG44966	23-OCT-07 10:20:00	SW846 9045C	23-OCT-07	JF	

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Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SA6036-20
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD46-0204	SL	19-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	40000 ug/gdrywt	680	LLOYDKAHN	WG45151	31-OCT-07 09:41:56	N/A	N/A	KR	
Total Solids	58. %	1	CLP SOW 788	WG44867	24-OCT-07 10:38:00	CLP SOW 788	23-OCT-07	JF	
pH(Soil)	6.6 pH	.1	SW846 9045C	WG44966	23-OCT-07 10:20:00	SW846 9045C	23-OCT-07	JF	

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Report of Analytical Results

Client: Amy Thomson
Tetra Tech NUS, Inc.
661 Andersen Drive
Pittsburgh,PA 15220

Lab Sample ID: SA6036-16
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD49-0001	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	130000 ug/gdrywt	1300	LLOYDKAHN	WG45098	30-OCT-07 16:49:23	N/A	N/A	CP	
Total Solids	30. %	1	CLP SOW 788	WG44867	24-OCT-07 10:33:00	CLP SOW 788	23-OCT-07	JF	
pH(Soil)	6.2 pH	.1	SW846 9045C	WG44966	23-OCT-07 16:42:00	SW846 9045C	23-OCT-07	JF	

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: SA6036-15
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD50-0001	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	200000 ug/gdrywt	1900	LLOYDKAHN	WG45098	30-OCT-07 16:40:37	N/A	N/A	CP	
Total Solids	21. %	1	CLP SOW 788	WG44867	24-OCT-07 10:32:00	CLP SOW 788	23-OCT-07	JF	
pH(Soil)	6.2 pH	.1	SW846 9045C	WG44966	23-OCT-07 16:40:00	SW846 9045C	23-OCT-07	JF	

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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: SA6036-14
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD50-0204	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	45000 ug/gdrywt	820	LLOYDKAHN	WG45098	30-OCT-07 16:32:08	N/A	N/A	CP	
Total Solids	49. %	1	CLP SOW 788	WG44867	24-OCT-07 10:31:00	CLP SOW 788	23-OCT-07	JF	
pH(Soil)	6.9 pH	.1	SW846 9045C	WG44966	23-OCT-07 16:38:00	SW846 9045C	23-OCT-07	JF	

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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: SA6036-12
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD51-0001	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	440000 ug/gdrywt	2900	LLOYDKAHN	WG45098	30-OCT-07 16:12:51	N/A	N/A	CP	
Total Solids	14. %	1	CLP SOW 788	WG44867	24-OCT-07 10:29:00	CLP SOW 788	23-OCT-07	JF	
pH(Soil)	5.3 pH	.1	SW846 9045C	WG44966	23-OCT-07 16:14:00	SW846 9045C	23-OCT-07	JF	

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: SA6036-13
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD52-0001	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	250000 ug/gdrywt	1100	LLOYDKAHN	WG45098	30-OCT-07 16:21:17	N/A	N/A	CP	
Total Solids	37. %	1	CLP SOW 788	WG44867	24-OCT-07 10:30:00	CLP SOW 788	23-OCT-07	JF	
pH(Soil)	5.6 pH	.1	SW846 9045C	WG44966	23-OCT-07 16:36:00	SW846 9045C	23-OCT-07	JF	

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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: SA6036-9
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD53-0001	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	200000 ug/gdrywt	1200	LLOYDKAHN	WG45098	30-OCT-07 15:19:20	N/A	N/A	CP	
Total Solids	34. %	1	CLP SOW 788	WG44867	24-OCT-07 10:25:00	CLP SOW 788	23-OCT-07	JF	
pH(Soil)	5.1 pH	.1	SW846 9045C	WG44966	23-OCT-07 16:00:00	SW846 9045C	23-OCT-07	JF	

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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: SA6036-10
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD53-0204	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	57000 ug/gdrywt	740	LLOYDKAHN	WG45098	30-OCT-07 15:54:39	N/A	N/A	CP	
Total Solids	54. %	1	CLP SOW 788	WG44867	24-OCT-07 10:27:00	CLP SOW 788	23-OCT-07	JF	
pH(Soil)	7.2 pH	.1	SW846 9045C	WG44966	23-OCT-07 16:10:00	SW846 9045C	23-OCT-07	JF	

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: SA6036-8
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD54-0001	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	370000 ug/gdrywt	2800	LLOYDKAHN	WG45098	30-OCT-07 09:45:00	N/A	N/A	CP	
Total Solids	14. %	1	CLP SOW 788	WG44866	24-OCT-07 10:22:00	CLP SOW 788	23-OCT-07	JF	
pH(Soil)	4.8 pH	.1	SW846 9045C	WG44966	23-OCT-07 16:08:00	SW846 9045C	23-OCT-07	JF	

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: SA6036-6
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD55-0001	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	220000 ug/gdrywt	1700	LLOYDKAHN	WG45098	30-OCT-07 09:28:07	N/A	N/A	CP	
Total Solids	23. %	1	CLP SOW 788	WG44866	24-OCT-07 10:20:00	CLP SOW 788	23-OCT-07	JF	
pH(Soil)	4.5 pH	.1	SW846 9045C	WG44966	23-OCT-07 10:20:00	SW846 9045C	23-OCT-07	JF	

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: SA6036-7
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD55-0002	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	56000 ug/gdrywt	770	LLOYDKAHN	WG45098	30-OCT-07 09:37:37	N/A	N/A	CP	
Total Solids	52. %	1	CLP SOW 788	WG44866	24-OCT-07 10:21:00	CLP SOW 788	23-OCT-07	JF	

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: SA6036-4
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD56-0001	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	38000 ug/gdrywt	660	LLOYDKAHN	WG45098	30-OCT-07 09:09:58	N/A	N/A	CP	
Total Solids	60. %	1	CLP SOW 788	WG44866	24-OCT-07 10:18:00	CLP SOW 788	23-OCT-07	JF	
pH(Soil)	5.9 pH	.1	SW846 9045C	WG44966	23-OCT-07 16:04:00	SW846 9045C	23-OCT-07	JF	

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: SA6036-5
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD56-0002	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	39000 ug/gdrywt	680	LLOYDKAHN	WG45098	30-OCT-07 09:19:31	N/A	N/A	CP	
Total Solids	59. %	1	CLP SOW 788	WG44866	24-OCT-07 10:19:00	CLP SOW 788	23-OCT-07	JF	

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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: SA6036-2
Report Date: 14-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD57-0001	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	24000 ug/gdrywt	640	LLOYDKAHN	WG45368	06-NOV-07 11:40:27	N/A	N/A	KR	
Total Solids	63. %	1	CLP SOW 788	WG44866	24-OCT-07 10:16:00	CLP SOW 788	23-OCT-07	JF	

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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: SA6036-3
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD57-0002	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	50000 ug/gdrywt	710	LLOYDKAHN	WG45098	30-OCT-07 08:36:22	N/A	N/A	CP	
Total Solids	56. %	1	CLP SOW 788	WG44866	24-OCT-07 10:17:00	CLP SOW 788	23-OCT-07	JF	

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: SA6036-1
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439 NSB New London
SDG: SA6036

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD58-0001	SL	18-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	57. %	1	CLP SOW 788	WG44866	24-OCT-07 10:15:00	CLP SOW 788	23-OCT-07	JF	

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APPENDIX C
REGION I WORKSHEETS

REGION I
Data Review Worksheets

Site Name New London
Reference Number _____

REGION I REVIEW OF INORGANIC CONTRACT LABORATORY DATA PACKAGE

The hardcopied (laboratory name) Katahdin data package receiv at Region I has been reviewed and the quality assurance and performan data summarized. The data review included:

Case No. _____ SAS No. _____ Sampling Date(s) Oct 18 + 19 2007
SDG. No. SA6036 Matrix soil Shipping Date(s) _____
No. of Samples 20 Date Rec'd by Lab _____

Traffic Report Nos: _____

Trip Blank No.: _____
Equipment Blank No.: _____
Field Dup Nos: _____

SOW No. _____ requires that specific analytical work be done and th associated reports be provided by the laboratory to the Regions, EMS LV, and SMO. The general criteria used to determine the performance we based on an examination of:

- Data Completeness
- Holding Times
- Calibrations
- Blanks
- ICP Interference Check Results
- Matrix Spike Recoveries
- Laboratory Duplicates
- Field Duplicates
- Lab Control Sample Results
- Furnace AA Results
- ICP Serial Dilution Results
- Detection Limit Results
- Sample Quantitation

Overall Comments: _____

Definitions and Qualifiers:

A - Acceptable data.
J - Approximate data due to quality control criteria.
R - Reject data due to quality control criteria.
U - Analyte not detected.

Reviewer: Helen Solomon Date: 12-10-07

REGION I
Data Review Worksheets

I. DATA COMPLETENESS

N/A

MISSING INFORMATION	DATE LAB CONTACTED	DATE REC'D

see validation letter

II. HOLDING TIMES

Complete table for all samples and circle the analysis date for samples not within criteria.

SAMPLE ID	DATE SAMPLED	HG DATE ANALYSIS	CYANIDE DATE ANALYSIS	OTHERS DATE ANALYSIS	pH	ACTION

METALS - 180 DAYS FROM SAMPLE COLLECTION
MERCURY - 28 DAYS FROM SAMPLE COLLECTION
CYANIDE - 14 DAYS FROM SAMPLE COLLECTION

ACTION:

1. If holding times are exceeded all positive results ar estimated (J) and non-detects are estimated (UJ).

2. If holding times are grossly exceeded, the reviewer may determine that non-detects are unusable (R).

REGION I
Data Review worksheets

see validation letter

III A. INSTRUMENT CALIBRATION (Section 1)

1. Recovery Criteria

List the analytes which did not meet the percent recovery (%R) criter: for Initial or Continuing Calibration.

DATE	ICV/CCV#	ANALYTE	%R	ACTION	SAMPLES AFFECTED

ACTIONS:

If any analyte does not meet the %R criteria follow the actions state below:

For Positive Results:

	Accept	Estimate (J)	Reject (R)
Metals	90-110%R	75-89%R, 111-125%R	<75%R, >125%R
Mercury	80-120%R	65-79%R, 121-135%R	<65%R, >135%R
Cyanide	85-115%R	70-84%R, 116-130%R	<70%R, >130%R

For Non-detected Results:

	Accept	Estimate (UJ)	Reject (R)
Metals	90-125%R	75-89%R	<75%R, >125%R
Mercury	80-135%R	65-79%R	<65%R, >135%R
Cyanide	85-130%R	70-84%R	<70%R, >130%R

REGION I
Data Review Worksheets see validation letter

III B. INSTRUMENT CALIBRATION (Section 2)

2. Analytical Sequence

A. Did the laboratory use the proper number of standards for calibration as described in the SOW? Yes or N

B. Were calibrations performed at the beginning of each analysis? Yes or N

C. Were calibration standards analyzed at the beginning of sample analysis and at a minimum frequency of ten percent or every two hours during analysis, whichever is more frequent? Yes or N

D. Were the correlation coefficients for the calibration curves for AA, Hg, and CN $\geq$ 0.995? Yes or N

E. Was a standard at 2xCRDL analyzed for all ICP analyses? Yes or N

If No,

The data may be affected. Use professional judgement to determin the severity of the effect and qualify the data accordingly. Discus any actions below and list the samples affected.

_____

_____

_____

_____

REGION I
Data Review Worksheet

see validation letter

IV A. BLANK ANALYSIS RESULTS (Sections 1-3)

List the blank contamination in Sections 1 & 2 below. A separa worksheet should be used for soil and water blanks.

1. Laboratory Blanks

MATRIX: _____

DATE	ICB/CCB#	PREP BL	ANALYTE	CONC./UNITS

2. Equipment/Trip Blanks

DATE	EQUIP BL#	ANALYTE	CONC./UNITS

3. Frequency Requirements

A. Was a preparation blank analyzed for each matrix, for every 20 samples and for each digestion batch? Yes or N

B. Was a calibration blank run every 10 samples or every 2 hours whichever is more frequent? Yes or N

If No,

The data may be affected. Use professional judgement to determin the severity of the effect and qualify the data accordingly. Discus any actions below, and list the samples affected.

_____

_____

REGION I
Data Review Worksheets

See validation letter

IV B. BLANK ANALYSIS RESULTS (Section 4)

4. Blank Actions

The Action Levels for any analyte is equal to five times the highest concentration of that element's contamination in any blank. The action level for samples which have been concentrated or diluted should be multiplied by the concentration/dilution factor. No positive sample result should be reported unless the concentration of the analyte in the sample exceeds the Action Level (AL). Specific actions are as follows:

1. When the concentration is greater than the IDL, but less than the Action Level, report the sample concentration detected with a U.
2. When the sample concentration is greater than the Action Level, report the sample concentration unqualified.

MATRIX: _____

ELEMENT	MAX. CONC./ UNITS	AL/ UNITS

MATRIX: _____

ELEMENT	MAX. CONC./ UNITS	AL/ UNITS

NOTE: Blanks analyzed during a soil case must be converted to mg/kg in order to compare them with the sample results.

$$\text{Conc. in ug/L} \times \frac{\text{Volume diluted to (200ml)}}{\text{Weight digested (1gram)}} \times \frac{1L}{1000ml} \times \frac{1000gm}{1kg} \times \frac{1mg}{1000ug} = mg/kg$$

Multiplying this result by 5 to arrive at the action level gives a final result in mg/kg which can then be compared to sample results.

REGION I
Data Review Worksheets

see validation letter

V A. ICP INTERFERENCE CHECK SAMPLE (Sections 1 & 2)

1. Recovery Criteria

List any elements in the ICS AB solution which did not meet the criteri for %R.

DATE	ELEMENT	%R	ACTION	SAMPLES AFFECTED

ACTIONS:

If an element does not meet the %R criteria , follow the actions state below:

	PERCENT RECOVERY		
	<50%	50-79%	>120%
Positive Sample Results	R	J	J
Non-detected Sample Results	R	UJ	A

2. Frequency Requirements

Were Interference QC samples run at the beginning and end of each sample analysis run or a minimum of twice per 8 hour working shift, whichever is more frequent? Yes or No

If no,

The data may be affected. Use professional judgement to determine the severity of the effect and qualify the data accordingly. Discuss any actions below and list the samples affected.

_____

_____

_____

REGION I
Data Review Worksheets

see validation letter

V B. ICP INTERFERENCE CHECK SAMPLE (Section 3)

3. Report the concentration of any elements detected in the IC solution > 2xIDL that should not be present.

ELEMENT	CONC. DETECTED IN THE ICS	CONC. OF INTERFERENTS IN THE ICS			
		AL	CA	FE	MG
_____	_____	____	____	____	____
_____	_____	____	____	____	____
_____	_____	____	____	____	____
_____	_____	____	____	____	____
_____	_____	____	____	____	____

Estimate the concentration produced by the interfering element in affected samples. See guidelines for examples. List the samp affected by interferences below:

SAMPLE AFFECTED	ELEMENT AFFECTED	SAMPLE CONC. (ug/L)	SAMPLE INTERFERENT CONC.				ESTIMATED INTERF. (ug/L)
			AL	CA	FE	MG	
_____	_____	_____	____	____	____	____	_____
_____	_____	_____	____	____	____	____	_____
_____	_____	_____	____	____	____	____	_____
_____	_____	_____	____	____	____	____	_____

ACTIONS:

1. In general, the sample data can be accepted without qualification the sample concentrations of Al, Ca, Fe, and Mg are less than 50% their respective levels in the ICS solution.

2. Estimate (J) positive results for affected elements for samples w levels of interferents 50% or more of that in the ICS solution.

3. Reject (R) positive results if the reported concentration is entirely to the interfering element.

4. Estimate (UJ) non-detected results for which false negatives suspect.

Give explanations for any actions taken below:

_____

_____

_____

See validation letter

V B. ICP INTERFERENCE CHECK SAMPLE (Supplemental)

E^1	- Sample	Rept. Sample Conc.	Intf.	Intf. Level ICS	Conc. E^1 ICS	Intf. Level Sample	Est. Elem. Intf.	Q^2

Formula: $\frac{\text{Conc. Affected Element in ICS} \times \text{Intf. Level in Sample}}{\text{Maximum Intf. Level ICS}} = \text{Est. Elem. Intf. in Sample}$

E^1 - Affected Element

Q^2 - Qualifier Applied

see validation letter

VI. MATRIX SPIKE

TR # _____ MATRIX: _____

1. Recovery Criteria

List the percent recoveries for analytes which did not meet the required criteria.

S - amount of spike added
SSR - spikes sample result
SR - sample result

Analyte	SSR	SR	S	%R	Action

Matrix Spike Actions apply to all samples of the same matrix.

ACTIONS:

1. If the sample concentration exceeds the spike concentration by a factor of 4 or more, no action is taken.

2. If any analyte does not meet the %R criteria follow the actions stated below:

	PERCENT RECOVERY		
	<30%	30%-74%	>125%
Positive Sample Results	J	J	J
Non-detected Results	R	UJ	A

2. Frequency Criteria

A. Was a matrix spike prepared at the required frequency? Yes or No

B. Was a post digestion spike analyzed for elements that did not meet required criteria for matrix spike recovery? Yes or No

A separate worksheet should be used for each matrix spike pair.

see validation letter

VII. LABORATORY DUPLICATES

List the concentrations of any analyte not meeting the criteria for duplicate precision. For soil duplicates, calculate the CRDL in mg/kg using the sample weight, volume and percent solids data for the sample. Indicate what criteria was used to evaluate precision by circling either the RPD or CRDL for each element.

MATRIX: _____

Element	CRDL water ug/L	CRDL soil mg/kg	Sample #	Duplicate#	RPD	Action
Aluminum	200					
Antimony	60					
Arsenic	10					
Barium	200					
Beryllium	5					
Cadmium	5					
Calcium	5000					
Chromium	10					
Cobalt	50					
Copper	25					
Iron	100					
Lead	5					
Magnesium	5000					
Manganese	15					
Mercury	0.2					
Nickel	40					
Potassium	5000					
Selenium	5					
Silver	10					
Sodium	5000					
Thallium	10					
Vanadium	50					
Zinc	20					
Cyanide	10					

Laboratory Duplicate Actions should be applied to all other samples of the same matrix type.

ACTIONS:

1. Estimate (J) positive results for elements which have an RPD >20% for waters and >35% for soils.

2. If sample results are less than 5x the CRDL, estimate (J) positive results for elements whose absolute difference is >CRDL. (2xCRDL for soils). If both samples are non-detected, the RPD is not calculated (NC).

REGION I
Data Review Worksheets

VIII. FIELD DUPLICATES

See validation letter

List the concentrations of all analytes in the field duplicate pair. For soil duplicates, calculate the CRDL in mg/kg using the sample weigh volume and percent solids data for the sample. Indicate what criter was used to evalute the precision by circling either the RPD or CRDL f each element.

MATRIX: _____

Element	CRDL water ug/L	CRDL soil mg/kg	Sample #	Duplicate#	RPD	Action
Aluminum	200					
Antimony	60					
Arsenic	10					
Barium	200					
Beryllium	5					
Cadmium	5					
Calcium	5000					
Chromium	10					
Cobalt	50					
Copper	25					
Iron	100					
Lead	5					
Magnesium	5000					
Manganese	15					
Mercury	0.2					
Nickel	40					
Potassium	5000					
Selenium	5					
Silver	10					
Sodium	5000					
Thallium	10					
Vanadium	50					
Zinc	20					
Cyanide	10					

Field Duplicate Actions should be applied to all other samples of t same matrix type.

ACTIONS:

1. Estimate (J) positive results for elements which have an RPD >3 for waters and >50% for soils.

2. If sample results are less than 5x the CRDL, estimate (J) positi results and (UJ) nondetected results for elements whose absolu difference is >2xCRDL, (4xCRDL for soils). If both samples are no detected, the RPD is not calculated (NC).

REGION I
Data Review Worksheets

See validation letter

IX. LABORATORY CONTROL SAMPLE

1. Aqueous LCS

List any LCS recoveries not within the 80-120% criteria and the sample affected.

DATE	ELEMENT	%R	ACTION	SAMPLES AFFECTED

2. Solid LCS

List any analytes that were not within the control windows set by th EPA for the solid LCS sample. The 80-120% criteria is not used t evaluate solid LCS results.

ELEMENT	LCS CONC.	CONTROL WINDOWS	ACTION	SAMPLES AFFECTED

ACTIONS:

AQUEOUS LCS	Percent Recovery <50%	51-79%	>120%
Positive Results	R	J	J
Non-detected Results	R	UJ	A

SOLID LCS	<EPA Control Windows	>EPA Control Windows
Positive Results	J	J
Non-detected Results	UJ	A

3. Frequency Criteria

A. Was an LCS analyzed for every matrix, every digestion batch, and every 20 samples? Yes or N

REGION I
Data Review Worksheets

See N/A

X A. FURNACE ATOMIC ABSORPTION ANALYSIS

1. Duplicate Precision

-------- Duplicate injections and one-point analytical spikes were performed for all samples: duplicate injections agreed within ± 20%.

-------- Duplicate injections and/or spikes were not performed for the following samples/elements: _____

_____

-------- Duplicate injections did not agree within ± 20% for samples/elements: _____

_____

2. Post Digestion Spike Recoveries

-------- Spike recoveries met the 85-115% recovery criteria for all samples.

-------- Spike recoveries did not meet the 85-115% criteria but did not require MSA for the following samples/elements:

_____

_____

-------- MSA was used to quantitate analytical results when contractually required.

_____ Correlation coefficients ≥0.995, accept results.
_____ Correlation coefficients <0.995 for sample numbers/elements: _____

-------- Method of Standard Addition (MSA) was not performed as required for samples/elements: _____

ACTIONS:

1. Estimate (J) positive results if duplicate injections are outside ± 20 % RSD or CV.

2. If the sample absorbance is <50% of post digestion spike absorbance the following actions should be applied:

	PERCENT RECOVERY		
	<10%	11%-84%	>115%
Positive Sample Results	J or R	J	J
Non-detected Results	R	UJ	A

3. Estimate (J) sample results if MSA was required and not performed.

4. Estimate (J) sample results if correlation coefficient was <0.995.

see validation letter

XI. INDUCTIVELY COUPLED PLASMA (ICP) SERIAL DILUTION ANALYSIS

_____ Serial Dilutions were performed for each matrix and results of the diluted sample analysis agreed within ten percent of the original undiluted analysis.

_____ Serial Dilutions were not performed for the following: _____

_____ Serial Dilutions were performed, but analytical results did not agree within 10% for analyte concentrations greater than 50x the IDL before dilution.

Report all results below that do not meet the required laboratory criteria for ICP serial dilution analysis.

MATRIX: _____

ELEMENT	IDL	50xIDL	SAMPLE RESULT	SERIAL DILUTION	%D	ACTION
Aluminum						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Nickel						
Potassium						
Silver						
Sodium						
Vanadium						
Zinc						

Actions apply to all samples of the same matrix.

ACTIONS:

1. Estimate (J) positive results if %D >15.

see validation letter

XII. DETECTION LIMIT RESULTS

1. Instrument Detection Limits

_____ Instrument Detection Limit results were present and found to less than the Contract Required Detection Limits.

_____ IDLs were not included in the data package on Form XI.

_____ IDLs were present, but the criteria was not met for th following elements: _____

2. Reporting Requirements

_____ Were sample results on Form I reported down to the IDL not the CRDL for all analytes? Yes or N

_____ Were sample results that were analyzed by ICP for Se, Tl, As, or Pb at least 5x IDL. Yes or N

_____ Were sample weights, volumes, and dilutions taken into account when reporting detection limits on Form I. Yes or N

If No,

The reported results may be inaccurate. Make the necessary change on the data summary tables and request that the laboratory resubmit th corrected data.

REGION I
Data Review Worksheets

See validation letter

XIII. SAMPLE QUANTITATION

_____ Sample results fall within the linear range for ICP and withi the calibrated range for all other parameters.

_____ Sample results were beyond the linear range/ calibration rang of the instrument for the following samples/elements

_____

In the space below, please show a minimum of one sample calculatio per method:

ICP

FURNACE

MERCURY

CYANIDE

For soil samples, the following equation may be necessary to convert raw data values (usually reported in ug/L) to actual sample concentrations (mg/kg):

The lab is required to use 1 gram sample (wet weight) to 200 ml.

Wet weight concentration =

$$\text{digest conc. in } \frac{ug}{L} \times \frac{200ml}{1\ gm} \times \frac{1L}{1000\ ml} \times \frac{1000gm}{1kg} \times \frac{1mg}{1000ug} = \frac{mg}{kg}$$

In addition the sample results are converted to dry weight using the percent solids calculations:

$$\frac{\text{Wet weight conc.}}{\%\text{solids}} \times 100 = \text{final concentration, dry weight (mg/kg)}$$

APPENDIX D
SUPPORT DOCUMENTATION

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO 439 NSB NEW LONDON
SA6036

Sample Receipt

The following samples were received on October 22, 2007 and were logged in under Katahdin Analytical Services work order number SA6036 for a hardcopy due date of November 8, 2007.

KATAHDIN Sample No.	TTNUS Sample Identification
SA6036-1	2W-SD-SD58-0001
SA6036-2	2W-SD-SD57-0001
SA6036-3	2W-SD-SD57-0002
SA6036-4	2W-SD-SD56-0001
SA6036-5	2W-SD-SD56-0002
SA6036-6	2W-SD-SD55-0001
SA6036-7	2W-SD-SD55-0002
SA6036-8	2W-SD-SD54-0001
SA6036-9	2W-SD-SD53-0001
SA6036-10	2W-SD-SD53-0204
SA6036-11	2W-FD-101807-01
SA6036-12	2W-SD-SD51-0001
SA6036-13	2W-SD-SD52-0001
SA6036-14	2W-SD-SD50-0204
SA6036-15	2W-SD-SD50-0001
SA6036-16	2W-SD-SD49-0001
SA6036-17	2W-SD-SD45-0001
SA6036-18	2W-SD-SD45-0002
SA6036-19	2W-SD-SD46-0001
SA6036-20	2W-SD-SD46-0204

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.

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

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

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

Organics Analysis

The samples of work order SA6036 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis. Sample SA6036-9 was used for the matrix spike (MS) and matrix spike duplicate (MSD), as requested by the client. Some manual integrations may have been performed due to split peaks and/or corrected baselines. All have been flagged with an "M" (software-generated) on the pertinent quantitation reports.

8082 Analysis

All samples and QC were put through a sulfur cleanup according to SW-846 method 3660 using the copper powder technique. The cleanup did not completely remove the sulfur. Consequently, some of the samples may have sulfur interference affecting the quantitation of target analytes.

Sample SA6036-4 had a high recovery for the surrogate TCX on channel A, which was outside of the laboratory established acceptance limits. Since the recovery for DCB was acceptable, as well as TCX on channel B, the sample was not reextracted.

The method blank WG44925-1 a high recovery for the surrogate TCX on channel A, which was outside of the laboratory established acceptance limits. Since the recovery for DCB was acceptable, as well as TCX on channel B, the associated samples were not reextracted.

Samples SA6036-11, 12, 13, 14, 16, 17, and 20 were manually integrated for Aroclor 1260 and/ or the surrogate DCB. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

The Form 7 for the calibration verification standard (CV) (files 6AJ3225, 6AJ4225, 6AJ3253, 6AJ4253, 6AK1021, and 6AK2021) are flagged for the surrogates TCX and/or DCB indicating that the %D is greater than the method acceptance limit of 15%. With the exception of DCB on channel A for file 6AJ3225 and 6AK1021, which were high, the %D's are actually within the method acceptance limits and should not be flagged, but due to software limitations the flagging could not be removed.

The CV (file 6AJ3225) had high responses for Aroclor 1260 and the surrogate DCB on channel A, which resulted in %D's that were outside of the method acceptance limits of 15%. Since the response was acceptable on channel B, the associated samples were not reanalyzed.

The CV (file 6AK1021) had high responses for Aroclor 1260 and the surrogate DCB on channel A, which resulted in %D's that were outside of the method acceptance limits of 15%. Since the responses were acceptable on channel B, the associated samples were not reanalyzed.

The closing CV (files 6AK1036 and 6AK2036) had high responses for Aroclor 1016 on both channels, and a high response for Aroclor 1260 on channel A, which resulted in %D's that were outside of the method acceptance limits of 15%.

8081 Analysis

Sample SA6036-10 was diluted due to matrix interference, sample viscosity or other matrix-related problem. Consequently, the sample PQL was elevated by a factor of 10.

Sample SA6036-4 had a high recovery for the surrogate DCB on channel B, which was outside of the laboratory established acceptance limits. Since the recovery for TCX was acceptable, as well as DCB on channel A, the sample was not reextracted.

Sample SA6036-8 had low recoveries for the surrogate TCX on channel A and DCB on channel B, which were outside of the laboratory established acceptance limits. Since the recovery for DCB was acceptable on channel A, and TCX was acceptable on channel B, the sample was not reextracted.

Sample SA6036-9 had a low recovery for the surrogate DCB on channel B, which was outside of the laboratory established acceptance limits. Since the recovery for TCX was acceptable, as well as DCB on channel A, the sample was not reextracted.

Samples SA6036-4, 6, 15, 16, 17, 18, and 19 were manually integrated for various target analytes. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Samples SA6036-4, 15RA, and 18DL had RPD's for 4,4'-DDT or 4,4'-DDE that were outside of the method acceptance limits of 40%. These analytes were flagged with a "J" qualifier on the report of analysis (ROA).

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

The closing CV (files 8AJ5032 and 8AJ6032) had low responses for most of the target analytes on both channels, and the surrogate DCB on channel B, which resulted in %D's that were outside of the method acceptance limits of 15%. Since these low responses could be attributable to sample(s) that were analyzed prior to the CV, the associated samples were not reanalyzed.

The CV (files 8AK1003 and 8AK2003) had high responses for endrin ketone on both channels and endosulfan sulfate on channel A, which resulted in %D's that were outside of the method acceptance limits of 15%. Since a high response would indicate a high bias, and the associated samples did not have these target analytes detected above the MDL, the samples were not reanalyzed.

The CV (files 8AK1008 and 8AK2008) had high responses for endosulfan sulfate and endrin ketone on both channels, which resulted in %D's that were outside of the method acceptance

limits of 15%. Since a high response would indicate a high bias, and the associated samples did not have these target analytes detected above the MDL, the samples were not reanalyzed.

The closing CV (files 8AK1020 and 8AK2020) had low and high responses for several target analytes on both channels, which resulted in %D's that were outside of the method acceptance limits of 15%. Since these low responses could be attributable to sample(s) that were analyzed prior to the CV, the associated samples were not reanalyzed.

The CV (files 8AK1035 and 8AK2035) had a high response for endrin ketone on both channels, which resulted in %D's that were outside of the method acceptance limits of 15%. Since a high response would indicate a high bias, and the associated samples did not have these target analytes detected above the MDL, the samples were not reanalyzed.

The closing CV (files 8AK1045 and 8AK2045) had low and high responses for several target analytes on both channels, which resulted in %D's that were outside of the method acceptance limits of 15%. Since these low responses could be attributable to sample(s) that were analyzed prior to the CV, the associated samples were not reanalyzed.

8270C SIM Analysis

All samples were manually integrated for one or more target analytes. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

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

The calibration verification standard (CV) (file R5876) had a low response for the calibration check compound (CCC) fluoranthene, which resulted in a %D that was outside the method acceptance limit of 20%.

Samples SA6036-2, 4 and 10 had high responses for one ore more internal standards that resulted in %D's which were outside the laboratory acceptance limit of -50% to +100% of the response of the internal standard of the daily calibration verification standard. Since these samples were analyzed at a dilution and had acceptable internal standard responses, they were not reanalyzed undiluted.

Sample SA6036-9 had a high response for one internal standard that resulted in a %D which was outside the laboratory acceptance limit of -50% to +100% of the response of the internal standard of the daily calibration verification standard. Since this is the sample used for the matrix spike/matrix spike duplicate, WG45069-3 and 4, which also had high responses for the same internal standard, the sample was not reanalyzed.

Sample SA6036-14 had a high response for one internal standard that resulted in a %D which was outside the laboratory acceptance limit of -50% to +100% of the response of the internal standard of the daily calibration verification standard. The sample was reanalyzed and had similar issues confirming a matrix effect. The results for both analyses are reported.

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

Metals Analysis

The samples of Work Order SA6036 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Soil-matrix Katahdin Sample Nos. SA6036-(1, 2, 4, 6, and 8-20) were digested for ICP analysis on 10/31/07 (QC Batch XJ31ICS0) in accordance with USEPA Method 3050B. Katahdin Sample No. SA6036-9 was prepared with duplicate matrix-spiked aliquots. The measured calcium concentration of the preparation blank that was digested in this batch is greater than the laboratory's reporting limit for that analyte. However, because the measured calcium concentrations of all associated samples are more than ten times that of the preparation blank, no corrective action was required.

ICP analyses of Work Order SA6036 sample digestates were performed using a Thermo iCAP 6500 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.

Analysis of Mercury by Cold Vapor Atomic Absorption (CVAA)

Soil-matrix Katahdin Sample Nos. SA6036-(2, 4, 6, and 8-12) were digested for mercury analysis on 10/29/07 (QC Batch XJ29HGS0) in accordance with USEPA Method 7471A. Katahdin Sample No. SA6036-9 was prepared with duplicate matrix-spiked aliquots.

Soil-matrix Katahdin Sample Nos. SA6036-(13-20) were digested for mercury analysis on 10/30/07 (QC Batch XJ30HGS0) in accordance with USEPA Method 7471A. Katahdin Sample No. SA6036-13 was prepared with duplicate matrix-spiked aliquots.

Mercury analyses of Work Order SA6036 sample digestates were performed using a Cetac M6100 automated mercury analyzer. All samples were analyzed within holding times and all analytical run QC criteria were met.

Matrix QC Summary

The recoveries of antimony, magnesium, and silver are outside the laboratory's acceptance limits (75% - 125% recovery of the added element, if the native concentration is less than four times the amount added) in one or both of the matrix-spiked aliquots of Katahdin Sample No. SA6036-9. The recoveries of all of these elements are within the laboratory's acceptance limits in a post-digestion matrix spike of this sample. The matrix-spike duplicate analysis of this sample is outside the laboratory's acceptance limit (<20% relative difference between duplicate matrix-spiked aliquots) for magnesium.

The recovery of mercury is within the laboratory's acceptance limits (75% - 125% recovery of the added element, if the native concentration is less than four times the amount added) in both of the matrix-spiked aliquots of Katahdin Sample No. SA6036-13. The matrix-spike duplicate analysis of this sample is within the laboratory's acceptance limit (<20% relative difference between duplicate matrix-spiked aliquots) for mercury.

The serial dilution analyses of Katahdin Sample Nos. SA6036-(9 and 13) are within the laboratory's acceptance limit (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the IDL) for all elements.

Wet Chemistry Analysis

The samples of Work Order SA6036 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for TOC in soil were performed according to "Determination of Total Organic Carbon in Sediment", Lloyd Kahn, USEPA Region II, 7/88.

Analyses for total solids were performed according to "U.S. EPA Contract Laboratory Program Statement of Work for Inorganic Analysis", SOW 7/88.

Analyses for pH (soil) were performed according to "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

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 holding times. All quality control criteria were met, with the following exception:

The matrix spike recovery for TOC in the matrix spike aliquot of Katahdin Sample No. SA6036-9 is outside the laboratory's acceptance limits of 75% - 125%.

Katahdin
ANALYTICAL SERVICES

Cert. No. E87604

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

Leslie Dimond 11.14.07

Leslie Dimond
Quality Assurance Officer

TETRA TECH NUS, INC. SA6036 SA6037 CHAIN OF CUSTODY | NUMBER 4596 | PAGE 1 OF 3

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
G00873	NSB NLON AREA A	A. BERNHARDT	412 921 7090	KATAHDIN / COLBY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
SJ Conti		S CONTI	412 921 7090	
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX #		

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 G G

PRESERVATIVE USED: 4°C 4°C 4°C 4°C 4°C 4°C

TYPE OF ANALYSIS

DATE YEAR 2007	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	PAH/PEST/PCB (8oz)	METALS/PH/TOC 4oz	PAHS (ONLY) 4oz	METALS (ONLY) 4oz TOC	CADMIUM (ONLY) 4oz	TOC (ONLY) 4oz			COMMENTS
10/18	0830	2W-SD-SD58-0001	SD58	0	4"	SO	G	1					1				
"	0855	2W-SD-SD57-0001	SD57	0	4"	SO	G	2			1	1					
"	0855	2W-SD-SD57-0002	SD57	15"	20"	SO	G	1						1			
"	1010	2W-SD-SD56-0001	SD56	0	4"	SO	G	2	1	1							
"	1010	2W-SD-SD56-0002	SD56	24"	27"	SO	G	1						1			
"	1040	2W-SD-SD55-0001	SD55	0	6"	SO	G	2	1	1							
"	1040	2W-SD-SD55-0002	SD55	27"	30"	SO	G	1						1			
"	1320	2W-SD-SD54-0001	SD54	0	6"	SO	G	2	1	1							
"	1355	2W-SD-SD53-0001	SD53	0	6"	SO	G	4	2	2							DO MS/MSD (QC)
"	1345	2W-SD-SD53-0204	SD53	24"	48"	SO	G	2	1	1							
"	0000	2W-FD-101807-01	FD	—	—	SO	G	2	1	1							(QC)
"	1440	2W-SD-SD51-0001	SD51	0	6"	SO	G	2	1	1							
"	1530	2W-SD-SD52-0001	SD52	0	6"	SO	G	2	1	1							

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY SJ Conti	10/20/07	1000	1. RECEIVED BY FED EX		
2. RELINQUISHED BY			2. RECEIVED BY	102207	1000
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS

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FORM NO. TtNUS-001

100013

TETRA TECH NUS, INC. SA60036 SA60037

CHAIN OF CUSTODY

NUMBER 4597

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
G00873	NSB-NLON AREA A	A. BERNHARTD	412 921 7090	KATAHDIN / COLBY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
S Conti		S CONTI	412 921 7090	
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX #		

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

DATE YEAR 2007	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	PAH/PEST/PCB (8 OZ)	METALS/pH/TOC (4 OZ)	PAH (ONLY) (4 OZ)	TOC (ONLY) (4 OZ)						COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)									G	G	G	G	G	G				
PRESERVATIVE USED									4°C	4°C	4°C	4°C	4°C	4°C				
TYPE OF ANALYSIS																		
10/18	1600	2W-SD-SD50-0204	SD50	24"	48"	SO	G	2	1	1								
10/18	1605	2W-SD-SD50-0001	SD50	0	4"	SO	G	2	1	1								
10/18	1630	2W-SD-SD49-0001	SD49	0	4"	SO	G	2	1	1								
10/18	1725	2W-SD-SD45-0001	SD45	0	4"	SO	G	2	1	1								
10/18	1730	2W-SD-SD45-0002	SD45	30"	40"	SO	G	2	1	1								
10/19	1020	2W-SD-SD46-0001	SD46	0	4"	SO	G	2	1	1								
10/19	1040	2W-SD-SD46-0204	SD46	24"	36"	SO	G	2	1	1								
10/19	1245	2W-SD-SD47-0001	SD47	0	6"	SO	G	2	1	1								
10/19	0000	2W-FD-101907-01	FD	—	—	SO	G	2	1	1								
10/19	1345	2W-SD-SD44-0001	SD44	0	4"	SO	G	2	1	1								
10/19	1400	2W-SD-SD44-0002	SD44	12"	24"	SO	G	1				1						
10/19	1430	2W-SD-SD43-0001	SD43	0	4"	SO	G	2	1	1								
10/19	1520	2W-SD-SD48-0001	SD48	0	4"	SO	G	2	1	1								
	1530	2W-SD-SD48-0204	SD48	24"	36"	SO	G	2	1	1								

1. RELINQUISHED BY: S Conti	DATE 10/20/07	TIME 1000	1. RECEIVED BY FED EX	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 102007	TIME 1000
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

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TETRA TECH NUS, INC.

SA6036 SA6037

CHAIN OF CUSTODY | NUMBER 4595 | PAGE 3 OF 3

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
G00873	NSB-NLON AREA A	A BERNHARDT	412 921 7090	KATAHDIN / COLBY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
SJ Conti		S CONTI	412 921 7090	
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX #		

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2007	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	PAHS	PEST/PCBS	METALS						COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)									G	G	P						
PRESERVATIVE USED									4°C	4°C	4°C HNO3						
10/19	0730	2W-RB-101907-01	RB	—	—	AQ QC	G	5	2	2	1						OVER Auger SPOONS, BOWLS
10/19	0750	2W-FB-101907-01	FB	—	—	AQ QC	G	5	2	2	1						DI WATER

1. RELINQUISHED BY SJ Conti	DATE 10/20/07	TIME 1000	1. RECEIVED BY FED EX	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 10 22 07	TIME 1000
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

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4/02R
FORM NO. TtNUS-001

G00000

HOLDTIME

SDG SA6036

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	2W-SD-SD53-0204	SA6036-010	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
HG	MG/KG	2W-SD-SD57-0001	SA6036-002	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
HG	MG/KG	2W-SD-SD56-0001	SA6036-004	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
HG	MG/KG	2W-SD-SD45-0001	SA6036-017	NM	10/18/2007	10/30/2007	10/31/2007	12	1	13
HG	MG/KG	2W-SD-SD54-0001	SA6036-008	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
HG	MG/KG	2W-SD-SD53-0001	SA6036-009	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
HG	MG/KG	2W-SD-SD52-0001	SA6036-013	NM	10/18/2007	10/30/2007	10/31/2007	12	1	13
HG	MG/KG	2W-SD-SD51-0001	SA6036-012	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
HG	MG/KG	2W-FD-101807-01	SA6036-011	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
HG	MG/KG	2W-SD-SD50-0001	SA6036-015	NM	10/18/2007	10/30/2007	10/31/2007	12	1	13
HG	MG/KG	2W-SD-SD49-0001	SA6036-016	NM	10/18/2007	10/30/2007	10/31/2007	12	1	13
HG	MG/KG	2W-SD-SD46-0204	SA6036-020	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	MG/KG	2W-SD-SD46-0001	SA6036-019	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	MG/KG	2W-SD-SD45-0002	SA6036-018	NM	10/18/2007	10/30/2007	10/31/2007	12	1	13
HG	MG/KG	2W-SD-SD50-0204	SA6036-014	NM	10/18/2007	10/30/2007	10/31/2007	12	1	13

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	2W-SD-SD55-0001	SA6036-006	NM	10/18/2007	10/29/2007	10/30/2007	11	1	12
M	MG/KG	2W-SD-SD46-0204	SA6036-020	NM	10/19/2007	10/31/2007	11/3/2007	12	3	15
M	MG/KG	2W-SD-SD46-0001	SA6036-019	NM	10/19/2007	10/31/2007	11/4/2007	12	4	16
M	MG/KG	2W-SD-SD45-0002	SA6036-018	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD45-0001	SA6036-017	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD45-0001	SA6036-017	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-FD-101807-01	SA6036-011	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD49-0001	SA6036-016	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-FD-101807-01	SA6036-011	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD53-0001	SA6036-009	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD58-0001	SA6036-001	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD57-0001	SA6036-002	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD57-0001	SA6036-002	NM	10/18/2007	10/31/2007	11/2/2007	13	2	15
M	MG/KG	2W-SD-SD56-0001	SA6036-004	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD56-0001	SA6036-004	NM	10/18/2007	10/31/2007	11/2/2007	13	2	15
M	MG/KG	2W-SD-SD55-0001	SA6036-006	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD55-0001	SA6036-006	NM	10/18/2007	10/31/2007	11/2/2007	13	2	15
M	MG/KG	2W-SD-SD54-0001	SA6036-008	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	MG/KG	2W-SD-SD54-0001	SA6036-008	NM	10/18/2007	10/31/2007	11/2/2007	13	2	15
M	MG/KG	2W-SD-SD46-0204	SA6036-020	NM	10/19/2007	10/31/2007	11/4/2007	12	4	16
M	MG/KG	2W-SD-SD53-0204	SA6036-010	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD49-0001	SA6036-016	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD53-0001	SA6036-009	NM	10/18/2007	10/31/2007	11/2/2007	13	2	15
M	MG/KG	2W-SD-SD52-0001	SA6036-013	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD52-0001	SA6036-013	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD51-0001	SA6036-012	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD51-0001	SA6036-012	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD50-0204	SA6036-014	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD50-0204	SA6036-014	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD50-0001	SA6036-015	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD50-0001	SA6036-015	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD45-0002	SA6036-018	NM	10/18/2007	10/31/2007	11/3/2007	13	3	16
M	MG/KG	2W-SD-SD53-0204	SA6036-010	NM	10/18/2007	10/31/2007	11/4/2007	13	4	17
M	MG/KG	2W-SD-SD46-0001	SA6036-019	NM	10/19/2007	10/31/2007	11/3/2007	12	3	15
PH	PH	2W-SD-SD54-0001	SA6036-8	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD49-0001	SA6036-16	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PH	PH	2W-SD-SD55-0001	SA6036-6	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD53-0204	SA6036-10	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD53-0001	SA6036-9	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD52-0001	SA6036-13	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD51-0001	SA6036-12	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD46-0204	SA6036-20	NM	10/19/2007	10/23/2007	10/23/2007	4	0	4
PH	PH	2W-SD-SD50-0001	SA6036-15	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-FD-101807-01	SA6036-11	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD45-0001	SA6036-17	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD45-0002	SA6036-18	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD46-0001	SA6036-19	NM	10/19/2007	10/23/2007	10/23/2007	4	0	4
PH	PH	2W-SD-SD50-0204	SA6036-14	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
PH	PH	2W-SD-SD56-0001	SA6036-4	NM	10/18/2007	10/23/2007	10/23/2007	5	0	5
TOC	UG/GD	2W-SD-SD53-0204	SA6036-10	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD54-0001	SA6036-8	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD55-0001	SA6036-6	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD55-0002	SA6036-7	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD56-0001	SA6036-4	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TOC	UG/GD	2W-SD-SD56-0002	SA6036-5	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD57-0002	SA6036-3	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD53-0001	SA6036-9	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD50-0001	SA6036-15	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD57-0001	SA6036-2	NM	10/18/2007	11/6/2007	11/6/2007	19	0	19
TOC	UG/GD	2W-SD-SD46-0001	SA6036-19	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-FD-101807-01	SA6036-11	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD45-0001	SA6036-17	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD51-0001	SA6036-12	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD45-0002	SA6036-18	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD46-0204	SA6036-20	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-SD-SD49-0001	SA6036-16	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD50-0204	SA6036-14	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TOC	UG/GD	2W-SD-SD52-0001	SA6036-13	NM	10/18/2007	10/30/2007	10/30/2007	12	0	12
TS	%	2W-SD-SD55-0001	SA6036-6	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD57-0002	SA6036-3	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD52-0001	SA6036-13	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD56-0002	SA6036-5	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TS	%	2W-SD-SD55-0002	SA6036-7	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD58-0001	SA6036-1	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD54-0001	SA6036-8	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD53-0204	SA6036-10	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD53-0001	SA6036-9	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD57-0001	SA6036-2	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD50-0204	SA6036-14	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD50-0001	SA6036-15	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD49-0001	SA6036-16	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD46-0204	SA6036-20	NM	10/19/2007	10/23/2007	10/24/2007	4	1	5
TS	%	2W-SD-SD46-0001	SA6036-19	NM	10/19/2007	10/23/2007	10/24/2007	4	1	5
TS	%	2W-SD-SD45-0002	SA6036-18	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD45-0001	SA6036-17	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-FD-101807-01	SA6036-11	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD56-0001	SA6036-4	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
TS	%	2W-SD-SD51-0001	SA6036-12	NM	10/18/2007	10/23/2007	10/24/2007	5	1	6
PAH	%	2W-SD-SD57-0001DL	SA6036-2DL	NM	10/18/2007	10/30/2007	11/6/2007	12	7	19
PAH	%	2W-SD-SD53-0001	SA6036-9	NM	10/18/2007	10/30/2007	11/2/2007	12	3	15

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: ICV

File: HXJ30A Oct 30, 2007 10:31

Analyte	True	Found	%R (1)
MERCURY	6.0	5.97	99.5

SAMPLE: CCV

File: HXJ30A Oct 30, 2007 10:56

Analyte	True	Found	%R (1)
MERCURY	5.0	5.14	102.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCV

File: HXJ30A Oct 30, 2007 11:23

Analyte	True	Found	%R (1)
MERCURY	5.0	5.23	104.6

SAMPLE: CCV

File: HXJ30A Oct 30, 2007 11:40

Analyte	True	Found	%R (1)
MERCURY	5.0	5.06	101.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: ICV

File: Hxj31a Oct 31, 2007 12:20

Analyte	True	Found	%R (1)
MERCURY	6.0	5.52	92.0

SAMPLE: CCV

File: Hxj31a Oct 31, 2007 12:45

Analyte	True	Found	%R (1)
MERCURY	5.0	5.38	107.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCV

File: Hxj31a Oct 31, 2007 13:11

Analyte	True	Found	%R (1)
MERCURY	5.0	5.47	109.4

SAMPLE: CCV

File: Hxj31a Oct 31, 2007 13:31

Analyte	True	Found	%R (1)
MERCURY	5.0	4.85	97.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: ICV

File: IXK02A Nov 02, 2007 17:57

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10050.00	100.5
ANTIMONY	400.0	393.20	98.3
ARSENIC	400.0	385.20	96.3
BARIUM	400.0	397.30	99.3
BERYLLIUM	400.0	390.70	97.7
CADMIUM	400.0	389.70	97.4
CALCIUM	10000.0	9942.00	99.4
CHROMIUM	400.0	393.70	98.4
COBALT	400.0	396.20	99.0
COPPER	400.0	388.80	97.2
IRON	10000.0	10030.00	100.3
LEAD	400.0	393.60	98.4
MAGNESIUM	10000.0	10000.00	100.0
NICKEL	400.0	395.20	98.8
POTASSIUM	13600.0	13300.00	97.8
SELENIUM	400.0	385.00	96.3
SILVER	400.0	386.90	96.7
SODIUM	10000.0	10060.00	100.6
THALLIUM	400.0	391.80	98.0
VANADIUM	400.0	388.60	97.2
ZINC	400.0	387.70	96.9

SAMPLE: CCV

File: IXK02A Nov 02, 2007 18:20

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12400.00	99.2
ANTIMONY	500.0	497.40	99.5
ARSENIC	500.0	494.80	99.0
BARIUM	500.0	494.80	99.0
BERYLLIUM	500.0	496.70	99.3
CADMIUM	500.0	502.40	100.5
CALCIUM	12500.0	12310.00	98.5
CHROMIUM	500.0	492.10	98.4
COBALT	500.0	497.20	99.4
COPPER	500.0	488.40	97.7
IRON	12500.0	12420.00	99.4
LEAD	500.0	507.00	101.4
MAGNESIUM	12500.0	13040.00	104.3
NICKEL	500.0	503.80	100.8
POTASSIUM	12500.0	12210.00	97.7
SELENIUM	500.0	493.80	98.8
SILVER	500.0	505.10	101.0
SODIUM	12500.0	12660.00	101.3
THALLIUM	500.0	499.90	100.0
VANADIUM	500.0	502.40	100.5
ZINC	500.0	496.30	99.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCV

File: IXK02A Nov 02, 2007 19:15

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12410.00	99.3
ANTIMONY	500.0	491.20	98.2
ARSENIC	500.0	502.20	100.4
BARIUM	500.0	488.40	97.7
BERYLLIUM	500.0	496.00	99.2
CADMIUM	500.0	514.20	102.8
CALCIUM	12500.0	12800.00	102.4
CHROMIUM	500.0	504.00	100.8
COBALT	500.0	498.20	99.6
COPPER	500.0	481.50	96.3
IRON	12500.0	12530.00	100.2
LEAD	500.0	516.70	103.3
MAGNESIUM	12500.0	13230.00	105.8
NICKEL	500.0	508.90	101.8
POTASSIUM	12500.0	12310.00	98.5
SELENIUM	500.0	496.50	99.3
SILVER	500.0	502.00	100.4
SODIUM	12500.0	12730.00	101.8
THALLIUM	500.0	501.80	100.4
VANADIUM	500.0	512.80	102.6
ZINC	500.0	519.10	103.8

SAMPLE: CCV

File: IXK02A Nov 02, 2007 20:11

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12350.00	98.8
ANTIMONY	500.0	498.20	99.6
ARSENIC	500.0	497.10	99.4
BARIUM	500.0	494.70	98.9
BERYLLIUM	500.0	498.80	99.8
CADMIUM	500.0	504.90	101.0
CALCIUM	12500.0	12580.00	100.6
CHROMIUM	500.0	496.30	99.3
COBALT	500.0	500.70	100.1
COPPER	500.0	494.30	98.9
IRON	12500.0	12430.00	99.4
LEAD	500.0	507.00	101.4
MAGNESIUM	12500.0	13010.00	104.1
NICKEL	500.0	507.30	101.5
POTASSIUM	12500.0	12380.00	99.0
SELENIUM	500.0	499.00	99.8
SILVER	500.0	499.50	99.9
SODIUM	12500.0	12840.00	102.7
THALLIUM	500.0	502.20	100.4
VANADIUM	500.0	505.40	101.1
ZINC	500.0	502.40	100.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCV

File: IXK02A Nov 02, 2007 21:06

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12280.00	98.2
ANTIMONY	500.0	483.90	96.8
ARSENIC	500.0	486.30	97.3
BARIUM	500.0	488.10	97.6
BERYLLIUM	500.0	494.20	98.8
CADMIUM	500.0	496.90	99.4
CALCIUM	12500.0	12490.00	99.9
CHROMIUM	500.0	498.00	99.6
COBALT	500.0	491.30	98.3
COPPER	500.0	486.70	97.3
IRON	12500.0	12340.00	98.7
LEAD	500.0	499.40	99.9
MAGNESIUM	12500.0	12920.00	103.4
NICKEL	500.0	498.30	99.7
POTASSIUM	12500.0	12270.00	98.2
SELENIUM	500.0	483.20	96.6
SILVER	500.0	498.60	99.7
SODIUM	12500.0	12640.00	101.1
THALLIUM	500.0	495.10	99.0
VANADIUM	500.0	502.80	100.6
ZINC	500.0	498.70	99.7

SAMPLE: CCV

File: IXK02A Nov 02, 2007 22:02

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12380.00	99.0
ANTIMONY	500.0	480.50	96.1
ARSENIC	500.0	496.20	99.2
BARIUM	500.0	483.40	96.7
BERYLLIUM	500.0	495.80	99.2
CADMIUM	500.0	509.70	101.9
CALCIUM	12500.0	13050.00	104.4
CHROMIUM	500.0	515.30	103.1
COBALT	500.0	497.90	99.6
COPPER	500.0	479.80	96.0
IRON	12500.0	12610.00	100.9
LEAD	500.0	510.30	102.1
MAGNESIUM	12500.0	13110.00	104.9
NICKEL	500.0	505.80	101.2
POTASSIUM	12500.0	12370.00	99.0
SELENIUM	500.0	491.10	98.2
SILVER	500.0	499.30	99.9
SODIUM	12500.0	12680.00	101.4
THALLIUM	500.0	500.00	100.0
VANADIUM	500.0	511.60	102.3
ZINC	500.0	529.30	105.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCV

File: IXK02A Nov 02, 2007 22:57

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12310.00	98.5
ANTIMONY	500.0	491.70	98.3
ARSENIC	500.0	493.00	98.6
BARIUM	500.0	488.90	97.8
BERYLLIUM	500.0	495.90	99.2
CADMIUM	500.0	503.00	100.6
CALCIUM	12500.0	12470.00	99.8
CHROMIUM	500.0	498.30	99.7
COBALT	500.0	496.60	99.3
COPPER	500.0	488.40	97.7
IRON	12500.0	12350.00	98.8
LEAD	500.0	506.50	101.3
MAGNESIUM	12500.0	12950.00	103.6
NICKEL	500.0	504.50	100.9
POTASSIUM	12500.0	12230.00	97.8
SELENIUM	500.0	487.20	97.4
SILVER	500.0	501.30	100.3
SODIUM	12500.0	12630.00	101.0
THALLIUM	500.0	500.70	100.1
VANADIUM	500.0	508.00	101.6
ZINC	500.0	503.80	100.8

SAMPLE: CCV

File: IXK02A Nov 02, 2007 23:52

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12240.00	97.9
ANTIMONY	500.0	488.00	97.6
ARSENIC	500.0	489.80	98.0
BARIUM	500.0	486.50	97.3
BERYLLIUM	500.0	492.80	98.6
CADMIUM	500.0	500.80	100.2
CALCIUM	12500.0	12440.00	99.5
CHROMIUM	500.0	495.30	99.1
COBALT	500.0	492.80	98.6
COPPER	500.0	486.30	97.3
IRON	12500.0	12310.00	98.5
LEAD	500.0	505.90	101.2
MAGNESIUM	12500.0	12950.00	103.6
NICKEL	500.0	500.90	100.2
POTASSIUM	12500.0	12180.00	97.4
SELENIUM	500.0	483.30	96.7
SILVER	500.0	499.30	99.9
SODIUM	12500.0	12670.00	101.4
THALLIUM	500.0	497.70	99.5
VANADIUM	500.0	503.80	100.8
ZINC	500.0	499.90	100.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCV

File: IXK02A Nov 03, 2007 0:47

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12310.00	98.5
ANTIMONY	500.0	481.50	96.3
ARSENIC	500.0	496.50	99.3
BARIUM	500.0	486.30	97.3
BERYLLIUM	500.0	495.40	99.1
CADMIUM	500.0	513.30	102.7
CALCIUM	12500.0	12480.00	99.8
CHROMIUM	500.0	511.80	102.4
COBALT	500.0	493.30	98.7
COPPER	500.0	479.30	95.9
IRON	12500.0	12470.00	99.8
LEAD	500.0	516.30	103.3
MAGNESIUM	12500.0	13060.00	104.5
NICKEL	500.0	505.80	101.2
POTASSIUM	12500.0	12200.00	97.6
SELENIUM	500.0	489.40	97.9
SILVER	500.0	504.40	100.9
SODIUM	12500.0	12630.00	101.0
THALLIUM	500.0	495.40	99.1
VANADIUM	500.0	513.00	102.6
ZINC	500.0	524.40	104.9

SAMPLE: CCV

File: IXK02A Nov 03, 2007 1:42

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12360.00	98.9
ANTIMONY	500.0	490.50	98.1
ARSENIC	500.0	491.30	98.3
BARIUM	500.0	490.70	98.1
BERYLLIUM	500.0	495.90	99.2
CADMIUM	500.0	502.00	100.4
CALCIUM	12500.0	12510.00	100.1
CHROMIUM	500.0	496.70	99.3
COBALT	500.0	494.00	98.8
COPPER	500.0	488.00	97.6
IRON	12500.0	12370.00	99.0
LEAD	500.0	505.30	101.1
MAGNESIUM	12500.0	12920.00	103.4
NICKEL	500.0	502.10	100.4
POTASSIUM	12500.0	12290.00	98.3
SELENIUM	500.0	483.80	96.8
SILVER	500.0	499.00	99.8
SODIUM	12500.0	12650.00	101.2
THALLIUM	500.0	498.70	99.7
VANADIUM	500.0	501.00	100.2
ZINC	500.0	500.30	100.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: ICV

File: IXK04A Nov 04, 2007 16:27

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10100.00	101.0
ANTIMONY	400.0	392.60	98.2
ARSENIC	400.0	385.60	96.4
BARIUM	400.0	401.80	100.4
BERYLLIUM	400.0	394.00	98.5
CADMIUM	400.0	392.40	98.1
CALCIUM	10000.0	10010.00	100.1
CHROMIUM	400.0	394.30	98.6
COBALT	400.0	400.20	100.1
COPPER	400.0	392.20	98.0
IRON	10000.0	10190.00	101.9
LEAD	400.0	394.50	98.6
MAGNESIUM	10000.0	9991.00	99.9
MANGANESE	400.0	395.20	98.8
NICKEL	400.0	399.10	99.8
POTASSIUM	13600.0	13510.00	99.3
SELENIUM	400.0	383.50	95.9
SILVER	400.0	389.90	97.5
SODIUM	10000.0	10060.00	100.6
THALLIUM	400.0	396.00	99.0
VANADIUM	400.0	392.00	98.0
ZINC	400.0	392.90	98.2

SAMPLE: CCV

File: IXK04A Nov 04, 2007 16:50

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12390.00	99.1
ANTIMONY	500.0	480.50	96.1
ARSENIC	500.0	493.50	98.7
BARIUM	500.0	487.80	97.6
BERYLLIUM	500.0	495.00	99.0
CADMIUM	500.0	508.90	101.8
CALCIUM	12500.0	13140.00	105.1
CHROMIUM	500.0	513.80	102.8
COBALT	500.0	504.50	100.9
COPPER	500.0	481.40	96.3
IRON	12500.0	12710.00	101.7
LEAD	500.0	509.70	101.9
MAGNESIUM	12500.0	12920.00	103.4
MANGANESE	500.0	500.30	100.1
NICKEL	500.0	502.90	100.6
POTASSIUM	12500.0	12280.00	98.2
SELENIUM	500.0	502.90	100.6
SILVER	500.0	501.80	100.4
SODIUM	12500.0	12330.00	98.6
THALLIUM	500.0	505.40	101.1
VANADIUM	500.0	510.20	102.0
ZINC	500.0	533.70	106.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCV

File: IXK04A Nov 04, 2007 17:45

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12420.00	99.4
ANTIMONY	500.0	486.10	97.2
ARSENIC	500.0	483.50	96.7
BARIUM	500.0	494.00	98.8
BERYLLIUM	500.0	493.70	98.7
CADMIUM	500.0	503.60	100.7
CALCIUM	12500.0	13030.00	104.2
CHROMIUM	500.0	491.90	98.4
COBALT	500.0	517.60	103.5
COPPER	500.0	486.00	97.2
IRON	12500.0	12370.00	99.0
LEAD	500.0	510.00	102.0
MAGNESIUM	12500.0	13010.00	104.1
MANGANESE	500.0	485.90	97.2
NICKEL	500.0	498.70	99.7
POTASSIUM	12500.0	11970.00	95.8
SELENIUM	500.0	510.30	102.1
SILVER	500.0	511.00	102.2
SODIUM	12500.0	12500.00	100.0
THALLIUM	500.0	522.60	104.5
VANADIUM	500.0	509.00	101.8
ZINC	500.0	529.20	105.8

SAMPLE: CCV

File: IXK04A Nov 04, 2007 18:39

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12360.00	98.9
ANTIMONY	500.0	475.20	95.0
ARSENIC	500.0	472.90	94.6
BARIUM	500.0	492.00	98.4
BERYLLIUM	500.0	492.20	98.4
CADMIUM	500.0	497.80	99.6
CALCIUM	12500.0	13290.00	106.3
CHROMIUM	500.0	496.90	99.4
COBALT	500.0	514.10	102.8
COPPER	500.0	485.00	97.0
IRON	12500.0	12340.00	98.7
LEAD	500.0	504.90	101.0
MAGNESIUM	12500.0	13100.00	104.8
MANGANESE	500.0	486.20	97.2
NICKEL	500.0	489.60	97.9
POTASSIUM	12500.0	11940.00	95.5
SELENIUM	500.0	509.90	102.0
SILVER	500.0	518.60	103.7
SODIUM	12500.0	12570.00	100.6
THALLIUM	500.0	519.00	103.8
VANADIUM	500.0	520.20	104.0
ZINC	500.0	532.70	106.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCV

File: IXK04A Nov 04, 2007 19:34

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12320.00	98.6
ANTIMONY	500.0	471.50	94.3
ARSENIC	500.0	484.80	97.0
BARIUM	500.0	483.70	96.7
BERYLLIUM	500.0	491.10	98.2
CADMIUM	500.0	512.40	102.5
CALCIUM	12500.0	13580.00	108.6
CHROMIUM	500.0	509.60	101.9
COBALT	500.0	514.50	102.9
COPPER	500.0	473.20	94.6
IRON	12500.0	12530.00	100.2
LEAD	500.0	515.70	103.1
MAGNESIUM	12500.0	13110.00	104.9
MANGANESE	500.0	495.40	99.1
NICKEL	500.0	498.50	99.7
POTASSIUM	12500.0	11910.00	95.3
SELENIUM	500.0	512.00	102.4
SILVER	500.0	512.30	102.5
SODIUM	12500.0	12410.00	99.3
THALLIUM	500.0	518.00	103.6
VANADIUM	500.0	518.00	103.6
ZINC	500.0	557.00	111.4*

SAMPLE: CCV

File: IXK04A Nov 04, 2007 20:28

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12030.00	96.2
ANTIMONY	500.0	477.80	95.6
ARSENIC	500.0	475.20	95.0
BARIUM	500.0	479.30	95.9
BERYLLIUM	500.0	480.80	96.2
CADMIUM	500.0	495.50	99.1
CALCIUM	12500.0	12690.00	101.5
CHROMIUM	500.0	484.30	96.9
COBALT	500.0	506.90	101.4
COPPER	500.0	474.20	94.8
IRON	12500.0	12130.00	97.0
LEAD	500.0	502.10	100.4
MAGNESIUM	12500.0	12670.00	101.4
MANGANESE	500.0	476.80	95.4
NICKEL	500.0	491.50	98.3
POTASSIUM	12500.0	11760.00	94.1
SELENIUM	500.0	495.30	99.1
SILVER	500.0	500.50	100.1
SODIUM	12500.0	12180.00	97.4
THALLIUM	500.0	509.90	102.0
VANADIUM	500.0	496.40	99.3
ZINC	500.0	520.80	104.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCV

File: IXK04A Nov 04, 2007 21:23

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12190.00	97.5
ANTIMONY	500.0	473.00	94.6
ARSENIC	500.0	469.50	93.9
BARIUM	500.0	480.40	96.1
BERYLLIUM	500.0	477.20	95.4
CADMIUM	500.0	489.00	97.8
CALCIUM	12500.0	12620.00	101.0
CHROMIUM	500.0	480.50	96.1
COBALT	500.0	496.70	99.3
COPPER	500.0	469.50	93.9
IRON	12500.0	12180.00	97.4
LEAD	500.0	494.20	98.8
MAGNESIUM	12500.0	12560.00	100.5
MANGANESE	500.0	478.60	95.7
NICKEL	500.0	483.80	96.8
POTASSIUM	12500.0	11610.00	92.9
SELENIUM	500.0	489.70	97.9
SILVER	500.0	491.80	98.4
SODIUM	12500.0	11980.00	95.8
THALLIUM	500.0	499.40	99.9
VANADIUM	500.0	488.50	97.7
ZINC	500.0	513.40	102.7

SAMPLE: CCV

File: IXK04A Nov 04, 2007 22:18

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12190.00	97.5
ANTIMONY	500.0	471.70	94.3
ARSENIC	500.0	477.10	95.4
BARIUM	500.0	478.10	95.6
BERYLLIUM	500.0	480.80	96.2
CADMIUM	500.0	500.80	100.2
CALCIUM	12500.0	13060.00	104.5
CHROMIUM	500.0	501.90	100.4
COBALT	500.0	502.40	100.5
COPPER	500.0	468.20	93.6
IRON	12500.0	12380.00	99.0
LEAD	500.0	505.80	101.2
MAGNESIUM	12500.0	12730.00	101.8
MANGANESE	500.0	485.80	97.2
NICKEL	500.0	489.20	97.8
POTASSIUM	12500.0	11660.00	93.3
SELENIUM	500.0	497.30	99.5
SILVER	500.0	499.70	99.9
SODIUM	12500.0	12040.00	96.3
THALLIUM	500.0	505.90	101.2
VANADIUM	500.0	499.40	99.9
ZINC	500.0	538.30	107.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCV

File: IXK04A Nov 04, 2007 23:13

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12130.00	97.0
ANTIMONY	500.0	474.00	94.8
ARSENIC	500.0	476.50	95.3
BARIUM	500.0	481.90	96.4
BERYLLIUM	500.0	478.60	95.7
CADMIUM	500.0	498.60	99.7
CALCIUM	12500.0	12550.00	100.4
CHROMIUM	500.0	485.80	97.2
COBALT	500.0	504.70	100.9
COPPER	500.0	475.60	95.1
IRON	12500.0	12250.00	98.0
LEAD	500.0	504.30	100.9
MAGNESIUM	12500.0	12540.00	100.3
MANGANESE	500.0	473.60	94.7
NICKEL	500.0	489.30	97.9
POTASSIUM	12500.0	11640.00	93.1
SELENIUM	500.0	498.30	99.7
SILVER	500.0	497.00	99.4
SODIUM	12500.0	11980.00	95.8
THALLIUM	500.0	509.40	101.9
VANADIUM	500.0	489.40	97.9
ZINC	500.0	533.90	106.8

SAMPLE: CCV

File: IXK04A Nov 05, 2007 0:08

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12160.00	97.3
ANTIMONY	500.0	478.20	95.6
ARSENIC	500.0	471.60	94.3
BARIUM	500.0	483.30	96.7
BERYLLIUM	500.0	479.60	95.9
CADMIUM	500.0	493.30	98.7
CALCIUM	12500.0	12590.00	100.7
CHROMIUM	500.0	488.50	97.7
COBALT	500.0	502.80	100.6
COPPER	500.0	475.20	95.0
IRON	12500.0	12140.00	97.1
LEAD	500.0	499.70	99.9
MAGNESIUM	12500.0	12550.00	100.4
MANGANESE	500.0	474.30	94.9
NICKEL	500.0	488.00	97.6
POTASSIUM	12500.0	11700.00	93.6
SELENIUM	500.0	496.60	99.3
SILVER	500.0	500.90	100.2
SODIUM	12500.0	12050.00	96.4
THALLIUM	500.0	509.40	101.9
VANADIUM	500.0	493.90	98.8
ZINC	500.0	520.50	104.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCV

File: IXK04A Nov 05, 2007 0:41

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12060.00	96.5
ANTIMONY	500.0	468.60	93.7
ARSENIC	500.0	474.70	94.9
BARIUM	500.0	472.20	94.4
BERYLLIUM	500.0	475.00	95.0
CADMIUM	500.0	502.80	100.6
CALCIUM	12500.0	12860.00	102.9
CHROMIUM	500.0	505.20	101.0
COBALT	500.0	503.10	100.6
COPPER	500.0	465.20	93.0
IRON	12500.0	12260.00	98.1
LEAD	500.0	506.20	101.2
MAGNESIUM	12500.0	12500.00	100.0
MANGANESE	500.0	475.20	95.0
NICKEL	500.0	489.40	97.9
POTASSIUM	12500.0	11620.00	93.0
SELENIUM	500.0	501.60	100.3
SILVER	500.0	499.10	99.8
SODIUM	12500.0	12010.00	96.1
THALLIUM	500.0	505.40	101.1
VANADIUM	500.0	496.70	99.3
ZINC	500.0	546.50	109.3

SAMPLE: CCV

File: IXK04A Nov 05, 2007 1:04

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12170.00	97.4
ANTIMONY	500.0	471.40	94.3
ARSENIC	500.0	474.90	95.0
BARIUM	500.0	474.00	94.8
BERYLLIUM	500.0	476.40	95.3
CADMIUM	500.0	500.20	100.0
CALCIUM	12500.0	12930.00	103.4
CHROMIUM	500.0	500.40	100.1
COBALT	500.0	502.30	100.5
COPPER	500.0	468.80	93.8
IRON	12500.0	12270.00	98.2
LEAD	500.0	505.10	101.0
MAGNESIUM	12500.0	12630.00	101.0
MANGANESE	500.0	477.80	95.6
NICKEL	500.0	490.40	98.1
POTASSIUM	12500.0	11570.00	92.6
SELENIUM	500.0	496.80	99.4
SILVER	500.0	498.70	99.7
SODIUM	12500.0	11910.00	95.3
THALLIUM	500.0	505.60	101.1
VANADIUM	500.0	493.90	98.8
ZINC	500.0	537.70	107.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

SAMPLE: PQL

File: HXJ30A Oct 30, 2007 10:35 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
MERCURY	0.2	0.17	85.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

SAMPLE: PQL

File: 'Hxj31a Oct 31, 2007 12:24 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
MERCURY	0.2	0.21	105.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

SAMPLE: PQL

File: IXK02A Nov 02, 2007 18:06 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	288.10	96.0
ANTIMONY	8.0	8.03	100.4
ARSENIC	8.0	6.96	87.0
BARIUM	5.0	4.96	99.2
BERYLLIUM	5.0	5.05	101.0
CADMIUM	10.0	10.40	104.0
CALCIUM	50.0	48.13	96.3
CHROMIUM	15.0	15.00	100.0
COBALT	30.0	31.79	106.0
COPPER	25.0	24.55	98.2
IRON	100.0	97.63	97.6
LEAD	5.0	4.41	88.2
MAGNESIUM	50.0	49.70	99.4
NICKEL	40.0	42.35	105.9
POTASSIUM	1000.0	989.10	98.9
SELENIUM	10.0	11.78	117.8
SILVER	15.0	15.14	100.9
SODIUM	1000.0	1012.00	101.2
THALLIUM	15.0	15.70	104.7
VANADIUM	25.0	24.11	96.4
ZINC	25.0	26.01	104.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

SAMPLE: PQL

File: IXK02A Nov 02, 2007 21:48 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	284.90	95.0
ANTIMONY	8.0	7.70	96.3
ARSENIC	8.0	6.56	82.0
BARIUM	5.0	4.94	98.8
BERYLLIUM	5.0	5.06	101.2
CADMIUM	10.0	10.46	104.6
CALCIUM	50.0	49.84	99.7
CHROMIUM	15.0	15.01	100.1
COBALT	30.0	31.61	105.4
COPPER	25.0	24.31	97.2
IRON	100.0	98.27	98.3
LEAD	5.0	4.47	89.4
MAGNESIUM	50.0	50.07	100.1
NICKEL	40.0	42.45	106.1
POTASSIUM	1000.0	950.10	95.0
SELENIUM	10.0	10.94	109.4
SILVER	15.0	14.39	95.9
SODIUM	1000.0	1078.00	107.8
THALLIUM	15.0	15.68	104.5
VANADIUM	25.0	24.44	97.8
ZINC	25.0	26.29	105.2

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

SAMPLE: PQL

File: IXK02A Nov 03, 2007 01:28 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	305.90	102.0
ANTIMONY	8.0	8.82	110.3
ARSENIC	8.0	6.93	86.6
BARIUM	5.0	5.37	107.4
BERYLLIUM	5.0	5.03	100.6
CADMIUM	10.0	10.44	104.4
CALCIUM	50.0	48.77	97.5
CHROMIUM	15.0	14.88	99.2
COBALT	30.0	31.30	104.3
COPPER	25.0	24.16	96.6
IRON	100.0	98.56	98.6
LEAD	5.0	4.65	93.0
MAGNESIUM	50.0	50.40	100.8
NICKEL	40.0	42.27	105.7
POTASSIUM	1000.0	951.90	95.2
SELENIUM	10.0	11.17	111.7
SILVER	15.0	14.89	99.3
SODIUM	1000.0	1028.00	102.8
THALLIUM	15.0	15.73	104.9
VANADIUM	25.0	24.94	99.8
ZINC	25.0	26.21	104.8

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

SAMPLE: PQL

File: IXK04A Nov 04, 2007 16:36 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	298.60	99.5
ANTIMONY	8.0	6.20	77.5
ARSENIC	8.0	8.65	108.1
BARIUM	5.0	5.30	106.0
BERYLLIUM	5.0	5.13	102.6
CADMIUM	10.0	10.51	105.1
CALCIUM	50.0	48.51	97.0
CHROMIUM	15.0	15.52	103.5
COBALT	30.0	32.08	106.9
COPPER	25.0	24.82	99.3
IRON	100.0	103.90	103.9
LEAD	5.0	5.07	101.4
MAGNESIUM	50.0	45.84	91.7
MANGANESE	5.0	4.75	95.0
NICKEL	40.0	42.46	106.2
POTASSIUM	1000.0	1013.00	101.3
SELENIUM	10.0	8.42	84.2
SILVER	15.0	15.27	101.8
SODIUM	1000.0	997.60	99.8
THALLIUM	15.0	15.26	101.7
VANADIUM	25.0	24.61	98.4
ZINC	25.0	26.55	106.2

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

SAMPLE: PQL

File: IXK04A Nov 04, 2007 21:09 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	303.80	101.3
ANTIMONY	8.0	7.31	91.4
ARSENIC	8.0	8.19	102.4
BARIUM	5.0	5.79	115.8
BERYLLIUM	5.0	4.85	97.0
CADMIUM	10.0	10.50	105.0
CALCIUM	50.0	49.45	98.9
CHROMIUM	15.0	15.59	103.9
COBALT	30.0	32.07	106.9
COPPER	25.0	24.25	97.0
IRON	100.0	104.50	104.5
LEAD	5.0	5.21	104.2
MAGNESIUM	50.0	48.09	96.2
MANGANESE	5.0	4.82	96.4
NICKEL	40.0	41.83	104.6
POTASSIUM	1000.0	952.10	95.2
SELENIUM	10.0	11.51	115.1
SILVER	15.0	15.32	102.1
SODIUM	1000.0	945.10	94.5
THALLIUM	15.0	15.04	100.3
VANADIUM	25.0	24.85	99.4
ZINC	25.0	33.19	132.8

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

SAMPLE: PQL

File: IXK04A Nov 05, 2007 00:50 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	285.10	95.0
ANTIMONY	8.0	7.54	94.3
ARSENIC	8.0	8.71	108.9
BARIUM	5.0	5.54	110.8
BERYLLIUM	5.0	4.85	97.0
CADMIUM	10.0	10.56	105.6
CALCIUM	50.0	50.14	100.3
CHROMIUM	15.0	15.64	104.3
COBALT	30.0	31.83	106.1
COPPER	25.0	23.07	92.3
IRON	100.0	102.10	102.1
LEAD	5.0	4.82	96.4
MAGNESIUM	50.0	45.31	90.6
MANGANESE	5.0	5.28	105.6
NICKEL	40.0	41.17	102.9
POTASSIUM	1000.0	929.00	92.9
SELENIUM	10.0	10.16	101.6
SILVER	15.0	14.80	98.7
SODIUM	1000.0	968.50	96.9
THALLIUM	15.0	14.96	99.7
VANADIUM	25.0	24.31	97.2
ZINC	25.0	28.56	114.2

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: ICB

File: HXJ30A Oct 30, 2007 10:33

Analyte	Result	C
MERCURY	-0.03	B

SAMPLE: CCB

File: HXJ30A Oct 30, 2007 10:58

Analyte	Result	C
MERCURY	-0.02	B

SAMPLE: CCB

File: HXJ30A Oct 30, 2007 11:25

Analyte	Result	C
MERCURY	-0.02	B

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCB

File: HXJ30A Oct 30, 2007 11:42

Analyte	Result	C
MERCURY	-0.03	B

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: ICB

File: Hxj31a Oct 31, 2007 12:22

Analyte	Result	C
MERCURY	0.02	U

SAMPLE: CCB

File: Hxj31a Oct 31, 2007 12:47

Analyte	Result	C
MERCURY	-0.02	B

SAMPLE: CCB

File: Hxj31a Oct 31, 2007 13:13

Analyte	Result	C
MERCURY	-0.02	B

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCB

File: Hxj31a Oct 31, 2007 13:33

Analyte	Result	C
MERCURY	-0.02	B

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: ICB

File: IXK02A Nov 02, 2007 18:02

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.37	B
IRON	5.20	U
LEAD	0.91	U
MAGNESIUM	4.90	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: CCB

File: IXK02A Nov 02, 2007 18:25

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.22	U
IRON	9.05	B
LEAD	0.91	U
MAGNESIUM	4.90	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	3.12	B
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: CCB

File: IXK02A Nov 02, 2007 19:19

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.12	B
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.22	U
IRON	6.96	B
LEAD	0.91	U
MAGNESIUM	4.90	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	2.71	B
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCB
File: IXK02A Nov 02, 2007 20:15

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	1.04	B
ARSENIC	-1.72	B
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.34	B
IRON	5.20	U
LEAD	0.91	U
MAGNESIUM	4.91	B
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.60	B
SODIUM	117.60	B
THALLIUM	0.71	U
VANADIUM	0.32	B
ZINC	0.23	U

SAMPLE: CCB
File: IXK02A Nov 02, 2007 21:11

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.41	B
IRON	6.15	B
LEAD	0.91	U
MAGNESIUM	4.90	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.57	B
SODIUM	112.50	B
THALLIUM	0.80	B
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: CCB
File: IXK02A Nov 02, 2007 22:06

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	1.60	B
ARSENIC	-0.96	B
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.58	B
IRON	8.26	B
LEAD	0.91	U
MAGNESIUM	6.04	B
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	61.86	B
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCB

File: IXK02A Nov 02, 2007 23:02

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	-0.88	B
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.50	B
IRON	5.42	B
LEAD	0.91	U
MAGNESIUM	5.96	B
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	2.05	B
SILVER	0.46	U
SODIUM	47.03	B
THALLIUM	0.71	U
VANADIUM	0.37	B
ZINC	0.23	U

SAMPLE: CCB

File: IXK02A Nov 02, 2007 23:57

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	B
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.22	U
IRON	17.41	B
LEAD	0.91	U
MAGNESIUM	5.10	B
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.86	B
SILVER	0.68	B
SODIUM	19.47	B
THALLIUM	0.71	U
VANADIUM	0.42	B
ZINC	0.23	U

SAMPLE: CCB

File: IXK02A Nov 03, 2007 0:51

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.45	B
IRON	20.63	B
LEAD	0.91	U
MAGNESIUM	4.90	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	2.13	B
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCB

File: IXK02A Nov 03, 2007 1:47

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	1.56	B
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.22	U
IRON	10.09	B
LEAD	0.91	U
MAGNESIUM	4.90	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.51	B
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: ~~ICB~~ CCB
File: IXK04A Nov 04, 2007 16:32

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	-10.09	B
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.40	B
IRON	6.62	B
LEAD	0.91	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	2.06	B
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	-0.73	B
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: ~~CCB~~ CCB
File: IXK04A Nov 04, 2007 16:55

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.33	B
COBALT	0.26	U
COPPER	0.53	B
IRON	11.38	B
LEAD	0.91	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	-17.08	B
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: ~~CCB~~ CCB
File: IXK04A Nov 04, 2007 17:49

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.82	B
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.45	B
COBALT	0.26	U
COPPER	0.45	B
IRON	13.50	B
LEAD	0.91	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.72	B
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.36	B
ZINC	0.23	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCB
File: IXK04A Nov 04, 2007 18:43

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	1.14	B
BARIUM	0.90	B
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.46	B
COBALT	0.26	U
COPPER	0.71	B
IRON	13.72	B
LEAD	0.91	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.77	B
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.51	B
ZINC	0.23	U

SAMPLE: CCB
File: IXK04A Nov 04, 2007 19:38

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.98	B
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	-7.72	B
CHROMIUM	0.28	B
COBALT	0.28	B
COPPER	0.81	B
IRON	17.27	B
LEAD	0.91	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	-17.84	B
THALLIUM	0.85	B
VANADIUM	0.41	B
ZINC	0.31	B

SAMPLE: CCB
File: IXK04A Nov 04, 2007 20:33

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	1.24	B
IRON	20.04	B
LEAD	0.91	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.27	B

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCB
File: IXK04A Nov 04, 2007 21:28

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.89	B
BARIUM	0.56	B
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.29	B
COBALT	0.26	U
COPPER	0.22	U
IRON	18.40	B
LEAD	0.91	U
MAGNESIUM	9.04	B
MANGANESE	0.90	B
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.49	B
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	B
ZINC	0.78	B

SAMPLE: CCB
File: IXK04A Nov 04, 2007 22:22

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.77	B
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	1.05	B
COBALT	0.26	U
COPPER	0.53	B
IRON	28.52	B
LEAD	0.91	U
MAGNESIUM	6.00	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	-13.83	B
THALLIUM	0.71	U
VANADIUM	0.49	B
ZINC	0.31	B

SAMPLE: CCB
File: IXK04A Nov 04, 2007 23:17

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.94	B
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.46	B
COBALT	0.27	B
COPPER	0.95	B
IRON	32.04	B
LEAD	0.91	U
MAGNESIUM	5.87	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	-18.77	B
THALLIUM	0.71	U
VANADIUM	0.41	B
ZINC	0.23	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: CCB

File: IXK04A Nov 05, 2007 0:12

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.57	B
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	-10.39	B
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.60	B
IRON	7.71	B
LEAD	0.91	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.40	B
ZINC	0.23	U

SAMPLE: CCB

File: IXK04A Nov 05, 2007 0:45

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.68	B
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.22	U
IRON	10.23	B
LEAD	0.91	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.94	B
SILVER	0.46	U
SODIUM	33.45	B
THALLIUM	-0.74	B
VANADIUM	0.29	U
ZINC	0.23	B

SAMPLE: CCB

File: IXK04A Nov 05, 2007 1:08

Analyte	Result	C
ALUMINUM	19.72	B
ANTIMONY	0.87	U
ARSENIC	1.17	B
BARIUM	0.93	B
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.33	B
COBALT	0.26	U
COPPER	0.41	B
IRON	17.59	B
LEAD	0.91	U
MAGNESIUM	9.64	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.65	B
ZINC	0.23	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSXJ29HGS0

Matrix: SOIL **SDG Name:** SA6036

QC Batch ID: XJ29HGS0

Concentration Units : mg/Kgdrywt

Analyte	RESULT	C
MERCURY	0.010	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSXJ30HGS0

Matrix: SOIL **SDG Name:** SA6036

QC Batch ID: XJ30HGS0

Concentration Units : mg/Kgdrywt

Analyte	RESULT	C
MERCURY	0.010	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSXJ31ICS0

Matrix: SOIL **SDG Name:** SA6036

QC Batch ID: XJ31ICS0

Concentration Units : mg/Kgdrywt

Analyte	RESULT	C
ALUMINUM	1.900	U
ANTIMONY	0.090	U
ARSENIC	0.080	U
BARIUM	0.050	U
BERYLLIUM	0.010	U
CADMIUM	0.010	U
CALCIUM	5.020	
CHROMIUM	0.117	B
COBALT	0.030	U
COPPER	0.321	B
IRON	2.750	B
LEAD	0.090	U
MAGNESIUM	1.468	B
MANGANESE	0.154	B
NICKEL	0.040	U
POTASSIUM	8.600	U
SELENIUM	0.150	U
SILVER	0.050	U
SODIUM	12.650	B
THALLIUM	0.070	U
VANADIUM	0.030	U
ZINC	0.346	B

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: ~~ICSA~~

File: IXK02A Nov 02, 2007 18:11

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	515400	103.1
ANTIMONY	0	2	
ARSENIC	0	-3	
BARIUM	0	-1	
BERYLLIUM	0	0	
CADMIUM	0	4	
CALCIUM	500000	482900	96.6
CHROMIUM	3	2	
COBALT	0	-3	
COPPER	0	6	
IRON	200000	190200	95.1
LEAD	0	0	
MAGNESIUM	500000	576000	115.2
NICKEL	0	8	
POTASSIUM	0	-5	
SELENIUM	0	-4	
SILVER	0	0	
SODIUM	0	12	
THALLIUM	0	1	
VANADIUM	0	0	
ZINC	0	7	

SAMPLE: **ICSAB**

File: IXK02A Nov 02, 2007 18:16

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	508600	101.7
ANTIMONY	600	576	96.0
ARSENIC	100	96	96.0
BARIUM	500	480	96.0
BERYLLIUM	500	461	92.2
CADMIUM	1000	889	88.9
CALCIUM	500000	470500	94.1
CHROMIUM	503	455	90.5
COBALT	500	427	85.4
COPPER	500	498	99.6
IRON	200000	187800	93.9
LEAD	50	43	86.0
MAGNESIUM	500000	562300	112.5
NICKEL	1000	858	85.8
POTASSIUM	20000	20860	104.3
SELENIUM	50	44	88.0
SILVER	200	203	101.5
SODIUM	20000	20770	103.8
THALLIUM	100	86	86.0
VANADIUM	500	454	90.8
ZINC	1000	860	86.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: ICSA

File: IXK02A Nov 02, 2007 21:52

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	514700	102.9
ANTIMONY	0	3	
ARSENIC	0	-1	
BARIUM	0	0	
BERYLLIUM	0	0	
CADMIUM	0	3	
CALCIUM	500000	485600	97.1
CHROMIUM	3	2	
COBALT	0	-3	
COPPER	0	6	
IRON	200000	189800	94.9
LEAD	0	-2	
MAGNESIUM	500000	594200	118.8
NICKEL	0	8	
POTASSIUM	0	-51	
SELENIUM	0	-3	
SILVER	0	-1	
SODIUM	0	105	
THALLIUM	0	2	
VANADIUM	0	0	
ZINC	0	7	

SAMPLE: ICSAB

File: IXK02A Nov 02, 2007 21:57

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	510200	102.0
ANTIMONY	600	564	94.0
ARSENIC	100	94	94.0
BARIUM	500	477	95.4
BERYLLIUM	500	464	92.8
CADMIUM	1000	909	90.9
CALCIUM	500000	477400	95.5
CHROMIUM	503	461	91.7
COBALT	500	433	86.6
COPPER	500	496	99.2
IRON	200000	188500	94.3
LEAD	50	40	80.0
MAGNESIUM	500000	589300	117.9
NICKEL	1000	869	86.9
POTASSIUM	20000	20850	104.3
SELENIUM	50	48	96.0
SILVER	200	206	103.0
SODIUM	20000	21310	106.5
THALLIUM	100	88	88.0
VANADIUM	500	476	95.2
ZINC	1000	922	92.2

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: ICSA

File: IXK02A Nov 03, 2007 01:33

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	521200	104.2
ANTIMONY	0	1	
ARSENIC	0	0	
BARIUM	0	0	
BERYLLIUM	0	0	
CADMIUM	0	3	
CALCIUM	500000	482900	96.6
CHROMIUM	3	2	
COBALT	0	-3	
COPPER	0	6	
IRON	200000	190700	95.3
LEAD	0	-1	
MAGNESIUM	500000	611000	122.2•
NICKEL	0	8	
POTASSIUM	0	-81	
SELENIUM	0	-3	
SILVER	0	-2	
SODIUM	0	15	
THALLIUM	0	1	
VANADIUM	0	0	
ZINC	0	7	

SAMPLE: ICSAB

File: IXK02A Nov 03, 2007 01:38

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	511300	102.3
ANTIMONY	600	576	96.0
ARSENIC	100	96	96.0
BARIUM	500	480	96.0
BERYLLIUM	500	463	92.6
CADMIUM	1000	888	88.8
CALCIUM	500000	467100	93.4
CHROMIUM	503	460	91.5
COBALT	500	429	85.8
COPPER	500	496	99.2
IRON	200000	188300	94.2
LEAD	50	41	82.0
MAGNESIUM	500000	587200	117.4
NICKEL	1000	860	86.0
POTASSIUM	20000	20740	103.7
SELENIUM	50	45	90.0
SILVER	200	206	103.0
SODIUM	20000	21190	106.0
THALLIUM	100	87	87.0
VANADIUM	500	470	94.0
ZINC	1000	871	87.1

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: ICSA

File: IXK04A Nov 04, 2007 16:41

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	521000	104.2
ANTIMONY	0	-1	
ARSENIC	0	6	
BARIUM	0	0	
BERYLLIUM	0	0	
CADMIUM	0	1	
CALCIUM	500000	494800	99.0
CHROMIUM	3	2	
COBALT	0	-3	
COPPER	0	5	
IRON	200000	191600	95.8
LEAD	0	3	
MAGNESIUM	500000	529200	105.8
MANGANESE	2	-5	
NICKEL	0	9	
POTASSIUM	0	-34	
SELENIUM	0	1	
SILVER	0	-3	
SODIUM	0	12	
THALLIUM	0	2	
VANADIUM	0	1	
ZINC	0	8	

SAMPLE: ICSAB

File: IXK04A Nov 04, 2007 16:46

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	515000	103.0
ANTIMONY	600	568	94.7
ARSENIC	100	102	102.0
BARIUM	500	479	95.8
BERYLLIUM	500	467	93.4
CADMIUM	1000	915	91.5
CALCIUM	500000	507900	101.6
CHROMIUM	503	481	95.6
COBALT	500	445	89.0
COPPER	500	493	98.6
IRON	200000	193700	96.9
LEAD	50	44	88.0
MAGNESIUM	500000	496900	99.4
MANGANESE	502	460	91.6
NICKEL	1000	879	87.9
POTASSIUM	20000	20810	104.1
SELENIUM	50	53	106.0
SILVER	200	208	104.0
SODIUM	20000	20960	104.8
THALLIUM	100	88	88.0
VANADIUM	500	488	97.6
ZINC	1000	945	94.5

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: ICSA

File: IXK04A Nov 04, 2007 21:14

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	517900	103.6
ANTIMONY	0	-1	
ARSENIC	0	8	
BARIUM	0	0	
BERYLLIUM	0	0	
CADMIUM	0	0	
CALCIUM	500000	506100	101.2
CHROMIUM	3	2	
COBALT	0	-3	
COPPER	0	5	
IRON	200000	192200	96.1
LEAD	0	2	
MAGNESIUM	500000	520900	104.2
MANGANESE	2	-5	
NICKEL	0	9	
POTASSIUM	0	-99	
SELENIUM	0	4	
SILVER	0	-5	
SODIUM	0	8	
THALLIUM	0	2	
VANADIUM	0	1	
ZINC	0	11	

SAMPLE: ICSAB

File: IXK04A Nov 04, 2007 21:19

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	512800	102.6
ANTIMONY	600	564	94.0
ARSENIC	100	99	99.0
BARIUM	500	477	95.4
BERYLLIUM	500	455	91.0
CADMIUM	1000	883	88.3
CALCIUM	500000	492700	98.5
CHROMIUM	503	457	90.9
COBALT	500	441	88.2
COPPER	500	488	97.6
IRON	200000	188100	94.0
LEAD	50	46	92.0
MAGNESIUM	500000	518000	103.6
MANGANESE	502	439	87.5
NICKEL	1000	849	84.9
POTASSIUM	20000	19870	99.4
SELENIUM	50	52	104.0
SILVER	200	205	102.5
SODIUM	20000	20560	102.8
THALLIUM	100	87	87.0
VANADIUM	500	473	94.6
ZINC	1000	911	91.1

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Concentration Units: ug/L

SAMPLE: ICSA

File: IXK04A Nov 05, 2007 00:54

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	520100	104.0
ANTIMONY	0	-3	
ARSENIC	0	9	
BARIUM	0	1	
BERYLLIUM	0	0	
CADMIUM	0	-1	
CALCIUM	500000	515700	103.1
CHROMIUM	3	2	
COBALT	0	-3	
COPPER	0	6	
IRON	200000	194300	97.2
LEAD	0	0	
MAGNESIUM	500000	513600	102.7
MANGANESE	2	-5	
NICKEL	0	9	
POTASSIUM	0	-57	
SELENIUM	0	3	
SILVER	0	-5	
SODIUM	0	41	
THALLIUM	0	2	
VANADIUM	0	1	
ZINC	0	9	

SAMPLE: ICSAB

File: IXK04A Nov 05, 2007 00:59

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	513200	102.6
ANTIMONY	600	560	93.3
ARSENIC	100	100	100.0
BARIUM	500	475	95.0
BERYLLIUM	500	458	91.6
CADMIUM	1000	907	90.7
CALCIUM	500000	506400	101.3
CHROMIUM	503	474	94.2
COBALT	500	449	89.8
COPPER	500	484	96.8
IRON	200000	191500	95.8
LEAD	50	44	88.0
MAGNESIUM	500000	501400	100.3
MANGANESE	502	445	88.6
NICKEL	1000	863	86.3
POTASSIUM	20000	20120	100.6
SELENIUM	50	52	104.0
SILVER	200	205	102.5
SODIUM	20000	20540	102.7
THALLIUM	100	89	89.0
VANADIUM	500	479	95.8
ZINC	1000	961	96.1

SDG SA6036

Soil

Affected Analyte	Sample	Reported Result	Qualifier	Interferent	Interferent level in ICS	Conc. ICS	Interferent Level	Est. Interference	Validation Action	Validation Action
Sb	2W-FD-101807-01	0.66	U	Fe	194300	-3	198000	-3.06	na	UJ
As		29.2			194300	9	198000	9.17	J	na
Cd		0.08	U		194300	-1	198000	-1.02	na	UJ
Cr		39.6			190700	-3	198000	-3.11	na	na
Co		2.4			194300	-3	198000	-3.06	J	na
Cu		57.2			190700	6	198000	6.23	J	na
Pb		61.4			194300	2	198000	2.04	na	na
Mn		205			194300	-5	198000	-5.10	na	na
Ni		17.7			194300	9	198000	9.17	J	na
Se		5.3			194300	4	198000	4.08	J	na
Ag		0.35	U		194300	-5	198000	-5.10	na	UJ
Na		323			190700	105	198000	109.02	J	na
Tl		0.54	U		194300	2	198000	2.04	na	na
V		51.2			194300	1	198000	1.02	na	na
Zn		125			190700	7	198000	7.27	na	na
Sb	2W-SD-SD45-0001	2.3		Fe	194300	-3	300000	-4.63	J	na
As		16.9			194300	9	300000	13.90	J	na
Cd		0.15	U		194300	-1	300000	-1.54	na	UJ
Cr		10.7			194300	2	300000	3.09	J	na
Co		0.4	U		194300	-3	300000	-4.63	na	UJ
Cu		25.4			190700	6	300000	9.44	J	na
Pb		14			194300	2	300000	3.09	J	na
Mn		636			194300	-5	300000	-7.72	na	na
Ni		15.7			194300	9	300000	13.90	J	na
Se		9			194300	4	300000	6.18	J	na
Ag		0.71	U		194300	-5	300000	-7.72	na	UJ
Na		653			190700	105	300000	165.18	J	na
Tl		1.1			194300	2	300000	3.09	J	na
V		30.6			194300	1	300000	1.54	na	na
Zn		342			190700	7	300000	11.01	na	na
Sb	2W-SD-SD45-0002	0.15	U	Fe	190700	3	36500	0.57	na	na
Cd		2.5			190700	3	36500	0.57	J	na
Cr		66.6			190700	2	36500	0.38	na	na
Co		9.1			190700	-3	36500	-0.57	na	na
Cu		60.6			190700	6	36500	1.15	na	na
Pb		51.3			194300	2	36500	0.38	na	na
Mn		326			194300	-5	36500	-0.94	na	na
Ni		28.7			190700	8	36500	1.53	na	na

Ag		0.18			190700	-2	36500	-0.38	J	na
Na		2320			190700	105	36500	20.10	na	na
Tl		0.64			190700	2	36500	0.38	J	na
Zn		200			190700	7	36500	1.34	na	na

Cu	2W-SD-SD46-0001	97.2		Fe	190700	6	57700	1.82	na	na
Na		571			190700	105	57700	31.77	na	na
Zn		342			190700	7	57700	2.12	na	na

Sb	2W-SD-SD46-0204	0.11	U	Fe	190700	3	22300	0.35	na	na
Cd		0.76			190700	3	22300	0.35	J	na
Cr		44.8			190700	2	22300	0.23	na	na
Co		6.9			190700	-3	22300	-0.35	na	na
Cu		42			190700	6	22300	0.70	na	na
Pb		51.1			194300	2	22300	0.23	na	na
Mn		242			194300	-5	22300	-0.57	na	na
Ni		21.1			190700	8	22300	0.94	na	na
Ag		0.11			190700	-2	22300	-0.23	J	na
Na		944			190700	105	22300	12.28	na	na
Tl		0.68			190700	2	22300	0.23	J	na
Zn		98.5			190700	7	22300	0.82	na	na

Sb	2W-SD-SD49-0001	2		Fe	194300	-3	109000	-1.68	J	na
As		14.6			194300	9	109000	5.05	J	na
Cd		1.2			194300	-1	109000	-0.56	J	na
Cr		8.5			194300	2	109000	1.12	J	na
Co		5.6			194300	-3	109000	-1.68	J	na
Cu		92.3			190700	6	109000	3.43	na	na
Pb		39.2			194300	2	109000	1.12	na	na
Mn		389			194300	-5	109000	-2.80	na	na
Ni		28.3			194300	9	109000	5.05	J	na
Se		3.4			194300	4	109000	2.24	J	na
Ag		0.22	U		194300	-5	109000	-2.80	na	UJ
Na		208			190700	105	109000	60.02	J	na
Tl		0.34	U		194300	2	109000	1.12	na	na
V		24.1			194300	1	109000	0.56	na	na
Zn		646			190700	7	109000	4.00	na	na

Sb	2W-SD-SD50-0001	1.25	U	Fe	194300	-3	315000	-4.86	na	UJ
As		43.6			194300	9	315000	14.59	J	na
Cd		0.14	U		194300	-1	315000	-1.62	na	UJ
Cr		20.7			194300	2	315000	3.24	J	na
Co		4			194300	-3	315000	-4.86	J	na

Cu		64			190700	6	315000	9.91	J	na
Pb		54			194300	2	315000	3.24	na	na
Mn		1220			194300	-5	315000	-8.11	na	na
Ni		28.8			194300	9	315000	14.59	J	na
Se		9.8			194300	4	315000	6.48	J	na
Ag		0.66	U		194300	-5	315000	-8.11	na	UJ
Na		769			190700	105	315000	173.44	J	na
Tl		1.02	U		194300	2	315000	3.24	na	na
V		114			194300	1	315000	1.62	na	na
Zn		447			190700	7	315000	11.56	na	na

Sb	2W-SD-SD50-0204	0.14	U	Fe	190700	3	28500	0.45	na	na
Cd		0.96			190700	3	28500	0.45	J	na
Cr		57.4			190700	2	28500	0.30	na	na
Co		7.8			190700	-3	28500	-0.45	na	na
Cu		35.6			190700	6	28500	0.90	na	na
Pb		31.5			194300	2	28500	0.29	na	na
Mn		306			194300	-5	28500	-0.73	na	na
Ni		23.9			190700	8	28500	1.20	na	na
Ag		0.12			190700	-2	28500	-0.30	J UJ	na
Na		1570			190700	105	28500	15.69	na	na
Tl		0.79			190700	2	28500	0.30	J	na
Zn		93.7			190700	7	28500	1.05	na	na

Sb	2W-SD-SD51-0001	0.86		Fe	190700	3	83600	1.32	J UJ	na
Cd		1.2			190700	3	83600	1.32	J	na
Cr		16.3			190700	2	83600	0.88	na	na
Co		5.6			190700	-3	83600	-1.32	J	na
Cu		36.1			190700	6	83600	2.63	na	na
Pb		24.6			190700	-2	83600	-0.88	na	na
Mn		326			194300	-5	83600	-2.15	na	na
Ni		25.9			190700	8	83600	3.51	J	na
Ag		0.26	U		190700	-2	83600	-0.88	na	UJ
Na		847			190700	105	83600	46.03	na	na
Tl		0.4	U		190700	2	83600	0.88	na	na
Zn		82.4			190700	7	83600	3.07	na	na

Sb	2W-SD-SD52-0001	0.27		Fe	190700	3	46100	0.73	J UJ	na
Cd		1.1			190700	3	46100	0.73	J	na
Cr		63.6			190700	2	46100	0.48	na	na
Co		5.5			190700	-3	46100	-0.73	J	na
Cu		96.7			190700	6	46100	1.45	na	na
Pb		119			194300	2	46100	0.47	na	na
Mn		208			194300	-5	46100	-1.19	na	na

Ni		23.5			190700	8	46100	1.93	na	na
Ag		0.11	U		190700	-2	46100	-0.48	na	UJ
Na		431			190700	105	46100	25.38	na	na
Tl		0.17	U		190700	2	46100	0.48	na	na
Zn		60.6			190700	7	46100	1.69	na	na

Sb	2W-SD-SD53-0001	0.86	U	Fe	194300	-3	199000	-3.07	na	UJ
As		28.2			194300	9	199000	9.22	J	na
Cd		0.1	U		194300	-1	199000	-1.02	na	UJ
Cr		47.3			194300	2	199000	2.05	na	na
Co		2.7			194300	-3	199000	-3.07	J	na
Cu		57.3			190700	6	199000	6.26	J	na
Pb		65.8			194300	2	199000	2.05	na	na
Mn		231			194300	-5	199000	-5.12	na	na
Ni		19.2			194300	9	199000	9.22	J	na
Se		6.6			194300	4	199000	4.10	J	na
Ag		0.45	U		194300	-5	199000	-5.12	na	UJ
Na		344			190700	105	199000	109.57	J	na
Tl		0.7	U		194300	2	199000	2.05	na	na
Va		57.3			194300	1	199000	1.02	na	na
Zn		138			190700	7	199000	7.30	na	na

Sb	2W-SD-SD53-0204	0.1	U	Fe	190700	3	27800	0.44	na	na
Cd		1.1			190700	3	27800	0.44	J	na
Cr		79.5			190700	2	27800	0.29	na	na
Co		7.3			190700	-3	27800	-0.44	na	na
Cu		50.4			190700	6	27800	0.87	na	na
Pb		55.5			194300	2	27800	0.29	na	na
Mn		278			194300	-5	27800	-0.72	na	na
Ni		22.5			190700	8	27800	1.17	na	na
Ag		0.29			190700	-2	27800	-0.29	J	na
Na		4060			190700	105	27800	15.31	na	na
Tl		0.82			190700	2	27800	0.29	J	na
Zn		99.2			190700	7	27800	1.02	na	na

Sb	2W-SD-SD54-0001	1.2		Fe	190700	3	130000	2.05	J	na
Cd		0.88			190700	3	130000	2.05	J	na
Cr		36.8			190700	2	130000	1.36	na	na
Co		1.1			190700	-3	130000	-2.05	J	na
Cu		55			190700	6	130000	4.09	na	na
Pb		48			190700	-2	130000	-1.36	na	na
Mn		149			194300	-5	130000	-3.35	na	na
Ni		15.9			190700	8	130000	5.45	J	na
Ag		0.24	U		190700	-2	130000	-1.36	na	UJ

Na		739			190700	105	130000	71.58	na	na
Tl		0.37	U		190700	2	130000	1.36	na	na
Zn		39.7			190700	7	130000	4.77	J	na

Sb	2W-SD-SD55-0001	1.3		Fe	194300	-3	249000	-3.84	J	na
As		52.5			194300	9	249000	11.53	J	na
Cd		0.1	U		194300	-1	249000	-1.28	na	UJ
Cr		51.2			194300	2	249000	2.56	na	na
Co		0.27	U		194300	-3	249000	-3.84	na	UJ
Cu		41.2			190700	6	249000	7.83	J	na
Pb		33.4			194300	2	249000	2.56	na	na
Mn		89.2			194300	-5	249000	-6.41	na	na
Ni		15.2			194300	9	249000	11.53	J	na
Se		7.8			194300	4	249000	5.13	J	na
Ag		0.47	U		194300	-5	249000	-6.41	na	UJ
Na		967			190700	105	249000	137.10	J	na
Tl		0.73	U		194300	2	249000	2.56	na	na
Va		60.6			194300	1	249000	1.28	na	na
Zn		80.1			190700	7	249000	9.14	J	na

Cu	2W-SD-SD56-0001	20			190700	6	37300	1.17	na	na
Na		202			190700	105	37300	20.54	J	na
Zn		78.6			190700	7	37300	1.37	na	na

Sb	2W-SD-SD57-0001	0.16	U	Fe	194300	-3	37900	-0.59	na	UJ
As		4.3			194300	9	37900	1.76	J	na
Cd		1.1			194300	-1	37900	-0.20	J	na
Cr		9.5			194300	2	37900	0.39	na	na
Co		4.9			194300	-3	37900	-0.59	J	na
Cu		19.2			190700	6	37900	1.19	na	na
Pb		159			194300	2	37900	0.39	na	na
Mn		469			194300	-5	37900	-0.98	na	na
Ni		11.2			194300	9	37900	1.76	J	na
Se		1.2			194300	4	37900	0.78	J	na
Ag		0.08	U		194300	-5	37900	-0.98	na	UJ
Na		149			190700	105	37900	20.87	J	na
Tl		0.13	U		194300	2	37900	0.39	na	na
Va		22.9			194300	1	37900	0.20	na	na
Zn		339			190700	7	37900	1.39	na	na

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services

Matrix: SOIL

Percent Solids: 34.2

Client Field ID: 2W-SD-SD53-0001S

SDG Name: SA6036

Lab Sample ID: SA6036-009P

Concentration Units : mg/Kgdrywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ALUMINUM, TOTAL	18137.5290		17104.7521		491.8	210.0		75	125	P
ANTIMONY, TOTAL	45.8110		-0.2409	U	122.95	37.3	N	75	125	P
ARSENIC, TOTAL	136.7938		28.2046		122.95	88.3		75	125	P
BARIUM, TOTAL	496.2247		48.5405		491.8	91.0		75	125	P
BERYLLIUM, TOTAL	12.1130		1.0615	B	12.29	89.9		75	125	P
CADMIUM, TOTAL	56.6060		-1.5108	U	61.47	92.1		75	125	P
CALCIUM, TOTAL	3334.3939		2665.5479		614.75	108.8		75	125	P
CHROMIUM, TOTAL	91.3762		47.3110		49.18	89.6		75	125	P
COBALT, TOTAL	122.2857		2.7074	B	122.95	97.3		75	125	P
COPPER, TOTAL	112.8923		57.2945		61.47	90.4		75	125	P
IRON, TOTAL	192071.9076		199325.9356		245.9	-2950.0		75	125	P
LEAD, TOTAL	176.6786		65.8026		122.95	90.2		75	125	P
MAGNESIUM, TOTAL	4271.2700		3339.3119		1229.5	75.8		75	125	P
MANGANESE, TOTAL	328.2755		231.4650		122.95	78.7		75	125	P
MERCURY, TOTAL	0.6570		0.2035		0.46	98.6		75	125	CV
NICKEL, TOTAL	134.4577		19.2047	B	122.95	93.7		75	125	P
POTASSIUM, TOTAL	4133.5665		1812.7693		2458.99	94.4		75	125	P
SELENIUM, TOTAL	118.9415		6.5655	B	122.95	91.4		75	125	P
SILVER, TOTAL	7.8958	B	-3.2975	U	12.29	64.2	N	75	125	P
SODIUM, TOTAL	2121.8647		344.5049		1844.24	96.4		75	125	P
THALLIUM, TOTAL	115.1546		0.2247	U	122.95	93.7		75	125	P
VANADIUM, TOTAL	170.3590		57.2945		122.95	92.0		75	125	P
ZINC, TOTAL	234.7600		138.4659		122.95	78.3		75	125	P

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services | **Client Field ID:** 2W-SD-SD53-0001S

Matrix: SOIL | **SDG Name:** SA6036

Percent Solids: 34.2 | **Lab Sample ID:** SA6036-009S

Concentration Units : mg/Kgdrywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ALUMINUM, TOTAL	20717.5042		17104.7521		487.7	740.8		75	125	P
ANTIMONY, TOTAL	40.2840		-0.2409	U	121.93	33.0	N	75	125	P
ARSENIC, TOTAL	134.0688		28.2046		121.93	86.8		75	125	P
BARIUM, TOTAL	502.5750		48.5405		487.7	93.1		75	125	P
BERYLLIUM, TOTAL	11.9560		1.0615	B	12.19	89.4		75	125	P
CADMIUM, TOTAL	56.0611		-1.5108	U	60.96	92.0		75	125	P
CALCIUM, TOTAL	3484.6179		2665.5479		609.63	134.4		75	125	P
CHROMIUM, TOTAL	98.2960		47.3110		48.77	104.5		75	125	P
COBALT, TOTAL	121.6324		2.7074	B	121.93	97.5		75	125	P
COPPER, TOTAL	113.7317		57.2945		60.96	92.6		75	125	P
IRON, TOTAL	175791.5342		199325.9356		243.85	-9651.2		75	125	P
LEAD, TOTAL	180.4978		65.8026		121.93	94.1		75	125	P
MAGNESIUM, TOTAL	5281.7931		3339.3119		1219.25	159.3	N	75	125	P
MANGANESE, TOTAL	357.4842		231.4650		121.93	103.4		75	125	P
MERCURY, TOTAL	0.6561		0.2035		0.46	98.4		75	125	CV
NICKEL, TOTAL	132.9227		19.2047	B	121.93	93.3		75	125	P
POTASSIUM, TOTAL	4698.9913		1812.7693		2438.5	118.4		75	125	P
SELENIUM, TOTAL	120.1206		6.5655	B	121.93	93.1		75	125	P
SILVER, TOTAL	8.0275	B	-3.2975	U	12.19	65.9	N	75	125	P
SODIUM, TOTAL	2140.5161		344.5049		1828.88	98.2		75	125	P
THALLIUM, TOTAL	115.2923		0.2247	U	121.93	94.6		75	125	P
VANADIUM, TOTAL	174.8649		57.2945		121.93	96.4		75	125	P
ZINC, TOTAL	238.6073		138.4659		121.93	82.1		75	125	P

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services

Matrix: SOIL

Percent Solids: 37.3

Client Field ID: 2W-SD-SD52-0001S

SDG Name: SA6036

Lab Sample ID: SA6036-013P

Concentration Units : mg/Kgdrywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
MERCURY, TOTAL	0.7109		0.3080		0.4	100.7		75	125	CV

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services

Matrix: SOIL

Percent Solids: 37.3

Client Field ID: 2W-SD-SD52-0001S

SDG Name: SA6036

Lab Sample ID: SA6036-013S

Concentration Units : mg/Kgdrywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
MERCURY, TOTAL	0.6149		0.3080		0.38	80.8		75	125	CV

Comments:

FORM V (Part 1) - IN

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services

Matrix: SOIL

Percent Solids: 34.2

Client Field ID: 2W-SD-SD53-0001S

SDG Name: SA6036

Lab Sample ID: SA6036-009A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	459.2500		-0.2449	U	500	91.8		75	125	P
MAGNESIUM, TOTAL	8182.5000		3395.0000		5000	95.8		75	125	P
SILVER, TOTAL	43.9000		-3.3525	U	50	87.8		75	125	P

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services

Matrix: SOIL

Percent Solids: 34.2

Client Field ID: 2W-SD-SD53-0001

SDG Name: SA6036

Lab Sample ID: SA6036-009

Concentration Units : mg/Kgdrywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ALUMINUM, TOTAL		20717.5042		18137.5290		13.3		P
ANTIMONY, TOTAL		40.2840		45.8110		12.8		P
ARSENIC, TOTAL		134.0688		136.7938		2.0		P
BARIUM, TOTAL		502.5750		496.2247		1.3		P
BERYLLIUM, TOTAL		11.9560		12.1130		1.3		P
CADMIUM, TOTAL		56.0611		56.6060		1.0		P
CALCIUM, TOTAL		3484.6179		3334.3939		4.4		P
CHROMIUM, TOTAL		98.2960		91.3762		7.3		P
COBALT, TOTAL	29	121.6324		122.2857		0.5		P
COPPER, TOTAL		113.7317		112.8923		0.7		P
IRON, TOTAL		175791.5342		192071.9076		8.9		P
LEAD, TOTAL		180.4978		176.6786		2.1		P
MAGNESIUM, TOTAL		5281.7931		4271.2700		21.2	*	P
MANGANESE, TOTAL		357.4842		328.2755		8.5		P
MERCURY, TOTAL		0.6561		0.6570		0.1		CV
NICKEL, TOTAL	39	132.9227		134.4577		1.1		P
POTASSIUM, TOTAL		4698.9913		4133.5665		12.8		P
SELENIUM, TOTAL		120.1206		118.9415		1.0		P
SILVER, TOTAL		8.0275	B	7.8958	B	1.7		P
SODIUM, TOTAL		2140.5161		2121.8647		0.9		P
THALLIUM, TOTAL		115.2923		115.1546		0.1		P
VANADIUM, TOTAL		174.8649		170.3590		2.6		P
ZINC, TOTAL		238.6073		234.7600		1.6		P

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services

Matrix: SOIL

Percent Solids: 37.3

Client Field ID: 2W-SD-SD52-0001

SDG Name: SA6036

Lab Sample ID: SA6036-013

Concentration Units : mg/Kgdrywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
MERCURY, TOTAL		0.6149		0.7109		14.5		CV

Comments:

FORM VD - IN

NSB NEW LONDON
SOIL DATA
SA6036

FRACTION	CHEMICAL	2W-SD-SD53-0001	UNITS	2W-FD-101807-01	RPD	D
M	ALUMINUM	17100	MG/KG	15200	11.76	1900.00
M	ARSENIC	28.2 J	MG/KG	29.2 J	3.48	1.00
M	BARIUM	48.5	MG/KG	40	19.21	8.50
M	BERYLLIUM	1.1	MG/KG	1	9.52	0.10
M	CALCIUM	2660	MG/KG	2470	7.41	190.00
M	CHROMIUM	47.3	MG/KG	39.6	17.72	7.70
M	COBALT	2.7 J	MG/KG	2.4 J	11.76	0.30
M	COPPER	57.3 J	MG/KG	57.2 J	0.17	0.10
M	IRON	199000	MG/KG	198000	0.50	1000.00
M	LEAD	65.8	MG/KG	61.4	6.92	4.40
M	MAGNESIUM	3340 J	MG/KG	2660 J	22.67	680.00
M	MANGANESE	231	MG/KG	205	11.93	26.00
M	MERCURY	0.2	MG/KG	0.21	4.88	0.01
M	NICKEL	19.2 J	MG/KG	17.7 J	8.13	1.50
M	POTASSIUM	1810	MG/KG	1430	23.46	380.00
M	SELENIUM	6.6 J	MG/KG	5.3 J	21.85	1.30
M	SODIUM	344 J	MG/KG	323 J	6.30	21.00
M	VANADIUM	57.3	MG/KG	51.2	11.24	6.10
M	ZINC	138	MG/KG	125	9.89	13.00

Current RPD Quality Control Limit: 55 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NSB NEW LONDON
SOIL DATA
SA6036

FRACTION	CHEMICAL	2W-SD-SD53-0001	UNITS	2W-FD-101807-01	RPD	D
MISC	PH	5.1	S.U.	5.3	3.85	0.20
MISC	TOTAL ORGANIC CARBON	200000 J	MG/KG	190000 J	5.13	10000.00
MISC	TOTAL SOLIDS	34	%	34	0.00	0.00

Current RPD Quality Control Limit: 55 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSSXJ29HGS0

Matrix: SOIL **SDG Name:** SA6036

QC Batch ID: XJ29HGS0

Concentration Units : mg/Kgdrywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
MERCURY	5.2	6.00	115.4	66	133

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSSXJ30HGS0

Matrix: SOIL **SDG Name:** SA6036

QC Batch ID: XJ30HGS0

Concentration Units : mg/Kgdrywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
MERCURY	5.2	4.85	93.3	66	133

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSSXJ31ICS0

Matrix: SOIL **SDG Name:** SA6036

QC Batch ID: XJ31ICS0

Concentration Units : mg/Kgdrywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ALUMINUM	7870.0	10019.96	127.3	59	141
ANTIMONY	70.5	37.02	52.5	0.0	211
ARSENIC	289.0	293.55	101.6	81	119
BARIUM	211.0	218.32	103.5	82	117
BERYLLIUM	54.4	55.66	102.3	83	117
CADMIUM	101.0	101.10	100.1	82	118
CALCIUM	3680.0	3811.61	103.6	81	119
CHROMIUM	224.0	227.10	101.4	80	120
COBALT	101.0	102.02	101.0	82	118
COPPER	88.0	89.52	101.7	83	117
IRON	15700.0	16565.56	105.5	42	159
LEAD	158.0	161.21	102.0	82	118
MAGNESIUM	2260.0	2506.49	110.9	78	122
MANGANESE	420.0	412.89	98.3	82	118
NICKEL	120.0	121.77	101.5	83	118
POTASSIUM	3000.0	3330.67	111.0	73	127
SELENIUM	130.0	131.77	101.4	78	122
SILVER	104.0	109.36	105.2	66	134
SODIUM	1080.0	1152.86	106.7	64	136
THALLIUM	94.0	97.21	103.4	77	122
VANADIUM	111.0	116.14	104.6	77	123
ZINC	272.0	276.39	101.6	79	121

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services

Matrix: SOIL

Client Field ID: 2W-SD-SD53-0001L

SDG Name: SA6036

Lab Sample ID: SA6036-009L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ALUMINUM, TOTAL	69560.00		72220.00		3.8		P
ANTIMONY, TOTAL	-0.24	U	2.20	U			P
ARSENIC, TOTAL	28.68		36.25	B	26.4		P
BARIUM, TOTAL	197.40		201.70		2.2		P
BERYLLIUM, TOTAL	4.32	B	4.38	B	1.4		P
CADMIUM, TOTAL	-1.54	U	-1.51	U			P
CALCIUM, TOTAL	10840.00		11400.00		5.2		P
CHROMIUM, TOTAL	48.10		49.65	B	3.2		P
COBALT, TOTAL	2.75	B	2.80	B	1.8		P
COPPER, TOTAL	233.00		238.50		2.4		P
IRON, TOTAL	202650.00		208000.00		2.6		P
LEAD, TOTAL	66.90		69.13		3.3		P
MAGNESIUM, TOTAL	3395.00		3297.50		2.9		P
MANGANESE, TOTAL	235.32		237.47		0.9		P
MERCURY, TOTAL	0.45		0.41	B	8.9		CV
NICKEL, TOTAL	19.52	B	19.14	B	1.9		P
POTASSIUM, TOTAL	7372.00		7470.00		1.3		P
SELENIUM, TOTAL	6.67	B	17.57	B	163.4		P
SILVER, TOTAL	-3.35	U	-3.32	U			P
SODIUM, TOTAL	1401.00		1527.00	B	9.0		P
THALLIUM, TOTAL	0.23	U	0.15	U			P
VANADIUM, TOTAL	58.25		59.75	B	2.6		P
ZINC, TOTAL	563.10		599.90		6.5		P

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services

Matrix: SOIL

Client Field ID: 2W-SD-SD52-0001L

SDG Name: SA6036

Lab Sample ID: SA6036-013L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
MERCURY, TOTAL	0.77		0.78	B	1.3		CV

FORM IX - IN

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 8/1/2007

Concentration Units: ug/L

Analyte	CRDL	IDL	M
MERCURY	0.20	0.02	CV

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 4/20/2007

Concentration Units: ug/L

Analyte	CRDL	IDL	M
ALUMINUM	300	19.00	P
ANTIMONY	8.0	0.87	P
ARSENIC	8.0	0.83	P
BARIUM	5.0	0.45	P
BERYLLIUM	5.0	0.12	P
CADMIUM	10	0.10	P
CALCIUM	50	7.70	P
CHROMIUM	15	0.28	P
COBALT	30	0.26	P
COPPER	25	0.22	P
IRON	100	5.20	P
LEAD	5.0	0.91	P
MAGNESIUM	50	4.90	P
MANGANESE	5.0	0.57	P
NICKEL	40	0.41	P
POTASSIUM	1000	86.00	P
SELENIUM	10	1.50	P
SILVER	15	0.46	P
SODIUM	1000	13.00	P
THALLIUM	15	0.71	P
VANADIUM	25	0.29	P
ZINC	25	0.23	P

ICP INTERELEMENT CORRECTION FACTORS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Instrument Name: THERMO ICAP 6500 **Date:** 9/19/2007

Instrument ID: I

Analyte	Wavelength (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Co	Cr	Cu	Mo	Ni	Ti	V
ALUMINUM	396.15	0.0	0.0002310	0.0	0.0	0.0	0.0	0.0	0.0492690	0.0	0.0	0.0
ANTIMONY	206.88	0.0000070	0.0	0.0000320	0.0	0.0	0.0135440	0.0	-0.0050900	-0.0006530	0.0	-0.0012130
ARSENIC	189.04	-0.0000020	0.0	-0.0002190	0.0	0.0	0.0004750	0.0	0.0014020	0.0	0.0	0.0
BARIUM	455.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BERYLLIUM	313.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0003030	0.0005500
BORON	208.96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0308360	0.0	0.0	0.0
CADMIUM	226.50	0.0	0.0	0.0000780	0.0	-0.0000220	0.0	0.0	0.0	-0.0000800	-0.0000120	0.0
CALCIUM	315.89	0.0	0.0	0.0	0.0	0.0012890	-0.0004940	0.0	0.0	0.0	0.0	0.0
CHROMIUM	267.72	0.0	0.0	-0.0000070	0.0	0.0	0.0	0.0	-0.0000210	0.0	0.0	0.0000720
COBALT	228.62	0.0	0.0	0.0000160	0.0	0.0	-0.0000800	0.0	0.0000180	0.0000830	0.0019920	0.0
COPPER	327.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0006350	0.0002980
IRON	259.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0005620	0.0	0.0	0.0
LEAD	220.35	-0.0000820	0.0	0.0000350	0.0	-0.0000490	0.0	0.0000790	-0.0014420	0.0001840	-0.0000270	0.0
MAGNESIUM	285.21	0.0	0.0	-0.0000030	0.0	0.0	0.0006030	0.0	0.0	0.0	0.0	0.0
MANGANESE	257.61	0.0	0.0	0.0	0.0000260	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MOLYBDENUM	202.03	0.0	0.0	0.0	0.0	0.0	0.0001080	0.0	0.0	0.0	0.0	-0.0001440
NICKEL	231.60	0.0	0.0	-0.0000400	0.0	0.0003390	0.0	0.0	0.0015690	0.0	0.0	0.0
SELENIUM	196.09	-0.0000020	0.0	-0.0000790	0.0	-0.0001540	0.0	0.0	0.0	0.0	0.0	-0.0000210
SILVER	328.07	0.0	0.0	-0.0001320	0.0	0.0	0.0	0.0	0.0	0.0	-0.0001650	0.0
THALLIUM	190.86	0.0	0.0	-0.0000020	0.0	0.0018720	0.0	-0.0000030	-0.0000300	0.0	-0.0015350	0.0005220
TITANIUM	334.90	0.0	0.0	0.0	0.0	0.0	0.0001290	0.0	0.0008550	0.0	0.0	0.0
VANADIUM	292.40	0.0	0.0	0.0000160	0.0	0.0	-0.0028800	0.0	-0.0077010	0.0	0.0004950	0.0
ZINC	206.20	0.0	0.0	0.0	0.0	0.0	-0.0005230	0.0	0.0	0.0	0.0	0.0

FORM XI - IN

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/8/2007

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	5.00	1000000	P
ANTIMONY	60.00	20000	P
ARSENIC	60.00	20000	P
BARIUM	5.00	20000	P
BERYLLIUM	5.00	20000	P
CADMIUM	60.00	20000	P
CALCIUM	5.00	1000000	P
CHROMIUM	10.00	20000	P
COBALT	60.00	20000	P
COPPER	10.00	20000	P
IRON	5.00	400000	P
LEAD	60.00	20000	P
MAGNESIUM	5.00	500000	P
MANGANESE	5.00	20000	P
NICKEL	10.00	20000	P
POTASSIUM	5.00	1000000	P
SELENIUM	60.00	20000	P
SILVER	10.00	2000	P
SODIUM	5.00	1000000	P
THALLIUM	60.00	20000	P
VANADIUM	10.00	20000	P
ZINC	60.00	20000	P

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** XJ31ICS0

Matrix: SOIL **SDG Name:** SA6036

Method: P **Prep Date:** 10/31/2007

Client ID	Lab Sample ID	Initial (g)	Final (L)
LCSSXJ31ICS0	LCSSXJ31ICS0	0.5011	0.1
PBSXJ31ICS0	PBSXJ31ICS0	1	0.1
2W-SD-SD58-0001	SA6036-001	1.05	0.1
2W-SD-SD57-0001	SA6036-002	1.75	0.1
2W-SD-SD56-0001	SA6036-004	1.66	0.1
2W-SD-SD55-0001	SA6036-006	1.26	0.1
2W-SD-SD54-0001	SA6036-008	1.36	0.1
2W-SD-SD53-0001	SA6036-009	1.19	0.1
2W-SD-SD53-0001P	SA6036-009P	1.19	0.1
2W-SD-SD53-0001S	SA6036-009S	1.2	0.1
2W-SD-SD53-0204	SA6036-010	1.62	0.1
2W-FD-101807-01	SA6036-011	1.18	0.1
2W-SD-SD51-0001	SA6036-012	1.3	0.1
2W-SD-SD52-0001	SA6036-013	1.15	0.1
2W-SD-SD50-0204	SA6036-014	1.29	0.1
2W-SD-SD50-0001	SA6036-015	1.34	0.1
2W-SD-SD49-0001	SA6036-016	1.38	0.1
2W-SD-SD45-0001	SA6036-017	1.57	0.1
2W-SD-SD45-0002	SA6036-018	1.6	0.1
2W-SD-SD46-0001	SA6036-019	1.34	0.1
2W-SD-SD46-0204	SA6036-020	1.32	0.1

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** XJ29HGS0

Matrix: SOIL **SDG Name:** SA6036

Method: CV **Prep Date:** 10/29/2007

Client ID	Lab Sample ID	Initial (g)	Final (L)
LCSSXJ29HGS0	LCSSXJ29HGS0	0.2022	0.1
PBSXJ29HGS0	PBSXJ29HGS0	0.6	0.1
2W-SD-SD57-0001	SA6036-002	0.7	0.1
2W-SD-SD56-0001	SA6036-004	0.66	0.1
2W-SD-SD55-0001	SA6036-006	0.63	0.1
2W-SD-SD54-0001	SA6036-008	0.6	0.1
2W-SD-SD53-0001	SA6036-009	0.64	0.1
2W-SD-SD53-0001P	SA6036-009P	0.64	0.1
2W-SD-SD53-0001S	SA6036-009S	0.64	0.1
2W-SD-SD53-0204	SA6036-010	0.61	0.1
2W-FD-101807-01	SA6036-011	0.61	0.1
2W-SD-SD51-0001	SA6036-012	0.61	0.1

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** XJ30HGS0

Matrix: SOIL **SDG Name:** SA6036

Method: CV **Prep Date:** 10/30/2007

Client ID	Lab Sample ID	Initial (g)	Final (L)
LCSSXJ30HGS0	LCSSXJ30HGS0	0.2008	0.1
PBSXJ30HGS0	PBSXJ30HGS0	0.6	0.1
2W-SD-SD52-0001	SA6036-013	0.67	0.1
2W-SD-SD52-0001P	SA6036-013P	0.67	0.1
2W-SD-SD52-0001S	SA6036-013S	0.7	0.1
2W-SD-SD50-0204	SA6036-014	0.63	0.1
2W-SD-SD50-0001	SA6036-015	0.83	0.1
2W-SD-SD49-0001	SA6036-016	0.65	0.1
2W-SD-SD45-0001	SA6036-017	0.6	0.1
2W-SD-SD45-0002	SA6036-018	0.7	0.1
2W-SD-SD46-0001	SA6036-019	0.63	0.1
2W-SD-SD46-0204	SA6036-020	0.7	0.1

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Instrument ID: THERMO ICAP 6500 **File Name:** IXK02A

Date: 11/2/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements							
Blank		1	17:48	AL SB AS BA BE	CD CA CR CO CU FE PB MG	NI K SE	AG NA	TL	V ZN		
Std 1		1	17:53	AL SB AS BA BE	CD CA CR CO CU FE PB MG	NI K SE	AG NA	TL	V ZN		
ICV		1	17:57	AL SB AS BA BE	CD CA CR CO CU FE PB MG	NI K SE	AG NA	TL	V ZN		
ICB		1	18:02	AL SB AS BA BE	CD CA CR CO CU FE PB MG	NI K SE	AG NA	TL	V ZN		
PQL		1	18:06	AL SB AS BA BE	CD CA CR CO CU FE PB MG	NI K SE	AG NA	TL	V ZN		
ICSA		1	18:11	AL SB AS BA BE	CD CA CR CO CU FE PB MG	NI K SE	AG NA	TL	V ZN		
ICSAB		1	18:16	AL SB AS BA BE	CD CA CR CO CU FE PB MG	NI K SE	AG NA	TL	V ZN		
CCV		1	18:20	AL SB AS BA BE	CD CA CR CO CU FE PB MG	NI K SE	AG NA	TL	V ZN		
CCB		1	18:25	AL SB AS BA BE	CD CA CR CO CU FE PB MG	NI K SE	AG NA	TL	V ZN		
ZZZZZZ		1	18:29								
ZZZZZZ		1	18:34								
ZZZZZZ		1	18:38								
ZZZZZZ		1	18:43								
ZZZZZZ		1	18:48								
ZZZZZZ		1	18:52								
ZZZZZZ		5	18:57								
ZZZZZZ		1	19:01								
ZZZZZZ		1	19:06								
ZZZZZZ		1	19:10								
CCV		1	19:15	AL SB AS BA BE	CD CA CR CO CU FE PB MG	NI K SE	AG NA	TL	V ZN		
CCB		1	19:19	AL SB AS BA BE	CD CA CR CO CU FE PB MG	NI K SE	AG NA	TL	V ZN		
ZZZZZZ		1	19:24								
ZZZZZZ		1	19:29								
ZZZZZZ		1	19:33								
ZZZZZZ		1	19:38								
ZZZZZZ		1	19:43								
ZZZZZZ		1	19:47								
ZZZZZZ		5	19:52								
ZZZZZZ		1	19:56								
ZZZZZZ		1	20:01								
ZZZZZZ		5	20:06								
CCV		1	20:11	AL SB AS BA BE	CD CA CR CO CU FE PB MG	NI K SE	AG NA	TL	V ZN		
CCB		1	20:15	AL SB AS BA BE	CD CA CR CO CU FE PB MG	NI K SE	AG NA	TL	V ZN		
ZZZZZZ		1	20:20								
ZZZZZZ		1	20:24								
ZZZZZZ		1	20:29								
ZZZZZZ		1	20:34								
ZZZZZZ		1	20:39								
ZZZZZZ		1	20:43								
ZZZZZZ		1	20:48								
ZZZZZZ		1	20:52								
ZZZZZZ		1	20:57								
ZZZZZZ		1	21:01								
CCV		1	21:06	AL SB AS BA BE	CD CA CR CO CU FE PB MG	NI K SE	AG NA	TL	V ZN		
CCB		1	21:11	AL SB AS BA BE	CD CA CR CO CU FE PB MG	NI K SE	AG NA	TL	V ZN		
ZZZZZZ		1	21:15								
ZZZZZZ		1	21:20								
ZZZZZZ		1	21:24								
ZZZZZZ		1	21:29								
ZZZZZZ		1	21:34								

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Instrument ID: THERMO ICAP 6500 **File Name:** IXK02A

Date: 11/2/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		1	21:38	
ZZZZZZ		1	21:43	
PQL		1	21:48	AL SB AS BA BE CD CA CR CO CU FE PB MG NI K SE AG NA TL V ZN
ICSA		1	21:52	AL SB AS BA BE CD CA CR CO CU FE PB MG NI K SE AG NA TL V ZN
ICSAB		1	21:57	AL SB AS BA BE CD CA CR CO CU FE PB MG NI K SE AG NA TL V ZN
CCV		1	22:02	AL SB AS BA BE CD CA CR CO CU FE PB MG NI K SE AG NA TL V ZN
CCB		1	22:06	AL SB AS BA BE CD CA CR CO CU FE PB MG NI K SE AG NA TL V ZN
ZZZZZZ		1	22:11	
ZZZZZZ		1	22:15	
ZZZZZZ		1	22:20	
ZZZZZZ		1	22:25	
ZZZZZZ		1	22:29	
ZZZZZZ		1	22:34	
ZZZZZZ		1	22:39	
ZZZZZZ		1	22:43	
ZZZZZZ		1	22:48	
PBSXJ31ICS0		1	22:53	AL SB AS BA BE CD CA CR CO CU FE NI K SE AG NA TL V ZN
CCV		1	22:57	AL SB AS BA BE CD CA CR CO CU FE PB MG NI K SE AG NA TL V ZN
CCB		1	23:02	AL SB AS BA BE CD CA CR CO CU FE PB MG NI K SE AG NA TL V ZN
LCSSXJ31ICS0		1	23:06	AL SB AS BA BE CD CA CR CO CU FE NI K SE AG NA TL V ZN
ZZZZZZ		1	23:11	
ZZZZZZ		1	23:15	
ZZZZZZ		1	23:20	
SA6036-002	2W-SD-SD57-0001	1	23:25	AL BA BE CA CU K NA ZN
SA6036-004	2W-SD-SD56-0001	1	23:29	AL BA BE CA CU FE K NA ZN
SA6036-006	2W-SD-SD55-0001	1	23:34	AL BA BE CA CU K NA ZN
SA6036-008	2W-SD-SD54-0001	1	23:38	AL SB AS BA BE CD CA CR CO CU FE PB NI K SE AG NA TL V ZN
SA6036-009	2W-SD-SD53-0001	1	23:43	AL BA BE CA CU K NA ZN
SA6036-009L	2W-SD-SD53-0001L	5	23:48	AL BA BE CA CU K NA ZN
CCV		1	23:52	AL SB AS BA BE CD CA CR CO CU FE PB MG NI K SE AG NA TL V ZN
CCB		1	23:57	AL SB AS BA BE CD CA CR CO CU FE PB MG NI K SE AG NA TL V ZN
ZZZZZZ		1	0:01	
SA6036-009S	2W-SD-SD53-0001S	1	0:06	AL BA BE CA CU K NA ZN
SA6036-009P	2W-SD-SD53-0001P	1	0:10	AL BA BE CA CU K NA ZN
SA6036-010	2W-SD-SD53-0204	1	0:15	AL SB AS BA BE CD CA CR CO CU FE NI K SE AG NA TL V ZN
SA6036-011	2W-FD-101807-01	1	0:19	AL BA BE CA CR CU K NA ZN
SA6036-012	2W-SD-SD51-0001	1	0:24	AL SB AS BA BE CD CA CR CO CU FE PB NI K SE AG NA TL V ZN
SA6036-013	2W-SD-SD52-0001	1	0:29	AL SB AS BA BE CD CA CR CO CU FE NI K SE AG NA TL V ZN
SA6036-014	2W-SD-SD50-0204	1	0:33	AL SB AS BA BE CD CA CR CO CU FE NI K SE AG NA TL V ZN
SA6036-015	2W-SD-SD50-0001	1	0:38	AL BA BE CA CU K NA ZN
SA6036-016	2W-SD-SD49-0001	1	0:42	AL BA BE CA CU K NA ZN
CCV		1	0:47	AL SB AS BA BE CD CA CR CO CU FE PB MG NI K SE AG NA TL V ZN
CCB		1	0:51	AL SB AS BA BE CD CA CR CO CU FE PB MG NI K SE AG NA TL V ZN
SA6036-017	2W-SD-SD45-0001	1	0:56	AL BA BE CA CU K NA ZN
SA6036-018	2W-SD-SD45-0002	1	1:01	AL SB AS BA BE CD CA CR CO CU FE NI K SE AG NA TL V ZN
SA6036-019	2W-SD-SD46-0001	1	1:05	AL BA BE CA CU FE K NA ZN
SA6036-020	2W-SD-SD46-0204	1	1:10	AL SB AS BA BE CD CA CR CO CU FE NI K SE AG NA TL V ZN
ZZZZZZ		1	1:14	
ZZZZZZ		5	1:19	
ZZZZZZ		1	1:24	
PQL		1	1:28	AL SB AS BA BE CD CA CR CO CU FE PB MG NI K SE AG NA TL V ZN

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Instrument ID: THERMO ICAP 6500 **File Name:** IXK02A

Date: 11/3/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements														
ICSA		1	1:33	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	NI	K	SE	AG	NA	TL	V	ZN
ICSAB		1	1:38	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	NI	K	SE	AG	NA	TL	V	ZN
CCV		1	1:42	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	NI	K	SE	AG	NA	TL	V	ZN
CCB		1	1:47	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	NI	K	SE	AG	NA	TL	V	ZN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Instrument ID: THERMO ICAP 6500 **File Name:** IXK04A

Date: 11/4/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements							
Blank		1	16:18	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
Std 1		1	16:23	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ICV		1	16:27	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ICB		1	16:32	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
PQL		1	16:36	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ICSA		1	16:41	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ICSAB		1	16:46	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
CCV		1	16:50	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
CCB		1	16:55	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ZZZZZZ		1	16:59								
ZZZZZZ		1	17:04								
ZZZZZZ		1	17:08								
ZZZZZZ		1	17:13								
ZZZZZZ		1	17:17								
ZZZZZZ		1	17:22								
ZZZZZZ		1	17:26								
ZZZZZZ		1	17:31								
ZZZZZZ		1	17:36								
ZZZZZZ		1	17:40								
CCV		1	17:45	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
CCB		1	17:49	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ZZZZZZ		1	17:54								
ZZZZZZ		1	17:58								
ZZZZZZ		1	18:03								
ZZZZZZ		1	18:07								
ZZZZZZ		1	18:12								
ZZZZZZ		1	18:16								
ZZZZZZ		1	18:21								
ZZZZZZ		5	18:26								
ZZZZZZ		1	18:30								
ZZZZZZ		1	18:35								
CCV		1	18:39	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
CCB		1	18:43	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ZZZZZZ		1	18:48								
ZZZZZZ		1	18:53								
ZZZZZZ		1	18:57								
ZZZZZZ		1	19:02								
ZZZZZZ		1	19:06								
ZZZZZZ		1	19:11								
ZZZZZZ		1	19:15								
ZZZZZZ		1	19:20								
ZZZZZZ		1	19:25								
ZZZZZZ		2	19:29								
CCV		1	19:34	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
CCB		1	19:38	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ZZZZZZ		1	19:43								
ZZZZZZ		1	19:47								
ZZZZZZ		2	19:52								
ZZZZZZ		2	19:56								
ZZZZZZ		1	20:01								

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Instrument ID: THERMO ICAP 6500 **File Name:** IXK04A

Date: 11/4/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements														
ZZZZZZ		1	20:05															
ZZZZZZ		1	20:10															
ZZZZZZ		1	20:14															
ZZZZZZ		2	20:19															
ZZZZZZ		2	20:24															
CCV		1	20:28	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
CCB		1	20:33	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
ZZZZZZ		2	20:37																						
ZZZZZZ		1	20:42																						
ZZZZZZ		2	20:46																						
ZZZZZZ		3	20:51																						
ZZZZZZ		50	20:56																						
ZZZZZZ		3	21:00																						
ZZZZZZ		50	21:05																						
PQL		1	21:09	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
ICSA		1	21:14	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
ICSAB		1	21:19	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
CCV		1	21:23	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
CCB		1	21:28	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
PBSXJ31ICS0		1	21:32												PB	MG	MN								
LCSSXJ31ICS0		1	21:37												PB	MG	MN								
ZZZZZZ		1	21:41																						
ZZZZZZ		1	21:46																						
SA6036-001	2W-SD-SD58-0001	2	21:51						CD																
SA6036-002	2W-SD-SD57-0001	2	21:55		SB	AS			CD		CR	CO		FE	PB	MG	MN	NI		SE	AG		TL	V	
SA6036-004	2W-SD-SD56-0001	2	22:00		SB	AS			CD		CR	CO			PB	MG	MN	NI		SE	AG		TL	V	
SA6036-006	2W-SD-SD55-0001	3	22:04		SB	AS			CD		CR	CO		FE	PB	MG	MN	NI		SE	AG		TL	V	
SA6036-008	2W-SD-SD54-0001	1	22:09													MG	MN								
SA6036-009	2W-SD-SD53-0001	4	22:13		SB	AS			CD		CR	CO		FE	PB	MG	MN	NI		SE	AG		TL	V	
CCV		1	22:18	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
CCB		1	22:22	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
SA6036-009L	2W-SD-SD53-0001L	20	22:27		SB	AS			CD		CR	CO		FE	PB	MG	MN	NI		SE	AG		TL	V	
SA6036-009A	2W-SD-SD53-0001A	4	22:32		SB											MG					AG				
SA6036-009S	2W-SD-SD53-0001S	4	22:36		SB	AS			CD		CR	CO		FE	PB	MG	MN	NI		SE	AG		TL	V	
SA6036-009P	2W-SD-SD53-0001P	4	22:41		SB	AS			CD		CR	CO		FE	PB	MG	MN	NI		SE	AG		TL	V	
SA6036-010	2W-SD-SD53-0204	1	22:45												PB	MG	MN								
SA6036-011	2W-FD-101807-01	3	22:50		SB	AS			CD			CO		FE	PB	MG	MN	NI		SE	AG		TL	V	
SA6036-012	2W-SD-SD51-0001	1	22:54													MG	MN								
SA6036-013	2W-SD-SD52-0001	1	22:59												PB	MG	MN								
SA6036-014	2W-SD-SD50-0204	1	23:03												PB	MG	MN								
SA6036-015	2W-SD-SD50-0001	4	23:08		SB	AS			CD		CR	CO		FE	PB	MG	MN	NI		SE	AG		TL	V	
CCV		1	23:13	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
CCB		1	23:17	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
SA6036-016	2W-SD-SD49-0001	2	23:22		SB	AS			CD		CR	CO		FE	PB	MG	MN	NI		SE	AG		TL	V	
SA6036-017	2W-SD-SD45-0001	4	23:26		SB	AS			CD		CR	CO		FE	PB	MG	MN	NI		SE	AG		TL	V	
SA6036-018	2W-SD-SD45-0002	1	23:31												PB	MG	MN								
SA6036-019	2W-SD-SD46-0001	2	23:35		SB	AS			CD		CR	CO			PB	MG	MN	NI		SE	AG		TL	V	
SA6036-020	2W-SD-SD46-0204	1	23:40												PB	MG	MN								
ZZZZZZ		1	23:45																						
ZZZZZZ		1	23:49																						
ZZZZZZ		5	23:54																						

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Instrument ID: THERMO ICAP 6500 **File Name:** IXK04A

Date: 11/4/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements															
ZZZZZZ		5	23:58																
ZZZZZZ		25	0:03																
CCV		1	0:08	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K
CCB		1	0:12	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K
ZZZZZZ		5	0:17																
ZZZZZZ		5	0:22																
ZZZZZZ		5	0:27																
ZZZZZZ		5	0:31																
ZZZZZZ		5	0:36																
CCV		1	0:41	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K
CCB		1	0:45	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K
PQL		1	0:50	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K
ICSA		1	0:54	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K
ICSAB		1	0:59	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K
CCV		1	1:04	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K
CCB		1	1:08	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K

Lab Sample ID	Client ID	D.F.	Time	Elements															
ZZZZZZ		5	23:58																
ZZZZZZ		25	0:03																
CCV		1	0:08	SE	AG	NA	TL	V	ZN										
CCB		1	0:12	SE	AG	NA	TL	V	ZN										
ZZZZZZ		5	0:17																
ZZZZZZ		5	0:22																
ZZZZZZ		5	0:27																
ZZZZZZ		5	0:31																
ZZZZZZ		5	0:36																
CCV		1	0:41	SE	AG	NA	TL	V	ZN										
CCB		1	0:45	SE	AG	NA	TL	V	ZN										
PQL		1	0:50	SE	AG	NA	TL	V	ZN										
ICSA		1	0:54	SE	AG	NA	TL	V	ZN										
ICSAB		1	0:59	SE	AG	NA	TL	V	ZN										
CCV		1	1:04	SE	AG	NA	TL	V	ZN										
CCB		1	1:08	SE	AG	NA	TL	V	ZN										

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6036

Instrument ID: CETAC M6100 **File Name:** HXJ30A

Date: 10/30/2007 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
Calibration Blank		1	10:18	Hg
Standard #1 (0.2 p		1	10:20	Hg
Standard #2 (0.5 p		1	10:22	Hg
Standard #3 (1.0 p		1	10:24	Hg
Standard #4 (5.0 p		1	10:26	Hg
Standard #5 (10.0		1	10:28	Hg
ICV		1	10:31	HG
ICB		1	10:33	HG
PQL		1	10:35	HG
LCSSXJ29HGS0		2	10:37	HG
PBSXJ29HGS0		1	10:39	HG
ZZZZZZ		1	10:41	
ZZZZZZ		1	10:43	
ZZZZZZ		1	10:45	
ZZZZZZ		1	10:47	
ZZZZZZ		1	10:50	
ZZZZZZ		1	10:52	
ZZZZZZ		1	10:54	
CCV		1	10:56	HG
CCB		1	10:58	HG
ZZZZZZ		1	11:01	
ZZZZZZ		1	11:03	
ZZZZZZ		1	11:06	
ZZZZZZ		1	11:08	
ZZZZZZ		1	11:10	
SA6036-002	2W-SD-SD57-0001	1	11:12	HG
SA6036-004	2W-SD-SD56-0001	1	11:14	HG
SA6036-006	2W-SD-SD55-0001	1	11:16	HG
SA6036-008	2W-SD-SD54-0001	1	11:18	HG
SA6036-009	2W-SD-SD53-0001	1	11:20	HG
CCV		1	11:23	HG
CCB		1	11:25	HG
SA6036-009P	2W-SD-SD53-0001P	1	11:27	HG
SA6036-009S	2W-SD-SD53-0001S	1	11:29	HG
SA6036-010	2W-SD-SD53-0204	1	11:31	HG
SA6036-011	2W-FD-101807-01	1	11:33	HG
SA6036-012	2W-SD-SD51-0001	1	11:35	HG
SA6036-009L	2W-SD-SD53-0001L	5	11:38	HG
CCV		1	11:40	HG
CCB		1	11:42	HG

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services

SDG Name: SA6036

Instrument ID: CETAC M6100

File Name: Hxj31a

Date: 10/31/2007

Method: CV

Lab Sample ID	Client ID	D.F.	Time	Elements
Calibration Blank		1	12:05	Hg
Standard #1 (0.2 p		1	12:07	Hg
Standard #2 (0.5 p		1	12:09	Hg
Standard #3 (1.0 p		1	12:11	Hg
Standard #4 (5.0 p		1	12:14	Hg
Standard #5 (10.0		1	12:16	Hg
ICV		1	12:20	HG
ICB		1	12:22	HG
PQL		1	12:24	HG
LCSSXJ30HGS0		2	12:26	HG
PBSXJ30HGS0		1	12:28	HG
ZZZZZZ		1	12:30	
ZZZZZZ		1	12:32	
ZZZZZZ		1	12:34	
ZZZZZZ		1	12:36	
SA6036-013	2W-SD-SD52-0001	1	12:39	HG
SA6036-014	2W-SD-SD50-0204	1	12:41	HG
SA6036-015	2W-SD-SD50-0001	1	12:43	HG
CCV		1	12:45	HG
CCB		1	12:47	HG
SA6036-016	2W-SD-SD49-0001	1	12:49	HG
SA6036-017	2W-SD-SD45-0001	1	12:51	HG
SA6036-018	2W-SD-SD45-0002	1	12:53	HG
SA6036-019	2W-SD-SD46-0001	1	12:56	HG
SA6036-020	2W-SD-SD46-0204	1	12:58	HG
ZZZZZZ		1	13:00	
ZZZZZZ		1	13:02	
ZZZZZZ		1	13:04	
ZZZZZZ		1	13:06	
ZZZZZZ		1	13:08	
CCV		1	13:11	HG
CCB		1	13:13	HG
ZZZZZZ		1	13:19	
SA6036-013P	2W-SD-SD52-0001P	1	13:21	HG
ZZZZZZ		1	13:23	
SA6036-013L	2W-SD-SD52-0001L	5	13:26	HG
SA6036-013S	2W-SD-SD52-0001S	1	13:29	HG
CCV		1	13:31	HG
CCB		1	13:33	HG

FORM XIV - IN

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Blank Sample Summary Report

TOC in Soil

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG45098	Lloyd Kahn	30-OCT-07	N/A	U 400 ug/gdrywt	400 ug/gdrywt
MBLANK	WG45151	Lloyd Kahn	31-OCT-07	N/A	U 400 ug/gdrywt	400 ug/gdrywt

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG44866	CLP SOW 788	24-OCT-07	23-OCT-07	U 1 %	1 %
MBLANK	WG44867	CLP SOW 788	24-OCT-07	23-OCT-07	U 1 %	1 %

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Laboratory Control Sample Summary Report

TOC In Soil

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG45098-2	LCS	WG45098	30-OCT-07	N/A	ug/gdrywt	400000.000	450000	112	80-120	
WG45151-2	LCS	WG45151	31-OCT-07	N/A	ug/gdrywt	400000.000	460000	114	80-120	

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG44866-2	LCS	WG44866	24-OCT-07	23-OCT-07	%	90	90.	100	80-120	
WG44867-2	LCS	WG44867	24-OCT-07	23-OCT-07	%	90	90.	100	80-120	

pH(Soil)

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG44966-1	LCS	WG44966	23-OCT-07	23-OCT-07	pH	7	7.0	100	80-120	

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Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Duplicate Sample Summary Report

Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG44867-3	SA6036-9	WG44867	24-OCT-07	%	34.	34.	0	20
WG44867-4	SA6036-19	WG44867	24-OCT-07	%	42.	44.	5	20

pH(Soil)

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG44966-3	SA6036-9	WG44966	23-OCT-07	pH	5.1	5.1	0	20

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Matrix Spike Sample Summary Report

TOC In Soil

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG45098-3	MS	SA6036-9	WG45098	30-OCT-07	ug/gdrywt	153164.65	200000	410000	133*	75 - 125
WG45098-4	MSD	SA6036-9	WG45098	30-OCT-07	ug/gdrywt	195735.81	200000	430000	115	75 - 125

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Sample 2W-SD-SD53-0001

SA6036-009

Acquire Date: 04-Nov-2007 10:13 pm Sample Type: Unknown

Arsenic 28.2 mg/kg

Elem	Avg	Units	Stddev	%RSD
Ag3280_	-13.41	ug/L	0.8186	6.1059
Al3961_	71790.	ug/L	106.8172	0.1488
As1891_	114.7	ug/L	1.1222	0.9780
B_2089_	39.54	ug/L	0.4713	1.1920
Ba4554_	202.3	ug/L	0.3091	0.1527
Be3130_	5.001	ug/L	0.1123	2.2461
Ca3158_	11710.	ug/L	115.2090	0.9836
Cd2265_	-6.144	ug/L	1.1066	18.0121
Co2286_	11.01	ug/L	0.8511	7.7303
Cr2677_	192.4	ug/L	1.9141	0.9949
Cu3273_	231.0	ug/L	0.4077	0.1765
Fe2599_	810600.	ug/L	427.0836	0.0527
K_7664_	7120.	ug/L	79.7780	1.1205
Mg2852	13580.	ug/L	47.0605	0.3465
Mn2576	941.3	ug/L	11.2587	1.1961
Mo2020	8.253	ug/L	0.1389	1.6833
Na5895_	1325.	ug/L	29.1955	2.2028
Ni2316_	78.10	ug/L	2.6279	3.3649
Pb2203_	267.6	ug/L	7.1687	2.6784
Sb2068_	-.9796	ug/L	0.6573	67.1037
Se1960_	26.70	ug/L	4.2647	15.9737
Si2516_	2091.	ug/L	4.9115	0.2349
Sn1899_	44.52	ug/L	2.5333	5.6902
Sr4215_	93.44	ug/L	0.2909	0.3113
Ti3349_	3241.	ug/L	0.7688	0.0237
Tl1908_	.9138	ug/L	1.1212	122.7004
V_2924_	233.0	ug/L	0.8630	0.3703
Zn2062_	631.9	ug/L	9.8273	1.5551
Y_2243_	6995.0	Cts/S	88.0553	1.2588
Y_3600_	11247.	Cts/S	20.9190	0.1860
Y_3600_	133470.	Cts/S	85.8974	0.0644

$$\left(\frac{114.7\ ug}{L}\right)\left(\frac{100\ ml}{1.19g}\right)\left(\frac{1}{.342}\right)\left(\frac{1}{1000}\right) = 28.2\ mg/kg$$

sAmple 2w-SD-SD57-0001
cd rep result 1.1 mg/kg

SA6036-002

Acquire Date: 04-Nov-2007 9:55 pm Sample Type: Unknown

Elem	Avg	Units	Stddev	%RSD
Ag3280_	-8.249	ug/L	0.1144	1.3869
Al3961_	60030.	ug/L	23.8786	0.0398
As1891_	47.21	ug/L	3.6322	7.6935
B_2089_	25.14	ug/L	0.5216	2.0750
Ba4554_	524.0	ug/L	0.0417	0.0080
Be3130_	3.911	ug/L	0.0734	1.8777
Ca3158_	19530.	ug/L	128.6213	0.6586
Cd2265_	12.37	ug/L	0.5343	4.3184
Co2286_	53.98	ug/L	0.6910	1.2802
Cr2677_	104.5	ug/L	0.4621	0.4422
Cu3273_	206.6	ug/L	3.2116	1.5547
Fe2599_	415800.	ug/L	923.1279	0.2220
K_7664_	12110.	ug/L	59.1958	0.4887
Mg2852_	24650.	ug/L	106.4887	0.4320
Mn2576_	5146.	ug/L	52.8777	1.0276
Mo2020_	3.336	ug/L	0.0969	2.9034
Na5895_	1489.	ug/L	6.8937	0.4631
Ni2316_	123.2	ug/L	0.5505	0.4467
Pb2203_	1742.	ug/L	17.7107	1.0167
Sb2068_	.2816	ug/L	0.9083	322.5920
Se1960_	12.78	ug/L	2.6032	20.3744
Si2516_	2038.	ug/L	5.2881	0.2595
Sn1899_	36.25	ug/L	0.6305	1.7390
Sr4215_	114.5	ug/L	0.2502	0.2184
Ti3349_	5078.	ug/L	0.0633	0.0012
Tl1908_	-1.218	ug/L	1.0265	84.2561
V_2924_	251.9	ug/L	1.9666	0.7806
Zn2062_	3878.	ug/L	33.6012	0.8665
Y_2243_	6558.4	Cts/S	53.2377	0.8117
Y_3600_	11442.	Cts/S	28.2462	0.2469
Y_3600_	130440.	Cts/S	318.5389	0.2442

$$\left(\frac{12.37\ ug}{L}\right)\left(\frac{100ml}{1.75g}\right)\left(\frac{1}{.627}\right)\left(\frac{1}{1000}\right) = 1.13\ mg/kg$$

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	DF
SA6000-009					UNK	10/30/07 11:03:52 am	0.183	1079	1.92		1.00
Replicates	1083.2	1050.6	1100.3	1082.9							
SA6000-010					UNK	10/30/07 11:06:00 am	0.142	883	1.84		1.00
Replicates	881.5	878.4	865.9	904.7							
SA6031-001					UNK	10/30/07 11:08:08 am	0.392	2092	1.43		1.00
Replicates	2127.8	2057.1	2081.0	2100.8							
SA6031-002					UNK	10/30/07 11:10:16 am	1.228	6139	1.79		1.00
Replicates	5998.5	6103.7	6225.8	6227.0							

Sample 2W-SD-SD57-0001 rep result 0.02 mg/kg

SA6036-002					UNK	10/30/07 11:12:24 am	0.090	628	4.44		1.00
Replicates	604.2	664.3	634.5	608.0							

$$\left(\frac{0.090\,ug}{L}\right)\left(\frac{100\,ml}{0.7\,g}\right)\left(\frac{1}{.627}\right)\left(\frac{1}{1000}\right) = 0.02\ mg/kg$$

SA6036-004					UNK	10/30/07 11:14:32 am	0.385	2054	0.98		1.00
Replicates	2027.0	2062.2	2074.2	2051.7							
SA6036-006					UNK	10/30/07 11:16:40 am	0.338	1828	2.74		1.00
Replicates	1761.8	1816.9	1857.1	1874.8							
SA6036-008					UNK	10/30/07 11:18:48 am	0.224	1278	1.37		1.00
Replicates	1296.5	1289.8	1261.4	1264.9							

Sample 2W-SD-SD53-0001 rep result 0.20 mg/kg

SA6036-009					UNK	10/30/07 11:20:57 am	0.445	2349	1.71		1.00
Replicates	2309.9	2320.7	2394.5	2369.2							

$$\left(\frac{0.445\,ug}{L}\right)\left(\frac{100\,ml}{0.64\,g}\right)\left(\frac{1}{.342}\right)\left(\frac{1}{1000}\right) = 0.203\ mg/kg$$

CCV					CCV	10/30/07 11:23:04 am	5.228	25502	0.18		1.00
Replicates	25562.3	25507.1	25478.4	25459.1							
% Recovery	104.57										
CCB					CCB	10/30/07 11:25:10 am	-0.023	83	24.78		1.00
Replicates	105.4	72.0	94.3	60.3							
SA6036-009P					UNK	10/30/07 11:27:19 am	1.437	7147	0.46		1.00
Replicates	7100.3	7147.5	7169.9	7168.9							

Katahdin Analytical Services 4000099

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**A. BERNHARDT**	**DATE:**	**JANUARY 17, 2008**
FROM:	**MATTHEW D. KRAUS**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – PAH/PEST/PCB**
NSB NEW LONDON – CTO 439
SDG – SA6037

SAMPLES: 6/Sediment/

2W-FD-101907-01	2W-SD-SD43-0001	2W-SD-SD44-0001
2W-SD-SD47-0001	2W-SD-SD48-0001	2W-SD-SD48-0204

2/Aqueous/

2W-FB-101907-01	2W-RB-101907-01

Overview

The sample set for CTO 439, NSB New London, SDG: SA6037, consists of six sediment environmental samples and two aqueous quality control blanks. One field duplicate pair (2W-FD-101907-01 / 2W-SD-SD47-0001) is included in this SDG.

All of the samples were analyzed for target compound list (TCL) polychlorinated aromatic hydrocarbons (PAHs), organochlorine pesticides (PEST) and polychlorinated biphenyls (PCBs). The samples were collected by Tetra Tech NUS on October 19, 2007 and analyzed by Mitkem Corporation under Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. The PAH, PEST and PCB analyses were conducted in accordance with SW-846 methods 8270C, 8180A and 8082, respectively. Gas chromatography/mass spectrometry (GC/MS) with selective ion monitoring (SIM) and gas chromatography/electron capture detector (GC/ECD), methodologies/instrumentation were implemented for PAH and PEST/PCB analyses, respectively. A USEPA Region I Tier III data validation was performed on all samples.

Data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • GC/MS Instrument Tuning
• Initial and Continuing Calibration Recoveries
* • Laboratory Method/Preparation Blank Analyses
• Surrogate Recoveries
• Laboratory Control Sample Recoveries
* • Internal Standards
* • Detection Limits
* • Field Duplicate Precision
• Compound Quantitation

* - All quality control criteria were met for this parameter.

PAH

The continuing calibration percent difference (%D) for dibenzo(a,h)anthracene on instrument GCMS-R at 10:30 on 11/05/07 was greater than 25%. No data was qualified because no environmental results were affected.

The continuing calibration %D for benzo(g,h,i)perylene on instrument GCMS-R at 12:22 on 10/30/07 was greater than 25% affecting samples 2W-RB-101907-01 and 2W-FB-101907-01. The non-detected results reported for dibenzo(a,h)anthracene for samples 2W-RB-101907-01 and 2W-FB-101907-01 were qualified as estimated, "UJ".

The continuing calibration %D for benzo(k)fluoranthene on instrument GCMS-R at 12:43 on 11/06/07 was less than -25% affecting samples 2W-SD-SD47-0001 and 2W-FD-101907-01. The positive results reported for benzo(k)fluoranthene for samples 2W-SD-SD47-0001 and 2W-FD-101907-01 were qualified as estimated, "J".

The continuing calibration %Ds for indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene on instrument GCMS-R at 13:01 on 11/07/07 were greater than 25% affecting samples 2W-SD-SD48-0001 (initial analysis) and 2W-SD-SD48-0204. The positive results reported for dibenzo(a,h)anthracene were qualified as estimated, "J", for both of the aforementioned samples. The positive result reported for indeno(1,2,3-cd)pyrene for sample 2W-SD-SD48-0204 was also qualified as estimated, "J". However, the positive result reported for indeno(1,2,3-cd)pyrene for sample 2W-SD-SD48-0001 was not qualified because that result was reported from a 4X dilution.

The continuing calibration %Ds for benzo(a)anthracene, benzo(k)fluoranthene and dibenzo(a,h)anthracene were outside of the ±25% quality control limit affecting samples 2W-SD-SD44-0001, 2W-SD-SD43-0001 and 2W-SD-SD48-0001. The affected positive results reported for the aforementioned compounds were qualified as estimated, "J".

The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) percent recoveries (%Rs) for pyrene were greater then the upper quality control limit in WG45236-2 (LCS) and WG5236-3 (LCSD). Those quality control (QC) samples were analyzed on 11/05/07 on instrument GCMS-R at 11:55 and 12:38 affecting all sediment samples. Positive results reported for pyrene in sediment samples were qualified as estimated, "J".

PEST

The continuing calibration %Ds for endrin ketone on instrument GC08 at 18:24 on 11/05/07 was outside of the ±15% quality control criteria on columns 1 (ZB-MULTIRESIDUE-1) and 2 (ZB-MULTIRESIDUE-2) affecting samples 2W-SD-SD44-0001, 2W-SD-SD47-0001, 2W-SD-SD48-0001, 2W-FB-101907-01 and 2W-RB-101907-01. The affected non-detected results reported for endrin ketone were qualified as estimated, "UJ", unless previously qualified as rejected, "UR", due to low percent solids in which case there was no further validation action.

The continuing calibration %Ds for several compounds in the PEST fraction on instrument GC08 at 22:55 on 11/05/07 were outside of the ±15% quality control criteria on columns 1 and 2. The positive 4,4'-DDD and 4,4'-DDT results reported for samples 2W-SD-SD44-0001, 2W-SD-SD47-0001 and 2W-SD-SD48-0001 were qualified as estimated, "J". The non-detected endrin ketone, gamma-BHC, heptachlor, delta-BHC, endrin, endosulfan sulfate and methoxychlor results reported for sample 2W-SD-SD48-0001 were qualified as estimated, "UJ".

The continuing calibration %D for endrin ketone was greater than 15% on instrument GC08 at 20:13 on 11/06/07 on columns 1 and 2 affecting samples 2W-FD-101907, 2W-SD-SD43-0001 and 2W-SD-SD48-0204. The endosulfan sulfate %Ds for the sample calibration verification were within quality control limits for column 1 and outside of quality control limits for column 2. The

non-detected result reported for endrin ketone for sample 2W-SD-SD48-0204 was qualified as estimated, "UJ". The other affected endrin ketone results were qualified previously qualified as rejected, "UR", due to low percent solids; therefore, no further validation action was taken. No endosulfan sulfate data was qualified because the endosulfan sulfate %D on column 2 was within quality control limits and all of the affected results were reported as non-detected.

The continuing calibration %D for endrin ketone was greater than 15% on instrument GC08 at 01:40 on 11/06/07 on columns 1 and 2 affecting samples 2W-FD-101907, 2W-SD-SD43-0001 and 2W-SD-SD48-0204. The non-detected endrin ketone result reported for sample 2W-SD-SD48-0204 was qualified as estimated, "UJ". No validation action was taken on the remaining affected endrin ketone results because those results were previously qualified as rejected, "UR", due to low percent solids.

The continuing calibration %Ds for heptachlor and endosulfan sulfate were greater than 15% on instrument GC08 at 01:40 on 11/06/07 on column 1 affecting samples 2W-FD-101907, 2W-SD-SD43-0001 and 2W-SD-SD48-0204. No data was qualified because the heptachlor and endosulfan sulfate %Ds were within quality control limits on column 2.

The continuing calibration %D for 4,4'-DDT was greater than 15% on instrument GC08 at 01:40 on 11/06/07 on column 2 affecting samples 2W-FD-101907, 2W-SD-SD43-0001 and 2W-SD-SD48-0204. No data was qualified because the 4,4'-DDT %D was within quality control limits on column 1.

The relative percent difference (RPD) between 4,4'-DDT results on column 1 and 2 for sample 2W-FD-101907-01 was greater than 25% but less than 100%. The positive result reported for 4,4'-DDT for sample 2W-FD-101907-01 was qualified as estimated, "J".

PCB

The average continuing calibration %Ds for all Aroclor-1016 peaks were greater than 25% on instrument GC06 at 03:25 on 11/03/07 on column 1 affecting all sediment samples. No data was qualified because the average %D of the Aroclor-1016 peaks on column 2 was within quality control limits and all of the affected Aroclor-1016 results were reported as non-detected.

The recoveries of the surrogate decachlorobiphenyl were greater than the upper quality control limit on columns 1 and 2 for QC samples WG44851-BLANK, WG44851-LCS and WG44851-LCSD. No data was qualified because the corresponding tetrachloro-m-xylene recoveries were within quality control limits and no environmental samples were affected.

Notes

Several results were qualified as estimated, "J", due to uncertainty near the detection limit.

Two of three laboratory Sample Receipt Condition Reports were marked to indicate that samples were not properly preserved; however, the laboratory case narrative stated nothing pertaining to this anomaly. The laboratory was contacted and stated the marks indicating that the samples were not properly preserved are incorrect.

Positive and non-detected results reported for samples 2W-FD-101907-01, 2W-SD-SD43-0001 2W-SD-SD44-0001 and 2W-SD-SD47-0001 were qualified as estimated, "J", or rejected, "UR", respectively due to sample consistency (percent solids < 30%).

According to the laboratory case narrative samples 2W-SK-SD47-0001, 2W-FD-101907-01, 2W-SD-SD44-0001, 2W-SD-SD43-0001, 2W-SD-SD48-0001 and 2W-SD-SD48-0204 analyzed for the PCB fraction were subjected to a sulfur cleanup which was not completely effective; therefore, the PCB results for those samples may be affected due to sulfur interference.

The PEST fraction of sample 2W-SD-SD48-0204 was diluted approximately 10X by the laboratory due to a matrix-related anomaly resulting in increased reporting limits for target compounds.

The initial analysis of samples 2W-SD-SD44-0001 and 2W-SD-SD43-0001 yielded noncompliant surrogate recoveries for the PEST fraction. The samples were re-analyzed yielding compliant surrogate recoveries. PEST results are reported from the re-analysis of the aforementioned compounds.

The initial analysis of sample 2W-SD-SD48-0001 yielded benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene and pyrene results that were greater than the instrumental calibration. Sample 2W-SD-SD48-001 was re-analyzed at a 4X dilution for the PAH fraction and all of the aforementioned compound results fell within the instrument calibration range. Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene and pyrene results are reported from the 4X dilution of sample 2W-SD-SD48-0001.

The rinsate blank was not used to establish blank action levels and was not qualified due to laboratory blank contamination.

Executive Summary

Laboratory Performance: Several VOC and PEST results were qualified due to calibration noncompliance. Pyrene results were qualified due to uncertainty near the detection limit. The 4,4'-DDT result reported for sample 2W-FD-101907-01 was qualified due to the difference between detector results.

Other Factors Affecting Data Quality: Several results were qualified due to uncertainty near the detection limit. All compound results reported for samples 2W-FD-101907-01, 2W-SD-SD43-0001, 2W-SD-SD44-0001 and 2W-SD47-0001 were qualified due to matrix consistency (percent solids < 30%).

The data for these analyses were reviewed with reference to the "USEPA Region 1 Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses", December 1996, and the (DOD) QSM document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006).

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 (DOD) QSM Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Matthew D. Kraus
Environmental Chemist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C – Regional Worksheets
4. Appendix D - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

A	= Lab Blank Contamination
B	= Field Blank Contamination
C	= Calibration Noncompliance (e.g. %RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	= GC/MS Tuning Noncompliance
D	= MS/MSD Recovery Noncompliance
E	= LCS/LCSD Recovery Noncompliance
F	= Laboratory Duplicate Imprecision
G	= Field Duplicate Imprecision
H	= Holding Time Exceedance
I	= ICP Serial Dilution Noncompliance
J	= GFAA PDS – GFAA MSA's r <0.995 / ICP PDS Recovery Noncompliance
K	= IPC Interference – included ICS %R Noncompliance
L	= Instrument Calibration Range Exceedance
M	= Sample Preservation Noncompliance
N	= Internal Standard Noncompliance
N01	= Internal Standard Recovery Noncompliance Dioxins
N02	= Recovery Standard Noncompliance Dioxins
N03	= Clean-up Standard Noncompliance Dioxins
O	= Poor Instrument Performance (e.g. base-line drifting)
P	= Uncertainty near detection limit (< 2 x IDL for inorganics and < CRDL for organics)
Q	= Other problems (can encompass a number of issues; e.g. chromatography, interferences, etc.)
R	= Surrogate Recovery Noncompliance
S	= Pesticide/PCB Resolution
T	= % Breakdown Noncompliance for DDT and Endrin
U	= % Difference between columns/detectors > 25% for positive results determined via GC/HPLC
V	= Non-linear calibrations; correlation coefficient r < 0.995
W	= EMPC result
X	= Signal to noise response drop
Y	= Percent solids <30%
Z	= Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 00873

SDG: SA6037 MEDIA: WATER DATA FRACTION: PAH

nsample	2W-FB-101907-01	nsample	2W-RB-101907-01
samp_date	10/19/2007	samp_date	10/19/2007
lab_id	SA6037-9	lab_id	SA6037-8
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	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	UJ	C
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	UJ	C
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: 00873

SDG: SA6037 MEDIA: SOIL DATA FRACTION: PAH

nsample	2W-FD-101907-01	nsample	2W-SD-SD43-0001	nsample	2W-SD-SD44-0001
samp_date	10/19/2007	samp_date	10/19/2007	samp_date	10/19/2007
lab_id	SA6037-2	lab_id	SA6037-5RA	lab_id	SA6037-3RA
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	15.1	Pct_Solids	21.9	Pct_Solids	23.3
DUP_OF:	2W-SD-SD47-0001	DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	130	UR	Y
2-METHYLNAPHTHALENE	130	UR	Y
ACENAPHTHENE	130	UR	Y
ACENAPHTHYLENE	110	J	PY
ANTHRACENE	81	J	PY
BENZO(A)ANTHRACENE	700	J	Y
BENZO(A)PYRENE	710	J	Y
BENZO(B)FLUORANTHENE	940	J	Y
BENZO(G,H,I)PERYLENE	530	J	Y
BENZO(K)FLUORANTHENE	480	J	CY
CHRYSENE	740	J	Y
DIBENZO(A,H)ANTHRACENE	310	J	Y
FLUORANTHENE	1200	J	Y
FLUORENE	30	J	PY
INDENO(1,2,3-CD)PYRENE	720	J	Y
NAPHTHALENE	130	UR	Y
PHENANTHRENE	420	J	Y
PYRENE	1200	J	EY

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	91	UR	Y
2-METHYLNAPHTHALENE	20	J	PY
ACENAPHTHENE	26	J	PY
ACENAPHTHYLENE	58	J	PY
ANTHRACENE	91	UR	Y
BENZO(A)ANTHRACENE	220	J	CY
BENZO(A)PYRENE	240	J	Y
BENZO(B)FLUORANTHENE	380	J	Y
BENZO(G,H,I)PERYLENE	240	J	Y
BENZO(K)FLUORANTHENE	160	J	CY
CHRYSENE	230	J	Y
DIBENZO(A,H)ANTHRACENE	120	J	CY
FLUORANTHENE	490	J	Y
FLUORENE	41	J	PY
INDENO(1,2,3-CD)PYRENE	270	J	Y
NAPHTHALENE	20	J	PY
PHENANTHRENE	170	J	Y
PYRENE	430	J	EY

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	86	UR	Y
2-METHYLNAPHTHALENE	86	UR	Y
ACENAPHTHENE	16	J	PY
ACENAPHTHYLENE	54	J	PY
ANTHRACENE	62	J	PY
BENZO(A)ANTHRACENE	740	J	CY
BENZO(A)PYRENE	680	J	Y
BENZO(B)FLUORANTHENE	810	J	Y
BENZO(G,H,I)PERYLENE	470	J	Y
BENZO(K)FLUORANTHENE	490	J	CY
CHRYSENE	710	J	Y
DIBENZO(A,H)ANTHRACENE	260	J	CY
FLUORANTHENE	1100	J	Y
FLUORENE	21	J	PY
INDENO(1,2,3-CD)PYRENE	660	J	Y
NAPHTHALENE	86	UR	Y
PHENANTHRENE	360	J	Y
PYRENE	1200	J	EY

PROJ_NO: 00873

SDG: SA6037 MEDIA: SOIL DATA FRACTION: PAH

nsample	2W-SD-SD47-0001
samp_date	10/19/2007
lab_id	SA6037-1
qc_type	NM
units	UG/KG
Pct_Solids	14.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	140	UR	Y
2-METHYLNAPHTHALENE	140	UR	Y
ACENAPHTHENE	140	UR	Y
ACENAPHTHYLENE	87	J	PY
ANTHRACENE	60	J	PY
BENZO(A)ANTHRACENE	560	J	Y
BENZO(A)PYRENE	560	J	Y
BENZO(B)FLUORANTHENE	730	J	Y
BENZO(G,H,I)PERYLENE	360	J	Y
BENZO(K)FLUORANTHENE	420	J	CY
CHRYSENE	600	J	Y
DIBENZO(A,H)ANTHRACENE	220	J	Y
FLUORANTHENE	950	J	Y
FLUORENE	24	J	PY
INDENO(1,2,3-CD)PYRENE	500	J	Y
NAPHTHALENE	140	UR	Y
PHENANTHRENE	330	J	Y
PYRENE	1000	J	EY

nsample	2W-SD-SD48-0001
samp_date	10/19/2007
lab_id	SA6037-6
qc_type	NM
units	UG/KG
Pct_Solids	38.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	53	U	
2-METHYLNAPHTHALENE	12	J	P
ACENAPHTHENE	25	J	P
ACENAPHTHYLENE	59		
ANTHRACENE	100		
BENZO(G,H,I)PERYLENE	700		
BENZO(K)FLUORANTHENE	650		
DIBENZO(A,H)ANTHRACENE	390	J	C
FLUORENE	43	J	P
NAPHTHALENE	9.6	J	P
PHENANTHRENE	690		

nsample	2W-SD-SD48-0001DL
samp_date	10/19/2007
lab_id	SA6037-6DL
qc_type	NM
units	UG/KG
Pct_Solids	38.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	1100	J	C
BENZO(A)PYRENE	930		
BENZO(B)FLUORANTHENE	1100		
CHRYSENE	1000		
FLUORANTHENE	2000		
INDENO(1,2,3-CD)PYRENE	870		
PYRENE	1800	J	E

PROJ_NO: 00873

SDG: SA6037 MEDIA: SOIL DATA FRACTION: PAH

nsample	2W-SD-SD48-0204
samp_date	10/19/2007
lab_id	SA6037-7
qc_type	NM
units	UG/KG
Pct_Solids	46.4
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	43	U	
2-METHYLNAPHTHALENE	12	J	P
ACENAPHTHENE	8.4	J	P
ACENAPHTHYLENE	41	J	P
ANTHRACENE	38	J	P
BENZO(A)ANTHRACENE	270		
BENZO(A)PYRENE	250		
BENZO(B)FLUORANTHENE	260		
BENZO(G,H,I)PERYLENE	190		
BENZO(K)FLUORANTHENE	180		
CHRYSENE	280		
DIBENZO(A,H)ANTHRACENE	110	J	C
FLUORANTHENE	300		
FLUORENE	20	J	P
INDENO(1,2,3-CD)PYRENE	250	J	C
NAPHTHALENE	12	J	P
PHENANTHRENE	170		
PYRENE	510	J	E

PROJ_NO: 00873

SDG: SA6037 MEDIA: WATER DATA FRACTION: PEST/PCB

nsample	2W-FB-101907-01	nsample	2W-RB-101907-01
samp_date	10/19/2007	samp_date	10/19/2007
lab_id	SA6037-9	lab_id	SA6037-8
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	Val Qual	Qual Code
4,4'-DDD	0.1	U	
4,4'-DDE	0.1	U	
4,4'-DDT	0.1	U	
ALDRIN	0.05	U	
ALPHA-BHC	0.05	U	
ALPHA-CHLORDANE	0.05	U	
AROCLOR-1016	0.5	U	
AROCLOR-1221	0.5	U	
AROCLOR-1232	0.5	U	
AROCLOR-1242	0.5	U	
AROCLOR-1248	0.5	U	
AROCLOR-1254	0.5	U	
AROCLOR-1260	0.5	U	
BETA-BHC	0.05	U	
DELTA-BHC	0.05	U	
DIELDRIN	0.1	U	
ENDOSULFAN I	0.05	U	
ENDOSULFAN II	0.1	U	
ENDOSULFAN SULFATE	0.1	U	
ENDRIN	0.1	U	
ENDRIN ALDEHYDE	0.1	U	
ENDRIN KETONE	0.1	UJ	C
GAMMA-BHC (LINDANE)	0.05	U	
GAMMA-CHLORDANE	0.05	U	
HEPTACHLOR	0.062		
HEPTACHLOR EPOXIDE	0.05	U	
METHOXYCHLOR	0.5	U	
TOXAPHENE	1	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.1	U	
4,4'-DDE	0.1	U	
4,4'-DDT	0.1	U	
ALDRIN	0.05	U	
ALPHA-BHC	0.05	U	
ALPHA-CHLORDANE	0.05	U	
AROCLOR-1016	0.5	U	
AROCLOR-1221	0.5	U	
AROCLOR-1232	0.5	U	
AROCLOR-1242	0.5	U	
AROCLOR-1248	0.5	U	
AROCLOR-1254	0.5	U	
AROCLOR-1260	0.5	U	
BETA-BHC	0.05	U	
DELTA-BHC	0.05	U	
DIELDRIN	0.1	U	
ENDOSULFAN I	0.05	U	
ENDOSULFAN II	0.1	U	
ENDOSULFAN SULFATE	0.1	U	
ENDRIN	0.1	U	
ENDRIN ALDEHYDE	0.1	U	
ENDRIN KETONE	0.1	UJ	C
GAMMA-BHC (LINDANE)	0.05	U	
GAMMA-CHLORDANE	0.05	U	
HEPTACHLOR	0.05	U	
HEPTACHLOR EPOXIDE	0.05	U	
METHOXYCHLOR	0.5	U	
TOXAPHENE	1	U	

PROJ_NO: 00873

SDG: SA6037 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample	2W-FD-101907-01	nsample	2W-SD-SD43-0001	nsample	2W-SD-SD44-0001
samp_date	10/19/2007	samp_date	10/19/2007	samp_date	10/19/2007
lab_id	SA6037-2DL	lab_id	SA6037-5DL	lab_id	SA6037-3
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	15.1	Pct_Solids	21.9	Pct_Solids	23.3
DUP_OF:	2W-SD-SD47-0001	DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	900	J	Y
4,4'-DDE	37	J	PY
4,4'-DDT	52	J	PUY
ALDRIN	22	UR	Y
ALPHA-BHC	22	UR	Y
ALPHA-CHLORDANE	22	UR	Y
AROCLOR-1016	110	UR	Y
AROCLOR-1221	110	UR	Y
AROCLOR-1232	110	UR	Y
AROCLOR-1242	110	UR	Y
AROCLOR-1248	110	UR	Y
AROCLOR-1254	110	UR	Y
AROCLOR-1260	430	J	Y
BETA-BHC	22	UR	Y
DELTA-BHC	22	UR	Y
DIELDRIN	44	UR	Y
ENDOSULFAN I	22	UR	Y
ENDOSULFAN II	44	UR	Y
ENDOSULFAN SULFATE	44	UR	Y
ENDRIN	44	UR	Y
ENDRIN ALDEHYDE	44	UR	Y
ENDRIN KETONE	44	UR	Y
GAMMA-BHC (LINDANE)	22	UR	Y
GAMMA-CHLORDANE	22	UR	Y
HEPTACHLOR	22	UR	Y
HEPTACHLOR EPOXIDE	22	UR	Y
METHOXYCHLOR	83	J	PY
TOXAPHENE	440	UR	Y

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	1300	J	Y
4,4'-DDE	55	J	PY
4,4'-DDT	150	UR	Y
ALDRIN	78	UR	Y
ALPHA-BHC	78	UR	Y
ALPHA-CHLORDANE	52	J	PY
AROCLOR-1016	78	UR	Y
AROCLOR-1221	78	UR	Y
AROCLOR-1232	78	UR	Y
AROCLOR-1242	78	UR	Y
AROCLOR-1248	78	UR	Y
AROCLOR-1254	78	UR	Y
AROCLOR-1260	300	J	Y
BETA-BHC	78	UR	Y
DELTA-BHC	78	UR	Y
DIELDRIN	150	UR	Y
ENDOSULFAN I	78	UR	Y
ENDOSULFAN II	150	UR	Y
ENDOSULFAN SULFATE	150	UR	Y
ENDRIN	150	UR	Y
ENDRIN ALDEHYDE	150	UR	Y
ENDRIN KETONE	150	UR	Y
GAMMA-BHC (LINDANE)	78	UR	Y
GAMMA-CHLORDANE	59	J	PY
HEPTACHLOR	78	UR	Y
HEPTACHLOR EPOXIDE	78	UR	Y
METHOXYCHLOR	780	UR	Y
TOXAPHENE	1500	UR	Y

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	93	J	CY
4,4'-DDE	10	J	PY
4,4'-DDT	19	J	CY
ALDRIN	7.3	UR	Y
ALPHA-BHC	7.3	UR	Y
ALPHA-CHLORDANE	7.3	UR	Y
AROCLOR-1016	73	UR	Y
AROCLOR-1221	73	UR	Y
AROCLOR-1232	73	UR	Y
AROCLOR-1242	73	UR	Y
AROCLOR-1248	73	UR	Y
AROCLOR-1254	73	UR	Y
AROCLOR-1260	150	J	Y
BETA-BHC	7.3	UR	Y
DELTA-BHC	7.3	UR	Y
DIELDRIN	14	UR	Y
ENDOSULFAN I	7.3	UR	Y
ENDOSULFAN II	14	UR	Y
ENDOSULFAN SULFATE	14	UR	Y
ENDRIN	14	UR	Y
ENDRIN ALDEHYDE	14	UR	Y
ENDRIN KETONE	14	UR	Y
GAMMA-BHC (LINDANE)	7.3	UR	Y
GAMMA-CHLORDANE	7.3	UR	Y
HEPTACHLOR	7.3	UR	Y
HEPTACHLOR EPOXIDE	7.3	UR	Y
METHOXYCHLOR	73	UR	Y
TOXAPHENE	140	UR	Y

PROJ_NO: 00873

SDG: SA6037 MEDIA: SOIL DATA FRACTION: PEST/PCB

~~nsample~~	~~2W-SD-SD47-0001~~	~~nsample~~	~~2W-SD-SD48-0001~~	nsample	2W-SD-SD48-0204
~~samp_date~~	~~10/19/2007~~	~~samp_date~~	~~10/19/2007~~	samp_date	10/19/2007
~~lab_id~~	~~SA6037-1~~	~~lab_id~~	~~SA6037-6~~	~~lab_id~~	~~SA6037-7DL~~
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	14.0	Pct_Solids	38.0	Pct_Solids	46.4
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	580	J	CY
4,4'-DDE	23	J	PY
4,4'-DDT	32	J	CY
ALDRIN	12	UR	Y
ALPHA-BHC	12	UR	Y
ALPHA-CHLORDANE	12	UR	Y
AROCLOR-1016	120	UR	Y
AROCLOR-1221	120	UR	Y
AROCLOR-1232	120	UR	Y
AROCLOR-1242	120	UR	Y
AROCLOR-1248	120	UR	Y
AROCLOR-1254	120	UR	Y
AROCLOR-1260	380	J	Y
BETA-BHC	12	UR	Y
DELTA-BHC	12	UR	Y
DIELDRIN	23	UR	Y
ENDOSULFAN I	12	UR	Y
ENDOSULFAN II	23	UR	Y
ENDOSULFAN SULFATE	23	UR	Y
ENDRIN	23	UR	Y
ENDRIN ALDEHYDE	23	UR	Y
ENDRIN KETONE	23	UR	Y
GAMMA-BHC (LINDANE)	12	UR	Y
GAMMA-CHLORDANE	12	UR	Y
HEPTACHLOR	12	UR	Y
HEPTACHLOR EPOXIDE	12	UR	Y
METHOXYCHLOR	120	UR	Y
TOXAPHENE	230	UR	Y

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	210	J	C
4,4'-DDE	95		
4,4'-DDT	210	J	C
ALDRIN	4.5	U	
ALPHA-BHC	4.5	U	
ALPHA-CHLORDANE	4.5	U	
AROCLOR-1016	45	U	
AROCLOR-1221	45	U	
AROCLOR-1232	45	U	
AROCLOR-1242	45	U	
AROCLOR-1248	45	U	
AROCLOR-1254	45	U	
AROCLOR-1260	580		
BETA-BHC	4.5	U	
DELTA-BHC	4.5	UJ	C
DIELDRIN	8.7	UJ	C
ENDOSULFAN I	4.5	U	
ENDOSULFAN II	8.7	U	
ENDOSULFAN SULFATE	8.7	UJ	C
ENDRIN	8.7	U	
ENDRIN ALDEHYDE	8.7	U	
ENDRIN KETONE	8.7	UJ	C
GAMMA-BHC (LINDANE)	4.5	UJ	C
GAMMA-CHLORDANE	4.5	U	
HEPTACHLOR	4.5	UJ	C
HEPTACHLOR EPOXIDE	4.5	U	
METHOXYCHLOR	45	UJ	C
TOXAPHENE	87	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	200		
4,4'-DDE	36	J	P
4,4'-DDT	71	U	
ALDRIN	37	U	
ALPHA-BHC	37	U	
ALPHA-CHLORDANE	37	U	
AROCLOR-1016	37	U	
AROCLOR-1221	37	U	
AROCLOR-1232	37	U	
AROCLOR-1242	37	U	
AROCLOR-1248	37	U	
AROCLOR-1254	37	U	
AROCLOR-1260	37	U	
BETA-BHC	37	U	
DELTA-BHC	37	U	
DIELDRIN	71	U	
ENDOSULFAN I	37	U	
ENDOSULFAN II	71	U	
ENDOSULFAN SULFATE	71	U	
ENDRIN	71	U	
ENDRIN ALDEHYDE	71	U	
ENDRIN KETONE	71	~~UR~~ UJ	C
GAMMA-BHC (LINDANE)	37	U	
GAMMA-CHLORDANE	37	U	
HEPTACHLOR	37	U	
HEPTACHLOR EPOXIDE	37	U	
METHOXYCHLOR	370	U	
TOXAPHENE	710	U	

1-18-08
JAS

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439-NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 11/02/07
Analysis Date: 07-NOV-2007 00:17
Report Date: 11/09/2007
Matrix: SOIL
% Solids: 15.0

Lab ID: SA6037-2
Client ID: 2W-FD-101907-01
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45236
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	130	1.0	20	130	12
91-57-6	2-Methylnaphthalene	U	130	1.0	20	130	18
90-12-0	1-Methylnaphthalene	U	130	1.0	20	130	61
208-96-8	Acenaphthylene	J	110	1.0	20	130	8.8
83-32-9	Acenaphthene	U	130	1.0	20	130	9.7
86-73-7	Fluorene	J	30	1.0	20	130	11
85-01-8	Phenanthrene		420	1.0	20	130	28
120-12-7	Anthracene	J	81	1.0	20	130	17
206-44-0	Fluoranthene		1200	1.0	20	130	26
129-00-0	Pyrene		1200	1.0	20	130	46
56-55-3	Benzo(a)anthracene		700	1.0	20	130	17
218-01-9	Chrysene		740	1.0	20	130	18
205-99-2	Benzo(b)fluoranthene		940	1.0	20	130	15
207-08-9	Benzo(k)fluoranthene		480	1.0	20	130	12
50-32-8	Benzo(a)pyrene		710	1.0	20	130	14
193-39-5	Indeno(1,2,3-cd)pyrene		720	1.0	20	130	29
191-24-2	Benzo(g,h,i)perylene		530	1.0	20	130	22
53-70-3	Dibenzo(a,h)anthracene		310	1.0	20	130	25
7297-45-2	2-Methylnaphthalene-d10		73%				
81103-79-9	Fluorene-d10		76%				
1718-52-1	Pyrene-d10		71%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439-NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 11/02/07
Analysis Date: 08-NOV-2007 13:04
Report Date: 11/09/2007
Matrix: SOIL
% Solids: 21.9

Lab ID: SA6037-5RA
Client ID: 2W-SD-SD43-0001
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45236
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	20	1.0	20	91	8.2
91-57-6	2-Methylnaphthalene	J	20	1.0	20	91	12
90-12-0	1-Methylnaphthalene	U	91	1.0	20	91	42
208-96-8	Acenaphthylene	J	58	1.0	20	91	6.1
83-32-9	Acenaphthene	J	26	1.0	20	91	6.7
86-73-7	Fluorene	J	41	1.0	20	91	7.5
85-01-8	Phenanthrene		170	1.0	20	91	20
120-12-7	Anthracene	U	91	1.0	20	91	12
206-44-0	Fluoranthene		490	1.0	20	91	18
129-00-0	Pyrene		430	1.0	20	91	31
56-55-3	Benzo(a)anthracene		220	1.0	20	91	11
218-01-9	Chrysene		230	1.0	20	91	12
205-99-2	Benzo(b)fluoranthene		380	1.0	20	91	10
207-08-9	Benzo(k)fluoranthene		160	1.0	20	91	8.5
50-32-8	Benzo(a)pyrene		240	1.0	20	91	9.4
193-39-5	Indeno(1,2,3-cd)pyrene		270	1.0	20	91	20
191-24-2	Benzo(g,h,i)perylene		240	1.0	20	91	15
53-70-3	Dibenzo(a,h)anthracene		120	1.0	20	91	17
7297-45-2	2-Methylnaphthalene-d10		77%				
81103-79-9	Fluorene-d10		71%				
1718-52-1	Pyrene-d10		90%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439-NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 11/02/07
Analysis Date: 08-NOV-2007 12:22
Report Date: 11/09/2007
Matrix: SOIL
% Solids: 23.3

Lab ID: SA6037-3RA
Client ID: 2W-SD-SD44-0001
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45236
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	86	1.0	20	86	7.7
91-57-6	2-Methylnaphthalene	U	86	1.0	20	86	12
90-12-0	1-Methylnaphthalene	U	86	1.0	20	86	40
208-96-8	Acenaphthylene	J	54	1.0	20	86	5.7
83-32-9	Acenaphthene	J	16	1.0	20	86	6.3
86-73-7	Fluorene	J	21	1.0	20	86	7.0
85-01-8	Phenanthrene		360	1.0	20	86	18
120-12-7	Anthracene	J	62	1.0	20	86	11
206-44-0	Fluoranthene		1100	1.0	20	86	17
129-00-0	Pyrene		1200	1.0	20	86	30
56-55-3	Benzo(a)anthracene		740	1.0	20	86	11
218-01-9	Chrysene		710	1.0	20	86	11
205-99-2	Benzo(b)fluoranthene		810	1.0	20	86	9.4
207-08-9	Benzo(k)fluoranthene		490	1.0	20	86	8.0
50-32-8	Benzo(a)pyrene		680	1.0	20	86	8.9
193-39-5	Indeno(1,2,3-cd)pyrene		660	1.0	20	86	19
191-24-2	Benzo(g,h,i)perylene		470	1.0	20	86	14
53-70-3	Dibenzo(a,h)anthracene		260	1.0	20	86	16
7297-45-2	2-Methylnaphthalene-d10		59%				
81103-79-9	Fluorene-d10		67%				
1718-52-1	Pyrene-d10		65%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439-NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 11/02/07
Analysis Date: 06-NOV-2007 23:33
Report Date: 11/09/2007
Matrix: SOIL
% Solids: 14.0

Lab ID: SA6037-1
Client ID: 2W-SD-SD47-0001
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45236
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	140	1.0	20	140	13
91-57-6	2-Methylnaphthalene	U	140	1.0	20	140	20
90-12-0	1-Methylnaphthalene	U	140	1.0	20	140	65
208-96-8	Acenaphthylene	J	87	1.0	20	140	9.5
83-32-9	Acenaphthene	U	140	1.0	20	140	10
86-73-7	Fluorene	J	24	1.0	20	140	12
85-01-8	Phenanthrene		330	1.0	20	140	30
120-12-7	Anthracene	J	60	1.0	20	140	18
206-44-0	Fluoranthene		950	1.0	20	140	28
129-00-0	Pyrene		1000	1.0	20	140	49
56-55-3	Benzo(a)anthracene		560	1.0	20	140	18
218-01-9	Chrysene		600	1.0	20	140	19
205-99-2	Benzo(b)fluoranthene		730	1.0	20	140	16
207-08-9	Benzo(k)fluoranthene		420	1.0	20	140	13
50-32-8	Benzo(a)pyrene		560	1.0	20	140	15
193-39-5	Indeno(1,2,3-cd)pyrene		500	1.0	20	140	31
191-24-2	Benzo(g,h,i)perylene		360	1.0	20	140	24
53-70-3	Dibenzo(a,h)anthracene		220	1.0	20	140	27
7297-45-2	2-Methylnaphthalene-d10		63%				
81103-79-9	Fluorene-d10		63%				
1718-52-1	Pyrene-d10		62%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439-NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 11/02/07
Analysis Date: 07-NOV-2007 15:08
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 38.0

Lab ID: SA6037-6
Client ID: 2W-SD-SD48-0001
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45236
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	9.6	1.0	20	53	4.7
91-57-6	2-Methylnaphthalene	J	12	1.0	20	53	7.3
90-12-0	1-Methylnaphthalene	U	53	1.0	20	53	24
208-96-8	Acenaphthylene		59	1.0	20	53	3.5
83-32-9	Acenaphthene	J	25	1.0	20	53	3.8
86-73-7	Fluorene	J	43	1.0	20	53	4.3
85-01-8	Phenanthrene		690	1.0	20	53	11
120-12-7	Anthracene		100	1.0	20	53	6.7
206-44-0	Fluoranthene	E	1800	1.0	20	53	10
129-00-0	Pyrene	E	1600	1.0	20	53	18
56-55-3	Benzo(a)anthracene	E	1100	1.0	20	53	6.6
218-01-9	Chrysene	E	1000	1.0	20	53	7.0
205-99-2	Benzo(b)fluoranthene	E	1200	1.0	20	53	5.8
207-08-9	Benzo(k)fluoranthene		650	1.0	20	53	4.9
50-32-8	Benzo(a)pyrene	E	960	1.0	20	53	5.4
193-39-5	Indeno(1,2,3-cd)pyrene	E	920	1.0	20	53	11
191-24-2	Benzo(g,h,i)perylene		700	1.0	20	53	8.7
53-70-3	Dibenzo(a,h)anthracene		390	1.0	20	53	9.9
7297-45-2	2-Methylnaphthalene-d10		59%				
81103-79-9	Fluorene-d10		61%				
1718-52-1	Pyrene-d10		55%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439-NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 11/02/07
Analysis Date: 08-NOV-2007 13:47
Report Date: 11/09/2007
Matrix: SOIL
% Solids: 38.0

Lab ID: SA6037-6DL
Client ID: 2W-SD-SD48-0001
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45236
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	210	4.0	20	210	19
91-57-6	2-Methylnaphthalene	U	210	4.0	20	210	29
90-12-0	1-Methylnaphthalene	U	210	4.0	20	210	97
208-96-8	Acenaphthylene	J	95	4.0	20	210	14
83-32-9	Acenaphthene	J	25	4.0	20	210	15
86-73-7	Fluorene	J	47	4.0	20	210	17
85-01-8	Phenanthrene		740	4.0	20	210	45
120-12-7	Anthracene	J	120	4.0	20	210	27
206-44-0	Fluoranthene		2000	4.0	20	210	42
129-00-0	Pyrene		1800	4.0	20	210	72
56-55-3	Benzo(a)anthracene		1100	4.0	20	210	26
218-01-9	Chrysene		1000	4.0	20	210	28
205-99-2	Benzo(b)fluoranthene		1100	4.0	20	210	23
207-08-9	Benzo(k)fluoranthene		670	4.0	20	210	20
50-32-8	Benzo(a)pyrene		930	4.0	20	210	22
193-39-5	Indeno(1,2,3-cd)pyrene		870	4.0	20	210	46
191-24-2	Benzo(g,h,i)perylene		630	4.0	20	210	35
53-70-3	Dibenzo(a,h)anthracene		370	4.0	20	210	40
7297-45-2	2-Methylnaphthalene-d10		66%				
81103-79-9	Fluorene-d10		63%				
1718-52-1	Pyrene-d10		27%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439-NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 11/02/07
Analysis Date: 07-NOV-2007 15:50
Report Date: 11/12/2007
Matrix: SOIL
% Solids: 46.4

Lab ID: SA6037-7
Client ID: 2W-SD-SD48-0204
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45236
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	J	12	1.0	20	43	3.8
91-57-6	2-Methylnaphthalene	J	12	1.0	20	43	5.9
90-12-0	1-Methylnaphthalene	U	43	1.0	20	43	20
208-96-8	Acenaphthylene	J	41	1.0	20	43	2.9
83-32-9	Acenaphthene	J	8.4	1.0	20	43	3.1
86-73-7	Fluorene	J	20	1.0	20	43	3.5
85-01-8	Phenanthrene		170	1.0	20	43	9.2
120-12-7	Anthracene	J	38	1.0	20	43	5.5
206-44-0	Fluoranthene		300	1.0	20	43	8.6
129-00-0	Pyrene		510	1.0	20	43	15
56-55-3	Benzo(a)anthracene		270	1.0	20	43	5.4
218-01-9	Chrysene		280	1.0	20	43	5.7
205-99-2	Benzo(b)fluoranthene		260	1.0	20	43	4.7
207-08-9	Benzo(k)fluoranthene		180	1.0	20	43	4.0
50-32-8	Benzo(a)pyrene		250	1.0	20	43	4.5
193-39-5	Indeno(1,2,3-cd)pyrene		250	1.0	20	43	9.4
191-24-2	Benzo(g,h,i)perylene		190	1.0	20	43	7.2
53-70-3	Dibenzo(a,h)anthracene		110	1.0	20	43	8.1
7297-45-2	2-Methylnaphthalene-d10		71%				
81103-79-9	Fluorene-d10		70%				
1718-52-1	Pyrene-d10		73%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439-NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/24/07
Analysis Date: 30-OCT-2007 17:20
Report Date: 11/09/2007
Matrix: WATER
% Solids: NA

Lab ID: SA6037-9
Client ID: 2W-FB-101907-01
SDG: SA6037
Extracted by: KF
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG44884
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	0.033
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.026
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.017
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.027
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.031
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.036
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.033
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.068
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.10
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.041
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.088
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.075
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.048
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.076
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.081
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.068
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.10
7297-45-2	2-Methylnaphthalene-d10		76%				
81103-79-9	Fluorene-d10		71%				
1718-52-1	Pyrene-d10		117%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439-NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/24/07
Analysis Date: 30-OCT-2007 16:38
Report Date: 11/09/2007
Matrix: WATER
% Solids: NA

Lab ID: SA6037-8
Client ID: 2W-RB-101907-01
SDG: SA6037
Extracted by: KF
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG44884
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	0.033
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.026
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.017
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.027
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.031
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.036
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.033
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.068
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.10
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.041
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.088
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.075
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.048
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.076
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.081
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.068
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.10
7297-45-2	2-Methylnaphthalene-d10		69%				
81103-79-9	Fluorene-d10		77%				
1718-52-1	Pyrene-d10		132%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 06-NOV-2007 23:51
Report Date: 11/08/2007
Matrix: SOIL
% Solids: 15.0

Lab ID: SA6037-2DL
Client ID: 2W-FD-101907-01
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG45073
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	22	2.0	1.7	22	7.5
58-89-9	gamma BHC	U	22	2.0	1.7	22	9.7
319-85-7	beta-BHC	U	22	2.0	1.7	22	9.7
319-86-8	delta-BHC	U	22	2.0	1.7	22	6.2
76-44-8	Heptachlor	U	22	2.0	1.7	22	8.8
309-00-2	Aldrin	U	22	2.0	1.7	22	9.3
1024-57-3	Heptachlor Epoxide	U	22	2.0	1.7	22	21
5103-74-2	gamma-Chlordane	U	22	2.0	1.7	22	11
5103-71-9	alpha-Chlordane	U	22	2.0	1.7	22	12
72-55-9	4,4'-DDE	J	37	2.0	3.3	44	11
959-98-8	Endosulfan I	U	22	2.0	1.7	22	7.5
60-57-1	Dieldrin	U	44	2.0	3.3	44	10
72-20-8	Endrin	U	44	2.0	3.3	44	18
72-54-8	4,4'-DDD		900	2.0	3.3	44	15
33213-65-9	Endosulfan II	U	44	2.0	3.3	44	8.0
50-29-3	4,4'-DDT	J	52	2.0	3.3	44	11
7421-36-3	Endrin Aldehyde	U	44	2.0	3.3	44	9.3
72-43-5	Methoxychlor	J	83	2.0	17	220	49
1031-07-8	Endosulfan sulfate	U	44	2.0	3.3	44	12
53494-70-5	Endrin Ketone	U	44	2.0	3.3	44	13
8001-35-2	Toxaphene	U	440	2.0	33	440	170
877-09-8	Tetrachloro-m-Xylene		65%				
2051-24-3	Decachlorobiphenyl		76%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 07-NOV-2007 00:19
Report Date: 11/08/2007
Matrix: SOIL
% Solids: 21.9

Lab ID: SA6037-5DL
Client ID: 2W-SD-SD43-0001
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG45073
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	78	10	1.7	78	26
58-89-9	gamma BHC	U	78	10	1.7	78	33
319-85-7	beta-BHC	U	78	10	1.7	78	33
319-86-8	delta-BHC	U	78	10	1.7	78	21
76-44-8	Heptachlor	U	78	10	1.7	78	30
309-00-2	Aldrin	U	78	10	1.7	78	32
1024-57-3	Heptachlor Epoxide	U	78	10	1.7	78	71
5103-74-2	gamma-Chlordane	J	59	10	1.7	78	38
5103-71-9	alpha-Chlordane	J	52	10	1.7	78	40
72-55-9	4,4'-DDE	J	55	10	3.3	150	36
959-98-8	Endosulfan I	U	78	10	1.7	78	26
60-57-1	Dieldrin	U	150	10	3.3	150	35
72-20-8	Endrin	U	150	10	3.3	150	62
72-54-8	4,4'-DDD		1300	10	3.3	150	52
33213-65-9	Endosulfan II	U	150	10	3.3	150	27
50-29-3	4,4'-DDT	U	150	10	3.3	150	38
7421-36-3	Endrin Aldehyde	U	150	10	3.3	150	32
72-43-5	Methoxychlor	U	780	10	17	780	170
1031-07-8	Endosulfan sulfate	U	150	10	3.3	150	41
53494-70-5	Endrin Ketone	U	150	10	3.3	150	44
8001-35-2	Toxaphene	U	1500	10	33	1500	590
877-09-8	Tetrachloro-m-Xylene		D				
2051-24-3	Decachlorobiphenyl		D				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 05-NOV-2007 20:39
Report Date: 11/08/2007
Matrix: SOIL
% Solids: 23.3

Lab ID: SA6037-3
Client ID: 2W-SD-SD44-0001
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG45073
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	7.3	1.0	1.7	7.3	2.4
58-89-9	gamma BHC	U	7.3	1.0	1.7	7.3	3.2
319-85-7	beta-BHC	U	7.3	1.0	1.7	7.3	3.2
319-86-8	delta-BHC	U	7.3	1.0	1.7	7.3	2.0
76-44-8	Heptachlor	U	7.3	1.0	1.7	7.3	2.9
309-00-2	Aldrin	U	7.3	1.0	1.7	7.3	3.0
1024-57-3	Heptachlor Epoxide	U	7.3	1.0	1.7	7.3	6.7
5103-74-2	gamma-Chlordane	U	7.3	1.0	1.7	7.3	3.6
5103-71-9	alpha-Chlordane	U	7.3	1.0	1.7	7.3	3.7
72-55-9	4,4'-DDE	J	10	1.0	3.3	14	3.4
959-98-8	Endosulfan I	U	7.3	1.0	1.7	7.3	2.4
60-57-1	Dieldrin	U	14	1.0	3.3	14	3.3
72-20-8	Endrin	U	14	1.0	3.3	14	5.9
72-54-8	4,4'-DDD		93	1.0	3.3	14	4.9
33213-65-9	Endosulfan II	U	14	1.0	3.3	14	2.6
50-29-3	4,4'-DDT		19	1.0	3.3	14	3.6
7421-36-3	Endrin Aldehyde	U	14	1.0	3.3	14	3.0
72-43-5	Methoxychlor	U	73	1.0	17	73	16
1031-07-8	Endosulfan sulfate	U	14	1.0	3.3	14	3.9
53494-70-5	Endrin Ketone	U	14	1.0	3.3	14	4.2
8001-35-2	Toxaphene	U	140	1.0	33	140	56
877-09-8	Tetrachloro-m-Xylene		58%				
2051-24-3	Decachlorobiphenyl		70%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 05-NOV-2007 19:45
Report Date: 11/08/2007
Matrix: SOIL
% Solids: 14.0

Lab ID: SA6037-1
Client ID: 2W-SD-SD47-0001
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG45073
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	12	1.0	1.7	12	4.0
58-89-9	gamma BHC	U	12	1.0	1.7	12	5.2
319-85-7	beta-BHC	U	12	1.0	1.7	12	5.2
319-86-8	delta-BHC	U	12	1.0	1.7	12	3.3
76-44-8	Heptachlor	U	12	1.0	1.7	12	4.7
309-00-2	Aldrin	U	12	1.0	1.7	12	5.0
1024-57-3	Heptachlor Epoxide	U	12	1.0	1.7	12	11
5103-74-2	gamma-Chlordane	U	12	1.0	1.7	12	5.9
5103-71-9	alpha-Chlordane	U	12	1.0	1.7	12	6.2
72-55-9	4,4'-DDE	J	23	1.0	3.3	23	5.7
959-98-8	Endosulfan I	U	12	1.0	1.7	12	4.0
60-57-1	Dieldrin	U	23	1.0	3.3	23	5.4
72-20-8	Endrin	U	23	1.0	3.3	23	9.7
72-54-8	4,4'-DDD		580	1.0	3.3	23	8.1
33213-65-9	Endosulfan II	U	23	1.0	3.3	23	4.3
50-29-3	4,4'-DDT		32	1.0	3.3	23	5.9
7421-36-3	Endrin Aldehyde	U	23	1.0	3.3	23	5.0
72-43-5	Methoxychlor	U	120	1.0	17	120	26
1031-07-8	Endosulfan sulfate	U	23	1.0	3.3	23	6.4
53494-70-5	Endrin Ketone	U	23	1.0	3.3	23	6.9
8001-35-2	Toxaphene	U	230	1.0	33	230	92
877-09-8	Tetrachloro-m-Xylene		56%				
2051-24-3	Decachlorobiphenyl		66%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 05-NOV-2007 21:34
Report Date: 11/08/2007
Matrix: SOIL
% Solids: 38.0

Lab ID: SA6037-6
Client ID: 2W-SD-SD48-0001
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG45073
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	4.5	1.0	1.7	4.5	1.5
58-89-9	gamma BHC	U	4.5	1.0	1.7	4.5	1.9
319-85-7	beta-BHC	U	4.5	1.0	1.7	4.5	1.9
319-86-8	delta-BHC	U	4.5	1.0	1.7	4.5	1.2
76-44-8	Heptachlor	U	4.5	1.0	1.7	4.5	1.8
309-00-2	Aldrin	U	4.5	1.0	1.7	4.5	1.8
1024-57-3	Heptachlor Epoxide	U	4.5	1.0	1.7	4.5	4.1
5103-74-2	gamma-Chlordane	U	4.5	1.0	1.7	4.5	2.2
5103-71-9	alpha-Chlordane	U	4.5	1.0	1.7	4.5	2.3
72-55-9	4,4'-DDE		95	1.0	3.3	8.7	2.1
959-98-8	Endosulfan I	U	4.5	1.0	1.7	4.5	1.5
60-57-1	Dieldrin	U	8.7	1.0	3.3	8.7	2.0
72-20-8	Endrin	U	8.7	1.0	3.3	8.7	3.6
72-54-8	4,4'-DDD		210	1.0	3.3	8.7	3.0
33213-65-9	Endosulfan II	U	8.7	1.0	3.3	8.7	1.6
50-29-3	4,4'-DDT		210	1.0	3.3	8.7	2.2
7421-36-3	Endrin Aldehyde	U	8.7	1.0	3.3	8.7	1.8
72-43-5	Methoxychlor	U	45	1.0	17	45	9.6
1031-07-8	Endosulfan sulfate	U	8.7	1.0	3.3	8.7	2.4
53494-70-5	Endrin Ketone	U	8.7	1.0	3.3	8.7	2.5
8001-35-2	Toxaphene	U	87	1.0	33	87	34
877-09-8	Tetrachloro-m-Xylene		59%				
2051-24-3	Decachlorobiphenyl		97%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 07-NOV-2007 00:46
Report Date: 11/08/2007
Matrix: SOIL
% Solids: 46.4

Lab ID: SA6037-7DL
Client ID: 2W-SD-SD48-0204
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG45073
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	37	10	1.7	37	12
58-89-9	gamma BHC	U	37	10	1.7	37	16
319-85-7	beta-BHC	U	37	10	1.7	37	16
319-86-8	delta-BHC	U	37	10	1.7	37	10
76-44-8	Heptachlor	U	37	10	1.7	37	14
309-00-2	Aldrin	U	37	10	1.7	37	15
1024-57-3	Heptachlor Epoxide	U	37	10	1.7	37	34
5103-74-2	gamma-Chlordane	U	37	10	1.7	37	18
5103-71-9	alpha-Chlordane	U	37	10	1.7	37	19
72-55-9	4,4'-DDE	J	36	10	3.3	71	17
959-98-8	Endosulfan I	U	37	10	1.7	37	12
60-57-1	Dieldrin	U	71	10	3.3	71	16
72-20-8	Endrin	U	71	10	3.3	71	29
72-54-8	4,4'-DDD		200	10	3.3	71	24
33213-65-9	Endosulfan II	U	71	10	3.3	71	13
50-29-3	4,4'-DDT	U	71	10	3.3	71	18
7421-36-3	Endrin Aldehyde	U	71	10	3.3	71	15
72-43-5	Methoxychlor	U	370	10	17	370	79
1031-07-8	Endosulfan sulfate	U	71	10	3.3	71	19
53494-70-5	Endrin Ketone	U	71	10	3.3	71	21
8001-35-2	Toxaphene	U	710	10	33	710	280
877-09-8	Tetrachloro-m-Xylene		D				
2051-24-3	Decachlorobiphenyl		D				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/24/07
Analysis Date: 05-NOV-2007 17:30
Report Date: 11/08/2007
Matrix: WATER
% Solids: NA

Lab ID: SA6037-9
Client ID: 2W-FB-101907-01
SDG: SA6037
Extracted by: KF
Extraction Method: SW846 3510
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44850
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	0.050	1.0	0.050	0.050	0.026
58-89-9	gamma BHC	U	0.050	1.0	0.050	0.050	0.031
319-85-7	beta-BHC	U	0.050	1.0	0.050	0.050	0.036
319-86-8	delta-BHC	U	0.050	1.0	0.050	0.050	0.031
76-44-8	Heptachlor		0.062	1.0	0.050	0.050	0.028
309-00-2	Aldrin	U	0.050	1.0	0.050	0.050	0.030
1024-57-3	Heptachlor Epoxide	U	0.050	1.0	0.050	0.050	0.033
5103-74-2	gamma-Chlordane	U	0.050	1.0	0.050	0.050	0.035
5103-71-9	alpha-Chlordane	U	0.050	1.0	0.050	0.050	0.033
72-55-9	4,4'-DDE	U	0.10	1.0	0.10	0.10	0.036
959-98-8	Endosulfan I	U	0.050	1.0	0.050	0.050	0.019
60-57-1	Dieldrin	U	0.10	1.0	0.10	0.10	0.032
72-20-8	Endrin	U	0.10	1.0	0.10	0.10	0.091
72-54-8	4,4'-DDD	U	0.10	1.0	0.10	0.10	0.034
33213-65-9	Endosulfan II	U	0.10	1.0	0.10	0.10	0.021
50-29-3	4,4'-DDT	U	0.10	1.0	0.10	0.10	0.037
7421-36-3	Endrin Aldehyde	U	0.10	1.0	0.10	0.10	0.048
72-43-5	Methoxychlor	U	0.50	1.0	0.50	0.50	0.32
1031-07-8	Endosulfan sulfate	U	0.10	1.0	0.10	0.10	0.037
53494-70-5	Endrin Ketone	U	0.10	1.0	0.10	0.10	0.090
8001-35-2	Toxaphene	U	1.0	1.0	1.0	1.0	0.64
877-09-8	Tetrachloro-m-Xylene		73%				
2051-24-3	Decachlorobiphenyl		72%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/24/07
Analysis Date: 05-NOV-2007 17:03
Report Date: 11/08/2007
Matrix: WATER
% Solids: NA

Lab ID: SA6037-8
Client ID: 2W-RB-101907-01
SDG: SA6037
Extracted by: KF
Extraction Method: SW846 3510
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44850
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	0.050	1.0	0.050	0.050	0.026
58-89-9	gamma BHC	U	0.050	1.0	0.050	0.050	0.031
319-85-7	beta-BHC	U	0.050	1.0	0.050	0.050	0.036
319-86-8	delta-BHC	U	0.050	1.0	0.050	0.050	0.031
76-44-8	Heptachlor	U	0.050	1.0	0.050	0.050	0.028
309-00-2	Aldrin	U	0.050	1.0	0.050	0.050	0.030
1024-57-3	Heptachlor Epoxide	U	0.050	1.0	0.050	0.050	0.033
5103-74-2	gamma-Chlordane	U	0.050	1.0	0.050	0.050	0.035
5103-71-9	alpha-Chlordane	U	0.050	1.0	0.050	0.050	0.033
72-55-9	4,4'-DDE	U	0.10	1.0	0.10	0.10	0.036
959-98-8	Endosulfan I	U	0.050	1.0	0.050	0.050	0.019
60-57-1	Dieldrin	U	0.10	1.0	0.10	0.10	0.032
72-20-8	Endrin	U	0.10	1.0	0.10	0.10	0.091
72-54-8	4,4'-DDD	U	0.10	1.0	0.10	0.10	0.034
33213-65-9	Endosulfan II	U	0.10	1.0	0.10	0.10	0.021
50-29-3	4,4'-DDT	U	0.10	1.0	0.10	0.10	0.037
7421-36-3	Endrin Aldehyde	U	0.10	1.0	0.10	0.10	0.048
72-43-5	Methoxychlor	U	0.50	1.0	0.50	0.50	0.32
1031-07-8	Endosulfan sulfate	U	0.10	1.0	0.10	0.10	0.037
53494-70-5	Endrin Ketone	U	0.10	1.0	0.10	0.10	0.090
8001-35-2	Toxaphene	U	1.0	1.0	1.0	1.0	0.64
877-09-8	Tetrachloro-m-Xylene		76%				
2051-24-3	Decachlorobiphenyl		36%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 03-NOV-2007 05:24
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 15.0

Lab ID: SA6037-2
Client ID: 2W-FD-101907-01
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG45074
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	110	1.0	17	110	110
11104-28-2	Aroclor-1221	U	110	1.0	17	110	80
11141-16-5	Aroclor-1232	U	110	1.0	17	110	35
53469-21-9	Aroclor-1242	U	110	1.0	17	110	44
12672-29-6	Aroclor-1248	U	110	1.0	17	110	38
11097-69-1	Aroclor-1254	U	110	1.0	17	110	86
11096-82-5	Aroclor-1260		430	1.0	17	110	93
877-09-8	Tetrachloro-m-xylene		70%				
2051-24-3	Decachlorobiphenyl		60%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 03-NOV-2007 06:23
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 21.9

Lab ID: SA6037-5
Client ID: 2W-SD-SD43-0001
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG45074
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	78	1.0	17	78	73
11104-28-2	Aroclor-1221	U	78	1.0	17	78	55
11141-16-5	Aroclor-1232	U	78	1.0	17	78	24
53469-21-9	Aroclor-1242	U	78	1.0	17	78	30
12672-29-6	Aroclor-1248	U	78	1.0	17	78	26
11097-69-1	Aroclor-1254	U	78	1.0	17	78	59
11096-82-5	Aroclor-1260		300	1.0	17	78	64
877-09-8	Tetrachloro-m-xylene		74%				
2051-24-3	Decachlorobiphenyl		59%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 03-NOV-2007 05:53
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 23.3

Lab ID: SA6037-3
Client ID: 2W-SD-SD44-0001
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG45074
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	73	1.0	17	73	69
11104-28-2	Aroclor-1221	U	73	1.0	17	73	52
11141-16-5	Aroclor-1232	U	73	1.0	17	73	23
53469-21-9	Aroclor-1242	U	73	1.0	17	73	29
12672-29-6	Aroclor-1248	U	73	1.0	17	73	24
11097-69-1	Aroclor-1254	U	73	1.0	17	73	56
11096-82-5	Aroclor-1260		150	1.0	17	73	60
877-09-8	Tetrachloro-m-xylene		80%				
2051-24-3	Decachlorobiphenyl		61%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 03-NOV-2007 02:26
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 14.0

Lab ID: SA6037-1
Client ID: 2W-SD-SD47-0001
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG45074
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	120	1.0	17	120	110
11104-28-2	Aroclor-1221	U	120	1.0	17	120	85
11141-16-5	Aroclor-1232	U	120	1.0	17	120	38
53469-21-9	Aroclor-1242	U	120	1.0	17	120	48
12672-29-6	Aroclor-1248	U	120	1.0	17	120	40
11097-69-1	Aroclor-1254	U	120	1.0	17	120	92
11096-82-5	Aroclor-1260		380	1.0	17	120	100
877-09-8	Tetrachloro-m-xylene		74%				
2051-24-3	Decachlorobiphenyl		61%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 03-NOV-2007 06:53
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 38.0

Lab ID: SA6037-6
Client ID: 2W-SD-SD48-0001
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG45074
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	45	1.0	17	45	42
11104-28-2	Aroclor-1221	U	45	1.0	17	45	32
11141-16-5	Aroclor-1232	U	45	1.0	17	45	14
53469-21-9	Aroclor-1242	U	45	1.0	17	45	18
12672-29-6	Aroclor-1248	U	45	1.0	17	45	15
11097-69-1	Aroclor-1254	U	45	1.0	17	45	34
11096-82-5	Aroclor-1260		580	1.0	17	45	37
877-09-8	Tetrachloro-m-xylene		76%				
2051-24-3	Decachlorobiphenyl		58%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/30/07
Analysis Date: 03-NOV-2007 07:22
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 46.4

Lab ID: SA6037-7
Client ID: 2W-SD-SD48-0204
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG45074
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	37	1.0	17	37	34
11104-28-2	Aroclor-1221	U	37	1.0	17	37	26
11141-16-5	Aroclor-1232	U	37	1.0	17	37	11
53469-21-9	Aroclor-1242	U	37	1.0	17	37	14
12672-29-6	Aroclor-1248	U	37	1.0	17	37	12
11097-69-1	Aroclor-1254	U	37	1.0	17	37	28
11096-82-5	Aroclor-1260	U	37	1.0	17	37	30
877-09-8	Tetrachloro-m-xylene		87%				
2051-24-3	Decachlorobiphenyl		70%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/24/07
Analysis Date: 02-NOV-2007 22:58
Report Date: 11/05/2007
Matrix: WATER
% Solids: NA

Lab ID: SA6037-9
Client ID: 2W-FB-101907-01
SDG: SA6037
Extracted by: KF
Extraction Method: SW846 3510
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44851
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	0.50	1.0	0.50	0.50	0.38
11104-28-2	Aroclor-1221	U	0.50	1.0	0.50	0.50	0.16
11141-16-5	Aroclor-1232	U	0.50	1.0	0.50	0.50	0.27
53469-21-9	Aroclor-1242	U	0.50	1.0	0.50	0.50	0.20
12672-29-6	Aroclor-1248	U	0.50	1.0	0.50	0.50	0.18
11097-69-1	Aroclor-1254	U	0.50	1.0	0.50	0.50	0.24
11096-82-5	Aroclor-1260	U	0.50	1.0	0.50	0.50	0.26
877-09-8	Tetrachloro-m-xylene		99%				
2051-24-3	Decachlorobiphenyl		91%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Tetra Tech NUS, Inc
Project: CTO 439 NSB New London
PO No:
Sample Date: 10/19/07
Received Date: 10/22/07
Extraction Date: 10/24/07
Analysis Date: 02-NOV-2007 22:29
Report Date: 11/05/2007
Matrix: WATER
% Solids: NA

Lab ID: SA6037-8
Client ID: 2W-RB-101907-01
SDG: SA6037
Extracted by: KF
Extraction Method: SW846 3510
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44851
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	0.50	1.0	0.50	0.50	0.38
11104-28-2	Aroclor-1221	U	0.50	1.0	0.50	0.50	0.16
11141-16-5	Aroclor-1232	U	0.50	1.0	0.50	0.50	0.27
53469-21-9	Aroclor-1242	U	0.50	1.0	0.50	0.50	0.20
12672-29-6	Aroclor-1248	U	0.50	1.0	0.50	0.50	0.18
11097-69-1	Aroclor-1254	U	0.50	1.0	0.50	0.50	0.24
11096-82-5	Aroclor-1260	U	0.50	1.0	0.50	0.50	0.26
877-09-8	Tetrachloro-m-xylene		106%				
2051-24-3	Decachlorobiphenyl		45%				

APPENDIX C

REGIONAL FORMS

See DV Report

EPA-NE
Data Validation Worksheet Cover Page - Page 1

Site Name _____
Reference No. _____

REGION I ORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name _____
Case/Project No. _____
SDG No. _____
No. of Samples/Matrix _____

SOW/Method No. _____
Sampling Date(s) _____
Shipping Date(s) _____
Date Rec'd by lab _____

Traffic Report Sample Nos. _____
_____
_____
Trip Blank No. _____
Equipment Blank No. _____
Bottle Blank No. _____
Field Duplicate Nos. _____

PES Nos. _____

The Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision _____ was used to evaluate the data and/or approved modifications to the EPA-NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attach modified criteria from EPA approved QAPjP or amendment to QAPjP).

A Tier II or Tier III evaluation was used to validate the data (circle one). If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc. that received partial Tier III validation
_____
.

The data were evaluated based upon the following parameters:

- Overall Evaluation of Data
- Data Completeness (CSF Audit - Tier I)
- Preservation & Technical Holding Times
- GC/MS & GC/ECD Instrument Performance Check
- Initial & Continuing Calibrations
- Blanks
- Surrogate Compounds
- Internal Standards
- Matrix Spike/Matrix Spike Duplicate
- Field Duplicates
- Sensitivity Check
- PE Samples/Accuracy Check
- Target Compound Identification
- Compound Quantitation and Reported Quantitation Limits
- TICs
- Semivolatile and Pesticide/PCB Cleanup
- System Performance

Region I Definitions and Qualifiers:

A - Acceptable Data
J - Numerical value associated with compound is an estimated quantity.
R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.
U - Compound not detected at that numerical sample quantitation limit.
UJ - The sample quantitation limit is an estimated quantity.
TB, BB, EB - Compound detected in aqueous trip blank, aqueous bottle blank, or aqueous equipment blank associated with soil/sediment samples.

Validator's Name _____ Company Name _____ Phone Number _____

Date Validation Started _____ Date Validation Completed _____

See DV Report

EPA-NE
Data Validation Worksheet Cover Page - Page 2

Check if all criteria are met and no hard copy worksheet provided. Indicate NA if worksheet is not applicable to analytical method. Note: there is no standard worksheet for System Performance, however, the validator must document all system performance issues in the Data Validation Memorandum.

VOA/SV worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	_____
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	_____
VOA/SV-II	GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)	_____
VOA/SV-III	INITIAL CALIBRATION	_____
VOA/SV-IV	CONTINUING CALIBRATION	_____
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	_____
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	_____
VOA-VI	VOA SURROGATE SPIKE RECOVERIES	_____
SV-VI	SV SURROGATE SPIKE RECOVERIES	_____
VOA/SV-VII	INTERNAL STANDARD PERFORMANCE	_____
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	_____
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	_____
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	_____
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	_____
VOA/SV-Pest/PCB-XII	TARGET COMPOUND IDENTIFICATION	_____
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	_____
VOA/SV-XIV	TENTATIVELY IDENTIFIED COMPOUNDS	_____
VOA/SV-XV	SEMIVOLATILE CLEANUP	_____
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	_____

Pest/PCB worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	_____
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	_____
Pest/PCB-IIA	GC/ECD INSTRUMENT PERFORMANCE CHECK-RESOLUTION	_____
Pest/PCB-IIB	GC/ECD INSTRUMENT PERFORMANCE CHECK-RETENTION TIMES	_____
Pest/PCB-IIC	GC/ECD INSTRUMENT PERFORMANCE CHECK-ACCURACY CHECK OF INITIAL CALIBRATION	_____
Pest/PCB-IID	GC/ECD INSTRUMENT PERFORMANCE CHECK-PESTICIDE DEGRADATION	_____
Pest/PCB-III	INITIAL CALIBRATION	_____
Pest/PCB-IV	CONTINUING CALIBRATION	_____
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	_____
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	_____
Pest/PCB-VI	SURROGATE COMPOUNDS: SPIKE RECOVERIES AND RETENTION TIME SHIFT	_____
Pest/PCB-VII	PESTICIDE CLEANUP	_____
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	_____
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	_____
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	_____
VOA/SV-Pest/PCB-XI	ACCURACY CHECK	_____
Pest/PCB-XII	COMPOUND IDENTIFICATION	_____
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	_____
TABLE II-WORKSHEET	OVERALL EVALUATION OF DATA	_____

I certify that all criteria were met for the worksheets checked above.

Signature:_____ Name:_____

Date: _____

The data validator generates a Data Validation Report, applicable to Data Validation Tiers II and III, that consists of the following components in the order specified below: (Refer to Section 11 for a description of each of the Data Validation Report components).

1. Organic Regional Data Assessment/Inorganic Regional Data Assessment (ORDA/IRDA) Form
2. Data Validation Memorandum
   a. Narrative
   b. Table I-Qualifier Recommendation Summary Table
   c. Table II-Overall Evaluation of Data
   d. Table III-Tentatively Identified Compounds
   e. Data Summary Tables
3. Standard Data Validation Worksheets
   a. Manual
   b. Automated Data Review Reports (i.e., CADRE)
4. Support Documentation
   a. Copy of non-CLP analytical method, e.g., DAS methods, modified EPA methods
   b. Copies of PES Score Reports/Vendor PES QC Acceptance Limits
   c. Copies of Telephone Logs/Communication Forms for:
      - RSCC communications
      - Requests for laboratory data resubmissions/clarifications
      - Communications with samplers resolving sampling problems
      - Communications with TPO/Lead Chemist to report contractually-deficient data for rejection/reduced payment
      - Communications with EPA Site Manager concerning possible data rejection
      - EPA Site Manager authorization for alternate DV tier
   d. Copies of data supporting recommendations for reduced payment resulting from CSF Audit and/or PE sample result evaluation
   e. Original data to support recommendations for data rejection/non-payment identified from Tier II or Tier III data validation
   f. Copies of field sampling notes and/or field report supplied by field sampler
   g. Copies of EPA-approved amendments to QAPjP and/or SAP describing modified criteria to be used for validating site data
5. CSF Completeness Evidence Audit
6. DQO Summary Form

The data validator is responsible for implementing all corrective actions required by the contractor Lead Chemist in response to EPA-NE data validation oversight findings.

OK

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

VOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: _____ Date: _____

OK

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

SEMIVOLATILE ORGANICS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

Validator: _____ Date: _____

See Dv Report

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB

COMPLETE SDG FILE (CSF) AUDIT

Organic Fractions:_____

Missing Information	Date Lab Contacted	Date Received

Validator: _____Date: _____

OK

EPA-NE - Data Validation
VOA/SV - Pest/PCB-I

12/96

Sampler:_____ Company:_____ Contacted: Yes No Date:_____

I. PRESERVATION AND HOLDING TIMES - Circle sample numbers with exceeded technical holding times or omitted preservation.
List all required preservation codes and circle omitted preservation codes.
Circle all exceeded technical holding times.
Identify extraction technique after "# of Days"/(*Extraction Code).

Sample No. (TR No.)	Matrix	Pres. Code	Date Sampled	VOA			BNA					PEST/PCB				
				Date Analyzed	# of Days from Samp. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action	Date Extracted	# of Days from Samp. to Extr./(*)	Date Analyzed	# of Days from Extr. to Anal.	Action

Preservation Code:
1. Cool @ 4°C (± 2°)
2. Preserve with HCl to at least pH 2
3. Protect from light
4. Freeze
5. Room Temperature (Avoid excessive heat)

(*Extraction Code:)
L/L - Liquid/Liquid
SON - Sonication
SEP - Separatory Funnel
SOX - Soxhlet
SPE - Solid Phase Extraction

Action Code:
J - Estimate (J) Detected Values
UJ - Estimate (UJ) Non-Detected Values
R - Reject (R) Non-Detected Values

Validator: _____ Date: _____

OK

II. GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)

List all Instrument Performance Checks that are outside method QC tuning acceptance criteria.

Volatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action

Comments:

Semivolatile Instrument Performance Check (Compound Name)	Analysis Date and Time	Instrument	Ion(s) Affected	Percent Relative Abundance	QC Limits	Samples Affected	Action

Comments:

If tuning compounds and criteria are different from those specified in CLP SOW OLM03.1, then the validator should include a copy of the method-specific tuning criteria with this worksheet.

Validator:_____ Date:_____

See Dv Report

EPA-NE - Data Validation Worksheet
VOA/SV-III

III. INITIAL CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Instrument	Parameter	Matrix	Compound	% RSD	$\overline{RRF}$	Samples Affected	Action

Comments:

Validator: _____ Date: _____

See Dv Report

EPA-NE - Data Validation Worksheet

VOA/SV-IV

IV. CONTINUING CALIBRATION - List all analytes that are outside calibration criteria.

Date of ICAL	Date of CCAL	Instrument	Parameter	Matrix	Compound	%D	RRF	Samples Affected	Action

Comments:

Validator:_____ Date:_____

OK

EPA-NE - Data Validation Worksheet

VOA/SV - Pest/PCB-V-A

V. BLANK ANALYSIS

List the blank contamination below. Concentration Level:_____

Sampler: _____ Company: _____ Contacted: Yes No Date:_____

1. Laboratory: Method, Storage and Instrument Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

2. Field: Equipment (Rinsate), Trip and Bottle Blanks

Date Extracted	Date Analyzed	Parameter/ Matrix	Sample No. (Blank Type)	Instrument/ Column	Compound	Conc. (units)

Validator:_____ Date:_____

OK

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-V-B

3. **Blank Actions** - List the maximum concentrations of blank compounds.

Compound	Type of Blank	Date Blank Sampled/Originated	Max. Conc. (units)	Action Level (units)	Sample QL	Samples Affected	Action

Comments: _____

_____

Validator: _____ Date: _____

See Dv Report

EPA-NE - Data Validation Worksheet
VOA-VI

VI. VOA SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Volatile Method QC Acceptance Criteria				
	Toluene-d_8	BFB	DCE-d_4	Other:	
OLM03.2	Water 88-110 Soil 84-138	Water 86-115 Soil 59-113	Water 76-114 Soil 70-121		
OLC02.1	NA	80-120	NA		
Other:					
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

Validator:_____ Date:_____

See Dv Report

EPA-NE - Data Validation Worksheet
SV-VI

VI. SV SURROGATE SPIKE RECOVERIES - List all surrogate compound recoveries that are outside method QC acceptance criteria.

Method	Base/Neutral Method QC Acceptance Criteria					
	NBZ-d_5	2-FBP	TPH-d_{14}	1,2-DCB-d_4*	Other:	
OLM03.2	Water Soil 35-114 23-120	Water Soil 43-116 30-115	Water Soil 33-141 18-137	Water Soil 16-110 20-130		
OLC02.1	40-110	30-110	20-140	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

Method	Acid Method QC Acceptance Criteria					
	Phenol-d_5	2-FP	2,4,6-TBP	2-CP-d_4*	Other:	
OLM03.2	Water Soil 10-110 24-113	Water Soil 21-110 25-121	Water Soil 10-123 19-122	Water Soil 33-110 20-130		
OLC02.1	15-115	15-110	15-130	NA		
Other:						
Sample Number/Matrix	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**% Recovery**	**Action**

* Advisory Surrogates - OLM03.2

Validator:_____ Date:_____

OK

EPA-NE - Data Validation Worksheet
VOA/SV-VII

VII. INTERNAL STANDARD PERFORMANCE

List the internal standards that are outside the area count and retention time method QC acceptance criteria.
IS Area Count method QC acceptance criteria:_____
IS Retention Time method QC acceptance criteria:_____

Sample Number (TR#)	Date and Time Analyzed	Instrument	Parameter	IS Outside Area Count and/or RT Criteria	__IS Area	RT Shift	Acceptable Range (IS area or RT shift)	Action

Validator:_____ Date:_____

N/A

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-VIII

VIII. MATRIX SPIKE/MATRIX SPIKE DUPLICATE - List all MS/MSD analytes that are outside method QC acceptance criteria.

Use a separate worksheet for each MS/MSD pair.

Sample # _____ Matrix _____ Concentration Level _____

Parameter	Compound	MS %Rec	MSD %Rec	RPD	Method QC Limits		Concentration			% RSD	Action
					% Rec	RPD	Unspiked Sample	MS	MSD		

Validator: _____ Date: _____

OK

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-IX

IX. FIELD DUPLICATE PRECISION - List all field duplicate analytes that are outside criteria.

Use a separate worksheet for each field duplicate pair.

Sample Number _____ Duplicate Sample Number _____ Matrix _____

Parameter	Compound	Sample Conc.	Sample QL		Duplicate Conc.	Duplicate QL		RPD	QC Acceptance Criteria RPD or NA*	Action
			SQL	2xSQL		SQL	2xSQL			

* For instances where one duplicate result is ND (or reported less than the sample QL).

Does the MS/MSD data indicate acceptable laboratory precision? Y N

Comments: _____

_____

Sampler Name: _____ Contractor Name: _____ Date Contacted: _____

Reason for Contact and resolution obtained: _____

Validator: _____ Date: _____

OK

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-X

X. SENSITIVITY CHECK (Method Detection Limit Study)

List all compounds, surrogates, and internal standards that are outside the MDL criteria.

- Has an appropriate MDL study been submitted with seven replicates for each compound and matrix of interest? Y N
- Date of Preparation/Analysis: _____ Within 1 year? Y N
- Instrument I.D.: _____ Same as samples? Y N
- Column I.D.: _____ Same as samples? Y N

Matrix	Compound	MDL > QL	Method QC Limits < 80% or > 120%	IS Outside Area Count and/or RT Criteria	RSD > 20%	Samples Affected	Action

If an MDL study has not been submitted, use only the LFB results to evaluate data.

(Laboratory Fortified Blank) - List all LFB compounds, surrogates and internal standards that are outside criteria.

- Has an appropriate and complete LFB been submitted at the proper frequency? Y N
- Does it contain all target compounds at the method-required QLs? Y N
- Was the LFB spiked with a standard from a source (vendor) independent of the calibration standard? Y N

Matrix	Compound	Method QC Limits < 60% or > 140% Other:	IS Outside Area Count and/or RT Criteria	Samples Affected	Action

Validator: _____ Date: _____

OK

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XI

XI. ACCURACY CHECK (Performance Evaluation Results) - List all analytes that are outside criteria.

SDG No: _____ CASE: _____

Are more than one-half of the PES analytes within criteria for each parameter. Y N

PE Sample Number	Ampule Number	Parameter	Type of PES	Matrix	Analyte	Conc.	Region I EPA PES Scores*	Non-EPA PES Scores**	Samples Affected	Action

* For Region I PESs indicate the Region I PES Score Report Result: Action High; Action Low; TCL MISS; TCL CONTAMINANT; TIC HIT; TIC MISS; TIC CONTAMINANT

** For Non-EPA PESs indicate the Non-EPA PES Score: PES COMPOUND MISS; PES COMPOUND CONTAMINANT; PES COMPOUND HIT (% Recovery Limits)

Validator: _____ Date: _____

~~See Dv Report~~ MDK 12-26-07 OK

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XII

XII. TARGET COMPOUND IDENTIFICATION - List the analytes that are outside the acceptance criteria.

Sample Number	Compound	___MS Ions	____RRT	Action

Validator: _____ Date: _____

See Dv Report

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/PCB-XIII

XIII. SAMPLE QUANTITATION

Recalculate, from the raw data, the concentrations for one positive detect and one reported sample quantitation limit for a non-detect in a diluted sample or soil sample per fraction. (Note: Although Section XIII, C.1.a, requires that one calculation for each fraction in each sample be performed, the validator is only required to reproduce an example, for each fraction, of one positive detect and one sample quantitation limit calculation on this worksheet.)

Do all soil/sediment samples have % solids greater than 30%? Y N
If no, list sample numbers_____

Fraction		Calculation
VOA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
BNA		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		
Pesticide/PCB		
Sample No.:		
Reported Compound:		
Reported Value:		
Not Detected Compound:		
Reported Quantitation Limit:		

Validator:_____ Date:_____

OK

XIV. TENTATIVELY IDENTIFIED COMPOUNDS (TICs)

List the 5 TICs having the highest concentration for each sample parameter.

Sample Number	Parameter	Compound	_____RRT	__Est. Conc.	Action

Validator: _____ Date: _____

See DV Report

EPA-NE - Data Validation Worksheet
VOA/SV-XV

XV. SEMIVOLATILE CLEANUP - List all analytes that are outside method cleanup QC criteria.

Cleanup Procedure	Instrument # or Lot #	Date/Time GPC Calibrated or Check Solution Analyzed	Compound	% Rec	QC Limits	Samples Affected	Action

Did the GPC column meet; resolution requirements? Y or N
peak shape requirements? Y or N
retention time shift requirements? Y or N

Was the GPC calibration, Silica Gel cleanup checked at the method required frequency with correct compounds and concentrations? Y or N

Were all compounds less than QL for the GPC/Silica Gel/Acid-Partition blank? Y or N

Did the blank surrogate recoveries and IS area counts and RTs (if added) meet method QC acceptance criteria? Y or N

Comments: _____

_____

Validator: _____ Date: _____

APPENDIX D

SUPPORT DOCUMENTATION

HOLDTIME

SDG SA6037

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	2W-FD-101907-01	SA6037-002	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	MG/KG	2W-SD-SD48-0204	SA6037-007	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	MG/KG	2W-SD-SD48-0001	SA6037-006	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	MG/KG	2W-SD-SD47-0001	SA6037-001	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	MG/KG	2W-SD-SD44-0001	SA6037-003	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	MG/KG	2W-SD-SD43-0001	SA6037-005	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	UG/L	2W-RB-101907-01	SA6037-008	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
HG	UG/L	2W-FB-101907-01	SA6037-009	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
M	MG/KG	2W-SD-SD47-0001	SA6037-001	NM	10/19/2007	10/26/2007	10/30/2007	7	4	11
M	MG/KG	2W-SD-SD48-0001	SA6037-006	NM	10/19/2007	10/26/2007	10/30/2007	7	4	11
M	MG/KG	2W-SD-SD44-0001	SA6037-003	NM	10/19/2007	10/26/2007	10/30/2007	7	4	11
M	MG/KG	2W-SD-SD43-0001	SA6037-005	NM	10/19/2007	10/26/2007	10/30/2007	7	4	11
M	MG/KG	2W-FD-101907-01	SA6037-002	NM	10/19/2007	10/26/2007	10/30/2007	7	4	11
M	MG/KG	2W-SD-SD48-0204	SA6037-007	NM	10/19/2007	10/26/2007	10/30/2007	7	4	11
M	UG/L	2W-FB-101907-01	SA6037-009	NM	10/19/2007	10/26/2007	10/29/2007	7	3	10

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	2W-RB-101907-01	SA6037-008	NM	10/19/2007	10/26/2007	10/29/2007	7	3	10
PH	PH	2W-SD-SD48-0204	SA6037-7	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
PH	PH	2W-SD-SD48-0001	SA6037-6	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
PH	PH	2W-SD-SD47-0001	SA6037-1	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
PH	PH	2W-SD-SD44-0001	SA6037-3	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
PH	PH	2W-SD-SD43-0001	SA6037-5	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
PH	PH	2W-FD-101907-01	SA6037-2	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
TOC	UG/GD	2W-SD-SD44-0001	SA6037-3	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-FD-101907-01	SA6037-2	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-SD-SD48-0001	SA6037-6	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-SD-SD44-0002	SA6037-4	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-SD-SD48-0204	SA6037-7	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-SD-SD43-0001	SA6037-5	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-SD-SD47-0001	SA6037-1	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TS	%	2W-SD-SD47-0001	SA6037-1	NM	10/19/2007	10/24/2007	10/25/2007	5	1	6
TS	%	2W-SD-SD48-0204	SA6037-7	NM	10/19/2007	10/24/2007	10/25/2007	5	1	6
TS	%	2W-SD-SD48-0001	SA6037-6	NM	10/19/2007	10/24/2007	10/25/2007	5	1	6
TS	%	2W-SD-SD44-0002	SA6037-4	NM	10/19/2007	10/24/2007	10/25/2007	5	1	6

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TS	%	2W-SD-SD44-0001	SA6037-3	NM	10/19/2007	10/24/2007	10/25/2007	5	1	6
TS	%	2W-FD-101907-01	SA6037-2	NM	10/19/2007	10/24/2007	10/25/2007	5	1	6
TS	%	2W-SD-SD43-0001	SA6037-5	NM	10/19/2007	10/24/2007	10/25/2007	5	1	6
PAH	%	2W-SD-SD48-0001DL	SA6037-6DL	NM	10/19/2007	11/2/2007	11/8/2007	14	6	20
PAH	%	2W-SD-SD47-0001	SA6037-1	NM	10/19/2007	11/2/2007	11/6/2007	14	4	18
PAH	%	2W-SD-SD48-0001	SA6037-6	NM	10/19/2007	11/2/2007	11/7/2007	14	5	19
PAH	%	2W-FD-101907-01	SA6037-2	NM	10/19/2007	11/2/2007	11/7/2007	14	5	19
PAH	%	2W-RB-101907-01	SA6037-8	NM	10/19/2007	10/24/2007	10/30/2007	5	6	11
PAH	%	2W-FB-101907-01	SA6037-9	NM	10/19/2007	10/24/2007	10/30/2007	5	6	11
PAH	%	2W-SD-SD48-0204	SA6037-7	NM	10/19/2007	11/2/2007	11/7/2007	14	5	19
PAH	%	2W-SD-SD44-0001RA	SA6037-3RA	NM	10/19/2007	11/2/2007	11/8/2007	14	6	20
PAH	%	2W-SD-SD43-0001RA	SA6037-5RA	NM	10/19/2007	11/2/2007	11/8/2007	14	6	20
PAH	UG/KG	2W-FD-101907-01	SA6037-2	NM	10/19/2007	11/2/2007	11/7/2007	14	5	19
PAH	UG/KG	2W-SD-SD43-0001RA	SA6037-5RA	NM	10/19/2007	11/2/2007	11/8/2007	14	6	20
PAH	UG/KG	2W-SD-SD44-0001RA	SA6037-3RA	NM	10/19/2007	11/2/2007	11/8/2007	14	6	20
PAH	UG/KG	2W-SD-SD47-0001	SA6037-1	NM	10/19/2007	11/2/2007	11/6/2007	14	4	18
PAH	UG/KG	2W-SD-SD48-0001	SA6037-6	NM	10/19/2007	11/2/2007	11/7/2007	14	5	19
PAH	UG/KG	2W-SD-SD48-0001DL	SA6037-6DL	NM	10/19/2007	11/2/2007	11/8/2007	14	6	20

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PAH	UG/KG	2W-SD-SD48-0204	SA6037-7	NM	10/19/2007	11/2/2007	11/7/2007	14	5	19
PAH	UG/L	2W-RB-101907-01	SA6037-8	NM	10/19/2007	10/24/2007	10/30/2007	5	6	11
PAH	UG/L	2W-FB-101907-01	SA6037-9	NM	10/19/2007	10/24/2007	10/30/2007	5	6	11
PCB	%	2W-FD-101907-01	SA6037-2	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15
PCB	%	2W-RB-101907-01	SA6037-8	NM	10/19/2007	10/24/2007	11/2/2007	5	9	14
PCB	%	2W-SD-SD43-0001	SA6037-5	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15
PCB	%	2W-SD-SD44-0001	SA6037-3	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15
PCB	%	2W-SD-SD47-0001	SA6037-1	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15
PCB	%	2W-SD-SD48-0001	SA6037-6	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15
PCB	%	2W-SD-SD48-0204	SA6037-7	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15
PCB	%	2W-FB-101907-01	SA6037-9	NM	10/19/2007	10/24/2007	11/2/2007	5	9	14
PCB	UG/KG	2W-SD-SD44-0001	SA6037-3	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15
PCB	UG/KG	2W-SD-SD47-0001	SA6037-1	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15
PCB	UG/KG	2W-SD-SD48-0001	SA6037-6	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15
PCB	UG/KG	2W-SD-SD48-0204	SA6037-7	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15
PCB	UG/KG	2W-FD-101907-01	SA6037-2	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15
PCB	UG/KG	2W-SD-SD43-0001	SA6037-5	NM	10/19/2007	10/30/2007	11/3/2007	11	4	15
PCB	UG/L	2W-FB-101907-01	SA6037-9	NM	10/19/2007	10/24/2007	11/2/2007	5	9	14

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/L	2W-RB-101907-01	SA6037-8	NM	10/19/2007	10/24/2007	11/2/2007	5	9	14
PEST	%	2W-SD-SD44-0001	SA6037-3	NM	10/19/2007	10/30/2007	11/5/2007	11	6	17
PEST	%	2W-SD-SD48-0204DL	SA6037-7DL	NM	10/19/2007	10/30/2007	11/7/2007	11	8	19
PEST	%	2W-SD-SD47-0001	SA6037-1	NM	10/19/2007	10/30/2007	11/5/2007	11	6	17
PEST	%	2W-SD-SD43-0001DL	SA6037-5DL	NM	10/19/2007	10/30/2007	11/7/2007	11	8	19
PEST	%	2W-RB-101907-01	SA6037-8	NM	10/19/2007	10/24/2007	11/5/2007	5	12	17
PEST	%	2W-FD-101907-01DL	SA6037-2DL	NM	10/19/2007	10/30/2007	11/6/2007	11	7	18
PEST	%	2W-FB-101907-01	SA6037-9	NM	10/19/2007	10/24/2007	11/5/2007	5	12	17
PEST	%	2W-SD-SD48-0001	SA6037-6	NM	10/19/2007	10/30/2007	11/5/2007	11	6	17
PEST	UG/KG	2W-FD-101907-01DL	SA6037-2DL	NM	10/19/2007	10/30/2007	11/6/2007	11	7	18
PEST	UG/KG	2W-SD-SD43-0001DL	SA6037-5DL	NM	10/19/2007	10/30/2007	11/7/2007	11	8	19
PEST	UG/KG	2W-SD-SD44-0001	SA6037-3	NM	10/19/2007	10/30/2007	11/5/2007	11	6	17
PEST	UG/KG	2W-SD-SD47-0001	SA6037-1	NM	10/19/2007	10/30/2007	11/5/2007	11	6	17
PEST	UG/KG	2W-SD-SD48-0001	SA6037-6	NM	10/19/2007	10/30/2007	11/5/2007	11	6	17
PEST	UG/KG	2W-SD-SD48-0204DL	SA6037-7DL	NM	10/19/2007	10/30/2007	11/7/2007	11	8	19
PEST	UG/L	2W-FB-101907-01	SA6037-9	NM	10/19/2007	10/24/2007	11/5/2007	5	12	17
PEST	UG/L	2W-RB-101907-01	SA6037-8	NM	10/19/2007	10/24/2007	11/5/2007	5	12	17

TETRA TECH NUS, INC. SAL0036 SAL0037 CHAIN OF CUSTODY | NUMBER 4596 | PAGE 1 OF 3

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
G00873	NSB NLON AREA A	A. BERNHARDT	412 921 7090	KATAHDIN / COLBY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
SJ Conti		S CONTI	412 921 7090	
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX #		

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 G G

PRESERVATIVE USED: 4°C 4°C 4°C 4°C 4°C 4°C

TYPE OF ANALYSIS

DATE YEAR 2007	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	PAH/PEST/PCB (8oz)	METALS/PH/TOC 4oz	PAHS (ONLY) 4oz	METALS (ONLY) 4oz	TOC (ONLY) 4oz	CADMIUM (ONLY) 4oz	TOC (ONLY) 4oz		COMMENTS
10/18	0830	2W-SD-SD58-0001	SD58	0	4"	SO	G	1					1				
"	0855	2W-SD-SD57-0001	SD57	0	4"	SO	G	2			1	1					
"	0855	2W-SD-SD57-0002	SD57	15"	20"	SO	G	1						1			
"	1010	2W-SD-SD56-0001	SD56	0	4"	SO	G	2	1	1							
"	1010	2W-SD-SD56-0002	SD56	24"	27"	SO	G	1						1			
"	1040	2W-SD-SD55-0001	SD55	0	6"	SO	G	2	1	1							
"	1040	2W-SD-SD55-0002	SD55	27"	30"	SO	G	1						1			
"	1320	2W-SD-SD54-0001	SD54	0	6"	SO	G	2	1	1							
"	1355	2W-SD-SD53-0001	SD53	0	6"	SO	G	4	(2)	(2)							DO MS/MSD (QC)
"	1345	2W-SD-SD53-0204	SD53	24"	48"	SO	G	2	1	1							
"	0000	2W-FD-101807-01	FD	—	—	SO	G	2	1	1							(QC)
"	1440	2W-SD-SD51-0001	SD51	0	6"	SO	G	2	1	1							
"	1530	2W-SD-SD52-0001	SD52	0	6"	SO	G	2	1	1							

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY SJ Conti	10/20/07	1000	1. RECEIVED BY FED EX		
2. RELINQUISHED BY			2. RECEIVED BY	102207	1000
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY) 4/02R

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 4597 | PAGE 2 OF 3

SA60036 SA60037

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
G008873	NSB-NLON AREA A	A. BERNHARTD	412 921 7090	KATAHDIN / COLBY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
S Conti		S CONTI	412 921 7090	
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX #		

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 G G

PRESERVATIVE USED: 4°C 4°C 4°C 4°C 4°C 4°C

DATE YEAR 2007	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: PAH/PEST/PCB (8 OZ)	METALS/pH/TOC (4 OZ)	PAH (ONLY) (4 OZ)	TOC (ONLY) (4 OZ)					COMMENTS
10/18	1600	2W-SD-SD50-0204	SD50	24"	48"	SO	G	2	1	1							
10/18	1605	2W-SD-SD50-0001	SD50	0	4"	SO	G	2	1	1							
10/18	1630	2W-SD-SD49-0001	SD49	0	4"	SO	G	2	1	1							
10/18	1725	2W-SD-SD45-0001	SD45	0	4"	SO	G	2	1	1							
10/18	1730	2W-SD-SD45-0002	SD45	30"	40"	SO	G	2	1	1							
10/19	1020	2W-SD-SD46-0001	SD46	0	4"	SO	G	2	1	1							
10/19	1040	2W-SD-SD46-0204	SD46	24"	36"	SO	G	2	1	1							
10/19	1245	2W-SD-SD47-0001	SD47	0	6"	SO	G	2	1	1							
10/19	0000	2W-FD-101907-01	FD	—	—	SO	G	2	1	1							
10/19	1345	2W-SD-SD44-0001	SD44	0	4"	SO	G	2	1	1							
10/19	1400	[redacted]	SD44	12"	24"	SO	G	1				1					
10/19	1430	2W-SD-SD43-0001	SD43	0	4"	SO	G	2	1	1							
10/19	1520	2W-SD-SD48-0001	SD48	0	4"	SO	G	2	1	1							
	1530	2W-SD-SD48-0204	SD48	24"	36"	SO	G	2	1	1							

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY: S Conti	10/20/07	1000	1. RECEIVED BY: FED EX		
2. RELINQUISHED BY			2. RECEIVED BY: [signature]	102007	1000
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY) 4/02R

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 4595 | PAGE 3 OF 3

SA6036 SA6037

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
G00873	NSB-NLON AREA A	A BERNHARDT	412 921 7090	KATAHDIN / COLBY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
SJ Conti		S CONTI	412 921 7090	
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX #		

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G G P

PRESERVATIVE USED: 4°C 4°C 4°C HNO3

DATE YEAR 2007	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	PAHS	PEST/PCBS	METALS					COMMENTS
10/19	0730	2W-RB-101907-01	RB	—	—	~~AQ~~ QC	G	5	2	2	1					OVER Auger SPOONS, BOWLS
10/19	0750	2W-FB-101907-01	FB	—	—	~~AQ~~ QC	G	5	2	2	1					DI WATER

1. RELINQUISHED BY SJ Conti	DATE 10/20/07	TIME 1000	1. RECEIVED BY FED EX	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 10 22 07	TIME 1000
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY) 4/02R

Katahdin Analytical Services, Inc. — Sample Receipt Condition Report

Client: Tetra Tech	KAS PM: AJ	Sampled By: Client
Project:	KIMS Entry By: DD	Delivered By: FEDEX
KAS Work Order#: SAL0036 SAL0037	KIMS Review By: AJC	Received By: DD
SDG #:	Cooler: 1 of 3	Date/Time Rec.: 1022071000

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	X				
2. Chain of Custody present in cooler?	X				
3. Chain of Custody signed by client?	X				
4. Chain of Custody matches samples?	X				
5. Temperature Blanks present?	X				Temp (°C): 2.1
6. Samples received at < 6 °C w/o freezing? Ice or ice packs present? Y or N	X				Cooler temp. (°C): (if no temp blank)
7. Volatiles free of headspace? **Aqueous:** No bubble larger than a pea				X	
Soil/Sediment: Received in airtight container?				X	
Received in methanol?				X	
Methanol covering soil?				X	
8. Trip Blank present in cooler?				X	
9. Proper sample containers and volume?	X				
10. Samples within hold time upon receipt?	X				
11. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	X				
Sulfide - >9				X	
Cyanide – pH >12				X	
12. Corrective Action Report Filed?				✓	

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

Katahdin Analytical Services, Inc. **Sample Receipt Condition Report**

Client: Tetra Tech	KAS PM: AJC	Sampled By: Client
Project:	KIMS Entry By: DJ	Delivered By: FEDEX
KAS Work Order#: SA60036 SA60037	KIMS Review By: AC	Received By: DJ
SDG #:	Cooler: 2 of 3	Date/Time Rec.: 102207 1050

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	X				
2. Chain of Custody present in cooler?		X			COCs in cooler 1 of 3
3. Chain of Custody signed by client?	X				
4. Chain of Custody matches samples?	X				
5. Temperature Blanks present?	X				Temp (°C): 2.0
6. Samples received at < 6 °C w/o freezing? Ice or ice packs present? Y or N	X				Cooler temp. (°C): (if no temp blank)
7. Volatiles free of headspace?					
Aqueous: No bubble larger than a pea				X	
Soil/Sediment: Received in airtight container?				X	
Received in methanol?				X	
Methanol covering soil?				X	
8. Trip Blank present in cooler?				X	
9. Proper sample containers and volume?	X				
10. Samples within hold time upon receipt?	X				
11. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2		X			metals in cooler 1 of 3.
Sulfide - >9				X	
Cyanide – pH >12				X	
12. Corrective Action Report Filed?				✓	

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

Katahdin Analytical Services, Inc. **Sample Receipt Condition Report**

Client: Tetra Tech	KAS PM: ADL	Sampled By: Client
Project:	KIMS Entry By: DJ	Delivered By: FEDEX
KAS Work Order#: SA60036 SA60037	KIMS Review By: ADL	Received By: DJ
SDG #:	Cooler: 3 of 3	Date/Time Rec.: 10/22/07 1000

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	X				
2. Chain of Custody present in cooler?		X			COC was in cooler 1 of 3
3. Chain of Custody signed by client?	X				
4. Chain of Custody matches samples?	X				
5. Temperature Blanks present?		X			Temp (°C):
6. Samples received at < 6 °C w/o freezing? (Ice) or ice packs present? (Y) or N	X				Cooler temp. (°C): (if no temp blank) 5.9
7. Volatiles free of headspace?					
Aqueous: No bubble larger than a pea				X	
Soil/Sediment:					
Received in airtight container?				X	
Received in methanol?				X	
Methanol covering soil?				X	
8. Trip Blank present in cooler?				X	
9. Proper sample containers and volume?	X				
10. Samples within hold time upon receipt?	X				
11. Aqueous samples properly preserved?					
Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2		X			metals in cooler 1 of 3.
Sulfide - >9				X	
Cyanide – pH >12				X	
12. Corrective Action Report Filed?				✓	

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

00000010

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO 439 NSB NEW LONDON
SA6037

Sample Receipt

The following samples were received on October 22, 2007 and were logged in under Katahdin Analytical Services work order number SA6037 for a hardcopy due date of November 8, 2007.

KATAHDIN Sample No.	TTNUS Sample Identification
SA6037-1	2W-SD-SD47-0001
SA6037-2	2W-FD-101907-01
SA6037-3	2W-SD-SD44-0001
SA6037-4	2W-SD-SD44-0002
SA6037-5	2W-SD-SD43-0001
SA6037-6	2W-SD-SD48-0001
SA6037-7	2W-SD-SD48-0204
SA6037-8	2W-RB-101907-01
SA6037-9	2W-FB-101907-01

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

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

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

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

Organics Analysis

The samples of work order SA6037 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis. Some manual integrations may have been performed due to split peaks and/or corrected baselines. All have been flagged with an "M" (software-generated) on the pertinent quantitation reports.

8082 Analysis

Samples SA6037-1, 2, 3, 5, 6, and 7, and associated QC were put through a sulfur cleanup according to SW-846 method 3660 using the copper powder technique. The cleanup did not completely remove the sulfur. Consequently, some of the samples may have sulfur interference affecting the quantitation of target analytes.

Samples SA6037-1, 2, 3, 5, 6, and 7 were manually integrated for Aroclor 1260 and/ or the surrogate DCB. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

The method blank, LCS, and LCSD WG44851-1, 2, and 3 had high recoveries for the surrogate DCB on both channels, which were outside of the laboratory established acceptance limits. Since the recovery for TCX was acceptable, the associated samples were not reextracted.

The Form 7 for the calibration verification standard (CV) (files 6AK1021, 6AK2021, 6AK1046, and 6AK2046) are flagged for the surrogates TCX and/or DCB indicating that the %D is greater than the method acceptance limit of 15%. With the exception of DCB for file 6AK1021, which was high, and 6AK2046, which was low, the %D's are actually within the method acceptance limits and should not be flagged, but due to software limitations the flagging could not be removed.

The CV (file 6AK1006) had a low response for the surrogate TCX on channel A, which resulted in a %D that was outside of the method acceptance limits of 15%. Since the response was acceptable on channel B, the associated samples were not reanalyzed.

The CV (file 6AK1021) had high responses for Aroclor 1260 and the surrogate DCB on channel A, which resulted in %D's that were outside of the method acceptance limits of 15%. Since the responses were acceptable on channel B, the associated samples were not reanalyzed.

The CV (files 6AK1036 and 6AK2036) had high responses for Aroclor 1016 on both channels, and a high response for Aroclor 1260 on channel A, which resulted in %D's that were outside of the method acceptance limits of 15%.

The CV (file 6AK2046) had a low response for the surrogate DCB on channel B, which resulted in a %D that was outside of the method acceptance limits of 15%. Since the response was acceptable on channel A, the associated samples were not reanalyzed.

8081 Analysis

Sample SA6037-2DL had a RPD for 4,4'-DDT that was outside of the method acceptance limits of 40%. This analyte is flagged with a "J" qualifier on the report of analysis (ROA).

The CV (files 8AK1035 and 8AK2035) had a high response for endrin ketone on both channels, which resulted in %D's that were outside of the method acceptance limits of 15%. Since a high response would indicate a high bias, and the associated samples did not have these target analytes detected above the MDL, the samples were not reanalyzed.

The closing CV (files 8AK1045 and 8AK2045) had low and high responses for various analytes on both channels, which resulted in %D's that were outside of the method acceptance limits of 15%.

The CV (file 8AK1052) had a high response for endrin ketone on channel A, which resulted in a %D that was outside of the method acceptance limits of 15%. Since a high response would indicate a high bias, and the associated samples did not have this target analyte detected above the MDL, the samples were not reanalyzed.

The CV (files 8AK1064 and 8AK2064) had high responses for endrin ketone on both channels and a high response for endosulfan sulfate on channel A, which resulted in %D's that were outside of the method acceptance limits of 15%. Since a high response would indicate a high bias, and the associated samples did not have these target analytes detected above the MDL, the samples were not reanalyzed.

The closing CV (files 8AK1076 and 8AK2076) had low and high responses for various analytes on both channels, which resulted in %D's that were outside of the method acceptance limits of 15%.

Sample SA6037-7 was diluted due to matrix interference, sample viscosity or other matrix-related problem. Consequently, the sample PQL was elevated by a factor of 10.

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 recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long the LCS is acceptable.

The calibration verification standard (CV) (file R5876) had a low response for the calibration verification compound (CCC) fluoranthene, which resulted in a %D that was outside the method acceptance limit of 20%. Since the associated samples were either reanalyses or dilutions, the samples were not reanalyzed.

The initial analysis of samples SA6037-3 and 5 had low responses for one or more internal standards that resulted in %D's which were outside the laboratory acceptance limit of -50% to +100% of the response of the internal standard of the daily calibration verification standard. The reanalysis of these samples are labeled with the suffix "RA". The reanalyses were analyzed within hold time and met all QC acceptance limits. Therefore, only the reanalyses are reported.

All of the soil samples were manually integrated for various analytes. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

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

Metals Analysis

The samples of Work Order SA6037 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Soil-matrix Katahdin Sample Nos. SA6037-(1-7) were digested for ICP analysis on 10/26/07 (QC Batch XJ26ICS0) in accordance with USEPA Method 3050B.

Aqueous-matrix Katahdin Sample Nos. SA6037-(8, 9) were digested for ICP analysis on 10/26/07 (QC Batch XJ26ICW1) in accordance with USEPA Method 3010A.

ICP analyses of Work Order SA6037 sample digestates were performed using a Thermo iCAP 6500 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.

Analysis of Mercury by Cold Vapor Atomic Absorption (CVAA)

Aqueous-matrix Katahdin Sample Nos. SA6037-(8, 9) were digested for mercury analysis on 10/24/07 (QC Batch XJ24HGW0) in accordance with USEPA Method 7470A.

Soil-matrix Katahdin Sample Nos. SA6037-(1-7) were digested for mercury analysis on 10/30/07 (QC Batch XJ30HGS0) in accordance with USEPA Method 7471A.

Mercury analyses of Work Order SA6037 sample digestates were performed using a Cetac M6100 automated mercury analyzer. All samples were analyzed within holding times and all analytical run QC criteria were met.

Wet Chemistry Analysis

The samples of Work Order SA6037 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for TOC in soil were performed according to "Determination of Total Organic Carbon in Sediment", Lloyd Kahn, USEPA Region II, 7/88.

Analyses for total solids were performed according to "U.S. EPA Contract Laboratory Program Statement of Work for Inorganic Analysis", SOW 7/88.

Analyses for pH (soil) were performed according to "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

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 holding times, and all quality control criteria were met.

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

Lisei Dimond 11·13·07

Leslie Dimond
Quality Assurance Officer

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID: RD442 DFTPP Injection Date: 10/29/07

Instrument ID: GCMS-R DFTPP Injection Time: 1057

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	30.6
68	Less than 2.0% of mass 69	0.6 (1.9)1
69	Less than 100.0% of mass 198	31.5
70	Less than 2.0% of mass 69	0.1 (0.4)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	6.9
275	10.0 - 30.0% of mass 198	26.6
365	1.0 - 100.0% of mass 198	3.2
441	0.0 - 100.0% of mass 443	10.6 (73.3)2
442	40.0 - 100.0% of mass 198	74.3
443	17.0 - 23.0% of mass 442	14.4 (19.4)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		SSTD0.20R1029	R5744	10/29/07	1212
02		SSTD0.50R1029	R5745	10/29/07	1255
03		SSTD1.00R1029	R5746	10/29/07	1338
04		SSTD3.00R1029	R5747	10/29/07	1421
05		SSTD6.00R1029	R5748	10/29/07	1504
06		SSTD10.0R1029	R5749	10/29/07	1546
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

FORM V SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 439-NSB NEW LONDON SDG No.: SA6037

Instrument ID: GCMS-R Calibration Date(s): 10/29/07 10/29/07

Column: RTX5-MS ID: 0.25 (mm) Calibration Time(s): 1212 1546

LAB FILE ID: RF0.2: R5744 RF0.5: R5745 RF1: R5746
RF3: R5747 RF6: R5748 RF10: R5749

COMPOUND	RF0.2	RF0.5	RF1	RF3	RF6	RF10	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2	MAX %RSD OR R^2
Naphthalene	0.974	0.897	0.856	0.769	0.740	0.651	AVRG		0.81451648	14.353	15.000
2-Methylnaphthalene	0.493	0.512	0.541	0.522	0.475	0.431	AVRG		0.49583647	7.850	15.000
1-Methylnaphthalene	0.614	0.564	0.554	0.516	0.457	0.418	AVRG		0.52053593	13.932	15.000
Acenaphthylene	1.349	1.369	1.456	1.421	1.486	1.457	AVRG		1.42325118	3.801	15.000
Acenaphthene	1.086	0.974	1.021	0.962	1.010	0.972	AVRG		1.00428711	4.591	15.000
Fluorene	0.948	0.996	1.102	1.063	1.160	1.121	AVRG		1.06501276	7.527	15.000
Phenanthrene	0.900	0.909	0.914	0.944	1.004	0.983	AVRG		0.94215878	4.540	15.000
Anthracene	0.944	0.968	0.926	0.940	0.991	0.985	AVRG		0.95899687	2.759	15.000
Fluoranthene	0.776	0.796	0.790	0.839	0.931	0.927	AVRG		0.84309360	8.298	15.000
Pyrene	12877	33643	78921	274060	530530	1096300	LINR	-0.3344882	0.66186492	0.99501	0.99000
Benzo(a)anthracene	0.708	0.716	0.730	0.772	0.842	0.870	AVRG		0.77309211	8.910	15.000
Chrysene	1.263	1.241	1.118	1.000	1.036	0.980	AVRG		1.10633739	11.078	15.000
Benzo(b)fluoranthene	0.895	0.996	0.911	1.006	1.173	1.253	AVRG		1.03900034	13.885	15.000
Benzo(k)fluoranthene	2.029	2.099	1.971	1.625	1.785	1.707	AVRG		1.86941068	10.215	15.000
Benzo(a)pyrene	0.841	0.826	0.832	0.902	1.043	1.053	AVRG		0.91625476	11.508	15.000
Indeno(1,2,3-cd)pyrene	0.539	0.572	0.516	0.576	0.681	0.624	AVRG		0.58474401	10.242	15.000
Benzo(g,h,i)perylene	0.785	0.736	0.742	0.742	0.781	0.650	AVRG		0.73916672	6.569	15.000
Dibenzo(a,h)anthracene	1116	2558	5065	28440	69761	143630	LINR	0.17551153	2.06706709	0.99636	0.99000
2-Methylnaphthalene-d10	0.410	0.403	0.402	0.379	0.330	0.315	AVRG		0.37338600	10.962	15.000
Fluorene-d10	1.077	1.093	1.196	1.151	1.202	1.174	AVRG		1.14868262	4.603	15.000
Pyrene-d10	9989	25064	58056	203340	400840	849420	LINR	-0.2827855	0.85909217	0.99723	0.99000

Average %RSD test result.

Calculate Average %RSD: 10.46548271
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: CTO 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID: RD448 DFTPP Injection Date: 11/05/07

Instrument ID: GCMS-R DFTPP Injection Time: 1010

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	44.1
68	Less than 2.0% of mass 69	0.8 (1.8)1
69	Less than 100.0% of mass 198	42.5
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	52.1
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	6.9
275	10.0 - 30.0% of mass 198	24.8
365	1.0 - 100.0% of mass 198	3.4
441	0.0 - 100.0% of mass 443	10.4 (76.3)2
442	40.0 - 100.0% of mass 198	72.0
443	17.0 - 23.0% of mass 442	13.6 (18.9)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD1.00R1105	R5825	11/05/07	1030
02	WG45236-BLANK	WG45236-1	R5826	11/05/07	1112
03	WG45236-LCS	WG45236-2	R5827	11/05/07	1155
04	WG45236-LCSD	WG45236-3	R5828	11/05/07	1238
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: CTO 439-NSB NEW LONDON SDG No.: SA6037

Instrument ID: GCMS-R Calibration Date: 11/05/07 Time: 1030

Lab File ID: R5825 Init. Calib. Date(s): 10/29/07 10/29/07

Init. Calib. Times: 1212 1546

GC Column: RTX5-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	0.8140000	0.8176500	0.8176500	0.01	0.45	100.00	AVRG
2-Methylnaphthalene	0.4960000	0.5106200	0.5106200	0.01	2.95	100.00	AVRG
1-Methylnaphthalene	0.5200000	0.5046800	0.5046800	0.01	-2.95	100.00	AVRG
Acenaphthylene	1.4230000	1.2768000	1.2768000	0.01	-10.27	100.00	AVRG
Acenaphthene	1.0040000	0.9021700	0.9021700	0.01	-10.14	20.00	AVRG
Fluorene	1.0650000	0.9798200	0.9798200	0.01	-8.00	100.00	AVRG
Phenanthrene	0.9420000	0.9453300	0.9453300	0.01	0.35	100.00	AVRG
Anthracene	0.9590000	0.8953400	0.8953400	0.01	-6.64	100.00	AVRG
Fluoranthene	0.8430000	0.7647500	0.7647500	0.01	-9.28	20.00	AVRG
Pyrene	0.9538700	1.0000000	1.8455000	0.01	-4.61	100.00	LINR
Benzo(a)anthracene	0.7730000	0.8238500	0.8238500	0.01	6.58	100.00	AVRG
Chrysene	1.1060000	1.0221000	1.0221000	0.01	-7.58	100.00	AVRG
Benzo(b)fluoranthene	1.0390000	1.0689000	1.0689000	0.01	2.88	100.00	AVRG
Benzo(k)fluoranthene	1.8690000	1.5070000	1.5070000	0.01	-19.37	100.00	AVRG
Benzo(a)pyrene	0.9160000	1.0834000	1.0834000	0.01	18.28	20.00	AVRG
Indeno(1,2,3-cd)pyrene	0.5850000	0.7200000	0.7200000	0.01	23.08	100.00	AVRG
Benzo(g,h,i)perylene	0.7390000	0.7532100	0.7532100	0.01	1.92	100.00	AVRG
Dibenzo(a,h)anthracene	1.2859000	1.0000000	0.5541600	0.01	28.59	100.00	LINR
2-Methylnaphthalene-d10	0.3730000	0.3783600	0.3783600	0.01	1.44	100.00	AVRG
Fluorene-d10	1.1490000	1.0676000	1.0676000	0.01	-7.08	100.00	AVRG
Pyrene-d10	0.9705000	1.0000000	1.3930000	0.01	-2.95	100.00	LINR

FORM VII PEST

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID: RD443 DFTPP Injection Date: 10/30/07

Instrument ID: GCMS-R DFTPP Injection Time: 1126

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	38.0
68	Less than 2.0% of mass 69	0.6 (1.5)1
69	Less than 100.0% of mass 198	36.6
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	49.1
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	6.8
275	10.0 - 30.0% of mass 198	25.9
365	1.0 - 100.0% of mass 198	3.4
441	0.0 - 100.0% of mass 443	11.4 (72.5)2
442	40.0 - 100.0% of mass 198	81.1
443	17.0 - 23.0% of mass 442	15.8 (19.4)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		SSTD1.00R1030	R5758	10/30/07	1222
02	WG44884-BLANK	WG44884-1	R5759	10/30/07	1304
03	WG44884-LCS	WG44884-2	R5760	10/30/07	1347
04	WG44884-LCSD	WG44884-3	R5761	10/30/07	1430
05	2W-RB-101907-01	SA6037-8	R5764	10/30/07	1638
06	2W-FB-101907-01	SA6037-9	R5765	10/30/07	1720
07					
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12					
13					
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15					
16					
17					
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19					
20					

FORM V SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Instrument ID: GCMS-R Calibration Date: 10/30/07 Time: 1222

Lab File ID: R5758 Init. Calib. Date(s): 10/29/07 10/29/07

Init. Calib. Times: 1212 1546

GC Column: RTX5-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	0.8140000	0.8637600	0.8637600	0.01	6.11	100.00	AVRG
2-Methylnaphthalene	0.4960000	0.5279600	0.5279600	0.01	6.44	100.00	AVRG
1-Methylnaphthalene	0.5200000	0.5372500	0.5372500	0.01	3.32	100.00	AVRG
Acenaphthylene	1.4230000	1.2153000	1.2153000	0.01	-14.60	100.00	AVRG
Acenaphthene	1.0040000	0.9477500	0.9477500	0.01	-5.60	20.00	AVRG
Fluorene	1.0650000	1.0051000	1.0051000	0.01	-5.62	100.00	AVRG
Phenanthrene	0.9420000	0.9512100	0.9512100	0.01	0.98	100.00	AVRG
Anthracene	0.9590000	0.8448800	0.8448800	0.01	-11.90	100.00	AVRG
Fluoranthene	0.8430000	0.7216600	0.7216600	0.01	-14.39	20.00	AVRG
Pyrene	1.0607000	1.0000000	2.0069000	0.01	6.07	100.00	LINR
Benzo(a)anthracene	0.7730000	0.6838200	0.6838200	0.01	-11.54	100.00	AVRG
Chrysene	1.1060000	1.0925000	1.0925000	0.01	-1.22	100.00	AVRG
Benzo(b)fluoranthene	1.0390000	0.9526600	0.9526600	0.01	-8.31	100.00	AVRG
Benzo(k)fluoranthene	1.8690000	2.2564000	2.2564000	0.01	20.73	100.00	AVRG
Benzo(a)pyrene	0.9160000	0.8444400	0.8444400	0.01	-7.81	20.00	AVRG
Indeno(1,2,3-cd)pyrene	0.5850000	0.6261100	0.6261100	0.01	7.03	100.00	AVRG
Benzo(g,h,i)perylene	0.7390000	0.9365800	0.9365800	0.01	26.74	100.00	AVRG
Dibenzo(a,h)anthracene	0.9362300	1.0000000	0.3850000	0.01	-6.38	100.00	LINR
2-Methylnaphthalene-d10	0.3730000	0.3806200	0.3806200	0.01	2.04	100.00	AVRG
Fluorene-d10	1.1490000	1.0746000	1.0746000	0.01	-6.48	100.00	AVRG
Pyrene-d10	0.9880600	1.0000000	1.4135000	0.01	-1.19	100.00	LINR

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID: RD449 DFTPP Injection Date: 11/06/07

Instrument ID: GCMS-R DFTPP Injection Time: 1224

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	44.3
68	Less than 2.0% of mass 69	0.8 (1.8)1
69	Less than 100.0% of mass 198	41.9
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	40.0 - 60.0% of mass 198	51.7
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	6.8
275	10.0 - 30.0% of mass 198	24.8
365	1.0 - 100.0% of mass 198	3.1
441	0.0 - 100.0% of mass 443	10.7 (76.3)2
442	40.0 - 100.0% of mass 198	72.1
443	17.0 - 23.0% of mass 442	14.0 (19.4)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		SSTD1.00R1106	R5842	11/06/07	1243
02	2W-SD-SD47-0001	SA6037-1	R5857	11/06/07	2333
03	2W-FD-101907-01	SA6037-2	R5858	11/07/07	0017
04					
05					
06					
07					
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09					
10					
11					
12					
13					
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15					
16					
17					
18					
19					
20					

FORM V SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Instrument ID: GCMS-R Calibration Date: 11/06/07 Time: 1243

Lab File ID: R5842 Init. Calib. Date(s): 10/29/07 10/29/07

Init. Calib. Times: 1212 1546

GC Column: RTX5-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	0.8140000	0.8206800	0.8206800	0.01	0.82	100.00	AVRG
2-Methylnaphthalene	0.4960000	0.5049100	0.5049100	0.01	1.80	100.00	AVRG
1-Methylnaphthalene	0.5200000	0.4997800	0.4997800	0.01	-3.89	100.00	AVRG
Acenaphthylene	1.4230000	1.4024000	1.4024000	0.01	-1.45	100.00	AVRG
Acenaphthene	1.0040000	0.9424600	0.9424600	0.01	-6.13	20.00	AVRG
Fluorene	1.0650000	1.0152000	1.0152000	0.01	-4.68	100.00	AVRG
Phenanthrene	0.9420000	0.9932000	0.9932000	0.01	5.44	100.00	AVRG
Anthracene	0.9590000	0.9599400	0.9599400	0.01	0.10	100.00	AVRG
Fluoranthene	0.8430000	0.8110200	0.8110200	0.01	-3.79	20.00	AVRG
Pyrene	0.9680100	1.0000000	1.8668000	0.01	-3.20	100.00	LINR
Benzo(a)anthracene	0.7730000	0.9341800	0.9341800	0.01	20.85	100.00	AVRG
Chrysene	1.1060000	1.0705000	1.0705000	0.01	-3.21	100.00	AVRG
Benzo(b)fluoranthene	1.0390000	1.1428000	1.1428000	0.01	9.99	100.00	AVRG
Benzo(k)fluoranthene	1.8690000	1.3876000	1.3876000	0.01	-25.76	100.00	AVRG
Benzo(a)pyrene	0.9160000	1.0242000	1.0242000	0.01	11.81	20.00	AVRG
Indeno(1,2,3-cd)pyrene	0.5850000	0.5708100	0.5708100	0.01	-2.42	100.00	AVRG
Benzo(g,h,i)perylene	0.7390000	0.7900500	0.7900500	0.01	6.91	100.00	AVRG
Dibenzo(a,h)anthracene	1.0682000	1.0000000	0.4488400	0.01	6.82	100.00	LINR
2-Methylnaphthalene-d10	0.3730000	0.3698300	0.3698300	0.01	-0.85	100.00	AVRG
Fluorene-d10	1.1490000	1.0725000	1.0725000	0.01	-6.66	100.00	AVRG
Pyrene-d10	0.9442900	1.0000000	1.3625000	0.01	-5.57	100.00	LINR

FORM VII PEST

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID: RD450 DFTPP Injection Date: 11/07/07

Instrument ID: GCMS-R DFTPP Injection Time: 1242

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	42.2
68	Less than 2.0% of mass 69	0.6 (1.6)1
69	Less than 100.0% of mass 198	40.2
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	40.0 - 60.0% of mass 198	51.7
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	6.9
275	10.0 - 30.0% of mass 198	25.1
365	1.0 - 100.0% of mass 198	3.4
441	0.0 - 100.0% of mass 443	10.7 (72.2)2
442	40.0 - 100.0% of mass 198	75.7
443	17.0 - 23.0% of mass 442	14.8 (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		SSTD1.00R1107	R5859	11/07/07	1301
02	2W-SD-SD48-0001	SA6037-6	R5862	11/07/07	1508
03	2W-SD-SD48-0204	SA6037-7	R5863	11/07/07	1550
04					
05					
06					
07					
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FORM V SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Instrument ID: GCMS-R Calibration Date: 11/07/07 Time: 1301

Lab File ID: R5859 Init. Calib. Date(s): 10/29/07 10/29/07

Init. Calib. Times: 1212 1546

GC Column: RTX5-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	0.8140000	0.8321800	0.8321800	0.01	2.23	100.00	AVRG
2-Methylnaphthalene	0.4960000	0.5269300	0.5269300	0.01	6.24	100.00	AVRG
1-Methylnaphthalene	0.5200000	0.5199700	0.5199700	0.01	-0.00	100.00	AVRG
Acenaphthylene	1.4230000	1.4672000	1.4672000	0.01	3.11	100.00	AVRG
Acenaphthene	1.0040000	0.9617700	0.9617700	0.01	-4.21	20.00	AVRG
Fluorene	1.0650000	1.1093000	1.1093000	0.01	4.16	100.00	AVRG
Phenanthrene	0.9420000	1.0240000	1.0240000	0.01	8.70	100.00	AVRG
Anthracene	0.9590000	0.9683100	0.9683100	0.01	0.97	100.00	AVRG
Fluoranthene	0.8430000	0.9170800	0.9170800	0.01	8.79	20.00	AVRG
Pyrene	0.7959000	1.0000000	1.6068000	0.01	-20.41	100.00	LINR
Benzo(a)anthracene	0.7730000	0.9623600	0.9623600	0.01	24.50	100.00	AVRG
Chrysene	1.1060000	1.0835000	1.0835000	0.01	-2.03	100.00	AVRG
Benzo(b)fluoranthene	1.0390000	1.1847000	1.1847000	0.01	14.02	100.00	AVRG
Benzo(k)fluoranthene	1.8690000	1.5628000	1.5628000	0.01	-16.38	100.00	AVRG
Benzo(a)pyrene	0.9160000	1.0068000	1.0068000	0.01	9.91	20.00	AVRG
Indeno(1,2,3-cd)pyrene	0.5850000	0.7389900	0.7389900	0.01	26.32	100.00	AVRG
Benzo(g,h,i)perylene	0.7390000	0.7781400	0.7781400	0.01	5.30	100.00	AVRG
Dibenzo(a,h)anthracene	1.2810000	1.0000000	0.5518200	0.01	28.10	100.00	LINR
2-Methylnaphthalene-d10	0.3730000	0.3943800	0.3943800	0.01	5.73	100.00	AVRG
Fluorene-d10	1.1490000	1.2161000	1.2161000	0.01	5.84	100.00	AVRG
Pyrene-d10	0.7747400	1.0000000	1.1652000	0.01	-22.53	100.00	LINR

FORM VII PEST

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID: RD451 DFTPP Injection Date: 11/08/07

Instrument ID: GCMS-R DFTPP Injection Time: 1116

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	42.7
68	Less than 2.0% of mass 69	0.6 (1.4)1
69	Less than 100.0% of mass 198	40.2
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	50.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	24.4
365	1.0 - 100.0% of mass 198	3.2
441	0.0 - 100.0% of mass 443	10.1 (73.9)2
442	40.0 - 100.0% of mass 198	70.7
443	17.0 - 23.0% of mass 442	13.6 (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		SSTD1.00R1108	R5876	11/08/07	1135
02	2W-SD-SD44-0001	SA6037-3RA	R5877	11/08/07	1222
03	2W-SD-SD43-0001	SA6037-5RA	R5878	11/08/07	1304
04	2W-SD-SD48-0001	SA6037-6DL	R5879	11/08/07	1347
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
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17					
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19					
20					

FORM V SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Instrument ID: GCMS-R Calibration Date: 11/08/07 Time: 1135

Lab File ID: R5876 Init. Calib. Date(s): 10/29/07 10/29/07

Init. Calib. Times: 1212 1546

GC Column: RTX5-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	0.8140000	0.8155000	0.8155000	0.01	0.18	100.00	AVRG	
2-Methylnaphthalene	0.4960000	0.5225800	0.5225800	0.01	5.36	100.00	AVRG	
1-Methylnaphthalene	0.5200000	0.5144400	0.5144400	0.01	-1.07	100.00	AVRG	
Acenaphthylene	1.4230000	1.6232000	1.6232000	0.01	14.07	100.00	AVRG	
Acenaphthene	1.0040000	1.0375000	1.0375000	0.01	3.34	20.00	AVRG	
Fluorene	1.0650000	1.1046000	1.1046000	0.01	3.72	100.00	AVRG	
Phenanthrene	0.9420000	0.9880000	0.9880000	0.01	4.88	100.00	AVRG	
Anthracene	0.9590000	0.9528500	0.9528500	0.01	-0.64	100.00	AVRG	
Fluoranthene	0.8430000	0.6410600	0.6410600	0.01	-23.96	20.00	AVRG	<-
Pyrene	1.0971000	1.0000000	2.0619000	0.01	9.71	100.00	LINR	
Benzo(a)anthracene	0.7730000	1.0082000	1.0082000	0.01	30.43	100.00	AVRG	
Chrysene	1.1060000	1.0791000	1.0791000	0.01	-2.43	100.00	AVRG	
Benzo(b)fluoranthene	1.0390000	1.1413000	1.1413000	0.01	9.85	100.00	AVRG	
Benzo(k)fluoranthene	1.8690000	1.3188000	1.3188000	0.01	-29.44	100.00	AVRG	
Benzo(a)pyrene	0.9160000	0.9678900	0.9678900	0.01	5.66	20.00	AVRG	
Indeno(1,2,3-cd)pyrene	0.5850000	0.5744600	0.5744600	0.01	-1.80	100.00	AVRG	
Benzo(g,h,i)perylene	0.7390000	0.7669100	0.7669100	0.01	3.78	100.00	AVRG	
Dibenzo(a,h)anthracene	1.3188000	1.0000000	0.5700800	0.01	31.88	100.00	LINR	
2-Methylnaphthalene-d10	0.3730000	0.3831100	0.3831100	0.01	2.71	100.00	AVRG	
Fluorene-d10	1.1490000	1.1600000	1.1600000	0.01	0.96	100.00	AVRG	
Pyrene-d10	1.0176000	1.0000000	1.4478000	0.01	1.76	100.00	LINR	

FORM VII PEST

FORM 2
SOIL SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Level:(low/med) LOW

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	WG45236-BLANK	WG45236-1	89	83	141						0
02	WG45236-LCS	WG45236-2	89	85	106						0
03	WG45236-LCSD	WG45236-3	87	81	130						0
04	2W-SD-SD47-0001	SA6037-1	63	63	62						0
05	2W-FD-101907-01	SA6037-2	73	76	71						0
06	2W-SD-SD48-0001	SA6037-6	59	61	55						0
07	2W-SD-SD48-0204	SA6037-7	71	70	73						0
08	2W-SD-SD44-0001	SA6037-3RA	59	67	65						0
09	2W-SD-SD43-0001	SA6037-5RA	77	71	90						0
10	2W-SD-SD48-0001	SA6037-6DL	66	63	27						0
11											
12											
13											
14											
15											
16											
17											
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19											
20											
21											
22											
23											
24											
25											
26											
27											
28											

		QC LIMITS
S1	= 2-Methylnaphthalene-d1	(27-128)
S2	= Fluorene-d10	(34-140)
S3	= Pyrene-d10	(20-174)

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

FORM 2
WATER SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

	CLIENT SAMPLE ID	LAB SAMPLE ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	WG44884-BLANK	WG44884-1	86	93	104						0
02	WG44884-LCS	WG44884-2	79	84	98						0
03	WG44884-LCSD	WG44884-3	76	79	80						0
04	2W-RB-101907-01	SA6037-8	69	77	132						0
05	2W-FB-101907-01	SA6037-9	76	71	117						0
06											
07											
08											
09											
10											
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28											

		QC LIMITS
S1	= 2-Methylnaphthalene-d1	(45-115)
S2	= Fluorene-d10	(58-120)
S3	= Pyrene-d10	(48-157)

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

WG45236-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID: R5826 Lab Sample ID: WG45236-1

Instrument ID: GCMS-R Date Extracted: 11/02/07

Matrix: (soil/water) SOIL Date Analyzed: 11/05/07

Level:(low/med) LOW Time Analyzed: 1112

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	WG45236-LCS	WG45236-2	R5827	11/05/07	1155
02	WG45236-LCSD	WG45236-3	R5828	11/05/07	1238
03	2W-SD-SD47-0001	SA6037-1	R5857	11/06/07	2333
04	2W-FD-101907-01	SA6037-2	R5858	11/07/07	0017
05	2W-SD-SD48-0001	SA6037-6	R5862	11/07/07	1508
06	2W-SD-SD48-0204	SA6037-7	R5863	11/07/07	1550
07	2W-SD-SD44-0001	SA6037-3RA	R5877	11/08/07	1222
08	2W-SD-SD43-0001	SA6037-5RA	R5878	11/08/07	1304
09	2W-SD-SD48-0001	SA6037-6DL	R5879	11/08/07	1347
10					
11					
12					
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COMMENTS:

FORM IV SV

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 439-NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 11/02/07
Analysis Date: 05-NOV-2007 11:12
Report Date: 11/09/2007
Matrix: SOIL
% Solids: 100

Lab ID: WG45236-1
Client ID: WG45236-Blank
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45236
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
91-20-3	Naphthalene	U	20	1.0	20	20	1.8
91-57-6	2-Methylnaphthalene	U	20	1.0	20	20	2.8
90-12-0	1-Methylnaphthalene	U	20	1.0	20	20	9.2
208-96-8	Acenaphthylene	U	20	1.0	20	20	1.3
83-32-9	Acenaphthene	U	20	1.0	20	20	1.5
86-73-7	Fluorene	U	20	1.0	20	20	1.6
85-01-8	Phenanthrene	U	20	1.0	20	20	4.3
120-12-7	Anthracene	U	20	1.0	20	20	2.6
206-44-0	Fluoranthene	U	20	1.0	20	20	4.0
129-00-0	Pyrene	U	20	1.0	20	20	6.9
56-55-3	Benzo(a)anthracene	U	20	1.0	20	20	2.5
218-01-9	Chrysene	U	20	1.0	20	20	2.6
205-99-2	Benzo(b)fluoranthene	U	20	1.0	20	20	2.2
207-08-9	Benzo(k)fluoranthene	U	20	1.0	20	20	1.9
50-32-8	Benzo(a)pyrene	U	20	1.0	20	20	2.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	20	1.0	20	20	4.3
191-24-2	Benzo(g,h,i)perylene	U	20	1.0	20	20	3.3
53-70-3	Dibenzo(a,h)anthracene	U	20	1.0	20	20	3.8
7297-45-2	2-Methylnaphthalene-d10		89%				
81103-79-9	Fluorene-d10		83%				
1718-52-1	Pyrene-d10		141%				

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: CTO 439-NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 11/02/07
Analysis Date: 11/05/07
Report Date: 11/13/2007
Matrix: SOIL

Lab ID: WG45236-2 & WG45236-3
Client ID: WG45236-LCS & WG45236-LCSD
SDG: CTO44-3
Extracted by: KM
Extraction Method: SW846 3550
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG45236
Units: ug/Kgdrywt

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
Naphthalene	67	67	NA	57	57	86	85	0.9	50	33-103
2-Methylnaphthalene	67	67	NA	76	74	114	110	3	50	66-136
1-Methylnaphthalene	67	67	NA	57	55	85	83	2	50	30-150
Acenaphthylene	67	67	NA	55	53	82	80	3	50	50-115
Acenaphthene	67	67	NA	55	55	83	83	0.2	50	44-102
Fluorene	67	67	NA	59	56	89	84	6	50	48-120
Phenanthrene	67	67	NA	64	61	96	92	5	50	39-132
Anthracene	67	67	NA	60	58	90	86	4	50	42-117
Fluoranthene	67	67	NA	62	55	93	82	13	50	32-154
Pyrene	67	67	NA	76	94	* 114	* 141	21	50	36-108
Benzo(a)anthracene	67	67	NA	75	70	112	104	7	50	37-153
Chrysene	67	67	NA	60	62	90	93	3	50	28-121
Benzo(b)fluoranthene	67	67	NA	71	73	107	110	2	50	37-147
Benzo(k)fluoranthene	67	67	NA	49	54	74	81	10	50	46-114
Benzo(a)pyrene	67	67	NA	63	70	94	105	11	50	47-109
Indeno(1,2,3-cd)pyrene	67	67	NA	74	79	110	118	7	50	16-137
Benzo(g,h,i)perylene	67	67	NA	61	73	91	109	18	50	10-110
Dibenzo(a,h)anthracene	67	67	NA	75	74	112	110	2	50	24-130

FORM III SV-2

R5827.D & R5828.D

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: CTO 439-NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/24/07
Analysis Date: 10/30/07
Report Date: 11/13/2007
Matrix: WATER

Lab ID: WG44884-2 & WG44884-3
Client ID: WG44884-LCS & WG44884-LCSD
SDG: CTO44-3
Extracted by: KF
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG44884
Units: ug/L

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
Naphthalene	2.0	2.0	NA	1.6	1.6	78	79	2	30	34-106
2-Methylnaphthalene	2.0	2.0	NA	2.0	2.0	100	100	0.5	30	30-148
1-Methylnaphthalene	2.0	2.0	NA	1.6	1.6	79	80	2	30	30-150
Acenaphthylene	2.0	2.0	NA	1.5	1.5	74	74	0.0	30	51-114
Acenaphthene	2.0	2.0	NA	1.5	1.6	76	78	2	30	47-108
Fluorene	2.0	2.0	NA	1.8	1.7	88	84	3	30	53-119
Phenanthrene	2.0	2.0	NA	1.9	1.8	94	88	7	30	53-130
Anthracene	2.0	2.0	NA	1.9	1.7	94	84	10	30	53-121
Fluoranthene	2.0	2.0	NA	2.3	1.9	116	96	18	30	51-139
Pyrene	2.0	2.0	NA	2.0	1.7	102	85	18	30	31-124
Benzo(a)anthracene	2.0	2.0	NA	2.4	2.0	120	100	19	30	42-143
Chrysene	2.0	2.0	NA	2.0	1.7	98	84	16	30	36-126
Benzo(b)fluoranthene	2.0	2.0	NA	2.2	1.8	111	90	21	30	36-148
Benzo(k)fluoranthene	2.0	2.0	NA	1.9	1.8	93	92	0.5	30	33-139
Benzo(a)pyrene	2.0	2.0	NA	2.2	1.8	110	92	18	30	44-130
Indeno(1,2,3-cd)pyrene	2.0	2.0	NA	2.4	1.9	118	93	24	30	23-142
Benzo(g,h,i)perylene	2.0	2.0	NA	2.0	1.6	98	80	21	30	30-119
Dibenzo(a,h)anthracene	2.0	2.0	NA	2.2	1.7	110	86	24	30	22-133

FORM III SV-1

R5760.D & R5761.D

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG44884-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID: R5759 Lab Sample ID: WG44884-1

Instrument ID: GCMS-R Date Extracted: 10/24/07

Matrix: (soil/water) WATER Date Analyzed: 10/30/07

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	WG44884-LCS	WG44884-2	R5760	10/30/07	1347
02	WG44884-LCSD	WG44884-3	R5761	10/30/07	1430
03	2W-RB-101907-01	SA6037-8	R5764	10/30/07	1638
04	2W-FB-101907-01	SA6037-9	R5765	10/30/07	1720
05					
06					
07					
08					
09					
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29					
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COMMENTS:

FORM IV SV

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 439-NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/24/07
Analysis Date: 30-OCT-2007 13:04
Report Date: 11/09/2007
Matrix: WATER
% Solids: NA

Lab ID: WG44884-1
Client ID: WG44884-Blank
SDG: SA6037
Extracted by: KF
Extraction Method: SW846 3510
Analyst: JCG
Analysis Method: SW846 M8270C
Lab Prep Batch: WG44884
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	0.035
90-12-0	1-Methylnaphthalene	U	0.20	1.0	0.20	0.20	0.027
208-96-8	Acenaphthylene	U	0.20	1.0	0.20	0.20	0.018
83-32-9	Acenaphthene	U	0.20	1.0	0.20	0.20	0.028
86-73-7	Fluorene	U	0.20	1.0	0.20	0.20	0.032
85-01-8	Phenanthrene	U	0.20	1.0	0.20	0.20	0.038
120-12-7	Anthracene	U	0.20	1.0	0.20	0.20	0.035
206-44-0	Fluoranthene	U	0.20	1.0	0.20	0.20	0.071
129-00-0	Pyrene	U	0.20	1.0	0.20	0.20	0.10
56-55-3	Benzo(a)anthracene	U	0.20	1.0	0.20	0.20	0.043
218-01-9	Chrysene	U	0.20	1.0	0.20	0.20	0.093
205-99-2	Benzo(b)fluoranthene	U	0.20	1.0	0.20	0.20	0.078
207-08-9	Benzo(k)fluoranthene	U	0.20	1.0	0.20	0.20	0.051
50-32-8	Benzo(a)pyrene	U	0.20	1.0	0.20	0.20	0.080
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.20	1.0	0.20	0.20	0.085
191-24-2	Benzo(g,h,i)perylene	U	0.20	1.0	0.20	0.20	0.072
53-70-3	Dibenzo(a,h)anthracene	U	0.20	1.0	0.20	0.20	0.10
7297-45-2	2-Methylnaphthalene-d10		86%				
81103-79-9	Fluorene-d10		93%				
1718-52-1	Pyrene-d10		104%				

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID (Standard): R5758 Date Analyzed: 10/30/07

Instrument ID: GCMS-R Time Analyzed: 1222

	IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD	15492	8.41	61664	11.30	31994	15.52
UPPER LIMIT	30984	8.91	123328	11.80	63988	16.02
LOWER LIMIT	7746	7.91	30832	10.80	15997	15.02

	CLIENT SAMPLE ID	LAB SAMPLE ID						
01	WG44884-BLANK	WG44884-1	17550	8.41	67172	11.30	34255	15.52
02	WG44884-LCS	WG44884-2	17759	8.41	72057	11.30	37088	15.52
03	WG44884-LCSD	WG44884-3	19384	8.41	77686	11.30	39395	15.52
04	2W-RB-101907-01	SA6037-8	16042	8.41	65396	11.30	33543	15.52
05	2W-FB-101907-01	SA6037-9	17046	8.42	62337	11.31	35037	15.52
06								
07								
08								
09								
10								
11								
12								
13								
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16								
17								
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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 VIII SV-1

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID (Standard): R5758 Date Analyzed: 10/30/07

Instrument ID: GCMS-R Time Analyzed: 1222

	IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD	43490	19.02	19432	25.39	9307	28.58
UPPER LIMIT	86980	19.52	38864	25.89	18614	29.08
LOWER LIMIT	21745	18.52	9716	24.89	4654	28.08

	CLIENT SAMPLE ID	LAB SAMPLE ID						
01	WG44884-BLANK	WG44884-1	58026	19.02	28248	25.39	15204	28.58
02	WG44884-LCS	WG44884-2	58038	19.02	34071	25.37	16444	28.57
03	WG44884-LCSD	WG44884-3	57740	19.02	33199	25.38	16214	28.57
04	2W-RB-101907-01	SA6037-8	52216	19.02	19651	25.39	8790	28.58
05	2W-FB-101907-01	SA6037-9	50966	19.02	21939	25.39	9452	28.57
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 VIII SV-2

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID (Standard): R5825 Date Analyzed: 11/05/07

Instrument ID: GCMS-R Time Analyzed: 1030

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD		25729	8.34	103707	11.23	54601	15.45
UPPER LIMIT		51458	8.84	207414	11.73	109202	15.95
LOWER LIMIT		12865	7.84	51854	10.73	27301	14.95
CLIENT SAMPLE ID	LAB SAMPLE ID						
01 WG45236-BLANK	WG45236-1	31570	8.35	117082	11.23	52856	15.45
02 WG45236-LCS	WG45236-2	35089	8.35	133245	11.24	65536	15.45
03 WG45236-LCSD	WG45236-3	32691	8.35	120049	11.24	55789	15.45
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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 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID (Standard): R5825 Date Analyzed: 11/05/07

Instrument ID: GCMS-R Time Analyzed: 1030

	IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD	72155	18.94	32637	25.30	14891	28.49
UPPER LIMIT	144310	19.44	65274	25.80	29782	28.99
LOWER LIMIT	36078	18.44	16319	24.80	7446	27.99

	CLIENT SAMPLE ID	LAB SAMPLE ID						
01	WG45236-BLANK	WG45236-1	65089	18.94	18320	25.30	10211	28.49
02	WG45236-LCS	WG45236-2	89045	18.94	37472	25.30	17751	28.49
03	WG45236-LCSD	WG45236-3	68092	18.94	20761	25.30	7469	28.49
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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 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID (Standard): R5842 Date Analyzed: 11/06/07

Instrument ID: GCMS-R Time Analyzed: 1243

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD		29626	8.33	118135	11.22	56665	15.43
UPPER LIMIT		59252	8.83	236270	11.72	113330	15.93
LOWER LIMIT		14813	7.83	59068	10.72	28333	14.93
CLIENT SAMPLE ID	LAB SAMPLE ID						
01 2W-SD-SD47-0001	SA6037-1	35501	8.34	149975	11.22	85779	15.43
02 2W-FD-101907-01	SA6037-2	30672	8.34	124658	11.22	63251	15.43
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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 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID (Standard): R5842 Date Analyzed: 11/06/07

Instrument ID: GCMS-R Time Analyzed: 1243

	IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD	71162	18.93	33931	25.29	19704	28.47
UPPER LIMIT	142324	19.43	67862	25.79	39408	28.97
LOWER LIMIT	35581	18.43	16966	24.79	9852	27.97

	CLIENT SAMPLE ID	LAB SAMPLE ID						
01	2W-SD-SD47-0001	SA6037-1	116065	18.93	61112	25.29	36649	28.48
02	2W-FD-101907-01	SA6037-2	76723	18.93	40931	25.29	29229	28.48
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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 VIII SV-2

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID (Standard): R5859 Date Analyzed: 11/07/07

Instrument ID: GCMS-R Time Analyzed: 1301

	IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD	20607	8.30	84637	11.18	43844	15.39
UPPER LIMIT	41214	8.80	169274	11.68	87688	15.89
LOWER LIMIT	10304	7.80	42319	10.68	21922	14.89

	CLIENT SAMPLE ID	LAB SAMPLE ID						
01	2W-SD-SD48-0001	SA6037-6	27292	8.30	90444	11.18	39355	15.41
02	2W-SD-SD48-0204	SA6037-7	26698	8.30	95869	11.18	49315	15.41
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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 VIII SV-1

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID (Standard): R5859 Date Analyzed: 11/07/07

Instrument ID: GCMS-R Time Analyzed: 1301

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD		68489	18.89	42045	25.26	21152	28.44
UPPER LIMIT		136978	19.39	84090	25.76	42304	28.94
LOWER LIMIT		34245	18.39	21023	24.76	10576	27.94
CLIENT SAMPLE ID	LAB SAMPLE ID						
01 2W-SD-SD48-0001	SA6037-6	44704	18.89	21433	25.26	17217	28.45
02 2W-SD-SD48-0204	SA6037-7	58136	18.91	27470	25.27	20093	28.46
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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 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID (Standard): R5876 Date Analyzed: 11/08/07

Instrument ID: GCMS-R Time Analyzed: 1135

	IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD	14111	8.26	57086	11.15	27410	15.36
UPPER LIMIT	28222	8.76	114172	11.65	54820	15.86
LOWER LIMIT	7056	7.76	28543	10.65	13705	14.86

	CLIENT SAMPLE ID	LAB SAMPLE ID						
01	2W-SD-SD44-0001	SA6037-3RA	16986	8.26	65533	11.15	31568	15.36
02	2W-SD-SD43-0001	SA6037-5RA	15581	8.27	62477	11.15	35895	15.38
03	2W-SD-SD48-0001	SA6037-6DL	16225	8.26	63470	11.15	34715	15.37
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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 439-NSB NEW LONDON SDG No.: SA6037

Lab File ID (Standard): R5876 Date Analyzed: 11/08/07

Instrument ID: GCMS-R Time Analyzed: 1135

	IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD	37971	18.85	15621	25.20	10421	28.39
UPPER LIMIT	75942	19.35	31242	25.70	20842	28.89
LOWER LIMIT	18986	18.35	7811	24.70	5211	27.89

	CLIENT SAMPLE ID	LAB SAMPLE ID						
01	2W-SD-SD44-0001	SA6037-3RA	40167	18.85	18838	25.22	12613	28.40
02	2W-SD-SD43-0001	SA6037-5RA	50663	18.87	23199	25.23	13182	28.42
03	2W-SD-SD48-0001	SA6037-6DL	46316	18.85	25352	25.22	16441	28.40
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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

SRV: 2W-SD-SD48-0001 [Fluoranthene] = 2000 ug/Kg as reported by the laboratory.

Data File: \\Target_server\GG\chem\gcms-r.i\R110807.b\R5879.D
Report Date: 09-Nov-2007 16:05

Katahdin Analytical Services

Data file : \\Target_server\GG\chem\gcms-r.i\R110807.b\R5879.D
Lab Smp Id: SA6037-6DL Client Smp ID: 2W-SD-SD48-0001
Inj Date : 08-NOV-2007 13:47 MS Autotune Date: 02-JUL-2007 15:09
Operator : JCG Inst ID: gcms-r.i
Smp Info : SA6037-6DL
Misc Info : SW846 M8270C
Comment :
Method : \\Target_server\GG\chem\gcms-r.i\R110807.b\rsim047.m
Meth Date : 08-Nov-2007 12:11 cgomez Quant Type: ISTD
Cal Date : 29-OCT-2007 15:46 Cal File: R5749.D
Als bottle: 5
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: tetrat439001.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo)*1000*(100/(100 - M)) * CpndVariabl

Name	Value	Description
DF	4.000	Dilution Factor
Vt	0.00100	Volume of final extract (L)
Vo	0.03000	Sample Weight (Kg)
M	62.035	% Moisture
Cpnd Variable		Local Compound Variable

$\frac{278172}{46316} \cdot \frac{0.8\,ug/mL}{0.84309360} = \left(\frac{5.89897\,ug}{mL} \cdot \frac{0.001L}{1} \cdot \frac{1000mL}{1L}\right) / 0.03\,Kg \cdot (0.38) \times 4 = \boxed{2000\ ug/Kg}$

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)
* 1 1,4-Dichlorobenzene-D4	152	8.264	8.263	(1.000)	16225	0.80000	
* 3 Naphthalene-D8	136	11.148	11.147	(1.000)	63470	0.80000	
$ 6 2-Methylnaphthalene-d10	150	12.780	12.778	(1.146)	9787	0.33038	116
11 Acenaphthylene	152	14.987	14.988	(0.975)	16662	0.26979	94.7(a)
* 12 Acenaphthene-D10	164	15.374	15.356	(1.000)	34715	0.80000	
13 Acenaphthene	153	15.429	15.430	(1.004)	3115	0.07148	25.1(a)
$ 14 Fluorene-d10	176	16.590	16.591	(1.079)	15760	0.31618	111
15 Fluorene	166	16.645	16.646	(1.083)	6148	0.13303	46.7(a)
* 19 Phenanthrene-D10	188	18.851	18.851	(1.000)	46316	0.80000	
20 Phenanthrene	178	18.907	18.907	(1.003)	114415	2.09758	737
21 Anthracene	178	19.017	19.017	(1.009)	18229	0.32833	115(a)
24 Fluoranthene	202	21.746	21.747	(1.154)	278172	5.69897	2000
$ 25 Pyrene-d10	212	22.226	22.213	(0.881)	13403	0.13712	48.2
26 Pyrene	202	22.268	22.255	(0.883)	256571	5.09105	1790
27 Benzo(a)anthracene	228	25.176	25.176	(0.998)	75905	3.09825	1090
* 28 Chrysene-D12	240	25.218	25.204	(1.000)	25352	0.80000	
29 Chrysene	228	25.274	25.261	(1.002)	104979	2.99428	1050
31 Benzo(b)fluoranthene	252	27.625	27.614	(0.973)	67935	3.18156	1120
32 Benzo(k)fluoranthene	252	27.663	27.664	(0.974)	73754	1.91974	674(M)
33 Benzo(a)pyrene	252	28.278	28.268	(0.996)	50053	2.65813	934
* 34 Perylene-D12	264	28.404	28.394	(1.000)	16441	0.80000	
35 Indeno(1,2,3-cd)pyrene	276	30.402	30.387	(1.070)	29786	2.47861	870(H)

NSB NEW LONDON
SOIL DATA
SA6037

FRACTION	CHEMICAL	2W-FD-101907-01	UNITS	2W-SD-SD47-0001	RPD	D
PAH	ACENAPHTHYLENE	110 J	UG/KG	87 J	23.35	23.00
PAH	ANTHRACENE	81 J	UG/KG	60 J	29.79	21.00
PAH	BENZO(A)ANTHRACENE	700 J	UG/KG	560 J	22.22	140.00
PAH	BENZO(A)PYRENE	710 J	UG/KG	560 J	23.62	150.00
PAH	BENZO(B)FLUORANTHENE	940 J	UG/KG	730 J	25.15	210.00
PAH	BENZO(G,H,I)PERYLENE	530 J	UG/KG	360 J	38.20	170.00
PAH	BENZO(K)FLUORANTHENE	480 J	UG/KG	420 J	13.33	60.00
PAH	CHRYSENE	740 J	UG/KG	600 J	20.90	140.00
PAH	DIBENZO(A,H)ANTHRACENE	310 J	UG/KG	220 J	33.96	90.00
PAH	FLUORANTHENE	1200 J	UG/KG	950 J	23.26	250.00
PAH	FLUORENE	30 J	UG/KG	24 J	22.22	6.00
PAH	INDENO(1,2,3-CD)PYRENE	720 J	UG/KG	500 J	36.07	220.00
PAH	PHENANTHRENE	420 J	UG/KG	330 J	24.00	90.00
PAH	PYRENE	1200 J	UG/KG	1000 J	18.18	200.00

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

FORM 2
SOIL PESTICIDE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

GC Column(1): ZB-MULTIRESIDUE-1ID: 0.53 (mm) GC Column(2): ZB-MULTIRESIDUE-2ID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	DCB1 REC#	DCB2 REC#	OTHR (1)	OTHR (2)	TOT OUT
01	2W-SD-SD47-0001	SA6037-1	56	54	66	58			0
02	2W-SD-SD44-0001	SA6037-3	58	54	70	60			0
03	2W-SD-SD48-0001	SA6037-6	59	58	97	63			0
04	WG45073-BLANK	WG45073-1RA	59	60	78	78			0
05	WG45073-LCS	WG45073-2RA	72	70	84	80			0
06	WG45073-LCSD	WG45073-3RA	74	70	87	83			0
07	2W-FD-101907-01	SA6037-2DL	65	63	76	66			0
08	2W-SD-SD43-0001	SA6037-5DL	D	D	D	D			0
09	2W-SD-SD48-0204	SA6037-7DL	D	D	D	D			0
10									
11									
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28									

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-Xylene (41-116)
S2 (DCB) = Decachlorobiphenyl (52-119)

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

FORM 2
WATER PESTICIDE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

GC Column(1): ZB-MULTIRESIDUE-1ID: 0.53 (mm) GC Column(2): ZB-MULTIRESIDUE-2ID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	DCB1 REC#	DCB2 REC#	OTHR (1)	OTHR (2)	TOT OUT
01	WG44850-BLANK	WG44850-1	70	70	78	77			0
02	WG44850-LCS	WG44850-2	72	75	71	70			0
03	WG44850-LCSD	WG44850-3	74	76	82	80			0
04	2W-RB-101907-01	SA6037-8	74	76	36	35			0
05	2W-FB-101907-01	SA6037-9	70	73	72	70			0
06									
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25									
26									
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28									

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-Xylene (49-102)
S2 (DCB) = Decachlorobiphenyl (13-102)

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

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/24/07
Analysis Date: 11/05/07
Report Date: 11/08/2007
Matrix: WATER

Lab ID: WG44850-2 & WG44850-3
Client ID: WG44850-LCS & WG44850-LCSD
SDG: SA6037
Extracted by: KF
Extraction Method: SW846 3510
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44850
Units: ug/L

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
alpha-BHC	0.50	0.50	NA	0.40	0.44	81	89	9	30	44-122
gamma BHC	0.50	0.50	NA	0.42	0.44	84	88	5	30	42-124
beta-BHC	0.50	0.50	NA	0.45	0.48	91	97	6	30	40-129
delta-BHC	0.50	0.50	NA	0.47	0.49	94	98	5	30	51-115
Heptachlor	0.50	0.50	NA	0.41	0.42	82	83	1	30	29-114
Aldrin	0.50	0.50	NA	0.38	0.39	77	79	2	30	22-120
Heptachlor Epoxide	0.50	0.50	NA	0.44	0.46	88	92	5	30	44-124
gamma-Chlordane	0.50	0.50	NA	0.43	0.46	85	91	6	30	34-125
alpha-Chlordane	0.50	0.50	NA	0.42	0.44	85	87	3	30	39-126
4,4'-DDE	0.50	0.50	NA	0.43	0.44	85	89	4	30	36-123
Endosulfan I	0.50	0.50	NA	0.25	0.26	49	53	7	30	23-108
Dieldrin	0.50	0.50	NA	0.43	0.45	85	91	6	30	38-125
Endrin	0.50	0.50	NA	0.44	0.47	87	94	8	30	41-124
4,4'-DDD	0.50	0.50	NA	0.41	0.45	82	90	9	30	42-122
Endosulfan II	0.50	0.50	NA	0.31	0.33	61	66	8	30	29-108
4,4'-DDT	0.50	0.50	NA	0.43	0.48	87	95	9	30	40-121
Endrin Aldehyde	0.50	0.50	NA	0.44	0.46	88	92	4	30	33-126
Methoxychlor	0.50	0.50	NA	0.47	0.51	95	102	7	30	37-145
Endosulfan sulfate	0.50	0.50	NA	0.48	0.51	96	102	6	30	47-122
Endrin Ketone	0.50	0.50	NA	0.53	0.58	106	116	9	30	43-131

FORM III PEST-1

8AK1030.d & 8AK1031.d

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/30/07
Analysis Date: 11/06/07
Report Date: 11/08/2007
Matrix: SOIL

Lab ID: WG45073-2RA& WG45073-3RA
Client ID: WG45073-LCS & WG45073-LCSD
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG45073
Units: ug/Kgdrywt

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
alpha-BHC	17	17	NA	14	14	82	86	5	50	47-127
gamma BHC	17	17	NA	13	14	79	86	8	50	54-115
beta-BHC	17	17	NA	14	15	85	92	7	50	53-119
delta-BHC	17	17	NA	15	17	91	100	9	50	65-120
Heptachlor	17	17	NA	14	14	83	85	1	50	57-114
Aldrin	17	17	NA	14	14	82	86	5	50	59-116
Heptachlor Epoxide	17	17	NA	15	15	89	91	3	50	59-119
gamma-Chlordane	17	17	NA	15	16	89	94	6	50	57-118
alpha-Chlordane	17	17	NA	14	14	86	86	0.0	50	60-117
4,4'-DDE	17	17	NA	15	15	88	92	5	50	59-119
Endosulfan I	17	17	NA	8.3	8.7	50	52	5	50	20- 87
Dieldrin	17	17	NA	14	15	86	90	4	50	56-116
Endrin	17	17	NA	15	16	89	95	6	50	52-127
4,4'-DDD	17	17	NA	14	15	85	92	9	50	62-117
Endosulfan II	17	17	NA	10	11	62	67	7	50	29- 91
4,4'-DDT	17	17	NA	15	16	91	97	6	50	60-117
Endrin Aldehyde	17	17	NA	13	14	79	81	3	50	35-109
Methoxychlor	17	17	NA	16	16	96	99	3	50	41-177
Endosulfan sulfate	17	17	NA	16	18	97	106	8	50	57-136
Endrin Ketone	17	17	NA	19	20	112	118	5	50	54-142

FORM III PEST-2

8AK1054.d & 8AK1055.d

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG44850-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Lab Sample ID: WG44850-1 Lab File ID: 8AK1029

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) SW846 3510

Sulfur Cleanup: (Y/N) N Date Extracted: 10/24/07

Date Analyzed (1): 11/05/07 Date Analyzed (2): 11/05/07

Time Analyzed (1): 1542 Time Analyzed (2): 1542

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column (1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE-2 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	WG44850-LCS	WG44850-2	8AK1030	11/05/07	11/05/07
02	WG44850-LCSD	WG44850-3	8AK1031	11/05/07	11/05/07
03	2W-RB-101907-01	SA6037-8	8AK1032	11/05/07	11/05/07
04	2W-FB-101907-01	SA6037-9	8AK1033	11/05/07	11/05/07
05					
06					
07					
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17					
18					
19					
20					
21					
22					
23					
24					

COMMENTS:

FORM IV PEST

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/24/07
Analysis Date: 05-NOV-2007 15:42
Report Date: 11/08/2007
Matrix: WATER
% Solids: NA

Lab ID: WG44850-1
Client ID: WG44850-Blank
SDG: SA6037
Extracted by: KF
Extraction Method: SW846 3510
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG44850
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	0.050	1.0	0.050	0.050	0.027
58-89-9	gamma BHC	U	0.050	1.0	0.050	0.050	0.033
319-85-7	beta-BHC	U	0.050	1.0	0.050	0.050	0.038
319-86-8	delta-BHC	U	0.050	1.0	0.050	0.050	0.033
76-44-8	Heptachlor	U	0.050	1.0	0.050	0.050	0.029
309-00-2	Aldrin	U	0.050	1.0	0.050	0.050	0.031
1024-57-3	Heptachlor Epoxide	U	0.050	1.0	0.050	0.050	0.035
5103-74-2	gamma-Chlordane	U	0.050	1.0	0.050	0.050	0.037
5103-71-9	alpha-Chlordane	U	0.050	1.0	0.050	0.050	0.035
72-55-9	4,4'-DDE	U	0.10	1.0	0.10	0.10	0.038
959-98-8	Endosulfan I	U	0.050	1.0	0.050	0.050	0.020
60-57-1	Dieldrin	U	0.10	1.0	0.10	0.10	0.034
72-20-8	Endrin	U	0.10	1.0	0.10	0.10	0.096
72-54-8	4,4'-DDD	U	0.10	1.0	0.10	0.10	0.036
33213-65-9	Endosulfan II	U	0.10	1.0	0.10	0.10	0.022
50-29-3	4,4'-DDT	U	0.10	1.0	0.10	0.10	0.039
7421-36-3	Endrin Aldehyde	U	0.10	1.0	0.10	0.10	0.050
72-43-5	Methoxychlor	U	0.50	1.0	0.50	0.50	0.34
1031-07-8	Endosulfan sulfate	U	0.10	1.0	0.10	0.10	0.039
53494-70-5	Endrin Ketone	U	0.10	1.0	0.10	0.10	0.094
8001-35-2	Toxaphene	U	1.0	1.0	1.0	1.0	0.67
877-09-8	Tetrachloro-m-Xylene		70%				
2051-24-3	Decachlorobiphenyl		78%				

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG45073-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Lab Sample ID: WG45073-1RA Lab File ID: 8AK1053

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3550

Sulfur Cleanup: (Y/N) Y Date Extracted: 10/30/07

Date Analyzed (1): 11/06/07 Date Analyzed (2): 11/06/07

Time Analyzed (1): 1516 Time Analyzed (2): 1516

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column (1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	2W-SD-SD47-0001	SA6037-1	8AK1038	11/05/07	11/05/07
02	2W-SD-SD44-0001	SA6037-3	8AK1040	11/05/07	11/05/07
03	2W-SD-SD48-0001	SA6037-6	8AK1042	11/05/07	11/05/07
04	WG45073-LCS	WG45073-2RA	8AK1054	11/06/07	11/06/07
05	WG45073-LCSD	WG45073-3RA	8AK1055	11/06/07	11/06/07
06	2W-FD-101907-01	SA6037-2DL	8AK1072	11/06/07	11/06/07
07	2W-SD-SD43-0001	SA6037-5DL	8AK1073	11/07/07	11/07/07
08	2W-SD-SD48-0204	SA6037-7DL	8AK1074	11/07/07	11/07/07
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

COMMENTS:

FORM IV PEST

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/30/07
Analysis Date: 06-NOV-2007 15:16
Report Date: 11/08/2007
Matrix: SOIL
% Solids: 100

Lab ID: WG45073-1RA
Client ID: WG45073-Blank
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8081A
Lab Prep Batch: WG45073
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
319-84-6	alpha-BHC	U	1.7	1.0	1.7	1.7	0.57
58-89-9	gamma BHC	U	1.7	1.0	1.7	1.7	0.73
319-85-7	beta-BHC	U	1.7	1.0	1.7	1.7	0.73
319-86-8	delta-BHC	U	1.7	1.0	1.7	1.7	0.47
76-44-8	Heptachlor	U	1.7	1.0	1.7	1.7	0.67
309-00-2	Aldrin	U	1.7	1.0	1.7	1.7	0.70
1024-57-3	Heptachlor Epoxide	U	1.7	1.0	1.7	1.7	1.6
5103-74-2	gamma-Chlordane	U	1.7	1.0	1.7	1.7	0.83
5103-71-9	alpha-Chlordane	U	1.7	1.0	1.7	1.7	0.87
72-55-9	4,4'-DDE	U	3.3	1.0	3.3	3.3	0.80
959-98-8	Endosulfan I	U	1.7	1.0	1.7	1.7	0.57
60-57-1	Dieldrin	U	3.3	1.0	3.3	3.3	0.77
72-20-8	Endrin	U	3.3	1.0	3.3	3.3	1.4
72-54-8	4,4'-DDD	U	3.3	1.0	3.3	3.3	1.1
33213-65-9	Endosulfan II	U	3.3	1.0	3.3	3.3	0.60
50-29-3	4,4'-DDT	U	3.3	1.0	3.3	3.3	0.83
7421-36-3	Endrin Aldehyde	U	3.3	1.0	3.3	3.3	0.70
72-43-5	Methoxychlor	U	17	1.0	17	17	3.7
1031-07-8	Endosulfan sulfate	U	3.3	1.0	3.3	3.3	0.90
53494-70-5	Endrin Ketone	U	3.3	1.0	3.3	3.3	0.97
8001-35-2	Toxaphene	U	33	1.0	33	33	13
877-09-8	Tetrachloro-m-Xylene		60%				
2051-24-3	Decachlorobiphenyl		78%				

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date(s): 10/30/07 10/30/07

Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Calibration Time(s): 1618 1955

LAB FILE ID: RF0.005: 8AJ5047 RF0.01: 8AJ5048 RF0.025: 8AJ5049
RF0.05: 8AJ5055 RF0.1: 8AJ5051 RF0.25: 8AJ5052

COMPOUND	RF0.005	RF0.01	RF0.025	RF0.05	RF0.1	RF0.25	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
alpha-BHC	6490	13948	40124	85404	169090	391940	2ORDR	1.469e-003	5.496e-007	2.15e-013	0.99991	0.99000
gamma BHC	6269	13305	37771	75426	162420	377740	2ORDR	1.711e-003	5.896e-007	1.774e-013	0.99966	0.99000
beta-BHC	3937	7497	18380	36872	73457	168280	2ORDR	3.813e-004	1.278e-006	1.216e-012	0.99995	0.99000
delta-BHC	5034	10003	29584	60653	133790	325900	2ORDR	1.947e-003	7.415e-007	5.766e-014	0.99961	0.99000
Heptachlor	6811	14212	35879	72161	138500	321780	2ORDR	2.043e-004	6.749e-007	3.154e-013	0.99999	0.99000
Aldrin	5340	10929	30831	66596	131800	309460	2ORDR	1.374e-003	7.137e-007	2.89e-013	0.99990	0.99000
Heptachlor Epoxide	5416	11063	29307	59059	112480	265280	2ORDR	2.14e-004	8.368e-007	3.959e-013	0.99996	0.99000
gamma-Chlordane	5001	10109	25826	52892	109150	255860	2ORDR	9.958e-004	8.798e-007	3.626e-013	0.99987	0.99000
alpha-Chlordane	4965	10363	26941	54107	105420	242080	2ORDR	5.35e-004	8.799e-007	6.215e-013	0.99999	0.99000
4,4'-DDE	3704	7535	21569	47395	97848	232560	2ORDR	1.857e-003	9.797e-007	3.724e-013	0.99979	0.99000
Endosulfan I	4484	9040	23754	48818	101100	236510	2ORDR	1.174e-003	9.471e-007	4.407e-013	0.99985	0.99000
Dieldrin	3863	7896	22347	48497	97701	235540	2ORDR	1.426e-003	9.868e-007	2.895e-013	0.99990	0.99000
Endrin	3498	6958	19305	42518	87970	211980	2ORDR	1.693e-003	1.104e-006	3.164e-013	0.99981	0.99000
4,4'-DDD	2417	4994	14165	30540	67276	166140	2ORDR	2.141e-003	1.484e-006	3.68e-014	0.99959	0.99000
Endosulfan II	3633	7237	19128	39736	81321	191140	2ORDR	1.117e-003	1.177e-006	6.482e-013	0.99989	0.99000
4,4'-DDT	2554	5155	14404	31715	69679	173440	2ORDR	2.159e-003	1.439e-006	-6.38e-014	0.99959	0.99000
Endrin Aldehyde	3158	6139	15489	31069	62257	145450	2ORDR	4.492e-004	1.532e-006	1.26e-012	0.99997	0.99000
Methoxychlor	1805	3465	9045	18729	37243	89656	2ORDR	5.657e-004	2.604e-006	1.985e-012	0.99998	0.99000
Endosulfan sulfate	2563	4918	13100	26086	57920	141490	2ORDR	1.387e-003	1.733e-006	1.539e-013	0.99959	0.99000
Endrin Ketone	2806	5356	14756	29870	63597	153830	2ORDR	1.238e-003	1.552e-006	4.17e-013	0.99980	0.99000
Toxaphene				13033			2ORDR	0.00000000	7.673e-005	0.00000000	1.00000	0.99000
(2)				13050			2ORDR	0.00000000	7.663e-005	0.00000000	1.00000	0.99000
(3)				19299			2ORDR	0.00000000	5.182e-005	0.00000000	1.00000	0.99000
(4)				23679			2ORDR	0.00000000	4.223e-005	0.00000000	1.00000	0.99000
(5)				18981			2ORDR	0.00000000	5.268e-005	0.00000000	1.00000	0.99000
(6)				10864			2ORDR	0.00000000	9.205e-005	0.00000000	1.00000	0.99000
(7)				11548			2ORDR	0.00000000	8.66e-005	0.00000000	1.00000	0.99000
(8)				28299			2ORDR	0.00000000	3.534e-005	0.00000000	1.00000	0.99000
(9)				15863			2ORDR	0.00000000	6.304e-005	0.00000000	1.00000	0.99000
(10)				10873			2ORDR	0.00000000	9.197e-005	0.00000000	1.00000	0.99000
Tetrachloro-m-Xylene	6317	12553	30608	60564	114840	256450	2ORDR	4.126e-005	7.844e-007	7.422e-013	1.00000	0.99000
Decachlorobiphenyl	3710	7178	17657	33156	64034	140550	2ORDR	-9.1e-005	1.394e-006	2.736e-012	0.99998	0.99000

FORM VI PESTICIDE

Report Date: 07-Nov-2007 01:32

Calibration History

Method : \\Target_server\GG\chem\gc08.i\GC08AJ30A1.b\PSTA293A.m
Start Cal Date: 30-OCT-2007 16:18
End Cal Date : 30-OCT-2007 19:55
Last Cal Level: 4
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.00500		
30-OCT-2007 16:18	ICAL	8AJ5047.d
Cal Level: 2 , Cal Amount: 0.01000		
30-OCT-2007 16:45	ICAL	8AJ5048.d
Cal Level: 3 , Cal Amount: 0.02500		
30-OCT-2007 17:12	ICAL	8AJ5049.d
Cal Level: 4 , Cal Amount: 0.05000		
30-OCT-2007 19:55	TC	8AJ5055.d
30-OCT-2007 19:28	TOX	8AJ5054.d
30-OCT-2007 17:39	ICAL	8AJ5050.d
Cal Level: 5 , Cal Amount: 0.10000		
30-OCT-2007 18:06	ICAL	8AJ5051.d
Cal Level: 6 , Cal Amount: 0.25000		
30-OCT-2007 18:33	ICAL	8AJ5052.d

Continuing Calibration
Ccal Level Mode: BY SAMPLE

31-OCT-2007 05:00	CV	8AJ5075.d
31-OCT-2007 01:21	CV	8AJ5067.d
30-OCT-2007 19:28	TOX	8AJ5054.d
30-OCT-2007 17:39	ICAL	8AJ5050.d
30-OCT-2007 19:55	TC	8AJ5055.d
30-OCT-2007 19:00	IND	8AJ5053.d

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date(s): 10/30/07 10/30/07

Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Calibration Time(s): 1618 1955

LAB FILE ID: RF0.005: 8AJ6047 RF0.01: 8AJ6048 RF0.025: 8AJ6049
RF0.05: 8AJ6055 RF0.1: 8AJ6051 RF0.25: 8AJ6052

COMPOUND	RF0.005	RF0.01	RF0.025	RF0.05	RF0.1	RF0.25	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
alpha-BHC	4275	9827	30360	69029	144330	346370	2ORDR	2.497e-003	6.649e-007	1.417e-013	0.99969	0.99000
gamma BHC	4921	10238	29552	63193	138730	332830	2ORDR	2.252e-003	7.056e-007	1.139e-013	0.99954	0.99000
beta-BHC	2921	5559	14424	30392	63099	149380	2ORDR	1.199e-003	1.533e-006	8.768e-013	0.99983	0.99000
delta-BHC	3235	6734	20902	47203	109030	275760	2ORDR	3.09e-003	9.275e-007	-1.21e-013	0.99923	0.99000
Heptachlor	5813	11316	30407	62782	135280	318340	2ORDR	1.609e-003	7.168e-007	1.968e-013	0.99965	0.99000
Aldrin	4314	9044	25889	56622	125210	302050	2ORDR	2.437e-003	7.847e-007	1.122e-013	0.99947	0.99000
Heptachlor Epoxide	4350	8925	23838	49946	108190	255770	2ORDR	1.789e-003	8.985e-007	2.768e-013	0.99962	0.99000
gamma-Chlordane	4163	8454	22701	47597	102540	247280	2ORDR	1.633e-003	9.604e-007	1.742e-013	0.99970	0.99000
alpha-Chlordane	4060	8340	22478	48843	100080	241790	2ORDR	1.424e-003	9.716e-007	2.315e-013	0.99987	0.99000
4,4'-DDE	2997	6255	17777	39171	89561	225670	2ORDR	2.601e-003	1.132e-006	-1.65e-013	0.99935	0.99000
Endosulfan I	3541	7425	20177	42698	91620	220320	2ORDR	1.754e-003	1.07e-006	2.54e-013	0.99971	0.99000
Dieldrin	3054	6375	17982	40061	89569	224710	2ORDR	2.447e-003	1.125e-006	-1.1e-013	0.99948	0.99000
Endrin	2677	5336	14658	33187	75050	190580	2ORDR	2.501e-003	1.355e-006	-3.04e-013	0.99939	0.99000
4,4'-DDD	1878	3737	11044	25047	58203	155210	2ORDR	2.823e-003	1.788e-006	-1.27e-012	0.99931	0.99000
Endosulfan II	2775	5674	15731	33709	71688	175650	2ORDR	1.698e-003	1.38e-006	1.871e-013	0.99978	0.99000
4,4'-DDT	1993	4033	11864	27543	64182	168350	2ORDR	3.064e-003	1.607e-006	-8.44e-013	0.99920	0.99000
Endrin Aldehyde	2587	4919	13032	26851	55435	137470	2ORDR	7.785e-004	1.8e-006	9.019e-014	0.99994	0.99000
Methoxychlor	1502	2850	7661	16234	34911	87361	2ORDR	1.429e-003	2.888e-006	-5.15e-013	0.99977	0.99000
Endosulfan sulfate	1946	3874	10569	21816	50277	130980	2ORDR	1.909e-003	2.068e-006	-1.35e-012	0.99946	0.99000
Endrin Ketone	2103	4000	11363	24458	55822	145410	2ORDR	2.19e-003	1.853e-006	-1.03e-012	0.99948	0.99000
Toxaphene				12037			2ORDR	0.00000000	8.308e-005	0.00000000	1.00000	0.99000
(2)				5860			2ORDR	0.00000000	1.706e-004	0.00000000	1.00000	0.99000
(3)				8122			2ORDR	0.00000000	1.231e-004	0.00000000	1.00000	0.99000
(4)				19054			2ORDR	0.00000000	5.248e-005	0.00000000	1.00000	0.99000
(5)				6849			2ORDR	0.00000000	1.46e-004	0.00000000	1.00000	0.99000
(6)				10366			2ORDR	0.00000000	9.647e-005	0.00000000	1.00000	0.99000
(7)				21163			2ORDR	0.00000000	4.725e-005	0.00000000	1.00000	0.99000
(8)				5697			2ORDR	0.00000000	1.755e-004	0.00000000	1.00000	0.99000
(9)				9042			2ORDR	0.00000000	1.106e-004	0.00000000	1.00000	0.99000
(10)				4684			2ORDR	0.00000000	2.135e-004	0.00000000	1.00000	0.99000
Tetrachloro-m-Xylene	4716	9274	23952	47378	96191	222250	2ORDR	6.523e-004	9.847e-007	6.149e-013	0.99992	0.99000
Decachlorobiphenyl	3764	7469	18697	36497	70740	159770	2ORDR	1.467e-004	1.297e-006	1.671e-012	1.00000	0.99000

FORM VI PESTICIDE

Report Date: 07-Nov-2007 01:33

Calibration History

Method : \\Target_server\GG\chem\gc08.i\GC08AJ30B1.b\PSTB293A.m
Start Cal Date: 30-OCT-2007 16:18
End Cal Date : 30-OCT-2007 19:55
Last Cal Level: 1
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.00500		
30-OCT-2007 16:18	ICAL	8AJ6047.d
Cal Level: 2 , Cal Amount: 0.01000		
30-OCT-2007 16:45	ICAL	8AJ6048.d
Cal Level: 3 , Cal Amount: 0.02500		
30-OCT-2007 17:12	ICAL	8AJ6049.d
Cal Level: 4 , Cal Amount: 0.05000		
30-OCT-2007 19:55	TC	8AJ6055.d
30-OCT-2007 19:28	TOX	8AJ6054.d
30-OCT-2007 17:39	ICAL	8AJ6050.d
Cal Level: 5 , Cal Amount: 0.10000		
30-OCT-2007 18:06	ICAL	8AJ6051.d
Cal Level: 6 , Cal Amount: 0.25000		
30-OCT-2007 18:33	ICAL	8AJ6052.d

Continuing Calibration
Ccal Level Mode: BY SAMPLE

31-OCT-2007 05:00	CV	8AJ6075.d
31-OCT-2007 01:21	CV	8AJ6067.d
30-OCT-2007 19:55	TC	8AJ6055.d
30-OCT-2007 19:28	TOX	8AJ6054.d
30-OCT-2007 19:00	IND	8AJ6053.d
30-OCT-2007 17:39	ICAL	8AJ6050.d

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 10/30/07 10/30/07

Client Sample ID (PEM): Date Analyzed :10/30/07
Lab Sample ID (PEM): EVAL Time Analyzed :1451

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	8AJ5045.d	3.35	2.44

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 10/30/07 10/30/07

Client Sample ID (PEM): Date Analyzed :10/30/07
Lab Sample ID (PEM): EVAL Time Analyzed :1451

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	8AJ6045.d	2.67	2.19

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date: 10/30/07 Time: 1900

Lab File ID: 8AJ5053 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

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

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Endosulfan I	4.9e-002	5.e-002	987760.00	0.01	-2.00	15.00	2RDR
gamma BHC	4.84e-002	5.e-002	1548900.0	0.01	-3.20	15.00	2RDR
beta-BHC	4.84e-002	5.e-002	725940.00	0.01	-3.20	15.00	2RDR
delta-BHC	5.3e-002	5.e-002	1369600.0	0.01	6.00	15.00	2RDR
Heptachlor	4.94e-002	5.e-002	1410000.0	0.01	-1.20	15.00	2RDR
Aldrin	4.99e-002	5.e-002	1325400.0	0.01	-0.20	15.00	2RDR
Heptachlor Epoxide	5.06e-002	5.e-002	1172600.0	0.01	1.20	15.00	2RDR
gamma-Chlordane	5.e-002	5.e-002	1090100.0	0.01	0.00	15.00	2RDR
alpha-Chlordane	4.99e-002	5.e-002	1080100.0	0.01	-0.20	15.00	2RDR
4,4'-DDE	4.69e-002	5.e-002	904580.00	0.01	-6.20	15.00	2RDR
alpha-BHC	4.94e-002	5.e-002	1688000.0	0.01	-1.20	15.00	2RDR
Dieldrin	4.96e-002	5.e-002	961880.00	0.01	-0.80	15.00	2RDR
Endrin	4.74e-002	5.e-002	819120.00	0.01	-5.20	15.00	2RDR
4,4'-DDD	4.73e-002	5.e-002	607400.00	0.01	-5.40	15.00	2RDR
Endosulfan II	4.99e-002	5.e-002	810240.00	0.01	-0.20	15.00	2RDR
4,4'-DDT	4.84e-002	5.e-002	644200.00	0.01	-3.20	15.00	2RDR
Endrin Aldehyde	5.18e-002	5.e-002	653320.00	0.01	3.60	15.00	2RDR
Methoxychlor	4.91e-002	5.e-002	367440.00	0.01	-1.80	15.00	2RDR
Endosulfan sulfate	5.04e-002	5.e-002	564300.00	0.01	0.80	15.00	2RDR
Endrin Ketone	5.14e-002	5.e-002	641140.00	0.01	2.80	15.00	2RDR

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date: 10/30/07 Time: 1900

Lab File ID: 8AJ6053 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
4,4'-DDE	4.75e-002	5.e-002	798020.00	0.01	-5.00	15.00	2RDR
gamma BHC	4.85e-002	5.e-002	1297100.0	0.01	-3.00	15.00	2RDR
beta-BHC	4.8e-002	5.e-002	600060.00	0.01	-4.00	15.00	2RDR
delta-BHC	5.23e-002	5.e-002	1069200.0	0.01	4.60	15.00	2RDR
Heptachlor	4.81e-002	5.e-002	1275300.0	0.01	-3.80	15.00	2RDR
Aldrin	4.88e-002	5.e-002	1171800.0	0.01	-2.40	15.00	2RDR
Heptachlor Epoxide	4.85e-002	5.e-002	1022900.0	0.01	-3.00	15.00	2RDR
gamma-Chlordane	4.98e-002	5.e-002	994680.00	0.01	-0.40	15.00	2RDR
alpha-Chlordane	4.82e-002	5.e-002	952420.00	0.01	-3.60	15.00	2RDR
Endosulfan I	4.93e-002	5.e-002	880620.00	0.01	-1.40	15.00	2RDR
alpha-BHC	4.85e-002	5.e-002	1364900.0	0.01	-3.00	15.00	2RDR
Dieldrin	4.85e-002	5.e-002	822600.00	0.01	-3.00	15.00	2RDR
Endrin	4.72e-002	5.e-002	664720.00	0.01	-5.60	15.00	2RDR
4,4'-DDD	4.6e-002	5.e-002	491920.00	0.01	-8.00	15.00	2RDR
Endosulfan II	4.98e-002	5.e-002	694560.00	0.01	-0.40	15.00	2RDR
4,4'-DDT	4.73e-002	5.e-002	558380.00	0.01	-5.40	15.00	2RDR
Endrin Aldehyde	5.15e-002	5.e-002	562700.00	0.01	3.00	15.00	2RDR
Endosulfan sulfate	4.95e-002	5.e-002	467140.00	0.01	-1.00	15.00	2RDR
Methoxychlor	4.92e-002	5.e-002	331680.00	0.01	-1.60	15.00	2RDR
Endrin Ketone	5.18e-002	5.e-002	544020.00	0.01	3.60	15.00	2RDR

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date: 11/05/07 Time: 1406

Lab File ID: 8AK1028 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

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

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
alpha-BHC	4.99e-002	5.e-002	1707000.0	0.01	-0.20	15.00	2RDR
gamma BHC	4.67e-002	5.e-002	1492700.0	0.01	-6.60	15.00	2RDR
Heptachlor	5.05e-002	5.e-002	1442600.0	0.01	1.00	15.00	2RDR
beta-BHC	4.89e-002	5.e-002	733580.00	0.01	-2.20	15.00	2RDR
Aldrin	4.83e-002	5.e-002	1281400.0	0.01	-3.40	15.00	2RDR
delta-BHC	4.82e-002	5.e-002	1241400.0	0.01	-3.60	15.00	2RDR
Heptachlor Epoxide	4.93e-002	5.e-002	1141800.0	0.01	-1.40	15.00	2RDR
Endosulfan I	4.74e-002	5.e-002	955800.00	0.01	-5.20	15.00	2RDR
4,4'-DDE	4.87e-002	5.e-002	939060.00	0.01	-2.60	15.00	2RDR
Dieldrin	4.92e-002	5.e-002	955700.00	0.01	-1.60	15.00	2RDR
Endrin	4.88e-002	5.e-002	843480.00	0.01	-2.40	15.00	2RDR
4,4'-DDD	4.88e-002	5.e-002	627740.00	0.01	-2.40	15.00	2RDR
Endosulfan II	4.84e-002	5.e-002	786060.00	0.01	-3.20	15.00	2RDR
4,4'-DDT	4.94e-002	5.e-002	657560.00	0.01	-1.20	15.00	2RDR
Endrin Aldehyde	4.78e-002	5.e-002	603640.00	0.01	-4.40	15.00	2RDR
Endosulfan sulfate	5.13e-002	5.e-002	574040.00	0.01	2.60	15.00	2RDR
Methoxychlor	5.21e-002	5.e-002	390340.00	0.01	4.20	15.00	2RDR
alpha-Chlordane	4.67e-002	5.e-002	1013200.0	0.01	-6.60	15.00	2RDR
gamma-Chlordane	4.82e-002	5.e-002	1050200.0	0.01	-3.60	15.00	2RDR
Endrin Ketone	5.49e-002	5.e-002	685760.00	0.01	9.80	15.00	2RDR
Tetrachloro-m-Xylene	4.86e-002	5.e-002	1173700.0	0.01	-2.80	15.00	2RDR
Decachlorobiphenyl	4.76e-002	5.e-002	643320.00	0.01	-4.80	15.00	2RDR

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date: 11/05/07 Time: 1406

Lab File ID: 8AK2028 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
alpha-BHC	4.72e-002	5.e-002	1324600.0	0.01	-5.60	15.00	2RDR
gamma BHC	4.4e-002	5.e-002	1172100.0	0.01	-12.00	15.00	2RDR
Heptachlor	4.53e-002	5.e-002	1198700.0	0.01	-9.40	15.00	2RDR
beta-BHC	4.68e-002	5.e-002	584440.00	0.01	-6.40	15.00	2RDR
Aldrin	4.26e-002	5.e-002	1015100.0	0.01	-14.80	15.00	2RDR
delta-BHC	4.39e-002	5.e-002	885300.00	0.01	-12.20	15.00	2RDR
Heptachlor Epoxide	4.52e-002	5.e-002	952240.00	0.01	-9.60	15.00	2RDR
Endosulfan I	4.45e-002	5.e-002	791940.00	0.01	-11.00	15.00	2RDR
4,4'-DDE	4.45e-002	5.e-002	743440.00	0.01	-11.00	15.00	2RDR
Dieldrin	4.4e-002	5.e-002	741120.00	0.01	-12.00	15.00	2RDR
Endrin	4.5e-002	5.e-002	631460.00	0.01	-10.00	15.00	2RDR
4,4'-DDD	4.49e-002	5.e-002	478520.00	0.01	-10.20	15.00	2RDR
Endosulfan II	4.47e-002	5.e-002	621020.00	0.01	-10.60	15.00	2RDR
4,4'-DDT	4.46e-002	5.e-002	524180.00	0.01	-10.80	15.00	2RDR
Endrin Aldehyde	4.62e-002	5.e-002	503580.00	0.01	-7.60	15.00	2RDR
Endosulfan sulfate	4.88e-002	5.e-002	460620.00	0.01	-2.40	15.00	2RDR
Methoxychlor	4.8e-002	5.e-002	323600.00	0.01	-4.00	15.00	2RDR
alpha-Chlordane	4.59e-002	5.e-002	904940.00	0.01	-8.20	15.00	2RDR
gamma-Chlordane	4.4e-002	5.e-002	875520.00	0.01	-12.00	15.00	2RDR
Endrin Ketone	5.25e-002	5.e-002	551760.00	0.01	5.00	15.00	2RDR
Tetrachloro-m-Xylene	4.6e-002	5.e-002	896580.00	0.01	-8.00	15.00	2RDR
Decachlorobiphenyl	4.68e-002	5.e-002	689140.00	0.01	-6.40	15.00	2RDR

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date: 11/05/07 Time: 1824

Lab File ID: 8AK1035 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

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

COMPOUND	RRF or AMOUNT	RRF0.1000 or AMOUNT	CCAL RRF0.1000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	0.1064800	0.1000000	1785900.0	0.01	6.48	15.00	2RDR	
gamma BHC	9.85e-002	0.1000000	1568300.0	0.01	-1.50	15.00	2RDR	
Heptachlor	0.1057900	0.1000000	1464300.0	0.01	5.79	15.00	2RDR	
beta-BHC	0.1027900	0.1000000	748030.00	0.01	2.79	15.00	2RDR	
Aldrin	0.1056600	0.1000000	1383600.0	0.01	5.66	15.00	2RDR	
delta-BHC	0.1051400	0.1000000	1376900.0	0.01	5.14	15.00	2RDR	
Heptachlor Epoxide	0.1052400	0.1000000	1188200.0	0.01	5.24	15.00	2RDR	
Endosulfan I	0.1022700	0.1000000	1019200.0	0.01	2.27	15.00	2RDR	
4,4'-DDE	0.1024200	0.1000000	989280.00	0.01	2.42	15.00	2RDR	
Dieldrin	0.1053300	0.1000000	1022300.0	0.01	5.33	15.00	2RDR	
Endrin	0.1039100	0.1000000	902870.00	0.01	3.91	15.00	2RDR	
4,4'-DDD	0.1022800	0.1000000	673580.00	0.01	2.28	15.00	2RDR	
Endosulfan II	0.1008100	0.1000000	810560.00	0.01	0.81	15.00	2RDR	
4,4'-DDT	0.1046800	0.1000000	714890.00	0.01	4.68	15.00	2RDR	
Endrin Aldehyde	0.1005400	0.1000000	621630.00	0.01	0.54	15.00	2RDR	
Endosulfan sulfate	0.1129100	0.1000000	639740.00	0.01	12.91	15.00	2RDR	
Methoxychlor	0.1042300	0.1000000	386730.00	0.01	4.23	15.00	2RDR	
alpha-Chlordane	9.88e-002	0.1000000	1040300.0	0.01	-1.20	15.00	2RDR	
gamma-Chlordane	0.1010900	0.1000000	1088800.0	0.01	1.09	15.00	2RDR	
Endrin Ketone	0.1199400	0.1000000	749840.00	0.01	-19.94	15.00	2RDR	<- X
Tetrachloro-m-Xylene	0.1023300	0.1000000	1173800.0	0.01	2.33	15.00	2RDR	
Decachlorobiphenyl	0.1000800	0.1000000	638390.00	0.01	0.08	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date: 11/05/07 Time: 1824

Lab File ID: 8AK2035 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.1000 or AMOUNT	CCAL RRF0.1000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	0.1044100	0.1000000	1485600.0	0.01	4.41	15.00	2RDR	
gamma BHC	0.1003200	0.1000000	1360100.0	0.01	0.32	15.00	2RDR	
Heptachlor	9.79e-002	0.1000000	1297200.0	0.01	-2.10	15.00	2RDR	
beta-BHC	9.93e-002	0.1000000	618070.00	0.01	-0.70	15.00	2RDR	
Aldrin	9.82e-002	0.1000000	1199600.0	0.01	-1.80	15.00	2RDR	
delta-BHC	0.1080400	0.1000000	1148700.0	0.01	8.04	15.00	2RDR	
Heptachlor Epoxide	9.72e-002	0.1000000	1029000.0	0.01	-2.80	15.00	2RDR	
Endosulfan I	9.93e-002	0.1000000	892760.00	0.01	-0.70	15.00	2RDR	
4,4'-DDE	9.93e-002	0.1000000	865070.00	0.01	-0.70	15.00	2RDR	
Dieldrin	0.1001200	0.1000000	875610.00	0.01	0.12	15.00	2RDR	
Endrin	9.9e-002	0.1000000	723820.00	0.01	-1.00	15.00	2RDR	
4,4'-DDD	9.78e-002	0.1000000	553160.00	0.01	-2.20	15.00	2RDR	
Endosulfan II	9.99e-002	0.1000000	705010.00	0.01	-0.10	15.00	2RDR	
4,4'-DDT	0.1004700	0.1000000	626740.00	0.01	0.47	15.00	2RDR	
Endrin Aldehyde	0.1001600	0.1000000	550660.00	0.01	0.16	15.00	2RDR	
Endosulfan sulfate	0.1123200	0.1000000	553730.00	0.01	12.32	15.00	2RDR	
Methoxychlor	9.48e-002	0.1000000	325210.00	0.01	-5.20	15.00	2RDR	
alpha-Chlordane	9.94e-002	0.1000000	985010.00	0.01	-0.60	15.00	2RDR	
gamma-Chlordane	9.74e-002	0.1000000	979770.00	0.01	-2.60	15.00	2RDR	
Endrin Ketone	0.1176000	0.1000000	646190.00	0.01	17.60	15.00	2RDR	<- X
Tetrachloro-m-Xylene	0.1023100	0.1000000	973260.00	0.01	2.31	15.00	2RDR	
Decachlorobiphenyl	0.1001900	0.1000000	707090.00	0.01	0.19	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date: 11/05/07 Time: 2255

Lab File ID: 8AK2045 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	4.62e-002	5.e-002	1297000.0	0.01	-7.60	15.00	2RDR	
gamma BHC	3.82e-002	5.e-002	1010900.0	0.01	-23.60	15.00	2RDR	<-
Heptachlor	3.05e-002	5.e-002	798200.00	0.01	-39.00	15.00	2RDR	<-
beta-BHC	4.1e-002	5.e-002	511480.00	0.01	-18.00	15.00	2RDR	<-
Aldrin	4.46e-002	5.e-002	1067400.0	0.01	-10.80	15.00	2RDR	
delta-BHC	3.83e-002	5.e-002	763640.00	0.01	-23.40	15.00	2RDR	<-
Heptachlor Epoxide	4.48e-002	5.e-002	943780.00	0.01	-10.40	15.00	2RDR	
Endosulfan I	4.45e-002	5.e-002	791100.00	0.01	-11.00	15.00	2RDR	
4,4'-DDE	4.44e-002	5.e-002	742800.00	0.01	-11.20	15.00	2RDR	
Dieldrin	4.42e-002	5.e-002	744660.00	0.01	-11.60	15.00	2RDR	
Endrin	3.71e-002	5.e-002	514180.00	0.01	-25.80	15.00	2RDR	<-
4,4'-DDD	7.01e-002	5.e-002	774300.00	0.01	40.20	15.00	2RDR	<-
Endosulfan II	4.39e-002	5.e-002	608660.00	0.01	-12.20	15.00	2RDR	
4,4'-DDT	8.63e-003	5.e-002	69420.000	0.01	-82.74	15.00	2RDR	<-
Endrin Aldehyde	4.63e-002	5.e-002	504980.00	0.01	-7.40	15.00	2RDR	
Endosulfan sulfate	3.04e-002	5.e-002	277640.00	0.01	-39.20	15.00	2RDR	<-
Methoxychlor	1.04e-002	5.e-002	62440.000	0.01	-79.20	15.00	2RDR	<-
alpha-Chlordane	4.59e-002	5.e-002	904960.00	0.01	-8.20	15.00	2RDR	
gamma-Chlordane	4.5e-002	5.e-002	896000.00	0.01	-10.00	15.00	2RDR	
Endrin Ketone	2.5e-002	5.e-002	247700.00	0.01	-50.00	15.00	2RDR	<-
Tetrachloro-m-Xylene	4.98e-002	5.e-002	969440.00	0.01	-0.40	15.00	2RDR	
Decachlorobiphenyl	4.71e-002	5.e-002	693400.00	0.01	-5.80	15.00	2RDR	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date: 11/05/07 Time: 2255

Lab File ID: 8AK1045 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

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

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.05e-002	5.e-002	1726200.0	0.01	1.00	15.00	2RDR	
gamma BHC	3.85e-002	5.e-002	1225600.0	0.01	-23.00	15.00	2RDR	<-
Heptachlor	3.35e-002	5.e-002	964760.00	0.01	-33.00	15.00	2RDR	<-
beta-BHC	4.25e-002	5.e-002	640180.00	0.01	-15.00	15.00	2RDR	
Aldrin	4.91e-002	5.e-002	1301800.0	0.01	-1.80	15.00	2RDR	
delta-BHC	4.01e-002	5.e-002	1024600.0	0.01	-19.80	15.00	2RDR	<-
Heptachlor Epoxide	4.8e-002	5.e-002	1113200.0	0.01	-4.00	15.00	2RDR	
Endosulfan I	4.87e-002	5.e-002	981560.00	0.01	-2.60	15.00	2RDR	
4,4'-DDE	4.72e-002	5.e-002	909800.00	0.01	-5.60	15.00	2RDR	
Dieldrin	4.79e-002	5.e-002	929840.00	0.01	-4.20	15.00	2RDR	
Endrin	4.05e-002	5.e-002	696600.00	0.01	-19.00	15.00	2RDR	<-
4,4'-DDD	6.55e-002	5.e-002	853520.00	0.01	31.00	15.00	2RDR	<-
Endosulfan II	4.69e-002	5.e-002	761820.00	0.01	-6.20	15.00	2RDR	
4,4'-DDT	9.08e-003	5.e-002	96180.000	0.01	-81.84	15.00	2RDR	<-
Endrin Aldehyde	4.91e-002	5.e-002	619380.00	0.01	-1.80	15.00	2RDR	
Endosulfan sulfate	3.37e-002	5.e-002	372380.00	0.01	-32.60	15.00	2RDR	<-
Methoxychlor	1.13e-002	5.e-002	82020.000	0.01	-77.40	15.00	2RDR	<-
alpha-Chlordane	4.71e-002	5.e-002	1022400.0	0.01	-5.80	15.00	2RDR	
gamma-Chlordane	4.84e-002	5.e-002	1053900.0	0.01	-3.20	15.00	2RDR	
Endrin Ketone	3.02e-002	5.e-002	371680.00	0.01	-39.60	15.00	2RDR	<-
Tetrachloro-m-Xylene	5.16e-002	5.e-002	1242400.0	0.01	3.20	15.00	2RDR	
Decachlorobiphenyl	4.77e-002	5.e-002	644060.00	0.01	-4.60	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date: 11/06/07 Time: 1309

Lab File ID: 8AK1052 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

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

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.11e-002	5.e-002	1746400.0	0.01	2.20	15.00	2RDR	
gamma BHC	4.92e-002	5.e-002	1575100.0	0.01	-1.60	15.00	2RDR	
Heptachlor	4.92e-002	5.e-002	1407200.0	0.01	-1.60	15.00	2RDR	
beta-BHC	4.97e-002	5.e-002	745780.00	0.01	-0.60	15.00	2RDR	
Aldrin	4.86e-002	5.e-002	1289800.0	0.01	-2.80	15.00	2RDR	
delta-BHC	5.1e-002	5.e-002	1314900.0	0.01	2.00	15.00	2RDR	
Heptachlor Epoxide	4.84e-002	5.e-002	1120900.0	0.01	-3.20	15.00	2RDR	
Endosulfan I	4.94e-002	5.e-002	995060.00	0.01	-1.20	15.00	2RDR	
4,4'-DDE	4.9e-002	5.e-002	945280.00	0.01	-2.00	15.00	2RDR	
Dieldrin	4.82e-002	5.e-002	935220.00	0.01	-3.60	15.00	2RDR	
Endrin	4.86e-002	5.e-002	840740.00	0.01	-2.80	15.00	2RDR	
4,4'-DDD	5.1e-002	5.e-002	658260.00	0.01	2.00	15.00	2RDR	
Endosulfan II	5.e-002	5.e-002	812420.00	0.01	0.00	15.00	2RDR	
4,4'-DDT	5.08e-002	5.e-002	676620.00	0.01	1.60	15.00	2RDR	
Endrin Aldehyde	4.95e-002	5.e-002	624740.00	0.01	-1.00	15.00	2RDR	
Endosulfan sulfate	5.44e-002	5.e-002	610200.00	0.01	8.80	15.00	2RDR	
Methoxychlor	5.32e-002	5.e-002	398420.00	0.01	6.40	15.00	2RDR	
alpha-Chlordane	4.76e-002	5.e-002	1032100.0	0.01	-4.80	15.00	2RDR	
gamma-Chlordane	4.89e-002	5.e-002	1065000.0	0.01	-2.20	15.00	2RDR	
Endrin Ketone	5.84e-002	5.e-002	729360.00	0.01	16.80	15.00	2RDR	<-
Tetrachloro-m-Xylene	5.07e-002	5.e-002	1220300.0	0.01	1.40	15.00	2RDR	
Decachlorobiphenyl	4.72e-002	5.e-002	638380.00	0.01	-5.60	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date: 11/06/07 Time: 1309

Lab File ID: 8AK2052 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
alpha-BHC	4.75e-002	5.e-002	1335900.0	0.01	-5.00	15.00	2RDR
gamma BHC	4.46e-002	5.e-002	1188900.0	0.01	-10.80	15.00	2RDR
Heptachlor	4.57e-002	5.e-002	1209100.0	0.01	-8.60	15.00	2RDR
beta-BHC	4.69e-002	5.e-002	586360.00	0.01	-6.20	15.00	2RDR
Aldrin	4.25e-002	5.e-002	1014400.0	0.01	-15.00	15.00	2RDR
delta-BHC	4.5e-002	5.e-002	909480.00	0.01	-10.00	15.00	2RDR
Heptachlor Epoxide	4.48e-002	5.e-002	944300.00	0.01	-10.40	15.00	2RDR
Endosulfan I	4.45e-002	5.e-002	791000.00	0.01	-11.00	15.00	2RDR
4,4'-DDE	4.53e-002	5.e-002	758900.00	0.01	-9.40	15.00	2RDR
Dieldrin	4.4e-002	5.e-002	740520.00	0.01	-12.00	15.00	2RDR
Endrin	4.49e-002	5.e-002	630580.00	0.01	-10.20	15.00	2RDR
4,4'-DDD	4.44e-002	5.e-002	473160.00	0.01	-11.20	15.00	2RDR
Endosulfan II	4.47e-002	5.e-002	621120.00	0.01	-10.60	15.00	2RDR
4,4'-DDT	4.52e-002	5.e-002	531740.00	0.01	-9.60	15.00	2RDR
Endrin Aldehyde	4.62e-002	5.e-002	504440.00	0.01	-7.60	15.00	2RDR
Endosulfan sulfate	5.e-002	5.e-002	472720.00	0.01	0.00	15.00	2RDR
Methoxychlor	4.82e-002	5.e-002	324500.00	0.01	-3.60	15.00	2RDR
alpha-Chlordane	4.56e-002	5.e-002	899860.00	0.01	-8.80	15.00	2RDR
gamma-Chlordane	4.38e-002	5.e-002	871440.00	0.01	-12.40	15.00	2RDR
Endrin Ketone	5.38e-002	5.e-002	566220.00	0.01	7.60	15.00	2RDR
Tetrachloro-m-Xylene	4.58e-002	5.e-002	891820.00	0.01	-8.40	15.00	2RDR
Decachlorobiphenyl	4.59e-002	5.e-002	676160.00	0.01	-8.20	15.00	2RDR

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date: 11/06/07 Time: 2013

Lab File ID: 8AK1064 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

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

COMPOUND	RRF or AMOUNT	RRF0.1000 or AMOUNT	CCAL RRF0.1000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	0.1123300	0.1000000	1878900.0	0.01	12.33	15.00	2RDR	
gamma BHC	0.1033500	0.1000000	1642800.0	0.01	3.35	15.00	2RDR	
Heptachlor	0.1114600	0.1000000	1538000.0	0.01	11.46	15.00	2RDR	
beta-BHC	0.1071600	0.1000000	777880.00	0.01	7.16	15.00	2RDR	
Aldrin	0.1090400	0.1000000	1426200.0	0.01	9.04	15.00	2RDR	
delta-BHC	0.1059500	0.1000000	1387600.0	0.01	5.95	15.00	2RDR	
Heptachlor Epoxide	0.1107800	0.1000000	1247700.0	0.01	10.78	15.00	2RDR	
Endosulfan I	0.1047600	0.1000000	1043100.0	0.01	4.76	15.00	2RDR	
4,4'-DDE	0.1064400	0.1000000	1027400.0	0.01	6.44	15.00	2RDR	
Dieldrin	0.1108100	0.1000000	1074600.0	0.01	10.81	15.00	2RDR	
Endrin	0.1109300	0.1000000	963290.00	0.01	10.93	15.00	2RDR	
4,4'-DDD	0.1018500	0.1000000	670700.00	0.01	1.85	15.00	2RDR	
Endosulfan II	0.1036300	0.1000000	832520.00	0.01	3.63	15.00	2RDR	
4,4'-DDT	0.1102500	0.1000000	753880.00	0.01	10.25	15.00	2RDR	
Endrin Aldehyde	0.1080600	0.1000000	665990.00	0.01	8.06	15.00	2RDR	
Endosulfan sulfate	0.1158600	0.1000000	656580.00	0.01	15.86	15.00	2RDR	<-
Methoxychlor	0.1077400	0.1000000	399470.00	0.01	7.74	15.00	2RDR	
alpha-Chlordane	0.1077600	0.1000000	1128600.0	0.01	7.76	15.00	2RDR	
gamma-Chlordane	0.1048300	0.1000000	1127800.0	0.01	4.83	15.00	2RDR	
Endrin Ketone	0.1253800	0.1000000	783550.00	0.01	25.38	15.00	2RDR	<-
Tetrachloro-m-Xylene	0.1096000	0.1000000	1249100.0	0.01	9.60	15.00	2RDR	
Decachlorobiphenyl	0.1043300	0.1000000	662650.00	0.01	4.33	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date: 11/06/07 Time: 2013

Lab File ID: 8AK2064 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.1000 or AMOUNT	CCAL RRF0.1000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	0.1081400	0.1000000	1538400.0	0.01	8.14	15.00	2RDR	
gamma BHC	9.94e-002	0.1000000	1347700.0	0.01	-0.60	15.00	2RDR	
Heptachlor	0.1002800	0.1000000	1328100.0	0.01	0.28	15.00	2RDR	
beta-BHC	0.1034400	0.1000000	643130.00	0.01	3.44	15.00	2RDR	
Aldrin	9.83e-002	0.1000000	1201000.0	0.01	-1.70	15.00	2RDR	
delta-BHC	0.1053300	0.1000000	1118600.0	0.01	5.33	15.00	2RDR	
Heptachlor Epoxide	9.96e-002	0.1000000	1054300.0	0.01	-0.40	15.00	2RDR	
Endosulfan I	0.1019200	0.1000000	916440.00	0.01	1.92	15.00	2RDR	
4,4'-DDE	0.1003700	0.1000000	874740.00	0.01	0.37	15.00	2RDR	
Dieldrin	0.1029900	0.1000000	901550.00	0.01	2.99	15.00	2RDR	
Endrin	0.1034300	0.1000000	757690.00	0.01	3.43	15.00	2RDR	
4,4'-DDD	9.7e-002	0.1000000	548370.00	0.01	-3.00	15.00	2RDR	
Endosulfan II	0.1003900	0.1000000	708510.00	0.01	0.39	15.00	2RDR	
4,4'-DDT	0.1014300	0.1000000	633120.00	0.01	1.43	15.00	2RDR	
Endrin Aldehyde	0.1008400	0.1000000	554440.00	0.01	0.84	15.00	2RDR	
Endosulfan sulfate	0.1137000	0.1000000	560920.00	0.01	13.70	15.00	2RDR	
Methoxychlor	9.68e-002	0.1000000	332090.00	0.01	-3.20	15.00	2RDR	
alpha-Chlordane	0.1020400	0.1000000	1011300.0	0.01	2.04	15.00	2RDR	
gamma-Chlordane	9.98e-002	0.1000000	1004100.0	0.01	-0.20	15.00	2RDR	
Endrin Ketone	0.1185400	0.1000000	651670.00	0.01	18.54	15.00	2RDR	<-
Tetrachloro-m-Xylene	0.1021200	0.1000000	971480.00	0.01	2.12	15.00	2RDR	
Decachlorobiphenyl	0.1016200	0.1000000	716410.00	0.01	1.62	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date: 11/07/07 Time: 0140

Lab File ID: 8AK1076 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

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

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.61e-002	5.e-002	1914900.0	0.01	12.20	15.00	2RDR	
gamma BHC	5.23e-002	5.e-002	1673500.0	0.01	4.60	15.00	2RDR	
Heptachlor	5.89e-002	5.e-002	1672700.0	0.01	17.80	15.00	2RDR	<-
beta-BHC	5.17e-002	5.e-002	774560.00	0.01	3.40	15.00	2RDR	
Aldrin	5.4e-002	5.e-002	1431900.0	0.01	8.00	15.00	2RDR	
delta-BHC	5.68e-002	5.e-002	1472000.0	0.01	13.60	15.00	2RDR	
Heptachlor Epoxide	5.65e-002	5.e-002	1306000.0	0.01	13.00	15.00	2RDR	
Endosulfan I	5.4e-002	5.e-002	1088800.0	0.01	8.00	15.00	2RDR	
4,4'-DDE	5.37e-002	5.e-002	1037100.0	0.01	7.40	15.00	2RDR	
Dieldrin	5.59e-002	5.e-002	1086900.0	0.01	11.80	15.00	2RDR	
Endrin	5.52e-002	5.e-002	957400.00	0.01	10.40	15.00	2RDR	
4,4'-DDD	5.5e-002	5.e-002	711860.00	0.01	10.00	15.00	2RDR	
Endosulfan II	5.28e-002	5.e-002	857320.00	0.01	5.60	15.00	2RDR	
4,4'-DDT	4.67e-002	5.e-002	620240.00	0.01	-6.60	15.00	2RDR	
Endrin Aldehyde	5.52e-002	5.e-002	694720.00	0.01	10.40	15.00	2RDR	
Endosulfan sulfate	5.85e-002	5.e-002	656600.00	0.01	17.00	15.00	2RDR	<-
Methoxychlor	5.06e-002	5.e-002	379020.00	0.01	1.20	15.00	2RDR	
alpha-Chlordane	5.42e-002	5.e-002	1170400.0	0.01	8.40	15.00	2RDR	
gamma-Chlordane	5.34e-002	5.e-002	1163000.0	0.01	6.80	15.00	2RDR	
Endrin Ketone	6.52e-002	5.e-002	815040.00	0.01	30.40	15.00	2RDR	<-
Tetrachloro-m-Xylene	5.61e-002	5.e-002	1343600.0	0.01	12.20	15.00	2RDR	
Decachlorobiphenyl	5.54e-002	5.e-002	742500.00	0.01	10.80	15.00	2RDR	

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC08 Calibration Date: 11/07/07 Time: 0140

Lab File ID: 8AK2076 Init. Calib. Date(s): 10/30/07 10/30/07

Init. Calib. Times: 1618 1955

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF5e-002 or AMOUNT	CCAL RRF5e-002	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
alpha-BHC	5.17e-002	5.e-002	1456800.0	0.01	3.40	15.00	2RDR	
gamma BHC	5.19e-002	5.e-002	1391500.0	0.01	3.80	15.00	2RDR	
Heptachlor	5.21e-002	5.e-002	1382400.0	0.01	4.20	15.00	2RDR	
beta-BHC	5.14e-002	5.e-002	642380.00	0.01	2.80	15.00	2RDR	
Aldrin	4.98e-002	5.e-002	1198100.0	0.01	-0.40	15.00	2RDR	
delta-BHC	5.36e-002	5.e-002	1098000.0	0.01	7.20	15.00	2RDR	
Heptachlor Epoxide	5.04e-002	5.e-002	1064700.0	0.01	0.80	15.00	2RDR	
Endosulfan I	5.03e-002	5.e-002	897500.00	0.01	0.60	15.00	2RDR	
4,4'-DDE	4.96e-002	5.e-002	836120.00	0.01	-0.80	15.00	2RDR	
Dieldrin	4.99e-002	5.e-002	847700.00	0.01	-0.20	15.00	2RDR	
Endrin	4.94e-002	5.e-002	697120.00	0.01	-1.20	15.00	2RDR	
4,4'-DDD	5.12e-002	5.e-002	551700.00	0.01	2.40	15.00	2RDR	
Endosulfan II	4.93e-002	5.e-002	686700.00	0.01	-1.40	15.00	2RDR	
4,4'-DDT	4.04e-002	5.e-002	470540.00	0.01	-19.20	15.00	2RDR	<-
Endrin Aldehyde	5.21e-002	5.e-002	568980.00	0.01	4.20	15.00	2RDR	
Endosulfan sulfate	5.53e-002	5.e-002	525700.00	0.01	10.60	15.00	2RDR	
Methoxychlor	4.34e-002	5.e-002	291600.00	0.01	-13.20	15.00	2RDR	
alpha-Chlordane	5.09e-002	5.e-002	1006800.0	0.01	1.80	15.00	2RDR	
gamma-Chlordane	5.06e-002	5.e-002	1010100.0	0.01	1.20	15.00	2RDR	
Endrin Ketone	6.13e-002	5.e-002	650140.00	0.01	22.60	15.00	2RDR	<-
Tetrachloro-m-Xylene	5.41e-002	5.e-002	1051900.0	0.01	8.20	15.00	2RDR	
Decachlorobiphenyl	5.3e-002	5.e-002	775940.00	0.01	6.00	15.00	2RDR	

FORM VII PEST

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 10/30/07 10/30/07

Client Sample ID (PEM): Date Analyzed :11/06/07
Lab Sample ID (PEM): EVAL Time Analyzed :1242

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	8AK1051.d	1.50	2.00

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 10/30/07 10/30/07

Client Sample ID (PEM): Date Analyzed :11/06/07
Lab Sample ID (PEM): EVAL Time Analyzed :1242

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	8AK2051.d	3.09	1.98

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 10/30/07 10/30/07

Client Sample ID (PEM): Date Analyzed :11/05/07
Lab Sample ID (PEM): EVAL Time Analyzed :1339

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	8AK1027.d	2.77	2.12

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 10/30/07 10/30/07

Client Sample ID (PEM): Date Analyzed :11/05/07
Lab Sample ID (PEM): EVAL Time Analyzed :1339

LAB SAMPLE ID	FILENAME	% DDT BREAKDOWN	% ENDRIN BREAKDOWN
EVAL	8AK2027.d	2.37	1.87

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-FD-101907-01

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6037

Lab Sample ID: SA6037-2DL Date(s) Analyzed: 11/06/07 11/06/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.14	9.07	9.21	37.1	
	2	9.14	9.07	9.21	32.9	12.0
4,4'-DDD	1	10.62	10.55	10.69	905	
	2	10.85	10.78	10.92	844	7.0
4,4'-DDT	1	11.61	11.54	11.68	32.6	
	2	11.70	11.63	11.77	51.6	45.1
Methoxychlor	1	13.38	13.31	13.45	83.1	
	2	13.89	13.83	13.97	78.8	5.3
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD43-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6037

Lab Sample ID: SA6037-5DL Date(s) Analyzed: 11/07/07 11/07/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
gamma-Chlordane	1	8.47	8.42	8.56	59.1	
	2	8.51	8.44	8.58	54.9	7.4
alpha-Chlordane	1	8.67	8.59	8.73	41.5	
	2	8.67	8.62	8.76	52.0	22.5
4,4'-DDE	1	9.14	9.07	9.21	54.9	
	2	9.14	9.07	9.21	55.2	0.5
4,4'-DDD	1	10.63	10.55	10.69	1300	
	2	10.85	10.78	10.92	1220	6.3
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD44-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6037

Lab Sample ID: SA6037-3 Date(s) Analyzed: 11/05/07 11/05/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.14	9.07	9.21	10.2	
	2	9.13	9.07	9.21	10.2	0.0
4,4'-DDD	1	10.62	10.56	10.70	92.7	
	2	10.85	10.79	10.93	83.2	10.8
4,4'-DDT	1	11.61	11.55	11.69	16.1	
	2	11.69	11.63	11.77	19.4	18.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD47-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6037

Lab Sample ID: SA6037-1 Date(s) Analyzed: 11/05/07 11/05/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.14	9.07	9.21	23.3	
	2	9.14	9.07	9.21	21.8	6.6
4,4'-DDD	1	10.63	10.56	10.70	583	
	2	10.85	10.79	10.93	545	6.7
4,4'-DDT	1	11.62	11.55	11.69	30.5	
	2	11.70	11.63	11.77	31.6	3.5
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD48-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6037

Lab Sample ID: SA6037-6 Date(s) Analyzed: 11/05/07 11/05/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.15	9.07	9.21	95.4	
	2	9.15	9.07	9.21	91.9	3.7
4,4'-DDD	1	10.63	10.56	10.70	214	
	2	10.86	10.79	10.93	184	15.1
4,4'-DDT	1	11.62	11.55	11.69	206	
	2	11.71	11.63	11.77	213	3.3
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD48-0204

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6037

Lab Sample ID: SA6037-7DL Date(s) Analyzed: 11/07/07 11/07/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
4,4'-DDE	1	9.14	9.07	9.21	35.8	
	2	9.13	9.07	9.21	32.5	9.7
4,4'-DDD	1	10.62	10.55	10.69	202	
	2	10.85	10.78	10.92	174	14.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE ID

2W-FB-101907-01

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6037

Lab Sample ID: SA6037-9 Date(s) Analyzed: 11/05/07 11/05/07

Instrument ID (1): GC08 Instrument ID (2): GC08

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
Heptachlor	1	6.54	6.52	6.62	0.0556	
	2	6.45	6.40	6.50	0.0621	11.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

SRV: 2W-SD-SD48-0001 [4,4'-DDD] = 210 ug/Kg as reported by the laboratory.

Data File: \\Target_server\GG\chem\gc08.i\GC08AK05A1.b\8AK1042.d
Report Date: 08-Nov-2007 02:34

Katahdin Analytical Services

Data file : \\Target_server\GG\chem\gc08.i\GC08AK05A1.b\8AK1042.d
Lab Smp Id: SA6037-6 Client Smp ID: 2W-SD-SD48-0001
Inj Date : 05-NOV-2007 21:34
Operator : SJC Inst ID: gc08.i
Smp Info : PSTA293A.M,GC08AK05A1.B,1,SA6037-6
Misc Info : SW846 8081A
Comment :
Method : \\TARGET_SERVER\GG\chem\gc08.i\GC08AK05A1.B\PSTA293A.m
Meth Date : 06-Nov-2007 10:09 scolby Quant Type: ESTD
Cal Date : 30-OCT-2007 19:55 Cal File: 8AJ5055.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8081.sub
Target Version: 4.12
Processing Host: TARGET03

Concentration Formula: Amt * DF * 1000*Vt *(1/Vo)*(100/(100-M)) * CpndVariab

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Volume of final extract (L)
Vo	0.03000	Sample Weight
M	62.035	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kgdrywt)
$ 5 Tetrachloro-m-Xylene	4.646	4.646	0.000	70640	0.05915	51.9
20 4,4'-DDE	9.153	9.140	0.013	104810	0.10863	95.4
25 4,4'-DDD	10.633	10.633	0.000	162213	0.24386	214
28 4,4'-DDT	11.620	11.620	0.000	162684	0.23452	206
$ 35 Decachlorobiphenyl	19.020	19.006	0.014	62190	0.09721	85.4

~~Response~~

$$\text{ON-Column} = (R^2 \cdot A2 + R \cdot A1 + A0)$$

$$(((0.99959 \cdot (3.68 \times 10^{-14})) + ((162213 \cdot (1.484 \times 10^{-6})) + 2.144 \times 10^{-3}) = \boxed{0.24286}$$

$$\frac{\frac{0.24286\ ug}{mL} \cdot \frac{1000\ mL}{1\ L} \cdot \frac{0.01\ L}{1}}{0.03\ Kg \cdot 0.38} = \boxed{213\ ug/Kg}$$

FORM 2
SOIL PCB SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

GC Column(1): ZB-MULTIRESIDUE-1ID: 0.53 (mm) GC Column(2): ZB-MULTIRESIDUE-2ID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	DCB1 REC#	DCB2 REC#	OTHR (1)	OTHR (2)	TOT OUT
01	WG45074-BLANK	WG45074-1	88	82	125	118			0
02	WG45074-LCS	WG45074-2	101	82	104	99			0
03	WG45074-LCSD	WG45074-3	100	81	112	103			0
04	2W-SD-SD47-0001	SA6037-1	74	64	61	51			0
05	2W-FD-101907-01	SA6037-2	70	61	60	54			0
06	2W-SD-SD44-0001	SA6037-3	80	69	61	57			0
07	2W-SD-SD43-0001	SA6037-5	74	63	59	57			0
08	2W-SD-SD48-0001	SA6037-6	76	67	58	52			0
09	2W-SD-SD48-0204	SA6037-7	87	73	70	66			0
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (41-116)
S2 (DCB) = Decachlorobiphenyl (31-128)

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

FORM II PEST-2

FORM 2
WATER PCB SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

GC Column(1): ZB-MULTIRESIDUE-1ID: 0.53 (mm) GC Column(2): ZB-MULTIRESIDUE-2ID: 0.53 (mm)

	CLIENT SAMPLE ID	LAB SAMPLE ID	TCX1 REC#	TCX2 REC#	DCB1 REC#	DCB2 REC#	OTHR (1)	OTHR (2)	TOT OUT
01	WG44851-BLANK	WG44851-1	106	85	102*	98*			2
02	WG44851-LCS	WG44851-2	106	85	104*	100*			2
03	WG44851-LCSD	WG44851-3	88	73	99*	96*			2
04	2W-RB-101907-01	SA6037-8	106	90	45	42			0
05	2W-FB-101907-01	SA6037-9	99	90	91	87			0
06									
07									
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (57-111)
S2 (DCB) = Decachlorobiphenyl (15- 93)

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

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/24/07
Analysis Date: 11/02/07
Report Date: 11/05/2007
Matrix: WATER

Lab ID: WG44851-2 & WG44851-3
Client ID: WG44851-LCS & WG44851-LCSD
SDG: SA6037
Extracted by: KF
Extraction Method: SW846 3510
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44851
Units: ug/L

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
Aroclor-1016	5.0	5.0	NA	5.0	4.8	100	96	4	30	72-119
Aroclor-1260	5.0	5.0	NA	5.3	5.3	105	105	0.0	30	60-119

FORM III PEST-1

6AK1019.d & 6AK1025.d

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/30/07
Analysis Date: 11/03/07
Report Date: 11/05/2007
Matrix: SOIL

Lab ID: WG45074-2 & WG45074-3
Client ID: WG45074-LCS & WG45074-LCSD
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG45074
Units: ug/Kgdrywt

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
Aroclor-1016	167	167	NA	162	162	97	97	0.0	50	71-114
Aroclor-1260	167	167	NA	174	180	104	108	3	50	77-119

FORM III PEST-2

6AK1029.d & 6AK1030.d

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG44851-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Lab Sample ID: WG44851-1 Lab File ID: 6AK1018

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) SW846 3510

Sulfur Cleanup: (Y/N) N Date Extracted: 10/24/07

Date Analyzed (1): 11/02/07 Date Analyzed (2): 11/02/07

Time Analyzed (1): 1832 Time Analyzed (2): 1832

Instrument ID (1): GC06 Instrument ID (2): GC06

GC Column (1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE-2 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	WG44851-LCS	WG44851-2	6AK1019	11/02/07	11/02/07
02	WG44851-LCSD	WG44851-3	6AK1025	11/02/07	11/02/07
03	2W-RB-101907-01	SA6037-8	6AK1026	11/02/07	11/02/07
04	2W-FB-101907-01	SA6037-9	6AK1027	11/02/07	11/02/07
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

COMMENTS:

FORM IV PEST

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/24/07
Analysis Date: 02-NOV-2007 18:32
Report Date: 11/05/2007
Matrix: WATER
% Solids: NA

Lab ID: WG44851-1
Client ID: WG44851-Blank
SDG: SA6037
Extracted by: KF
Extraction Method: SW846 3510
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG44851
Units: ug/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	0.50	1.0	0.50	0.50	0.40
11104-28-2	Aroclor-1221	U	0.50	1.0	0.50	0.50	0.17
11141-16-5	Aroclor-1232	U	0.50	1.0	0.50	0.50	0.28
53469-21-9	Aroclor-1242	U	0.50	1.0	0.50	0.50	0.21
12672-29-6	Aroclor-1248	U	0.50	1.0	0.50	0.50	0.19
11097-69-1	Aroclor-1254	U	0.50	1.0	0.50	0.50	0.25
11096-82-5	Aroclor-1260	U	0.50	1.0	0.50	0.50	0.27
877-09-8	Tetrachloro-m-xylene		106%				
2051-24-3	Decachlorobiphenyl		*102%				

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG45074-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Lab Sample ID: WG45074-1 Lab File ID: 6AK1028

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SW846 3550

Sulfur Cleanup: (Y/N) Y Date Extracted: 10/30/07

Date Analyzed (1): 11/02/07 Date Analyzed (2): 11/02/07

Time Analyzed (1): 2328 Time Analyzed (2): 2328

Instrument ID (1): GC06 Instrument ID (2): GC06

GC Column (1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column (2): ZB-MULTIRESIDUE-2 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	WG45074-LCS	WG45074-2	6AK1029	11/02/07	11/02/07
02	WG45074-LCSD	WG45074-3	6AK1030	11/03/07	11/03/07
03	2W-SD-SD47-0001	SA6037-1	6AK1034	11/03/07	11/03/07
04	2W-FD-101907-01	SA6037-2	6AK1040	11/03/07	11/03/07
05	2W-SD-SD44-0001	SA6037-3	6AK1041	11/03/07	11/03/07
06	2W-SD-SD43-0001	SA6037-5	6AK1042	11/03/07	11/03/07
07	2W-SD-SD48-0001	SA6037-6	6AK1043	11/03/07	11/03/07
08	2W-SD-SD48-0204	SA6037-7	6AK1044	11/03/07	11/03/07
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

COMMENTS:

FORM IV PEST

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: CTO 439 NSB New London
PO No:
Sample Date:
Received Date:
Extraction Date: 10/30/07
Analysis Date: 02-NOV-2007 23:28
Report Date: 11/05/2007
Matrix: SOIL
% Solids: 100

Lab ID: WG45074-1
Client ID: WG45074-Blank
SDG: SA6037
Extracted by: KM
Extraction Method: SW846 3550
Analyst: SJC
Analysis Method: SW846 8082
Lab Prep Batch: WG45074
Units: ug/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
12674-11-2	Aroclor-1016	U	17	1.0	17	17	16
11104-28-2	Aroclor-1221	U	17	1.0	17	17	12
11141-16-5	Aroclor-1232	U	17	1.0	17	17	5.3
53469-21-9	Aroclor-1242	U	17	1.0	17	17	6.7
12672-29-6	Aroclor-1248	U	17	1.0	17	17	5.7
11097-69-1	Aroclor-1254	U	17	1.0	17	17	13
11096-82-5	Aroclor-1260	U	17	1.0	17	17	14
877-09-8	Tetrachloro-m-xylene		88%				
2051-24-3	Decachlorobiphenyl		125%				

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC06 Calibration Date(s): 10/24/07 10/25/07

Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Calibration Time(s): 1915 0606

LAB FILE ID: RF0.05: 6AJ3174 RF0.1: 6AJ3175 RF0.25: 6AJ3176
RF1: 6AJ3177 RF2.5: 6AJ3178 RF10: 6AJ3179

COMPOUND	RF0.05	RF0.1	RF0.25	RF1	RF2.5	RF10	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
Aroclor-1016	1773	3138	7657	27142	57385	177030	2ORDR	-2.44e-002	3.695e-005	1.112e-010	0.99992	0.99000
(2)	1200	2162	5547	20771	45631	146720	2ORDR	-1.42e-002	4.828e-005	1.362e-010	0.99996	0.99000
(3)	3638	6500	16299	61040	132720	425430	2ORDR	-1.68e-002	1.654e-005	1.647e-011	0.99994	0.99000
(4)	2346	3255	8582	29544	63535	205950	2ORDR	-3.19e-002	3.502e-005	6.652e-011	0.99991	0.99000
(5)	1308	2337	6047	23980	54604	182480	2ORDR	-5.91e-003	4.161e-005	7.247e-011	0.99998	0.99000
Aroclor-1221				13412			2ORDR	0.00000000	7.456e-005	0.00000000	1.00000	0.99000
(2)				9383			2ORDR	0.00000000	1.066e-004	0.00000000	1.00000	0.99000
(3)				30133			2ORDR	0.00000000	3.319e-005	0.00000000	1.00000	0.99000
(4)				5011			2ORDR	0.00000000	1.996e-004	0.00000000	1.00000	0.99000
Aroclor-1232				8627			2ORDR	0.00000000	1.159e-004	0.00000000	1.00000	0.99000
(2)				23431			2ORDR	0.00000000	4.268e-005	0.00000000	1.00000	0.99000
(3)				12251			2ORDR	0.00000000	8.163e-005	0.00000000	1.00000	0.99000
(4)				27307			2ORDR	0.00000000	3.662e-005	0.00000000	1.00000	0.99000
(5)				10228			2ORDR	0.00000000	9.777e-005	0.00000000	1.00000	0.99000
Aroclor-1242	1458	2776	6519	22494	48734	150860	2ORDR	-2.42e-002	4.399e-005	1.49e-010	0.99996	0.99000
(2)	977	1914	4669	16870	37953	122400	2ORDR	-1.49e-002	5.861e-005	1.897e-010	0.99998	0.99000
(3)	2972	5657	13801	49240	109420	355360	2ORDR	-1.98e-002	2.041e-005	2.191e-011	0.99996	0.99000
(4)	1807	2921	6892	24150	53213	173650	2ORDR	-2.86e-002	4.225e-005	8.93e-011	0.99995	0.99000
(5)	1081	2052	5106	19259	45035	150910	2ORDR	-6.97e-003	5.092e-005	1.02e-010	1.00000	0.99000
Aroclor-1248				32282			2ORDR	0.00000000	3.098e-005	0.00000000	1.00000	0.99000
(2)				27991			2ORDR	0.00000000	3.573e-005	0.00000000	1.00000	0.99000
(3)				32026			2ORDR	0.00000000	3.122e-005	0.00000000	1.00000	0.99000
(4)				25779			2ORDR	0.00000000	3.879e-005	0.00000000	1.00000	0.99000
(5)				20478			2ORDR	0.00000000	4.883e-005	0.00000000	1.00000	0.99000
Aroclor-1254	2532	4483	10024	34741	77095	249880	2ORDR	-2.88e-002	2.91e-005	4.42e-011	0.99996	0.99000
(2)	3251	6114	14907	55097	124570	408420	2ORDR	-1.41e-002	1.808e-005	1.578e-011	0.99998	0.99000
(3)	3734	7020	17130	64275	145350	482340	2ORDR	-1.37e-002	1.561e-005	1.069e-011	0.99998	0.99000
(4)	2501	4696	11986	50231	119200	414530	2ORDR	3.299e-003	1.959e-005	1.091e-011	0.99999	0.99000
(5)	2910	5510	13496	50906	116520	385990	2ORDR	-1.05e-002	1.948e-005	1.673e-011	0.99999	0.99000
Aroclor-1260	2840	4980	12137	43868	95981	313610	2ORDR	-2.33e-002	2.331e-005	2.759e-011	0.99994	0.99000
(2)	3856	6708	16429	59661	130120	423120	2ORDR	-2.28e-002	1.712e-005	1.553e-011	0.99994	0.99000
(3)	3273	5889	15075	58068	130910	436520	2ORDR	-1.07e-002	1.733e-005	1.283e-011	0.99997	0.99000
(4)	5226	9172	23880	91781	207800	715440	2ORDR	-1.27e-002	1.115e-005	3.981e-012	0.99996	0.99000
(5)	2987	5306	13576	53943	121190	414630	2ORDR	-1.07e-002	1.899e-005	1.244e-011	0.99996	0.99000
Tetrachloro-m-xylene	464	1122	4316	20464	51059	146380	2ORDR	1.021e-003	7.714e-007	4.013e-012	0.99986	0.99000
Decachlorobiphenyl	1088	1983	5092	19683	44219	134720	2ORDR	-1.28e-005	9.534e-007	3.945e-012	1.00000	0.99000

FORM VI PCB

Report Date: 31-Oct-2007 10:48

Calibration History

Method : \\Target_server\GG\chem\gc06.i\GC06AJ24A1.b\PCBA082A.m
Start Cal Date: 24-OCT-2007 19:15
End Cal Date : 25-OCT-2007 06:06
Last Cal Level: 3
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.05000		
25-OCT-2007 03:38	AR1254	6AJ3174.d
25-OCT-2007 00:10	AR1242	6AJ3167.d
24-OCT-2007 19:15	AR1660	6AJ3157.d
Cal Level: 2 , Cal Amount: 0.10000		
25-OCT-2007 04:07	AR1254	6AJ3175.d
25-OCT-2007 00:40	AR1242	6AJ3168.d
24-OCT-2007 19:44	AR1660	6AJ3158.d
Cal Level: 3 , Cal Amount: 0.25000		
25-OCT-2007 04:37	AR1254	6AJ3176.d
25-OCT-2007 01:09	AR1242	6AJ3169.d
24-OCT-2007 20:13	AR1660	6AJ3159.d
Cal Level: 4 , Cal Amount: 1.00000		
25-OCT-2007 05:07	AR1254	6AJ3177.d
25-OCT-2007 03:08	AR1248	6AJ3173.d
25-OCT-2007 01:39	AR1242	6AJ3170.d
24-OCT-2007 23:40	AR1232	6AJ3166.d
24-OCT-2007 23:11	AR1221	6AJ3165.d
24-OCT-2007 20:43	AR1660	6AJ3160.d
Cal Level: 5 , Cal Amount: 2.50000		
25-OCT-2007 05:36	AR1254	6AJ3178.d
25-OCT-2007 02:09	AR1242	6AJ3171.d
24-OCT-2007 21:13	AR1660	6AJ3161.d
Cal Level: 6 , Cal Amount: 10.00000		
25-OCT-2007 06:06	AR1254	6AJ3179.d
25-OCT-2007 02:38	AR1242	6AJ3172.d
24-OCT-2007 21:42	AR1660	6AJ3162.d

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC06 Calibration Date(s): 10/24/07 10/25/07

Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Calibration Time(s): 1915 0606

LAB FILE ID: RF0.05: 6AJ4174 RF0.1: 6AJ4175 RF0.25: 6AJ4176
RF1: 6AJ4177 RF2.5: 6AJ4178 RF10: 6AJ4179

COMPOUND	RF0.05	RF0.1	RF0.25	RF1	RF2.5	RF10	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
Aroclor-1016	2177	3849	9008	32303	67732	209600	2ORDR	-2.71e-002	3.136e-005	7.868e-011	0.99991	0.99000
(2)	1686	2964	7204	27157	58932	190360	2ORDR	-1.9e-002	3.749e-005	7.959e-011	0.99994	0.99000
(3)	4001	7003	17123	64510	139720	447900	2ORDR	-1.84e-002	1.571e-005	1.487e-011	0.99994	0.99000
(4)	1831	3221	7856	29339	63709	206930	2ORDR	-2.03e-002	3.484e-005	6.567e-011	0.99994	0.99000
(5)	1514	2685	6628	26538	59331	197930	2ORDR	-1.e-002	3.817e-005	6.271e-011	0.99996	0.99000
Aroclor-1221				14781			2ORDR	0.00000000	6.765e-005	0.00000000	1.00000	0.99000
(2)				10299			2ORDR	0.00000000	9.71e-005	0.00000000	1.00000	0.99000
(3)				32695			2ORDR	0.00000000	3.059e-005	0.00000000	1.00000	0.99000
(4)				5707			2ORDR	0.00000000	1.752e-004	0.00000000	1.00000	0.99000
Aroclor-1232				24606			2ORDR	0.00000000	4.064e-005	0.00000000	1.00000	0.99000
(2)				14601			2ORDR	0.00000000	6.849e-005	0.00000000	1.00000	0.99000
(3)				28590			2ORDR	0.00000000	3.498e-005	0.00000000	1.00000	0.99000
(4)				13118			2ORDR	0.00000000	7.623e-005	0.00000000	1.00000	0.99000
(5)				11218			2ORDR	0.00000000	8.914e-005	0.00000000	1.00000	0.99000
Aroclor-1242	1762	3316	7575	25617	55411	171450	2ORDR	-2.84e-002	3.876e-005	1.151e-010	0.99995	0.99000
(2)	1337	2540	6134	21793	48675	155700	2ORDR	-1.81e-002	4.543e-005	1.215e-010	0.99998	0.99000
(3)	3170	5956	14452	51222	113670	365040	2ORDR	-2.e-002	1.949e-005	2.181e-011	0.99997	0.99000
(4)	1432	2774	6671	23387	52371	169260	2ORDR	-2.01e-002	4.261e-005	9.806e-011	0.99997	0.99000
(5)	1194	2332	5684	20949	48365	161600	2ORDR	-1.19e-002	4.731e-005	9.064e-011	0.99999	0.99000
Aroclor-1248				33255			2ORDR	0.00000000	3.007e-005	0.00000000	1.00000	0.99000
(2)				30960			2ORDR	0.00000000	3.23e-005	0.00000000	1.00000	0.99000
(3)				34629			2ORDR	0.00000000	2.888e-005	0.00000000	1.00000	0.99000
(4)				28498			2ORDR	0.00000000	3.509e-005	0.00000000	1.00000	0.99000
(5)				21323			2ORDR	0.00000000	4.69e-005	0.00000000	1.00000	0.99000
Aroclor-1254	2773	5106	12138	42947	95887	309010	2ORDR	-2.08e-002	2.322e-005	2.98e-011	0.99997	0.99000
(2)	3414	6450	15525	56832	127990	420060	2ORDR	-1.64e-002	1.761e-005	1.485e-011	0.99998	0.99000
(3)	4268	7914	18895	68424	153090	505280	2ORDR	-2.01e-002	1.478e-005	9.998e-012	0.99997	0.99000
(4)	2690	5114	12885	52838	123710	423760	2ORDR	-1.54e-004	1.87e-005	1.156e-011	0.99999	0.99000
(5)	3388	6079	14680	53675	120810	399140	2ORDR	-1.81e-002	1.875e-005	1.591e-011	0.99997	0.99000
Aroclor-1260	3237	5604	13193	48313	104340	339040	2ORDR	-2.55e-002	2.132e-005	2.437e-011	0.99993	0.99000
(2)	3835	6604	15838	58042	125340	408790	2ORDR	-2.51e-002	1.778e-005	1.65e-011	0.99992	0.99000
(3)	3364	5930	14889	57652	127240	429700	2ORDR	-1.62e-002	1.792e-005	1.254e-011	0.99994	0.99000
(4)	5387	9628	24685	93875	211660	717050	2ORDR	-1.35e-002	1.084e-005	4.36e-012	0.99997	0.99000
(5)	3164	5716	14682	57119	129670	438290	2ORDR	-9.48e-003	1.766e-005	1.181e-011	0.99997	0.99000
Tetrachloro-m-xylene	1107	2035	5407	24100	56110	185580	2ORDR	2.122e-004	8.015e-007	1.482e-012	0.99999	0.99000
Decachlorobiphenyl	1200	2176	5527	20486	44650	132600	2ORDR	-1.4e-004	9.165e-007	4.471e-012	0.99999	0.99000

FORM VI PCB

Report Date: 31-Oct-2007 11:09

Calibration History

Method : \\Target_server\GG\chem\gc06.i\GC06AJ24B1.b\PCBB082A.m
Start Cal Date: 24-OCT-2007 19:15
End Cal Date : 25-OCT-2007 06:06
Last Cal Level: 3
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.05000		
25-OCT-2007 03:38	AR1254	6AJ4174.d
25-OCT-2007 00:10	AR1242	6AJ4167.d
24-OCT-2007 19:15	AR1660	6AJ4157.d

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 0.10000		
25-OCT-2007 04:07	AR1254	6AJ4175.d
25-OCT-2007 00:40	AR1242	6AJ4168.d
24-OCT-2007 19:44	AR1660	6AJ4158.d

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 0.25000		
25-OCT-2007 04:37	AR1254	6AJ4176.d
25-OCT-2007 01:09	AR1242	6AJ4169.d
24-OCT-2007 20:13	AR1660	6AJ4159.d

Injection Date	Sublist	Calibration File
Cal Level: 4 , Cal Amount: 1.00000		
25-OCT-2007 05:07	AR1254	6AJ4177.d
25-OCT-2007 03:08	AR1248	6AJ4173.d
25-OCT-2007 01:39	AR1242	6AJ4170.d
24-OCT-2007 23:40	AR1232	6AJ4166.d
24-OCT-2007 23:11	AR1221	6AJ4165.d
24-OCT-2007 20:43	AR1660	6AJ4160.d

Injection Date	Sublist	Calibration File
Cal Level: 5 , Cal Amount: 2.50000		
25-OCT-2007 05:36	AR1254	6AJ4178.d
25-OCT-2007 02:09	AR1242	6AJ4171.d
24-OCT-2007 21:13	AR1660	6AJ4161.d

Injection Date	Sublist	Calibration File
Cal Level: 6 , Cal Amount: 10.00000		
25-OCT-2007 06:06	AR1254	6AJ4179.d
25-OCT-2007 02:38	AR1242	6AJ4172.d
24-OCT-2007 21:42	AR1660	6AJ4162.d

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC06 Calibration Date: 10/24/07 Time: 2212

Lab File ID: 6AJ3163 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

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

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Aroclor-1016	0.9662100	1.0000000	24937.000	0.01	-3.38	15.00	2RDR
(2)	0.9576300	1.0000000	19099.000	0.01	-4.24	15.00	2RDR
(3)	0.9635400	1.0000000	56131.000	0.01	-3.65	15.00	2RDR
(4)	1.0268000	1.0000000	28668.000	0.01	2.68	15.00	2RDR
(5)	0.9430200	1.0000000	21963.000	0.01	-5.70	15.00	2RDR
Average %D: -2.860							

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC06 Calibration Date: 10/24/07 Time: 2212

Lab File ID: 6AJ4163 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Aroclor-1016	0.9610600	1.0000000	29398.000	0.01	-3.89	15.00	2RDR
(2)	0.9599100	1.0000000	24843.000	0.01	-4.01	15.00	2RDR
(3)	0.9591100	1.0000000	58983.000	0.01	-4.09	15.00	2RDR
(4)	0.9646700	1.0000000	26939.000	0.01	-3.53	15.00	2RDR
(5)	0.9478700	1.0000000	24175.000	0.01	-5.21	15.00	2RDR
Average %D: -4.150							

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC06 Calibration Date: 10/24/07 Time: 2241

Lab File ID: 6AJ3164 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

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

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Aroclor-1260	1.0082000	1.0000000	42140.000	0.01	0.82	15.00	2RDR
(2)	1.0182000	1.0000000	57777.000	0.01	1.82	15.00	2RDR
(3)	1.0624000	1.0000000	59302.000	0.01	6.24	15.00	2RDR
(4)	0.9001900	1.0000000	79619.000	0.01	-9.98	15.00	2RDR
(5)	0.9181200	1.0000000	47436.000	0.01	-8.19	15.00	2RDR
Average %D: -1.860							

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC06 Calibration Date: 10/24/07 Time: 2241

Lab File ID: 6AJ4164 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Aroclor-1260	0.9951400	1.0000000	45551.000	0.01	-0.49	15.00	2RDR
(2)	0.9882900	1.0000000	54306.000	0.01	-1.17	15.00	2RDR
(3)	1.0703000	1.0000000	58302.000	0.01	7.03	15.00	2RDR
(4)	0.8878700	1.0000000	80538.000	0.01	-11.21	15.00	2RDR
(5)	0.9063200	1.0000000	50165.000	0.01	-9.37	15.00	2RDR
Average %D: -3.040							

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC06 Calibration Date: 11/02/07 Time: 1111

Lab File ID: 6AK1006 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

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

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	1.1287000	1.0000000	28723.000	0.01	12.87	15.00	2RDR	
(2)	1.1039000	1.0000000	21815.000	0.01	10.39	15.00	2RDR	
(3)	1.1366000	1.0000000	65464.000	0.01	13.66	15.00	2RDR	
(4)	1.1377000	1.0000000	31510.000	0.01	13.77	15.00	2RDR	
(5)	1.0798000	1.0000000	25002.000	0.01	7.98	15.00	2RDR	
Average %D: 11.740								
Aroclor-1260	1.1367000	1.0000000	47128.000	0.01	13.67	15.00	2RDR	
(2)	1.1386000	1.0000000	64107.000	0.01	13.86	15.00	2RDR	
(3)	1.1430000	1.0000000	63561.000	0.01	14.30	15.00	2RDR	
(4)	1.1505000	1.0000000	100710.00	0.01	15.05	15.00	2RDR	<-
(5)	1.1172000	1.0000000	57248.000	0.01	11.72	15.00	2RDR	
Average %D: 13.720								
Tetrachloro-m-xylene	1.65e-002	2.e-002	913650.00	0.01	-17.50	15.00	2RDR	<-
Decachlorobiphenyl	2.26e-002	2.e-002	1086000.0	0.01	13.00	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC06 Calibration Date: 11/02/07 Time: 1111

Lab File ID: 6AK2006 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Aroclor-1016	1.0752000	1.0000000	32499.000	0.01	7.52	15.00	2RDR
(2)	1.0902000	1.0000000	27931.000	0.01	9.02	15.00	2RDR
(3)	1.0963000	1.0000000	66729.000	0.01	9.63	15.00	2RDR
(4)	1.1056000	1.0000000	30553.000	0.01	10.56	15.00	2RDR
(5)	1.0868000	1.0000000	27496.000	0.01	8.68	15.00	2RDR
Average %D: 9.0800							
Aroclor-1260	1.0959000	1.0000000	49780.000	0.01	9.59	15.00	2RDR
(2)	1.0774000	1.0000000	58789.000	0.01	7.74	15.00	2RDR
(3)	1.0724000	1.0000000	58350.000	0.01	7.24	15.00	2RDR
(4)	1.0930000	1.0000000	98192.000	0.01	9.30	15.00	2RDR
(5)	1.0967000	1.0000000	60201.000	0.01	9.67	15.00	2RDR
Average %D: 8.7100							
Tetrachloro-m-xylene	2.05e-002	2.e-002	1211000.0	0.01	2.50	15.00	2RDR
Decachlorobiphenyl	2.19e-002	2.e-002	1085400.0	0.01	9.50	15.00	2RDR

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC06 Calibration Date: 11/02/07 Time: 2000

Lab File ID: 6AK1021 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

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

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	0.2839000	0.2500000	32576.000	0.01	13.56	15.00	2RDR	
(2)	0.2847700	0.2500000	24352.000	0.01	13.91	15.00	2RDR	
(3)	0.2795200	0.2500000	70428.000	0.01	11.81	15.00	2RDR	
(4)	0.2990800	0.2500000	37148.000	0.01	19.63	15.00	2RDR	<-
(5)	0.2751000	0.2500000	26700.000	0.01	10.04	15.00	2RDR	
Average %D: 13.800								
Aroclor-1260	0.3025200	0.2500000	55008.000	0.01	21.01	15.00	2RDR	<-
(2)	0.2986800	0.2500000	73864.000	0.01	19.47	15.00	2RDR	<-
(3)	0.2914900	0.2500000	68844.000	0.01	16.60	15.00	2RDR	<-
(4)	0.2853900	0.2500000	105950.00	0.01	14.16	15.00	2RDR	
(5)	0.2821900	0.2500000	61084.000	0.01	12.88	15.00	2RDR	
Average %D: 16.840								
Tetrachloro-m-xylene	5.12e-003	5.e-003	1033800.0	0.01	2.40	15.00	2RDR	<-
Decachlorobiphenyl	5.87e-003	5.e-003	1204600.0	0.01	17.40	15.00	2RDR	<-

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC06 Calibration Date: 11/02/07 Time: 2000

Lab File ID: 6AK2021 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	0.2738900	0.2500000	37504.000	0.01	9.56	15.00	2RDR	
(2)	0.2587900	0.2500000	29188.000	0.01	3.52	15.00	2RDR	
(3)	0.2612800	0.2500000	70032.000	0.01	4.51	15.00	2RDR	
(4)	0.2586700	0.2500000	31560.000	0.01	3.47	15.00	2RDR	
(5)	0.2455600	0.2500000	26500.000	0.01	-1.78	15.00	2RDR	
Average %D: 3.8400								
Aroclor-1260	0.2788900	0.2500000	56224.000	0.01	11.56	15.00	2RDR	
(2)	0.2786500	0.2500000	67268.000	0.01	11.46	15.00	2RDR	
(3)	0.2777800	0.2500000	64876.000	0.01	11.11	15.00	2RDR	
(4)	0.2643800	0.2500000	101480.00	0.01	5.75	15.00	2RDR	
(5)	0.2730700	0.2500000	63316.000	0.01	9.23	15.00	2RDR	
Average %D: 9.8400								
Tetrachloro-m-xylene	4.52e-003	5.e-003	1065000.0	0.01	-9.60	15.00	2RDR	<-
Decachlorobiphenyl	5.56e-003	5.e-003	1208600.0	0.01	11.20	15.00	2RDR	<-

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC06 Calibration Date: 11/03/07 Time: 0325

Lab File ID: 6AK1036 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

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

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	1.2644000	1.0000000	31829.000	0.01	26.44	15.00	2RDR	<-
(2)	1.2492000	1.0000000	24476.000	0.01	24.92	15.00	2RDR	<-
(3)	1.2672000	1.0000000	72407.000	0.01	26.72	15.00	2RDR	<-
(4)	1.2780000	1.0000000	35066.000	0.01	27.80	15.00	2RDR	<-
(5)	1.2188000	1.0000000	28060.000	0.01	21.88	15.00	2RDR	<-
Average %D: 25.550								
Aroclor-1260	1.2494000	1.0000000	51456.000	0.01	24.94	15.00	2RDR	<-
(2)	1.2430000	1.0000000	69549.000	0.01	24.30	15.00	2RDR	<-
(3)	1.2331000	1.0000000	68296.000	0.01	23.31	15.00	2RDR	<-
(4)	1.2284000	1.0000000	107220.00	0.01	22.84	15.00	2RDR	<-
(5)	1.1798000	1.0000000	60308.000	0.01	17.98	15.00	2RDR	<-
Average %D: 22.680								
Tetrachloro-m-xylene	1.86e-002	2.e-002	1027000.0	0.01	-7.00	15.00	2RDR	
Decachlorobiphenyl	2.27e-002	2.e-002	1091900.0	0.01	13.50	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC06 Calibration Date: 11/03/07 Time: 0325

Lab File ID: 6AK2036 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF1.0000 or AMOUNT	CCAL RRF1.0000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	1.1711000	1.0000000	35112.000	0.01	17.11	15.00	2RDR	<-
(2)	1.1784000	1.0000000	30025.000	0.01	17.84	15.00	2RDR	<-
(3)	1.1736000	1.0000000	71081.000	0.01	17.36	15.00	2RDR	<-
(4)	1.1836000	1.0000000	32554.000	0.01	18.36	15.00	2RDR	<-
(5)	1.1716000	1.0000000	29528.000	0.01	17.16	15.00	2RDR	<-
Average %D: 17.570								
Aroclor-1260	1.1720000	1.0000000	52974.000	0.01	17.20	15.00	2RDR	<-
(2)	1.1454000	1.0000000	62225.000	0.01	14.54	15.00	2RDR	
(3)	1.1488000	1.0000000	62284.000	0.01	14.88	15.00	2RDR	
(4)	1.1517000	1.0000000	103200.00	0.01	15.17	15.00	2RDR	<-
(5)	1.1379000	1.0000000	62357.000	0.01	13.79	15.00	2RDR	
Average %D: 15.120								
Tetrachloro-m-xylene	2.15e-002	2.e-002	1267200.0	0.01	7.50	15.00	2RDR	
Decachlorobiphenyl	2.09e-002	2.e-002	1041400.0	0.01	4.50	15.00	2RDR	

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC06 Calibration Date: 11/03/07 Time: 0822

Lab File ID: 6AK1046 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

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

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	0.2835900	0.2500000	32544.000	0.01	13.44	15.00	2RDR	
(2)	0.2785300	0.2500000	23852.000	0.01	11.41	15.00	2RDR	
(3)	0.2836900	0.2500000	71404.000	0.01	13.48	15.00	2RDR	
(4)	0.3045500	0.2500000	37752.000	0.01	21.82	15.00	2RDR	<-
(5)	0.2677300	0.2500000	26008.000	0.01	7.09	15.00	2RDR	
Average %D: 13.440								
Aroclor-1260	0.2818600	0.2500000	51572.000	0.01	12.74	15.00	2RDR	
(2)	0.2786700	0.2500000	69336.000	0.01	11.47	15.00	2RDR	
(3)	0.2633100	0.2500000	62496.000	0.01	5.32	15.00	2RDR	
(4)	0.2587100	0.2500000	96544.000	0.01	3.48	15.00	2RDR	
(5)	0.2466100	0.2500000	53728.000	0.01	-1.36	15.00	2RDR	
Average %D: 6.3200								
Tetrachloro-m-xylene	4.98e-003	5.e-003	1000400.0	0.01	-0.40	15.00	2RDR	<-
Decachlorobiphenyl	4.58e-003	5.e-003	944600.00	0.01	-8.40	15.00	2RDR	<-

FORM VII PEST

FORM 7B
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

Instrument ID: GC06 Calibration Date: 11/03/07 Time: 0822

Lab File ID: 6AK2046 Init. Calib. Date(s): 10/24/07 10/25/07

Init. Calib. Times: 1915 0606

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Aroclor-1016	0.2638500	0.2500000	36280.000	0.01	5.54	15.00	2RDR	
(2)	0.2532300	0.2500000	28612.000	0.01	1.29	15.00	2RDR	
(3)	0.2587000	0.2500000	69396.000	0.01	3.48	15.00	2RDR	
(4)	0.2561600	0.2500000	31280.000	0.01	2.46	15.00	2RDR	
(5)	0.2480600	0.2500000	26756.000	0.01	-0.78	15.00	2RDR	
Average %D: 2.4000								
Aroclor-1260	0.2540600	0.2500000	51704.000	0.01	1.62	15.00	2RDR	
(2)	0.2571300	0.2500000	62568.000	0.01	2.85	15.00	2RDR	
(3)	0.2497600	0.2500000	58756.000	0.01	-0.10	15.00	2RDR	
(4)	0.2435800	0.2500000	93956.000	0.01	-2.57	15.00	2RDR	
(5)	0.2335200	0.2500000	54532.000	0.01	-6.59	15.00	2RDR	
Average %D: -0.960								
Tetrachloro-m-xylene	4.34e-003	5.e-003	1020600.0	0.01	-13.20	15.00	2RDR	<-
Decachlorobiphenyl	4.18e-003	5.e-003	921600.00	0.01	-16.40	15.00	2RDR	<-

FORM VII PEST

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 10/24/07 10/25/07

Instrument ID: GC06

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.28 DCB: 17.08

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		AR1660 0.05	10/24/07	1915	4.27	17.08
02		AR1660 0.1	10/24/07	1944	4.27	17.07
03		AR1660 0.25	10/24/07	2013	4.27	17.07
04		AR1660 1.0	10/24/07	2043	4.27	17.07
05		AR1660 2.5	10/24/07	2113	4.27	17.07
06		AR1660 10	10/24/07	2142	4.27	17.07
07		AR1016 1.0	10/24/07	2212		
08		AR1260 1.0	10/24/07	2241		
09		AR1221 1.0	10/24/07	2311		
10		AR1232 1.0	10/24/07	2340		
11		AR1242 1.0	10/25/07	0139		
12		AR1248 1.0	10/25/07	0308		
13		AR1254 1.0	10/25/07	0507		
14		AR1660 1.0	11/02/07	1111	4.27	17.07
15	WG44851-BLAN	WG44851-1	11/02/07	1832	4.27	17.06
16	WG44851-LCS	WG44851-2	11/02/07	1902	4.26	17.06
17		AR1660 0.25	11/02/07	2000	4.27	17.05
18	WG44851-LCSD	WG44851-3	11/02/07	2159	4.26	17.05
19	2W-RB-101907	SA6037-8	11/02/07	2229	4.26	17.05
20	2W-FB-101907	SA6037-9	11/02/07	2258	4.26	17.05

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

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

FORM VIII PEST

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 10/24/07 10/25/07

Instrument ID: GC06

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.51 DCB: 17.63

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		AR1660 0.05	10/24/07	1915	4.51	17.63
02		AR1660 0.1	10/24/07	1944	4.51	17.63
03		AR1660 0.25	10/24/07	2013	4.51	17.63
04		AR1660 1.0	10/24/07	2043	4.50	17.63
05		AR1660 2.5	10/24/07	2113	4.50	17.62
06		AR1660 10	10/24/07	2142	4.50	17.62
07		AR1016 1.0	10/24/07	2212		
08		AR1260 1.0	10/24/07	2241		
09		AR1221 1.0	10/24/07	2311		
10		AR1232 1.0	10/24/07	2340		
11		AR1242 1.0	10/25/07	0139		
12		AR1248 1.0	10/25/07	0308		
13		AR1254 1.0	10/25/07	0507		
14		AR1660 1.0	11/02/07	1111	4.49	17.61
15	WG44851-BLAN	WG44851-1	11/02/07	1832	4.49	17.60
16	WG44851-LCS	WG44851-2	11/02/07	1902	4.49	17.61
17		AR1660 0.25	11/02/07	2000	4.49	17.60
18	WG44851-LCSD	WG44851-3	11/02/07	2159	4.48	17.60
19	2W-RB-101907	SA6037-8	11/02/07	2229	4.48	17.60
20	2W-FB-101907	SA6037-9	11/02/07	2258	4.48	17.60

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

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

FORM VIII PEST

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

GC Column: ZB-MULTIRESIDUE-1 ID: 0.53 (mm) Init. Calib. Date(s): 10/24/07 10/25/07

Instrument ID: GC06

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.28 DCB: 17.08

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	WG45074-BLAN	WG45074-1	11/02/07	2328	4.26	17.05
02	WG45074-LCS	WG45074-2	11/02/07	2358	4.26	17.05
03	WG45074-LCSD	WG45074-3	11/03/07	0027	4.26	17.05
04	2W-SD-SD47-0	SA6037-1	11/03/07	0226	4.26	17.06
05		AR1660 1.0	11/03/07	0325	4.26	17.05
06	2W-FD-101907	SA6037-2	11/03/07	0524	4.26	17.05
07	2W-SD-SD44-0	SA6037-3	11/03/07	0553	4.26	17.05
08	2W-SD-SD43-0	SA6037-5	11/03/07	0623	4.26	17.05
09	2W-SD-SD48-0	SA6037-6	11/03/07	0653	4.26	17.05
10	2W-SD-SD48-0	SA6037-7	11/03/07	0722	4.26	17.05
11		AR1660 0.25	11/03/07	0822	4.27	17.05
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

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

FORM VIII PEST

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: CTO 439 NSB NEW LONDON SDG No.: SA6037

GC Column: ZB-MULTIRESIDUE-2 ID: 0.53 (mm) Init. Calib. Date(s): 10/24/07 10/25/07

Instrument ID: GC06

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.51 DCB: 17.63

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	WG45074-BLAN	WG45074-1	11/02/07	2328	4.48	17.60
02	WG45074-LCS	WG45074-2	11/02/07	2358	4.48	17.60
03	WG45074-LCSD	WG45074-3	11/03/07	0027	4.48	17.60
04	2W-SD-SD47-0	SA6037-1	11/03/07	0226	4.49	17.60
05		AR1660 1.0	11/03/07	0325	4.48	17.60
06	2W-FD-101907	SA6037-2	11/03/07	0524	4.49	17.60
07	2W-SD-SD44-0	SA6037-3	11/03/07	0553	4.48	17.60
08	2W-SD-SD43-0	SA6037-5	11/03/07	0623	4.49	17.60
09	2W-SD-SD48-0	SA6037-6	11/03/07	0653	4.49	17.60
10	2W-SD-SD48-0	SA6037-7	11/03/07	0722	4.49	17.60
11		AR1660 0.25	11/03/07	0822	4.48	17.60
12						
13						
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.07 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

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

FORM VIII PEST

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID

2W-FD-101907-01

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6037

Lab Sample ID: SA6037-2 Date(s) Analyzed: 11/03/07 11/03/07

Instrument ID (1): GC06 Instrument ID (2): GC06

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	11.19	11.13	11.27	353		
Aroclor-1260	2	12.48	12.43	12.57	346		
	3	13.97	13.93	14.07	453		
COLUMN 1	4	14.60	14.55	14.69	504		
	5					414	
	1	11.71	11.67	11.81	303		
	2	12.25	12.20	12.34	224		
	3	13.04	12.98	13.12	603		
COLUMN 2	4	14.41	14.37	14.51	455		
	5	15.23	15.18	15.32	568	431	4.0
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD43-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6037

Lab Sample ID: SA6037-5 Date(s) Analyzed: 11/03/07 11/03/07

Instrument ID (1): GC06 Instrument ID (2): GC06

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	11.19	11.13	11.27	280		
Aroclor-1260	2	12.48	12.43	12.57	320		
	3	13.99	13.93	14.07	267		
COLUMN 1	4	14.60	14.55	14.69	347		
	5					304	
	1	11.71	11.67	11.81	317		
	2	12.25	12.20	12.34	218		
	3	13.03	12.98	13.12	364		
COLUMN 2	4	14.41	14.37	14.51	228		
	5	15.24	15.18	15.32	318	289	5.0
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD44-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6037

Lab Sample ID: SA6037-3 Date(s) Analyzed: 11/03/07 11/03/07

Instrument ID (1): GC06 Instrument ID (2): GC06

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
Aroclor-1260 COLUMN 1	1	11.18	11.13	11.27	145		
	2	12.48	12.43	12.57	164		
	3	13.98	13.93	14.07	146		
	4	14.59	14.55	14.69	133		
	5					147	
COLUMN 2	1	11.71	11.67	11.81	130		
	2	12.25	12.20	12.34	111		
	3	14.41	14.37	14.51	148		
	4	15.22	15.18	15.32	191		
	5					145	1.4
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD47-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6037

Lab Sample ID: SA6037-1 Date(s) Analyzed: 11/03/07 11/03/07

Instrument ID (1): GC06 Instrument ID (2): GC06

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
Aroclor-1260 COLUMN 1	1	11.18	11.13	11.27	298		
	2	12.48	12.43	12.57	312		
	3	13.98	13.93	14.07	403		
	4	14.59	14.55	14.69	438		
	5					363	
COLUMN 2	1	11.71	11.67	11.81	269		
	2	12.25	12.20	12.34	205		
	3	13.04	12.98	13.12	508		
	4	14.41	14.37	14.51	407		
	5	15.22	15.18	15.32	526	383	5.4
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						
_____ COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE ID

2W-SD-SD48-0001

Lab Name: KATAHDIN ANALYTICAL SERVICES Project: CTO 439 NSB NE

Lab Code: KAS PO No.: SDG No.: SA6037

Lab Sample ID: SA6037-6 Date(s) Analyzed: 11/03/07 11/03/07

Instrument ID (1): GC06 Instrument ID (2): GC06

GC Column(1): ZB-MULTIRESIDUE-1 ID: 0.53(mm) GC Column(2): ZB-MULTIRESIDUE-2 ID: 0.53(mm

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	RPD
	1	11.19	11.13	11.27	418		
Aroclor-1260	2	12.48	12.43	12.57	551		
	3	13.97	13.93	14.07	664		
COLUMN 1	4	14.60	14.55	14.69	656		
	5					572	
	1	11.71	11.67	11.81	378		
	2	12.25	12.20	12.34	456		
	3	14.41	14.37	14.51	682		
COLUMN 2	4	15.23	15.18	15.32	784		
	5					575	0.5
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

SRV: 2W-SD-SD48-0001 [Aroclor-1260] = 580 ug/kg as reported by the lab.

Data File: \\Target_server\GG\chem\gc06.i\GC06AK01B1.b\6AK2043.d
Report Date: 05-Nov-2007 14:55

Katahdin Analytical Services

Data file : \\Target_server\GG\chem\gc06.i\GC06AK01B1.b\6AK2043.d
Lab Smp Id: SA6037-6 Client Smp ID: 2W-SD-SD48-0001
Inj Date : 03-NOV-2007 06:53
Operator : SJC Inst ID: gc06.i
Smp Info : PCBB082A.M,GC06AK01A1.B,1,SA6037-6
Misc Info : SW846 8082
Comment :
Method : \\Target_server\GG\chem\gc06.i\GC06AK01B1.b\PCBB082A.m
Meth Date : 05-Nov-2007 10:25 scolby Quant Type: ESTD
Cal Date : 25-OCT-2007 04:37 Cal File: 6AJ4176.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: SW8082.sub
Target Version: 4.12 Sample Matrix: SOIL
Processing Host: TARGET03

Concentration Formula: Amt * DF * 1000*Vt*(100/(100-M))/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.01000	Volume of final extract (L)(1000 low, 20
M	62.035	% Moisture
Vo	0.03000	Sample Weight
Cpnd Variable		Local Compound Variable ✓ Peak 1 ~~& Avg.~~ MDK 12-24-07

$(0.99993 \cdot 2.437\times10^{-11}) + (20888 \cdot 2.132\times10^{-5}) + (-2.55\times10^{-2}) =$

$\left(\frac{0.420\,ug}{mL} \cdot \frac{100\,mL}{1\,L} \cdot \frac{0.01\,L}{1}\right) / (0.03\,kg \cdot 0.36) =$

$\boxed{368\ ug/kg}$

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/mL)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.486	4.506	-0.020	73476	0.06711	58.9		
9 Aroclor-1260					CAS #: 11096-82-5		
11.706	11.736	-0.030	20888	0.43033	378	80.00- 120.00	100.00 (M) MS
12.253	12.270	-0.017	29763	0.51882	456	94.69- 142.03	142.49
13.045	13.045	0.000	0	0.000	0.000	89.28- 133.92	0.00
14.413	14.437	-0.024	70933	0.77741	682	72.48- 108.72	339.59
15.226	15.245	-0.019	49469	0.89320	784	0.00- 0.00	236.83
Average of Peak Concentrations =					575		
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
17.600	17.625	-0.025	46134	0.05166	45.4		(M)

SRL 11/5/07

Avg ✓ = (378+456+682+784)/4 = 575

QC Flag Legend

M - Compound response manually integrated.

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**A. BERNHARDT**	**DATE:**	**JANUARY 10, 2008**
FROM:	**TERRI L. SOLOMON**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – TAL METALS, pH, TOTAL ORGANIC CARBON, TOTAL SOLIDS**
CTO – 439 NSB NEW LONDON
SAMPLE DELIVERY GROUP (SDG) – SA6037

SAMPLES: 2/Aqueous/

2W-FB-101907-01 2W-RB-101907-01

7/Sediment/

2W-FD-101907-01 2W-SD-SD43-0001 2W-SD-SD44-0001
2W-SD-SD44-0002 2W-SD-SD47-0001 2W-SD-SD48-0001
2W-SD-SD48-0204

Overview

The sample set for NSB New London, CTO 439, SDG SA6037 consists of two (2) aqueous field blanks (2W-FB-101907 and 2W-RB-101907-01) and seven (7) sediment samples. One (1) field duplicate pair (2W-SD-SD47-0001 / 2W-FD-101907-01) was included within this SDG.

All samples, with the exception of 2W-SD-SD44-0002 were analyzed for target analyte list (TAL) metals, total organic carbon, total solids and pH. Sample 2W-SD-SD44-0002 was analyzed for total organic carbon and total solids. The samples were collected by Tetra Tech NUS on October 19, 2007 and analyzed by Katahdin Analytical Services under Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. TAL metals analyses were conducted using SW-846 method 6010B. Mercury analyses were conducted using 7470A. Total organic carbon analyses were conducted using Lloyd Kahn method. Total solids analyses were conducted using EPA SOW 788 and pH analyses were conducted using SW-846 method 9045C.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Verification Results
• Laboratory Method/Preparation Blank Analyses
• ICP Interference Check Sample Results
* • Laboratory Control Sample Duplicate Results
* • Field Duplicate Results
* • Detection Limits
* • Sample Quantitation

* - All quality control criteria were met for this parameter.

Laboratory Method/Preparation Blank Analyses

The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Antimony(4)	1.05 ug/L	0.525 mg/kg
Arsenic(4)	1.70 ug/L	0.85 mg/kg
Calcium(5)	3.702 mg/kg	18.51 mg/kg
Cadmium(4)	0.18 ug/L	0.09 mg/kg
Chromium(5)	0.099 mg/kg	0.495 mg/kg
Copper(5)	0.271 mg/kg	1.355 mg/kg
Iron(3)	35.56 ug/L	17.78 mg/kg
Iron(5)	1.434 mg/kg	7.17 mg/kg
Lead(2)	1.04 ug/L	0.52 mg/kg
Lead(4)	1.20 ug/L	0.60 mg/kg
Magnesium(5)	0.747 mg/kg	3.735 mg/kg
Magnesium(4)	8.83 ug/L	4.415 mg/kg
Manganese(5)	0.070 mg/kg	0.35 mg/kg
Sodium(5)	2.955 mg/kg	14.775 mg/kg
Thallium(1)	0.82 ug/L	0.41 mg/kg
Thallium(4)	0.98 ug/L	0.49 mg/kg
Zinc(5)	0.331 mg/kg	1.655 mg/kg

(1) Maximum concentration present affecting samples 2W-SD-SD48-0001, 2W-SD-SD43-0001 and 2W-SD-SD44-0001.
(2) Maximum concentration present affecting samples 2W-SD-SD48-0001 and 2W-SD-SD43-0001.
(3) Maximum concentration present affecting sample 2W-SD-SD44-0001.
(4) Maximum concentration present affecting samples 2W-SD-SD47-0001, 2W-FD-101907-01 and 2W-SD-SD48-0204.
(5) Maximum concentration present in a soil preparation blank.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive results less than the blank action level for antimony and thallium were qualified "U" as a result of laboratory blank contamination.

Blank results > 2X the negative instrument detection limit (IDL) exists for sodium (-29.25 ug/L) affecting samples 2W-SD-SD47-0001, 2W-FD-101907-01 and 2W-SD-SD48-0204. No validation actions were warranted as all sodium results were > CRDL in the affected samples.

ICP Interference Analysis

The interfering analyte iron was present in samples 2W-SD-SD43-0001 and 2W-SD-SD48-0001 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, manganese and zinc were present in the ICS solution at a concentration that exceeded 2X the absolute value of the Method Detection Limit (MDL). No interference effects exist for manganese and zinc in the affected samples.

The interfering analyte iron was present in sample 2W-SD-SD44-0001 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, antimony, cadmium, chromium, cobalt, copper, manganese, nickel, silver, thallium, vanadium and zinc were present in the ICS solution at a concentration that exceeded 2X the absolute value of the Method Detection Limit (MDL). Interference effects exist for antimony, cadmium, cobalt, nickel, silver and thallium in the affected sample. The positive results reported for cadmium, cobalt and nickel were qualified as estimated, "J". The nondetected results reported for antimony and silver were rejected for a more severe noncompliance. The positive result reported for thallium was qualified as a result of blank contamination.

The interfering analyte iron was present in sample 2W-SD-SD47-0001 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, arsenic, cadmium, chromium, cobalt, copper, manganese, nickel, selenium, silver, thallium, vanadium and zinc were present in the ICS solution at a concentration that exceeded 2X the absolute value of the Method Detection Limit (MDL). Interference effects exist for arsenic, cadmium, cobalt, selenium and silver in the affected sample. The positive results reported for arsenic, cadmium and cobalt were qualified as estimated, "J". The nondetected results reported for selenium and silver were rejected for a more severe noncompliance.

The interfering analyte iron was present in sample 2W-SD-SD48-0204 at a concentration that was greater than 50% of the iron concentration in the Interference Check Sample (ICS) solution. Several analytes, namely, arsenic, cadmium, chromium, cobalt, copper, manganese, nickel, selenium, silver, thallium, vanadium and zinc were present in the ICS solution at a concentration that exceeded 2X the absolute value of the Method Detection Limit (MDL). Interference effects exist for cadmium, selenium and silver in the affected sample. The positive results reported for cadmium and selenium were qualified as estimated, "J". The nondetected result reported for silver was qualified as estimated, "UJ".

Notes

The percent solids were < 30% for samples 2W-FD-101907-01, 2W-SD-SD43-0001, 2W-SD-SD44-0001 and 2W-SD-SD47-0001. The positive results reported in the affected samples were qualified as estimated, "J". The nondetected results reported in the affected samples were qualified as rejected, "UR".

Several analytes including aluminum, antimony, arsenic, beryllium, cadmium, calcium, chromium, copper, iron, magnesium, mercury, selenium, silver, sodium and zinc were present in the laboratory method / preparation blanks affecting the aqueous matrix. However, no validation actions were warranted as field blanks are not qualified for laboratory blank contamination.

Positive results reported for several analytes that were < 2X the instrument detection limit (IDL) were qualified as estimated, "J", as a result of uncertainty near the detection limit.

Several contract required detection limit (CRDL) percent recoveries for calcium, iron and magnesium were outside the 90-110% quality control limits. However, no validation actions are required for CRDL percent recovery noncompliances.

Executive Summary

Laboratory Performance: Several analytes were present in the laboratory method / preparation blanks.

Other Factors Affecting Data Quality: The interfering analyte iron was present in several samples.

The data for these analyses were reviewed with reference to the EPA Region I, " National Functional Guidelines for Inorganic Review", February 1989 and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", January 2006.

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 DOD QSM."

for

Tetra Tech NUS
Terri L. Solomon
Environmental Scientist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C – Regional Worksheets
4. Appendix D – Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS-GFAA MSA's r < 0.995 / ICP PDS Recovery Noncompliance
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O - Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DOT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 00873

SDG: SA6037 MEDIA: WATER DATA FRACTION: M

nsample	2W-FB-101907-01	nsample	2W-RB-101907-01
samp_date	10/19/2007	samp_date	10/19/2007
lab_id	SA6037-009	lab_id	SA6037-008
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	Val Qual	Qual Code
ALUMINUM	19.1	J	P
ANTIMONY	0.87	U	
ARSENIC	0.83	U	
BARIUM	0.45	U	
BERYLLIUM	0.12	U	
CADMIUM	0.12	J	P
CALCIUM	35.5		
CHROMIUM	0.81		
COBALT	0.26	U	
COPPER	0.62		
IRON	24.7		
LEAD	0.91	U	
MAGNESIUM	7.9	J	P
MANGANESE	2.9		
MERCURY	0.02	U	
NICKEL	0.43	J	P
POTASSIUM	86	U	
SELENIUM	1.5	U	
SILVER	0.46	U	
SODIUM	43.6		
THALLIUM	0.71	U	
VANADIUM	0.29	U	
ZINC	23.7		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	19	U	
ANTIMONY	0.87	U	
ARSENIC	0.83	U	
BARIUM	0.45	U	
BERYLLIUM	0.12	U	
CADMIUM	0.1	U	
CALCIUM	18.6		
CHROMIUM	0.58	J	P
COBALT	0.26	U	
COPPER	0.54		
IRON	31.7		
LEAD	0.91	U	
MAGNESIUM	7.8	J	P
MANGANESE	0.96	J	P
MERCURY	0.02	U	
NICKEL	0.41	U	
POTASSIUM	86	U	
SELENIUM	1.5	U	
SILVER	0.46	U	
SODIUM	46.5		
THALLIUM	0.71	U	
VANADIUM	0.29	U	
ZINC	15		

PROJ_NO: 00873

SDG: SA6037 MEDIA: SOIL DATA FRACTION: M

nsample	2W-FD-101907-01	nsample	2W-SD-SD43-0001	nsample	2W-SD-SD44-0001
samp_date	10/19/2007	samp_date	10/19/2007	samp_date	10/19/2007
lab_id	SA6037-002	lab_id	SA6037-005	lab_id	SA6037-003
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/KG	units	MG/KG	units	MG/KG
Pct_Solids	15.1	Pct_Solids	21.9	Pct_Solids	23.3
DUP_OF:	2W-SD-SD47-0001	DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	18400	J	Y
ANTIMONY	0.82	U	A
ARSENIC	7.5	J	Y
BARIUM	184	J	Y
BERYLLIUM	1.2	J	Y
CADMIUM	2.6	J	Y
CALCIUM	5590	J	Y
CHROMIUM	31.8	J	Y
COBALT	5.8	J	Y
COPPER	120	J	Y
IRON	36000	J	Y
LEAD	94.8	J	Y
MAGNESIUM	4660	J	Y
MANGANESE	298	J	Y
MERCURY	0.34	J	Y
NICKEL	36	J	Y
POTASSIUM	1810	J	Y
SELENIUM	0.75	J	PY
SILVER	0.18	UR	Y
SODIUM	1020	J	Y
THALLIUM	0.28	UR	Y
VANADIUM	85.4	J	Y
ZINC	322	J	Y

Parameter	Result	Val Qual	Qual Code
ALUMINUM	28600	J	Y
ANTIMONY	0.41	UR	Y
ARSENIC	16.6	J	Y
BARIUM	328	J	Y
BERYLLIUM	2.9	J	Y
CADMIUM	1.8	J	Y
CALCIUM	4490	J	Y
CHROMIUM	76.9	J	Y
COBALT	6.1	J	Y
COPPER	161	J	Y
IRON	70800	J	Y
LEAD	127	J	Y
MAGNESIUM	6580	J	Y
MANGANESE	262	J	Y
MERCURY	0.72	J	Y
NICKEL	30.9	J	Y
POTASSIUM	2850	J	Y
SELENIUM	0.71	UR	Y
SILVER	0.22	UR	Y
SODIUM	1010	J	Y
THALLIUM	0.44	J	PY
VANADIUM	289	J	Y
ZINC	654	J	Y

Parameter	Result	Val Qual	Qual Code
ALUMINUM	10400	J	Y
ANTIMONY	0.6	UR	Y
ARSENIC	12.8	J	Y
BARIUM	146	J	Y
BERYLLIUM	0.58	J	Y
CADMIUM	1.1	J	KY
CALCIUM	2020	J	Y
CHROMIUM	19.6	J	Y
COBALT	3.4	J	KY
COPPER	82.3	J	Y
IRON	164000	J	Y
LEAD	45.2	J	Y
MAGNESIUM	3360	J	Y
MANGANESE	265	J	Y
MERCURY	0.26	J	Y
NICKEL	19.6	J	KY
POTASSIUM	1740	J	Y
SELENIUM	1.03	UR	Y
SILVER	0.32	UR	Y
SODIUM	318	J	Y
THALLIUM	0.86	U	A
VANADIUM	51.3	J	Y
ZINC	600	J	Y

PROJ_NO: 00873

SDG: SA6037 MEDIA: SOIL DATA FRACTION: M

nsample	2W-SD-SD47-0001	nsample	2W-SD-SD48-0001	nsample	2W-SD-SD48-0204
samp_date	10/19/2007	samp_date	10/19/2007	samp_date	10/19/2007
lab_id	SA6037-001	lab_id	SA6037-006	lab_id	SA6037-007
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/KG	units	MG/KG	units	MG/KG
Pct_Solids	14.0	Pct_Solids	38.0	Pct_Solids	46.4
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	18100	J	Y
ANTIMONY	0.33	UR	Y
ARSENIC	9.1	J	KY
BARIUM	198	J	Y
BERYLLIUM	1.3	J	Y
CADMIUM	1.7	J	KY
CALCIUM	5770	J	Y
CHROMIUM	29.6	J	Y
COBALT	5.1	J	KY
COPPER	100	J	Y
IRON	45300	J	Y
LEAD	79.1	J	Y
MAGNESIUM	4500	J	Y
MANGANESE	352	J	Y
MERCURY	0.47	J	Y
NICKEL	33.2	J	Y
POTASSIUM	1790	J	Y
SELENIUM	0.57	UR	Y
SILVER	0.18	UR	Y
SODIUM	1070	J	Y
THALLIUM	0.27	UR	Y
VANADIUM	83.7	J	Y
ZINC	344	J	Y

Parameter	Result	Val Qual	Qual Code
ALUMINUM	15800		
ANTIMONY	0.26	U	
ARSENIC	11.5		
BARIUM	131		
BERYLLIUM	0.49		
CADMIUM	1.2		
CALCIUM	4330		
CHROMIUM	25.9		
COBALT	9.4		
COPPER	59.9		
IRON	40000		
LEAD	49.7		
MAGNESIUM	5410		
MANGANESE	812		
MERCURY	0.21		
NICKEL	30.2		
POTASSIUM	2150		
SELENIUM	0.45	U	
SILVER	0.14	U	
SODIUM	292		
THALLIUM	1		
VANADIUM	96.1		
ZINC	624		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	17400		
ANTIMONY	0.1	U	
ARSENIC	11.9		
BARIUM	77.1		
BERYLLIUM	0.5		
CADMIUM	0.54	J	K
CALCIUM	3430		
CHROMIUM	75.8		
COBALT	5.8		
COPPER	49.2		
IRON	22600		
LEAD	53.9		
MAGNESIUM	7100		
MANGANESE	219		
MERCURY	0.5		
NICKEL	19.4		
POTASSIUM	3690		
SELENIUM	0.31	J	KP
SILVER	0.05	UJ	K
SODIUM	1110		
THALLIUM	0.55	U	A
VANADIUM	57.4		
ZINC	74		

PROJ_NO: 00873

SDG: SA6037 MEDIA: SOIL DATA FRACTION: MISC

nsample	2W-FD-101907-01	nsample	2W-SD-SD43-0001	nsample	2W-SD-SD44-0001
samp_date	10/19/2007	samp_date	10/19/2007	samp_date	10/19/2007
lab_id	SA6037-2	lab_id	SA6037-5	lab_id	SA6037-3
qc_type	NM	qc_type	NM	qc_type	NM
Pct_Solids	15.1	Pct_Solids	21.9	Pct_Solids	23.3
DUP_OF:	2W-SD-SD47-0001	DUP_OF:		DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	5.9		
TOTAL ORGANIC CARBON	MG/KG	370000	J	Y
TOTAL SOLIDS	%	15		

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	5.5		
TOTAL ORGANIC CARBON	MG/KG	180000	J	Y
TOTAL SOLIDS	%	22		

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	5.7		
TOTAL ORGANIC CARBON	MG/KG	160000	J	Y
TOTAL SOLIDS	%	23		

PROJ_NO: 00873

SDG: SA6037 MEDIA: SOIL DATA FRACTION: MISC

nsample	2W-SD-SD44-0002
samp_date	10/19/2007
lab_id	SA6037-4
qc_type	NM
Pct_Solids	46.7
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
TOTAL ORGANIC CARBON	MG/KG	59000		
TOTAL SOLIDS	%	47		

nsample	2W-SD-SD47-0001
samp_date	10/19/2007
lab_id	SA6037-1
qc_type	NM
Pct_Solids	14.0
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	5.8		
TOTAL ORGANIC CARBON	MG/KG	400000	J	Y
TOTAL SOLIDS	%	14		

nsample	2W-SD-SD48-0001
samp_date	10/19/2007
lab_id	SA6037-6
qc_type	NM
Pct_Solids	38.0
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	6.5		
TOTAL ORGANIC CARBON	MG/KG	120000		
TOTAL SOLIDS	%	38		

PROJ_NO: 00873

SDG: SA6037 MEDIA: SOIL DATA FRACTION: MISC

nsample	2W-SD-SD48-0204
samp_date	10/19/2007
lab_id	SA6037-7
qc_type	NM
Pct_Solids	46.4
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
PH	S.U.	6.9		
TOTAL ORGANIC CARBON	MG/KG	64000		
TOTAL SOLIDS	%	46		

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-FB-101907-01

Matrix: WATER **SDG Name:** SA6037

Percent Solids: 0.00 **Lab Sample ID:** SA6037-009

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	19.1	B		P	1	300	19.00
7440-36-0	ANTIMONY, TOTAL	0.87	U		P	1	8.0	0.87
7440-38-2	ARSENIC, TOTAL	0.83	U		P	1	8.0	0.83
7440-39-3	BARIUM, TOTAL	0.45	U		P	1	5.0	0.45
7440-41-7	BERYLLIUM, TOTAL	0.12	U		P	1	5.0	0.12
7440-43-9	CADMIUM, TOTAL	0.12	B		P	1	10	0.10
7440-70-2	CALCIUM, TOTAL	35.5	B		P	1	50	7.70
7440-47-3	CHROMIUM, TOTAL	0.81	B		P	1	15	0.28
7440-48-4	COBALT, TOTAL	0.26	U		P	1	30	0.26
7440-50-8	COPPER, TOTAL	0.62	B		P	1	25	0.22
7439-89-6	IRON, TOTAL	24.7	B		P	1	100	5.20
7439-92-1	LEAD, TOTAL	0.91	U		P	1	5.0	0.91
7439-95-4	MAGNESIUM, TOTAL	7.9	B		P	1	50	4.90
7439-96-5	MANGANESE, TOTAL	2.9	B		P	1	5.0	0.57
7439-97-6	MERCURY, TOTAL	0.02	U		CV	1	0.20	0.02
7440-02-0	NICKEL, TOTAL	0.43	B		P	1	40	0.41
7440-09-7	POTASSIUM, TOTAL	86.00	U		P	1	1000	86.00
7782-49-2	SELENIUM, TOTAL	1.50	U		P	1	10	1.50
7440-22-4	SILVER, TOTAL	0.46	U		P	1	15	0.46
7440-23-5	SODIUM, TOTAL	43.6	B		P	1	1000	13.00
7440-28-0	THALLIUM, TOTAL	0.71	U		P	1	15	0.71
7440-62-2	VANADIUM, TOTAL	0.29	U		P	1	25	0.29
7440-66-6	ZINC, TOTAL	23.7	B		P	1	25	0.23

Bottle ID: A

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-RB-101907-01

Matrix: WATER **SDG Name:** SA6037

Percent Solids: 0.00 **Lab Sample ID:** SA6037-008

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	19.00	U		P	1	300	19.00
7440-36-0	ANTIMONY, TOTAL	0.87	U		P	1	8.0	0.87
7440-38-2	ARSENIC, TOTAL	0.83	U		P	1	8.0	0.83
7440-39-3	BARIUM, TOTAL	0.45	U		P	1	5.0	0.45
7440-41-7	BERYLLIUM, TOTAL	0.12	U		P	1	5.0	0.12
7440-43-9	CADMIUM, TOTAL	0.10	U		P	1	10	0.10
7440-70-2	CALCIUM, TOTAL	18.6	B		P	1	50	7.70
7440-47-3	CHROMIUM, TOTAL	0.58	B		P	1	15	0.28
7440-48-4	COBALT, TOTAL	0.26	U		P	1	30	0.26
7440-50-8	COPPER, TOTAL	0.54	B		P	1	25	0.22
7439-89-6	IRON, TOTAL	31.7	B		P	1	100	5.20
7439-92-1	LEAD, TOTAL	0.91	U		P	1	5.0	0.91
7439-95-4	MAGNESIUM, TOTAL	7.8	B		P	1	50	4.90
7439-96-5	MANGANESE, TOTAL	0.96	B		P	1	5.0	0.57
7439-97-6	MERCURY, TOTAL	0.02	U		CV	1	0.20	0.02
7440-02-0	NICKEL, TOTAL	0.41	U		P	1	40	0.41
7440-09-7	POTASSIUM, TOTAL	86.00	U		P	1	1000	86.00
7782-49-2	SELENIUM, TOTAL	1.50	U		P	1	10	1.50
7440-22-4	SILVER, TOTAL	0.46	U		P	1	15	0.46
7440-23-5	SODIUM, TOTAL	46.5	B		P	1	1000	13.00
7440-28-0	THALLIUM, TOTAL	0.71	U		P	1	15	0.71
7440-62-2	VANADIUM, TOTAL	0.29	U		P	1	25	0.29
7440-66-6	ZINC, TOTAL	15.0	B		P	1	25	0.23

Bottle ID: A

Comments:

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-FD-101907-01

Matrix: SOIL **SDG Name:** SA6037

Percent Solids: 15.0 **Lab Sample ID:** SA6037-002

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	18400			P	1	120	7.51
7440-36-0	ANTIMONY, TOTAL	0.82	B		P	1	3.2	0.34
7440-38-2	ARSENIC, TOTAL	7.5			P	1	3.2	0.33
7440-39-3	BARIUM, TOTAL	184			P	1	2.0	0.18
7440-41-7	BERYLLIUM, TOTAL	1.2	B		P	1	2.0	0.05
7440-43-9	CADMIUM, TOTAL	2.6	B		P	1	4.0	0.04
7440-70-2	CALCIUM, TOTAL	5590			P	1	20	3.04
7440-47-3	CHROMIUM, TOTAL	31.8			P	1	5.9	0.11
7440-48-4	COBALT, TOTAL	5.8	B		P	1	12	0.10
7440-50-8	COPPER, TOTAL	120			P	1	9.9	0.09
7439-89-6	IRON, TOTAL	36000			P	1	40	2.06
7439-92-1	LEAD, TOTAL	94.8			P	1	2.0	0.36
7439-95-4	MAGNESIUM, TOTAL	4660			P	1	20	1.94
7439-96-5	MANGANESE, TOTAL	298			P	1	2.0	0.23
7439-97-6	MERCURY, TOTAL	0.34			CV	1	0.17	0.02
7440-02-0	NICKEL, TOTAL	36.0			P	1	16	0.16
7440-09-7	POTASSIUM, TOTAL	1810			P	1	400	33.99
7782-49-2	SELENIUM, TOTAL	0.75	B		P	1	4.0	0.59
7440-22-4	SILVER, TOTAL	0.18	U		P	1	5.9	0.18
7440-23-5	SODIUM, TOTAL	1020			P	1	400	5.14
7440-28-0	THALLIUM, TOTAL	0.28	U		P	1	5.9	0.28
7440-62-2	VANADIUM, TOTAL	85.4			P	1	9.9	0.11
7440-66-6	ZINC, TOTAL	322			P	1	9.9	0.09

Bottle ID: A

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD43-0001

Matrix: SOIL **SDG Name:** SA6037

Percent Solids: 21.9 **Lab Sample ID:** SA6037-005

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	28600			P	1	71	4.49
7440-36-0	ANTIMONY, TOTAL	0.41	U		P	2	3.8	0.41
7440-38-2	ARSENIC, TOTAL	16.6			P	2	3.8	0.39
7440-39-3	BARIUM, TOTAL	328			P	1	1.2	0.11
7440-41-7	BERYLLIUM, TOTAL	2.9			P	1	1.2	0.03
7440-43-9	CADMIUM, TOTAL	1.8	B		P	2	4.7	0.05
7440-70-2	CALCIUM, TOTAL	4490			P	2	24	3.64
7440-47-3	CHROMIUM, TOTAL	76.9			P	2	7.1	0.13
7440-48-4	COBALT, TOTAL	6.1	B		P	2	14	0.12
7440-50-8	COPPER, TOTAL	161			P	1	5.9	0.05
7439-89-6	IRON, TOTAL	70800			P	1	24	1.23
7439-92-1	LEAD, TOTAL	127			P	2	2.4	0.43
7439-95-4	MAGNESIUM, TOTAL	6580			P	2	24	2.32
7439-96-5	MANGANESE, TOTAL	262			P	1	1.2	0.13
7439-97-6	MERCURY, TOTAL	0.72			CV	1	0.14	0.01
7440-02-0	NICKEL, TOTAL	30.9			P	2	19	0.19
7440-09-7	POTASSIUM, TOTAL	2850			P	1	240	20.33
7782-49-2	SELENIUM, TOTAL	0.71	U		P	2	4.7	0.71
7440-22-4	SILVER, TOTAL	0.22	U		P	2	7.1	0.22
7440-23-5	SODIUM, TOTAL	1010			P	1	240	3.07
7440-28-0	THALLIUM, TOTAL	0.44	B		P	2	7.1	0.34
7440-62-2	VANADIUM, TOTAL	289			P	2	12	0.14
7440-66-6	ZINC, TOTAL	654			P	1	5.9	0.05

Bottle ID: A

Comments:

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD44-0001

Matrix: SOIL **SDG Name:** SA6037

Percent Solids: 23.3 **Lab Sample ID:** SA6037-003

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	10400			P	1	69	4.37
7440-36-0	ANTIMONY, TOTAL	0.60	U		P	3	5.5	0.60
7440-38-2	ARSENIC, TOTAL	12.8			P	3	5.5	0.57
7440-39-3	BARIUM, TOTAL	146			P	1	1.1	0.10
7440-41-7	BERYLLIUM, TOTAL	0.58	B		P	1	1.1	0.03
7440-43-9	CADMIUM, TOTAL	1.1	B		P	3	6.9	0.07
7440-70-2	CALCIUM, TOTAL	2020			P	1	11	1.77
7440-47-3	CHROMIUM, TOTAL	19.6			P	3	10	0.19
7440-48-4	COBALT, TOTAL	3.4	B		P	3	21	0.18
7440-50-8	COPPER, TOTAL	82.3			P	1	5.7	0.05
7439-89-6	IRON, TOTAL	164000			P	3	69	3.59
7439-92-1	LEAD, TOTAL	45.2			P	1	1.1	0.21
7439-95-4	MAGNESIUM, TOTAL	3360			P	1	11	1.13
7439-96-5	MANGANESE, TOTAL	265			P	1	1.1	0.13
7439-97-6	MERCURY, TOTAL	0.26			CV	1	0.13	0.01
7440-02-0	NICKEL, TOTAL	19.6	B		P	3	28	0.28
7440-09-7	POTASSIUM, TOTAL	1740			P	1	230	19.77
7782-49-2	SELENIUM, TOTAL	1.03	U		P	3	6.9	1.03
7440-22-4	SILVER, TOTAL	0.32	U		P	3	10	0.32
7440-23-5	SODIUM, TOTAL	318			P	1	230	2.99
7440-28-0	THALLIUM, TOTAL	0.86	B		P	3	10	0.49
7440-62-2	VANADIUM, TOTAL	51.3			P	3	17	0.20
7440-66-6	ZINC, TOTAL	600			P	1	5.7	0.05

Bottle ID: A

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD47-0001

Matrix: SOIL **SDG Name:** SA6037

Percent Solids: 14.0 **Lab Sample ID:** SA6037-001

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	18100			P	1	110	7.23
7440-36-0	ANTIMONY, TOTAL	0.33	U		P	1	3.0	0.33
7440-38-2	ARSENIC, TOTAL	9.1			P	1	3.0	0.32
7440-39-3	BARIUM, TOTAL	198			P	1	1.9	0.17
7440-41-7	BERYLLIUM, TOTAL	1.3	B		P	1	1.9	0.05
7440-43-9	CADMIUM, TOTAL	1.7	B		P	1	3.8	0.04
7440-70-2	CALCIUM, TOTAL	5770			P	1	19	2.93
7440-47-3	CHROMIUM, TOTAL	29.6			P	1	5.7	0.11
7440-48-4	COBALT, TOTAL	5.1	B		P	1	11	0.10
7440-50-8	COPPER, TOTAL	100			P	1	9.5	0.08
7439-89-6	IRON, TOTAL	45300			P	1	38	1.98
7439-92-1	LEAD, TOTAL	79.1			P	1	1.9	0.35
7439-95-4	MAGNESIUM, TOTAL	4500			P	1	19	1.87
7439-96-5	MANGANESE, TOTAL	352			P	1	1.9	0.22
7439-97-6	MERCURY, TOTAL	0.47			CV	1	0.22	0.02
7440-02-0	NICKEL, TOTAL	33.2			P	1	15	0.16
7440-09-7	POTASSIUM, TOTAL	1790			P	1	380	32.74
7782-49-2	SELENIUM, TOTAL	0.57	U		P	1	3.8	0.57
7440-22-4	SILVER, TOTAL	0.18	U		P	1	5.7	0.18
7440-23-5	SODIUM, TOTAL	1070			P	1	380	4.95
7440-28-0	THALLIUM, TOTAL	0.27	U		P	1	5.7	0.27
7440-62-2	VANADIUM, TOTAL	83.7			P	1	9.5	0.11
7440-66-6	ZINC, TOTAL	344			P	1	9.5	0.09

Bottle ID: A

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD48-0001

Matrix: SOIL **SDG Name:** SA6037

Percent Solids: 38.0 **Lab Sample ID:** SA6037-006

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	15800			P	1	45	2.84
7440-36-0	ANTIMONY, TOTAL	0.26	U		P	2	2.4	0.26
7440-38-2	ARSENIC, TOTAL	11.5			P	2	2.4	0.25
7440-39-3	BARIUM, TOTAL	131			P	1	0.75	0.07
7440-41-7	BERYLLIUM, TOTAL	0.49	B		P	1	0.75	0.02
7440-43-9	CADMIUM, TOTAL	1.2	B		P	2	3.0	0.03
7440-70-2	CALCIUM, TOTAL	4330			P	2	15	2.30
7440-47-3	CHROMIUM, TOTAL	25.9			P	2	4.5	0.08
7440-48-4	COBALT, TOTAL	9.4			P	2	9.0	0.08
7440-50-8	COPPER, TOTAL	59.9			P	1	3.7	0.03
7439-89-6	IRON, TOTAL	40000			P	1	15	0.78
7439-92-1	LEAD, TOTAL	49.7			P	2	1.5	0.27
7439-95-4	MAGNESIUM, TOTAL	5410			P	2	15	1.47
7439-96-5	MANGANESE, TOTAL	812			P	1	0.75	0.09
7439-97-6	MERCURY, TOTAL	0.21			CV	1	0.079	0.01
7440-02-0	NICKEL, TOTAL	30.2			P	2	12	0.12
7440-09-7	POTASSIUM, TOTAL	2150			P	1	150	12.87
7782-49-2	SELENIUM, TOTAL	0.45	U		P	2	3.0	0.45
7440-22-4	SILVER, TOTAL	0.14	U		P	2	4.5	0.14
7440-23-5	SODIUM, TOTAL	292			P	1	150	1.95
7440-28-0	THALLIUM, TOTAL	1.0	B		P	2	4.5	0.21
7440-62-2	VANADIUM, TOTAL	96.1			P	2	7.5	0.09
7440-66-6	ZINC, TOTAL	624			P	1	3.7	0.03

Bottle ID: A

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** 2W-SD-SD48-0204

Matrix: SOIL **SDG Name:** SA6037

Percent Solids: 46.4 **Lab Sample ID:** SA6037-007

Concentration Units : mg/Kgdrywt

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7429-90-5	ALUMINUM, TOTAL	17400			P	1	34	2.19
7440-36-0	ANTIMONY, TOTAL	0.10	U		P	1	0.92	0.10
7440-38-2	ARSENIC, TOTAL	11.9			P	1	0.92	0.10
7440-39-3	BARIUM, TOTAL	77.1			P	1	0.58	0.05
7440-41-7	BERYLLIUM, TOTAL	0.50	B		P	1	0.58	0.01
7440-43-9	CADMIUM, TOTAL	0.54	B		P	1	1.2	0.01
7440-70-2	CALCIUM, TOTAL	3430			P	1	5.8	0.89
7440-47-3	CHROMIUM, TOTAL	75.8			P	1	1.7	0.03
7440-48-4	COBALT, TOTAL	5.8			P	1	3.4	0.03
7440-50-8	COPPER, TOTAL	49.2			P	1	2.9	0.03
7439-89-6	IRON, TOTAL	22600			P	1	12	0.60
7439-92-1	LEAD, TOTAL	53.9			P	1	0.58	0.10
7439-95-4	MAGNESIUM, TOTAL	7100			P	1	5.8	0.56
7439-96-5	MANGANESE, TOTAL	219			P	1	0.58	0.07
7439-97-6	MERCURY, TOTAL	0.50			CV	1	0.071	0.01
7440-02-0	NICKEL, TOTAL	19.4			P	1	4.6	0.05
7440-09-7	POTASSIUM, TOTAL	3690			P	1	120	9.91
7782-49-2	SELENIUM, TOTAL	0.31	B		P	1	1.2	0.17
7440-22-4	SILVER, TOTAL	0.05	U		P	1	1.7	0.05
7440-23-5	SODIUM, TOTAL	1110			P	1	120	1.50
7440-28-0	THALLIUM, TOTAL	0.55	B		P	1	1.7	0.08
7440-62-2	VANADIUM, TOTAL	57.4			P	1	2.9	0.03
7440-66-6	ZINC, TOTAL	74.0			P	1	2.9	0.03

Bottle ID: B

Comments:

FORM I - IN

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: SA6037-2
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439-NSB New London
SDG: SA6037

Sample Description	Matrix	Date Sampled	Date Received
2W-FD-101907-01	SL	19-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	370000 ug/gdrywt	2600	LLOYDKAHN	WG45151	31-OCT-07 11:04:21	N/A	N/A	KR	
Total Solids	15. %	1	CLP SOW 788	WG44913	25-OCT-07 09:10:00	CLP SOW 788	24-OCT-07	JF	
pH(Soil)	5.9 pH	.1	SW846 9045C	WG44992	24-OCT-07 12:44:00	SW846 9045C	24-OCT-07	JF	

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: SA6037-5
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439-NSB New London
SDG: SA6037

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD43-0001	SL	19-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	180000 ug/gdrywt	1800	LLOYDKAHN	WG45151	31-OCT-07 11:28:56	N/A	N/A	KR	
Total Solids	22. %	1	CLP SOW 788	WG44913	25-OCT-07 09:13:00	CLP SOW 788	24-OCT-07	JF	
pH(Soil)	5.5 pH	.1	SW846 9045C	WG44992	24-OCT-07 12:50:00	SW846 9045C	24-OCT-07	JF	

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: SA6037-3
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439-NSB New London
SDG: SA6037

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD44-0001	SL	19-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	160000 ug/gdrywt	1700	LLOYDKAHN	WG45151	31-OCT-07 11:12:28	N/A	N/A	KR	
Total Solids	23. %	1	CLP SOW 788	WG44913	25-OCT-07 09:11:00	CLP SOW 788	24-OCT-07	JF	
pH(Soil)	5.7 pH	.1	SW846 9045C	WG44992	24-OCT-07 12:46:00	SW846 9045C	24-OCT-07	JF	

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: SA6037-4
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439-NSB New London
SDG: SA6037

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD44-0002	SL	19-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	59000 ug/gdrywt	860	LLOYDKAHN	WG45151	31-OCT-07 11:21:16	N/A	N/A	KR	
Total Solids	47. %	1	CLP SOW 788	WG44913	25-OCT-07 09:12:00	CLP SOW 788	24-OCT-07	JF	

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: SA6037-1
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439-NSB New London
SDG: SA6037

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD47-0001	SL	19-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	400000 ug/gdrywt	2800	LLOYDKAHN	WG45151	31-OCT-07 09:51:27	N/A	N/A	KR	
Total Solids	14. %	1	CLP SOW 788	WG44913	25-OCT-07 09:09:00	CLP SOW 788	24-OCT-07	JF	
pH(Soil)	5.8 pH	.1	SW846 9045C	WG44992	24-OCT-07 12:40:00	SW846 9045C	24-OCT-07	JF	

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: SA6037-6
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439-NSB New London
SDG: SA6037

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD48-0001	SL	19-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	120000 ug/gdrywt	1000	LLOYDKAHN	WG45151	31-OCT-07 11:37:37	N/A	N/A	KR	
Total Solids	38. %	1	CLP SOW 788	WG44913	25-OCT-07 09:15:00	CLP SOW 788	24-OCT-07	JF	
pH(Soil)	6.5 pH	.1	SW846 9045C	WG44992	24-OCT-07 12:52:00	SW846 9045C	24-OCT-07	JF	

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: SA6037-7
Report Date: 01-NOV-07
Client PO: 1000693 21-439
Project: CTO 439-NSB New London
SDG: SA6037

Sample Description	Matrix	Date Sampled	Date Received
2W-SD-SD48-0204	SL	19-OCT-07	22-OCT-07

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
TOC In Soil	64000 ug/gdrywt	860	LLOYDKAHN	WG45151	31-OCT-07 11:46:25	N/A	N/A	KR	
Total Solids	46. %	1	CLP SOW 788	WG44913	25-OCT-07 09:16:00	CLP SOW 788	24-OCT-07	JF	
pH(Soil)	6.9 pH	.1	SW846 9045C	WG44992	24-OCT-07 12:54:00	SW846 9045C	24-OCT-07	JF	

APPENDIX C
REGION I WORKSHEETS

REGION I
Data Review Worksheets

Site Name New London
Reference Number

REGION I REVIEW OF INORGANIC CONTRACT LABORATORY DATA PACKAGE

The hardcopied (laboratory name) Kathdin data package receiv at Region I has been reviewed and the quality assurance and performan data summarized. The data review included:

Case No.
SDG. No. SA6037
No. of Samples 9

SAS No.
Matrix Aqueous Soil

Sampling Date(s) Oct 19, 2007
Shipping Date(s)
Date Rec'd by Lab

Traffic Report Nos:

Trip Blank No.:
Equipment Blank No.:
Field Dup Nos:

SOW No. _____ requires that specific analytical work be done and th associated reports be provided by the laboratory to the Regions, EMS LV, and SMO. The general criteria used to determine the performance we based on an examination of:

- Data Completeness
- Holding Times
- Calibrations
- Blanks
- ICP Interference Check Results
- Matrix Spike Recoveries
- Laboratory Duplicates
- Field Duplicates
- Lab Control Sample Results
- Furnace AA Results
- ICP Serial Dilution Results
- Detection Limit Results
- Sample Quantitation

Overall Comments:

Definitions and Qualifiers:

A - Acceptable data.
J - Approximate data due to quality control criteria.
R - Reject data due to quality control criteria.
U - Analyte not detected.

Reviewer: Dave Solomon

Date: 12-17-07

REGION I
Data Review Worksheets

I. DATA COMPLETENESS

N/A

MISSING INFORMATION	DATE LAB CONTACTED	DATE REC'D

see validation letter

II. HOLDING TIMES

Complete table for all samples and circle the analysis date for samples not within criteria.

SAMPLE ID	DATE SAMPLED	HG DATE ANALYSIS	CYANIDE DATE ANALYSIS	OTHERS DATE ANALYSIS	pH	ACTION

METALS - 180 DAYS FROM SAMPLE COLLECTION
MERCURY - 28 DAYS FROM SAMPLE COLLECTION
CYANIDE - 14 DAYS FROM SAMPLE COLLECTION

ACTION:

1. If holding times are exceeded all positive results ar estimated (J) and non-detects are estimated (UJ).

2. If holding times are grossly exceeded, the reviewer may determine that non-detects are unusable (R).

REGION I
Data Review worksheets

See validation letter

III A. INSTRUMENT CALIBRATION (Section 1)

1. Recovery Criteria

List the analytes which did not meet the percent recovery (%R) criteri for Initial or Continuing Calibration.

DATE	ICV/CCV#	ANALYTE	%R	ACTION	SAMPLES AFFECTED

ACTIONS:

If any analyte does not meet the %R criteria follow the actions state below:

For Positive Results:

	Accept	Estimate (J)	Reject (R)
Metals	90-110%R	75-89%R, 111-125%R	<75%R, >125%R
Mercury	80-120%R	65-79%R, 121-135%R	<65%R, >135%R
Cyanide	85-115%R	70-84%R, 116-130%R	<70%R, >130%R

For Non-detected Results:

	Accept	Estimate (UJ)	Reject (R)
Metals	90-125%R	75-89%R	<75%R, >125%R
Mercury	80-135%R	65-79%R	<65%R, >135%R
Cyanide	85-130%R	70-84%R	<70%R, >130%R

REGION I
Data Review Worksheets

See validation letter

III B. INSTRUMENT CALIBRATION (Section 2)

2. Analytical Sequence

A. Did the laboratory use the proper number of standards for calibration as described in the SOW? Yes or N

B. Were calibrations performed at the beginning of each analysis? Yes or N

C. Were calibration standards analyzed at the beginning of sample analysis and at a minimum frequency of ten percent or every two hours during analysis, whichever is more frequent? Yes or N

D. Were the correlation coefficients for the calibration curves for AA, Hg, and CN $\geq$ 0.995? Yes or N

E. Was a standard at 2xCRDL analyzed for all ICP analyses? Yes or N

If No,

The data may be affected. Use professional judgement to determin the severity of the effect and qualify the data accordingly. Discus any actions below and list the samples affected.

_____

_____

_____

_____

REGION I
Data Review Worksheet

see validation letter

IV A. BLANK ANALYSIS RESULTS (Sections 1-3)

List the blank contamination in Sections 1 & 2 below. A separa worksheet should be used for soil and water blanks.

1. Laboratory Blanks

MATRIX: _____

DATE	ICB/CCB#	PREP BL	ANALYTE	CONC./UNITS

2. Equipment/Trip Blanks

DATE	EQUIP BL#	ANALYTE	CONC./UNITS

3. Frequency Requirements

A. Was a preparation blank analyzed for each matrix, for every 20 samples and for each digestion batch? Yes or N

B. Was a calibration blank run every 10 samples or every 2 hours whichever is more frequent? Yes or N

If No,

The data may be affected. Use professional judgement to determin the severity of the effect and qualify the data accordingly. Discus any actions below, and list the samples affected.

_____

_____

REGION I
Data Review Worksheets

see validation letter

IV B. BLANK ANALYSIS RESULTS (Section 4)

4. Blank Actions

The Action Levels for any analyte is equal to five times the highest concentration of that element's contamination in any blank. The action level for samples which have been concentrated or diluted should be multiplied by the concentration/dilution factor. No positive sample result should be reported unless the concentration of the analyte in the sample exceeds the Action Level (AL). Specific actions are as follows:

1. When the concentration is greater than the IDL, but less than the Action Level, report the sample concentration detected with a U.
2. When the sample concentration is greater than the Action Level, report the sample concentration unqualified.

MATRIX: _____

ELEMENT	MAX. CONC./ UNITS	AL/ UNITS

MATRIX: _____

ELEMENT	MAX. CONC./ UNITS	AL/ UNITS

NOTE: Blanks analyzed during a soil case must be converted to mg/kg in order to compare them with the sample results.

$$\text{Conc. in ug/L} \times \frac{\text{Volume diluted to (200ml)}}{\text{Weight digested (1gram)}} \times \frac{1\text{L}}{1000\text{ml}} \times \frac{1000\text{gm}}{1\text{kg}} \times \frac{1\text{mg}}{1000\text{ug}} = \text{mg/kg}$$

Multiplying this result by 5 to arrive at the action level gives a final result in mg/kg which can then be compared to sample results.

REGION I
Data Review Worksheets

see validation letter

V A. ICP INTERFERENCE CHECK SAMPLE (Sections 1 & 2)

1. Recovery Criteria

List any elements in the ICS AB solution which did not meet the criteri for %R.

DATE	ELEMENT	%R	ACTION	SAMPLES AFFECTED

ACTIONS:

If an element does not meet the %R criteria , follow the actions state below:

	PERCENT RECOVERY		
	<50%	50-79%	>120%
Positive Sample Results	R	J	J
Non-detected Sample Results	R	UJ	A

2. Frequency Requirements

Were Interference QC samples run at the beginning and end of each sample analysis run or a minimum of twice per 8 hour working shift, whichever is more frequent? Yes or No

If no,

The data may be affected. Use professional judgement to determine the severity of the effect and qualify the data accordingly. Discuss any actions below and list the samples affected.

_____

_____

_____

REGION I
Data Review Worksheets

See validation letter

V B. ICP INTERFERENCE CHECK SAMPLE (Section 3)

3. Report the concentration of any elements detected in the IC solution > 2xIDL that should not be present.

ELEMENT	CONC. DETECTED IN THE ICS	CONC. OF INTERFERENTS IN THE ICS			
		AL	CA	FE	MG

Estimate the concentration produced by the interfering element in affected samples. See guidelines for examples. List the samp affected by interferences below:

SAMPLE AFFECTED	ELEMENT AFFECTED	SAMPLE CONC. (ug/L)	SAMPLE INTERFERENT CONC.				ESTIMATED INTERF. (ug/L)
			AL	CA	FE	MG	

ACTIONS:

1. In general, the sample data can be accepted without qualification the sample concentrations of Al, Ca, Fe, and Mg are less than 50% their respective levels in the ICS solution.

2. Estimate (J) positive results for affected elements for samples w levels of interferents 50% or more of that in the ICS solution.

3. Reject (R) positive results if the reported concentration is entirely to the interfering element.

4. Estimate (UJ) non-detected results for which false negatives suspect.

Give explanations for any actions taken below:

_____

_____

_____

See validation letter

V B. ICP INTERFERENCE CHECK SAMPLE (Supplemental)

E^1	Sample	Rept. Sample Conc.	Intf.	Intf. Level ICS	Conc. E^1 ICS	Intf. Level Sample	Est. Elem. Intf.	Q^2

Formula:

$$\frac{\text{Conc. Affected Element in ICS} \times \text{Intf. Level in Sample}}{\text{Maximum Intf. Level ICS}} = \text{Est. Elem. Intf. in Sample}$$

E^1 - Affected Element

Q^2 - Qualifier Applied

VI. MATRIX SPIKE

See N/A

TR # _____

MATRIX: _____

1. Recovery Criteria

List the percent recoveries for analytes which did not meet the required criteria.

S - amount of spike added
SSR - spikes sample result
SR - sample result

Analyte	SSR	SR	S	%R	Action

Matrix Spike Actions apply to all samples of the same matrix.

ACTIONS:

1. If the sample concentration exceeds the spike concentration by a factor of 4 or more, no action is taken.

2. If any analyte does not meet the %R criteria follow the actions stated below:

	PERCENT RECOVERY		
	<30%	30%-74%	>125%
Positive Sample Results	J	J	J
Non-detected Results	R	UJ	A

2. Frequency Criteria

A. Was a matrix spike prepared at the required frequency? Yes or No

B. Was a post digestion spike analyzed for elements that did not meet required criteria for matrix spike recovery? Yes or No

A separate worksheet should be used for each matrix spike pair.

VII. LABORATORY DUPLICATES

N/A

List the concentrations of any analyte not meeting the criteria for duplicate precision. For soil duplicates, calculate the CRDL in mg/kg using the sample weight, volume and percent solids data for the sample. Indicate what criteria was used to evaluate precision by circling either the RPD or CRDL for each element.

MATRIX: _____

Element	CRDL water ug/L	CRDL soil mg/kg	Sample #	Duplicate#	RPD	Action
Aluminum	200					
Antimony	60					
Arsenic	10					
Barium	200					
Beryllium	5					
Cadmium	5					
Calcium	5000					
Chromium	10					
Cobalt	50					
Copper	25					
Iron	100					
Lead	5					
Magnesium	5000					
Manganese	15					
Mercury	0.2					
Nickel	40					
Potassium	5000					
Selenium	5					
Silver	10					
Sodium	5000					
Thallium	10					
Vanadium	50					
Zinc	20					
Cyanide	10					

Laboratory Duplicate Actions should be applied to all other samples of the same matrix type.

ACTIONS:

1. Estimate (J) positive results for elements which have an RPD >20% for waters and >35% for soils.

2. If sample results are less than 5x the CRDL, estimate (J) positive results for elements whose absolute difference is >CRDL, (2xCRDL for soils). If both samples are non-detected, the RPD is not calculated (NC).

REGION I
Data Review Worksheets

VIII. FIELD DUPLICATES

See validation letter

List the concentrations of all analytes in the field duplicate pair. For soil duplicates, calculate the CRDL in mg/kg using the sample weigh volume and percent solids data for the sample. Indicate what criter was used to evalute the precision by circling either the RPD or CRDL f each element.

MATRIX: _____

Element	CRDL water ug/L	CRDL soil mg/kg	Sample #	Duplicate#	RPD	Action
Aluminum	200					
Antimony	60					
Arsenic	10					
Barium	200					
Beryllium	5					
Cadmium	5					
Calcium	5000					
Chromium	10					
Cobalt	50					
Copper	25					
Iron	100					
Lead	5					
Magnesium	5000					
Manganese	15					
Mercury	0.2					
Nickel	40					
Potassium	5000					
Selenium	5					
Silver	10					
Sodium	5000					
Thallium	10					
Vanadium	50					
Zinc	20					
Cyanide	10					

Field Duplicate Actions should be applied to all other samples of t same matrix type.

ACTIONS:

1. Estimate (J) positive results for elements which have an RPD >3 for waters and >50% for soils.

2. If sample results are less than 5x the CRDL, estimate (J) positi results and (UJ) nondetected results for elements whose absolu difference is >2xCRDL, (4xCRDL for soils). If both samples are nc detected, the RPD is not calculated (NC).

IX. LABORATORY CONTROL SAMPLE

see validation letter

1. Aqueous LCS

List any LCS recoveries not within the 80-120% criteria and the sample affected.

DATE	ELEMENT	%R	ACTION	SAMPLES AFFECTED

2. Solid LCS

List any analytes that were not within the control windows set by th EPA for the solid LCS sample. The 80-120% criteria is not used t evaluate solid LCS results.

ELEMENT	LCS CONC.	CONTROL WINDOWS	ACTION	SAMPLES AFFECTED

ACTIONS:

AQUEOUS LCS	Percent Recovery <50%	51-79%	>120%
Positive Results	R	J	J
Non-detected Results	R	UJ	A

SOLID LCS	<EPA Control Windows	>EPA Control Windows
Positive Results	J	J
Non-detected Results	UJ	A

3. Frequency Criteria

A. Was an LCS analyzed for every matrix, every digestion batch, and every 20 samples? Yes or N

REGION I
Data Review Worksheets

N/A

X A. FURNACE ATOMIC ABSORPTION ANALYSIS

1. Duplicate Precision

-------- Duplicate injections and one-point analytical spikes were performed for all samples: duplicate injections agreed within ± 20%.

-------- Duplicate injections and/or spikes were not performed for the following samples/elements: _____

-------- Duplicate injections did not agree within ± 20% for samples/elements: _____

2. Post Digestion Spike Recoveries

-------- Spike recoveries met the 85-115% recovery criteria for all samples.

-------- Spike recoveries did not meet the 85-115% criteria but did not require MSA for the following samples/elements: _____

-------- MSA was used to quantitate analytical results when contractually required.

_____ Correlation coefficients ≥0.995, accept results.
_____ Correlation coefficients <0.995 for sample numbers/elements: _____

-------- Method of Standard Addition (MSA) was not performed as required for samples/elements: _____

ACTIONS:

1. Estimate (J) positive results if duplicate injections are outside ± 20 % RSD or CV.

2. If the sample absorbance is <50% of post digestion spike absorbance the following actions should be applied:

	PERCENT RECOVERY		
	<10%	11%-84%	>115%
Positive Sample Results	J or R	J	J
Non-detected Results	R	UJ	A

3. Estimate (J) sample results if MSA was required and not performed.

4. Estimate (J) sample results if correlation coefficient was <0.995.

N/A

XI. INDUCTIVELY COUPLED PLASMA (ICP) SERIAL DILUTION ANALYSIS

_____ Serial Dilutions were performed for each matrix and results of the diluted sample analysis agreed within ten percent of the original undiluted analysis.

_____ Serial Dilutions were not performed for the following: _____

_____ Serial Dilutions were performed, but analytical results did not agree within 10% for analyte concentrations greater than 50x the IDL before dilution.

Report all results below that do not meet the required laboratory criteria for ICP serial dilution analysis.

MATRIX: _____

ELEMENT	IDL	50xIDL	SAMPLE RESULT	SERIAL DILUTION	%D	ACTION
Aluminum						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Nickel						
Potassium						
Silver						
Sodium						
Vanadium						
Zinc						

Actions apply to all samples of the same matrix.

ACTIONS:

1. Estimate (J) positive results if %D >15.

XII. DETECTION LIMIT RESULTS

See validation letter

1. Instrument Detection Limits

_____ Instrument Detection Limit results were present and found to less than the Contract Required Detection Limits.

_____ IDLs were not included in the data package on Form XI.

_____ IDLs were present, but the criteria was not met for th following elements: _____

2. Reporting Requirements

_____ Were sample results on Form I reported down to the IDL not the CRDL for all analytes? Yes or N

_____ Were sample results that were analyzed by ICP for Se, Tl, As, or Pb at least 5x IDL. Yes or N

_____ Were sample weights, volumes, and dilutions taken into account when reporting detection limits on Form I. Yes or N

If No,

The reported results may be inaccurate. Make the necessary change on the data summary tables and request that the laboratory resubmit th corrected data.

REGION I
Data Review Worksheets

See validation letter

XIII. SAMPLE QUANTITATION

_____ Sample results fall within the linear range for ICP and withi the calibrated range for all other parameters.

_____ Sample results were beyond the linear range/ calibration rang of the instrument for the following samples/elements

_____

In the space below, please show a minimum of one sample calculatic per method:

ICP

FURNACE

MERCURY

CYANIDE

For soil samples, the following equation may be necessary to convert raw data values (usually reported in ug/L) to actual sample concentrations (mg/kg):

The lab is required to use 1 gram sample (wet weight) to 200 ml.

Wet weight concentration =

$$\text{digest conc. in } \frac{ug}{L} \times \frac{200ml}{1\ gm} \times \frac{1L}{1000\ ml} \times \frac{1000gm}{1kg} \times \frac{1mg}{1000ug} = \frac{mg}{kg}$$

In addition the sample results are converted to dry weight using the percent solids calculations:

$$\frac{\text{Wet weight conc.}}{\%\text{solids}} \times 100 = \text{final concentration, dry weight (mg/kg)}$$

APPENDIX D
SUPPORT DOCUMENTATION

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
TETRA TECH NUS
CASE CTO 439 NSB NEW LONDON
SA6037

Sample Receipt

The following samples were received on October 22, 2007 and were logged in under Katahdin Analytical Services work order number SA6037 for a hardcopy due date of November 8, 2007.

KATAHDIN Sample No.	TTNUS Sample Identification
SA6037-1	2W-SD-SD47-0001
SA6037-2	2W-FD-101907-01
SA6037-3	2W-SD-SD44-0001
SA6037-4	2W-SD-SD44-0002
SA6037-5	2W-SD-SD43-0001
SA6037-6	2W-SD-SD48-0001
SA6037-7	2W-SD-SD48-0204
SA6037-8	2W-RB-101907-01
SA6037-9	2W-FB-101907-01

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

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

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

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

Organics Analysis

The samples of work order SA6037 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis. Some manual integrations may have been performed due to split peaks and/or corrected baselines. All have been flagged with an "M" (software-generated) on the pertinent quantitation reports.

8082 Analysis

Samples SA6037-1, 2, 3, 5, 6, and 7, and associated QC were put through a sulfur cleanup according to SW-846 method 3660 using the copper powder technique. The cleanup did not completely remove the sulfur. Consequently, some of the samples may have sulfur interference affecting the quantitation of target analytes.

Samples SA6037-1, 2, 3, 5, 6, and 7 were manually integrated for Aroclor 1260 and/ or the surrogate DCB. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

The method blank, LCS, and LCSD WG44851-1, 2, and 3 had high recoveries for the surrogate DCB on both channels, which were outside of the laboratory established acceptance limits. Since the recovery for TCX was acceptable, the associated samples were not reextracted.

The Form 7 for the calibration verification standard (CV) (files 6AK1021, 6AK2021, 6AK1046, and 6AK2046) are flagged for the surrogates TCX and/or DCB indicating that the %D is greater than the method acceptance limit of 15%. With the exception of DCB for file 6AK1021, which was high, and 6AK2046, which was low, the %D's are actually within the method acceptance limits and should not be flagged, but due to software limitations the flagging could not be removed.

The CV (file 6AK1006) had a low response for the surrogate TCX on channel A, which resulted in a %D that was outside of the method acceptance limits of 15%. Since the response was acceptable on channel B, the associated samples were not reanalyzed.

The CV (file 6AK1021) had high responses for Aroclor 1260 and the surrogate DCB on channel A, which resulted in %D's that were outside of the method acceptance limits of 15%. Since the responses were acceptable on channel B, the associated samples were not reanalyzed.

The CV (files 6AK1036 and 6AK2036) had high responses for Aroclor 1016 on both channels, and a high response for Aroclor 1260 on channel A, which resulted in %D's that were outside of the method acceptance limits of 15%.

The CV (file 6AK2046) had a low response for the surrogate DCB on channel B, which resulted in a %D that was outside of the method acceptance limits of 15%. Since the response was acceptable on channel A, the associated samples were not reanalyzed.

8081 Analysis

Sample SA6037-2DL had a RPD for 4,4'-DDT that was outside of the method acceptance limits of 40%. This analyte is flagged with a "J" qualifier on the report of analysis (ROA).

The CV (files 8AK1035 and 8AK2035) had a high response for endrin ketone on both channels, which resulted in %D's that were outside of the method acceptance limits of 15%. Since a high response would indicate a high bias, and the associated samples did not have these target analytes detected above the MDL, the samples were not reanalyzed.

The closing CV (files 8AK1045 and 8AK2045) had low and high responses for various analytes on both channels, which resulted in %D's that were outside of the method acceptance limits of 15%.

The CV (file 8AK1052) had a high response for endrin ketone on channel A, which resulted in a %D that was outside of the method acceptance limits of 15%. Since a high response would indicate a high bias, and the associated samples did not have this target analyte detected above the MDL, the samples were not reanalyzed.

The CV (files 8AK1064 and 8AK2064) had high responses for endrin ketone on both channels and a high response for endosulfan sulfate on channel A, which resulted in %D's that were outside of the method acceptance limits of 15%. Since a high response would indicate a high bias, and the associated samples did not have these target analytes detected above the MDL, the samples were not reanalyzed.

The closing CV (files 8AK1076 and 8AK2076) had low and high responses for various analytes on both channels, which resulted in %D's that were outside of the method acceptance limits of 15%.

Sample SA6037-7 was diluted due to matrix interference, sample viscosity or other matrix-related problem. Consequently, the sample PQL was elevated by a factor of 10.

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 recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long the LCS is acceptable.

The calibration verification standard (CV) (file R5876) had a low response for the calibration verification compound (CCC) fluoranthene, which resulted in a %D that was outside the method acceptance limit of 20%. Since the associated samples were either reanalyses or dilutions, the samples were not reanalyzed.

The initial analysis of samples SA6037-3 and 5 had low responses for one or more internal standards that resulted in %D's which were outside the laboratory acceptance limit of -50% to +100% of the response of the internal standard of the daily calibration verification standard. The reanalysis of these samples are labeled with the suffix "RA". The reanalyses were analyzed within hold time and met all QC acceptance limits. Therefore, only the reanalyses are reported.

All of the soil samples were manually integrated for various analytes. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

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

Metals Analysis

The samples of Work Order SA6037 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Soil-matrix Katahdin Sample Nos. SA6037-(1-7) were digested for ICP analysis on 10/26/07 (QC Batch XJ26ICS0) in accordance with USEPA Method 3050B.

Aqueous-matrix Katahdin Sample Nos. SA6037-(8, 9) were digested for ICP analysis on 10/26/07 (QC Batch XJ26ICW1) in accordance with USEPA Method 3010A.

ICP analyses of Work Order SA6037 sample digestates were performed using a Thermo iCAP 6500 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.

Analysis of Mercury by Cold Vapor Atomic Absorption (CVAA)

Aqueous-matrix Katahdin Sample Nos. SA6037-(8, 9) were digested for mercury analysis on 10/24/07 (QC Batch XJ24HGW0) in accordance with USEPA Method 7470A.

Soil-matrix Katahdin Sample Nos. SA6037-(1-7) were digested for mercury analysis on 10/30/07 (QC Batch XJ30HGS0) in accordance with USEPA Method 7471A.

Mercury analyses of Work Order SA6037 sample digestates were performed using a Cetac M6100 automated mercury analyzer. All samples were analyzed within holding times and all analytical run QC criteria were met.

Wet Chemistry Analysis

The samples of Work Order SA6037 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for TOC in soil were performed according to "Determination of Total Organic Carbon in Sediment", Lloyd Kahn, USEPA Region II, 7/88.

Analyses for total solids were performed according to "U.S. EPA Contract Laboratory Program Statement of Work for Inorganic Analysis", SOW 7/88.

Analyses for pH (soil) were performed according to "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

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 holding times, and all quality control criteria were met.

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

Leslie Dimond 11·13·07

Leslie Dimond
Quality Assurance Officer

TETRA TECH NUS, INC. SAL0036 SAL0037 CHAIN OF CUSTODY | NUMBER 4596 | PAGE 1 OF 3

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
G00873	NSB NLON AREA A	A. BERNHARDT	412 921 7090	KATAHDIN / COLBY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
SJ Conti		S CONTI	412 921 7090	
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX #		

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 G G

PRESERVATIVE USED: 4°C 4°C 4°C 4°C 4°C 4°C

DATE YEAR 2007	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	PAH/PEST/PCB (8oz)	METALS/PH/TOC 4oz	PAHS (ONLY) 4oz	METALS (ONLY) 4oz	TOC (ONLY) 4oz	CADMIUM (ONLY) 4oz	TOC (ONLY) 4oz		COMMENTS
10/18	0830	2W-SD-SD58-0001	SD58	0	4"	SO	G	1					1				
"	0855	2W-SD-SD57-0001	SD57	0	4"	SO	G	2			1	1					
"	0855	2W-SD-SD57-0002	SD57	15"	20"	SO	G	1						1			
"	1010	2W-SD-SD56-0001	SD56	0	4"	SO	G	2	1	1							
"	1010	2W-SD-SD56-0002	SD56	24"	27"	SO	G	1						1			
"	1040	2W-SD-SD55-0001	SD55	0	6"	SO	G	2	1	1							
"	1040	2W-SD-SD55-0002	SD55	27"	30"	SO	G	1						1			
"	1320	2W-SD-SD54-0001	SD54	0	6"	SO	G	2	1	1							
"	1355	2W-SD-SD53-0001	SD53	0	6"	SO	G	4	(2)	(2)							DO MS/MSD (QC)
"	1345	2W-SD-SD53-0204	SD53	24"	48"	SO	G	2	1	1							
"	0000	2W-FD-101807-01	FD	—	—	SO	G	2	1	1							(QC)
"	1440	2W-SD-SD51-0001	SD51	0	6"	SO	G	2	1	1							
"	1530	2W-SD-SD52-0001	SD52	0	6"	SO	G	2	1	1							

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY SJ Conti	10/20/07	1000	1. RECEIVED BY FED EX		
2. RELINQUISHED BY			2. RECEIVED BY	102-20	1000
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS

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TETRA TECH NUS, INC. SA60036 SA60037

CHAIN OF CUSTODY

NUMBER 4597

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
G00873	NSB-NLON AREA A	A. BERNHARTD	412 921 7090	KATAHDIN / COLBY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
S Conti		S CONTI	412 921 7090	
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX #		

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

DATE YEAR 2007	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	PAH/PEST/PCB (8 OZ)	METALS/pH/TOC (4 OZ)	PAH (ONLY) (4 OZ)	TOC (ONLY) (4 OZ)						COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)									G	G	G	G	G	G				
PRESERVATIVE USED									4°C	4°C	4°C	4°C	4°C	4°C				
TYPE OF ANALYSIS																		
10/18	1600	2W-SD-SD50-0204	SD50	24"	48"	SO	G	2	1	1								
10/18	1605	2W-SD-SD50-0001	SD50	0	4"	SO	G	2	1	1								
10/18	1630	2W-SD-SD49-0001	SD49	0	4"	SO	G	2	1	1								
10/18	1725	2W-SD-SD45-0001	SD45	0	4"	SO	G	2	1	1								
10/18	1730	2W-SD-SD45-0002	SD45	30"	40"	SO	G	2	1	1								
10/19	1020	2W-SD-SD46-0001	SD46	0	4"	SO	G	2	1	1								
10/19	1040	2W-SD-SD46-0204	SD46	24"	36"	SO	G	2	1	1								
10/19	1245	2W-SD-SD47-0001	SD47	0	6"	SO	G	2	1	1								
10/19	0000	2W-FD-101907-01	FD	—	—	SO	G	2	1	1								
10/19	1345	2W-SD-SD44-0001	SD44	0	4"	SO	G	2	1	1								
10/19	1400	2W-SD-SD44-0002	SD44	12"	24"	SO	G	1				1						
10/19	1430	2W-SD-SD43-0001	SD43	0	4"	SO	G	2	1	1								
10/19	1520	~~2W-SD-SD48-0001~~	SD48	0	4"	SO	G	2	1	1								
	1530	2W-SD-SD48-0204	SD48	24"	36"	SO	G	2	1	1								

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY S Conti	10/20/07	1000	1. RECEIVED BY FED EX		
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 10/20/07	TIME 1000
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

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

4/02R

TETRA TECH NUS, INC. SA6036 SA6037 CHAIN OF CUSTODY | NUMBER 4595 | PAGE 3 OF 3

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
G00873	NSB-NLON AREA A	A BERNHARDT	412 921 7090	KATAHDIN / COLBY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
SJ Conti		S CONTI	412 921 7090	
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX #		

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G G P
PRESERVATIVE USED: 4°C 4°C 4°C HNO3

DATE YEAR 2007	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: PAHS	PEST/PCBS	METALS						COMMENTS
10/19	0730	2W-RB-101907-01	RB	—	—	QC AQ	G	5	2	2	1						OVER Auger SPOONS, BOWLS
10/19	0750	2W-FB-101907-01	FB	—	—	QC AQ	G	5	2	2	1						DI WATER

1. RELINQUISHED BY SJ Conti	DATE 10/20/07	TIME 1000	1. RECEIVED BY FED EX	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE 10/22/07	TIME 1000
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

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HOLDTIME

SDG SA6037

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	2W-FD-101907-01	SA6037-002	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	MG/KG	2W-SD-SD48-0204	SA6037-007	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	MG/KG	2W-SD-SD48-0001	SA6037-006	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	MG/KG	2W-SD-SD47-0001	SA6037-001	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	MG/KG	2W-SD-SD44-0001	SA6037-003	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	MG/KG	2W-SD-SD43-0001	SA6037-005	NM	10/19/2007	10/30/2007	10/31/2007	11	1	12
HG	UG/L	2W-RB-101907-01	SA6037-008	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
HG	UG/L	2W-FB-101907-01	SA6037-009	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
M	MG/KG	2W-SD-SD47-0001	SA6037-001	NM	10/19/2007	10/26/2007	10/30/2007	7	4	11
M	MG/KG	2W-SD-SD48-0001	SA6037-006	NM	10/19/2007	10/26/2007	10/30/2007	7	4	11
M	MG/KG	2W-SD-SD44-0001	SA6037-003	NM	10/19/2007	10/26/2007	10/30/2007	7	4	11
M	MG/KG	2W-SD-SD43-0001	SA6037-005	NM	10/19/2007	10/26/2007	10/30/2007	7	4	11
M	MG/KG	2W-FD-101907-01	SA6037-002	NM	10/19/2007	10/26/2007	10/30/2007	7	4	11
M	MG/KG	2W-SD-SD48-0204	SA6037-007	NM	10/19/2007	10/26/2007	10/30/2007	7	4	11
M	UG/L	2W-FB-101907-01	SA6037-009	NM	10/19/2007	10/26/2007	10/29/2007	7	3	10

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	2W-RB-101907-01	SA6037-008	NM	10/19/2007	10/26/2007	10/29/2007	7	3	10
PH	PH	2W-SD-SD48-0204	SA6037-7	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
PH	PH	2W-SD-SD48-0001	SA6037-6	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
PH	PH	2W-SD-SD47-0001	SA6037-1	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
PH	PH	2W-SD-SD44-0001	SA6037-3	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
PH	PH	2W-SD-SD43-0001	SA6037-5	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
PH	PH	2W-FD-101907-01	SA6037-2	NM	10/19/2007	10/24/2007	10/24/2007	5	0	5
TOC	UG/GD	2W-SD-SD44-0001	SA6037-3	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-FD-101907-01	SA6037-2	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-SD-SD48-0001	SA6037-6	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-SD-SD44-0002	SA6037-4	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-SD-SD48-0204	SA6037-7	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-SD-SD43-0001	SA6037-5	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TOC	UG/GD	2W-SD-SD47-0001	SA6037-1	NM	10/19/2007	10/31/2007	10/31/2007	12	0	12
TS	%	2W-SD-SD47-0001	SA6037-1	NM	10/19/2007	10/24/2007	10/25/2007	5	1	6
TS	%	2W-SD-SD48-0204	SA6037-7	NM	10/19/2007	10/24/2007	10/25/2007	5	1	6
TS	%	2W-SD-SD48-0001	SA6037-6	NM	10/19/2007	10/24/2007	10/25/2007	5	1	6
TS	%	2W-SD-SD44-0002	SA6037-4	NM	10/19/2007	10/24/2007	10/25/2007	5	1	6

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TS	%	2W-SD-SD44-0001	SA6037-3	NM	10/19/2007	10/24/2007	10/25/2007	5	1	6
TS	%	2W-FD-101907-01	SA6037-2	NM	10/19/2007	10/24/2007	10/25/2007	5	1	6
TS	%	2W-SD-SD43-0001	SA6037-5	NM	10/19/2007	10/24/2007	10/25/2007	5	1	6
PAH	%	2W-SD-SD48-0001DL	SA6037-6DL	NM	10/19/2007	11/2/2007	11/8/2007	14	6	20
PAH	%	2W-SD-SD47-0001	SA6037-1	NM	10/19/2007	11/2/2007	11/6/2007	14	4	18
PAH	%	2W-SD-SD48-0001	SA6037-6	NM	10/19/2007	11/2/2007	11/7/2007	14	5	19
PAH	%	2W-FD-101907-01	SA6037-2	NM	10/19/2007	11/2/2007	11/7/2007	14	5	19
PAH	%	2W-RB-101907-01	SA6037-8	NM	10/19/2007	10/24/2007	10/30/2007	5	6	11
PAH	%	2W-FB-101907-01	SA6037-9	NM	10/19/2007	10/24/2007	10/30/2007	5	6	11
PAH	%	2W-SD-SD48-0204	SA6037-7	NM	10/19/2007	11/2/2007	11/7/2007	14	5	19
PAH	%	2W-SD-SD44-0001RA	SA6037-3RA	NM	10/19/2007	11/2/2007	11/8/2007	14	6	20
PAH	%	2W-SD-SD43-0001RA	SA6037-5RA	NM	10/19/2007	11/2/2007	11/8/2007	14	6	20
PAH	UG/KG	2W-FD-101907-01	SA6037-2	NM	10/19/2007	11/2/2007	11/7/2007	14	5	19
PAH	UG/KG	2W-SD-SD43-0001RA	SA6037-5RA	NM	10/19/2007	11/2/2007	11/8/2007	14	6	20
PAH	UG/KG	2W-SD-SD44-0001RA	SA6037-3RA	NM	10/19/2007	11/2/2007	11/8/2007	14	6	20
PAH	UG/KG	2W-SD-SD47-0001	SA6037-1	NM	10/19/2007	11/2/2007	11/6/2007	14	4	18
PAH	UG/KG	2W-SD-SD48-0001	SA6037-6	NM	10/19/2007	11/2/2007	11/7/2007	14	5	19
PAH	UG/KG	2W-SD-SD48-0001DL	SA6037-6DL	NM	10/19/2007	11/2/2007	11/8/2007	14	6	20

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICV

File: HXJ24B Oct 24, 2007 14:04

Analyte	True	Found	%R (1)
MERCURY	6.0	5.95	99.2

SAMPLE: CCV

File: HXJ24B Oct 24, 2007 14:29

Analyte	True	Found	%R (1)
MERCURY	5.0	5.16	103.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: HXJ24B Oct 24, 2007 14:55

Analyte	True	Found	%R (1)
MERCURY	5.0	4.78	95.6

SAMPLE: CCV

File: HXJ24B Oct 24, 2007 15:40

Analyte	True	Found	%R (1)
MERCURY	5.0	5.51	110.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: HXJ24B Oct 24, 2007 15:57

Analyte	True	Found	%R (1)
MERCURY	5.0	5.35	107.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICV

File: Hxj31a Oct 31, 2007 12:20

Analyte	True	Found	%R (1)
MERCURY	6.0	5.52	92.0

SAMPLE: CCV

File: Hxj31a Oct 31, 2007 12:45

Analyte	True	Found	%R (1)
MERCURY	5.0	5.38	107.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: Hxj31a Oct 31, 2007 13:11

Analyte	True	Found	%R (1)
MERCURY	5.0	5.47	109.4

SAMPLE: CCV

File: Hxj31a Oct 31, 2007 13:31

Analyte	True	Found	%R (1)
MERCURY	5.0	4.85	97.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICV

File: IXJ26A Oct 26, 2007 15:37

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	9920.00	99.2
ANTIMONY	400.0	394.10	98.5
BERYLLIUM	400.0	392.40	98.1
CALCIUM	10000.0	9914.00	99.1
COBALT	400.0	393.40	98.3
COPPER	400.0	371.70	92.9
IRON	10000.0	9985.00	99.9
MAGNESIUM	10000.0	9997.00	100.0
MANGANESE	400.0	398.00	99.5
NICKEL	400.0	395.70	98.9
POTASSIUM	13600.0	13330.00	98.0
SODIUM	10000.0	9976.00	99.8
THALLIUM	400.0	389.80	97.5
VANADIUM	400.0	373.40	93.3
ZINC	400.0	388.90	97.2

SAMPLE: CCV

File: IXJ26A Oct 26, 2007 16:00

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12150.00	97.2
ANTIMONY	500.0	483.60	96.7
BERYLLIUM	500.0	483.40	96.7
CALCIUM	12500.0	12080.00	96.6
COBALT	500.0	480.00	96.0
COPPER	500.0	475.90	95.2
IRON	12500.0	12190.00	97.5
MAGNESIUM	12500.0	12280.00	98.2
MANGANESE	500.0	489.70	97.9
NICKEL	500.0	489.20	97.8
POTASSIUM	12500.0	11940.00	95.5
SODIUM	12500.0	12200.00	97.6
THALLIUM	500.0	480.30	96.1
VANADIUM	500.0	471.20	94.2
ZINC	500.0	480.20	96.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ26A Oct 26, 2007 16:54

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12300.00	98.4
ANTIMONY	500.0	480.30	96.1
BERYLLIUM	500.0	484.90	97.0
CALCIUM	12500.0	11910.00	95.3
COBALT	500.0	475.00	95.0
COPPER	500.0	462.80	92.6
IRON	12500.0	12470.00	99.8
MAGNESIUM	12500.0	12080.00	96.6
MANGANESE	500.0	486.30	97.3
NICKEL	500.0	486.70	97.3
POTASSIUM	12500.0	11970.00	95.8
SODIUM	12500.0	12270.00	98.2
THALLIUM	500.0	475.90	95.2
VANADIUM	500.0	448.70	89.7
ZINC	500.0	481.90	96.4

SAMPLE: CCV

File: IXJ26A Oct 26, 2007 17:49

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12050.00	96.4
ANTIMONY	500.0	473.40	94.7
BERYLLIUM	500.0	476.40	95.3
CALCIUM	12500.0	11700.00	93.6
COBALT	500.0	465.50	93.1
COPPER	500.0	463.20	92.6
IRON	12500.0	12120.00	97.0
MAGNESIUM	12500.0	11550.00	92.4
MANGANESE	500.0	478.90	95.8
NICKEL	500.0	487.10	97.4
POTASSIUM	12500.0	11720.00	93.8
SODIUM	12500.0	12140.00	97.1
THALLIUM	500.0	467.10	93.4
VANADIUM	500.0	453.40	90.7
ZINC	500.0	490.20	98.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ26A Oct 26, 2007 18:44

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12130.00	97.0
ANTIMONY	500.0	478.80	95.8
BERYLLIUM	500.0	479.50	95.9
CALCIUM	12500.0	11770.00	94.2
COBALT	500.0	465.30	93.1
COPPER	500.0	466.70	93.3
IRON	12500.0	11970.00	95.8
MAGNESIUM	12500.0	11800.00	94.4
MANGANESE	500.0	489.50	97.9
NICKEL	500.0	487.20	97.4
POTASSIUM	12500.0	11670.00	93.4
SODIUM	12500.0	12530.00	100.2
THALLIUM	500.0	469.70	93.9
VANADIUM	500.0	457.20	91.4
ZINC	500.0	471.00	94.2

SAMPLE: CCV

File: IXJ26A Oct 26, 2007 19:39

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12290.00	98.3
ANTIMONY	500.0	478.30	95.7
BERYLLIUM	500.0	478.40	95.7
CALCIUM	12500.0	11960.00	95.7
COBALT	500.0	470.80	94.2
COPPER	500.0	467.80	93.6
IRON	12500.0	12200.00	97.6
MAGNESIUM	12500.0	11960.00	95.7
MANGANESE	500.0	490.00	98.0
NICKEL	500.0	490.00	98.0
POTASSIUM	12500.0	11750.00	94.0
SODIUM	12500.0	12290.00	98.3
THALLIUM	500.0	473.20	94.6
VANADIUM	500.0	468.50	93.7
ZINC	500.0	489.60	97.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ26A Oct 26, 2007 20:34

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12190.00	97.5
ANTIMONY	500.0	479.20	95.8
BERYLLIUM	500.0	475.30	95.1
CALCIUM	12500.0	11660.00	93.3
COBALT	500.0	464.40	92.9
COPPER	500.0	462.20	92.4
IRON	12500.0	11990.00	95.9
MAGNESIUM	12500.0	11710.00	93.7
MANGANESE	500.0	487.40	97.5
NICKEL	500.0	486.00	97.2
POTASSIUM	12500.0	11490.00	91.9
SODIUM	12500.0	12400.00	99.2
THALLIUM	500.0	469.70	93.9
VANADIUM	500.0	446.60	89.3 *
ZINC	500.0	469.50	93.9

SAMPLE: CCV

File: IXJ26A Oct 26, 2007 21:30

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12030.00	96.2
ANTIMONY	500.0	483.90	96.8
BERYLLIUM	500.0	469.80	94.0
CALCIUM	12500.0	11450.00	91.6
COBALT	500.0	463.40	92.7
COPPER	500.0	476.30	95.3
IRON	12500.0	11800.00	94.4
MAGNESIUM	12500.0	11500.00	92.0
MANGANESE	500.0	476.70	95.3
NICKEL	500.0	486.60	97.3
POTASSIUM	12500.0	11420.00	91.4
SODIUM	12500.0	12200.00	97.6
THALLIUM	500.0	469.30	93.9
VANADIUM	500.0	466.30	93.3
ZINC	500.0	468.50	93.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ26A Oct 26, 2007 22:25

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12190.00	97.5
ANTIMONY	500.0	483.90	96.8
BERYLLIUM	500.0	476.50	95.3
CALCIUM	12500.0	11520.00	92.2
COBALT	500.0	465.30	93.1
COPPER	500.0	467.70	93.5
IRON	12500.0	11960.00	95.7
MAGNESIUM	12500.0	11630.00	93.0
MANGANESE	500.0	479.60	95.9
NICKEL	500.0	488.90	97.8
POTASSIUM	12500.0	11510.00	92.1
SODIUM	12500.0	12380.00	99.0
THALLIUM	500.0	471.90	94.4
VANADIUM	500.0	448.50	89.7
ZINC	500.0	469.70	93.9

SAMPLE: CCV

File: IXJ26A Oct 26, 2007 23:21

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	6.17	0.0 •
ANTIMONY	500.0	0.88	0.2 •
BERYLLIUM	500.0	0.00	0.0 •
CALCIUM	12500.0	7.78	0.1 •
COBALT	500.0	-0.51	-0.1 •
COPPER	500.0	3.78	0.8 •
IRON	12500.0	-3.51	0.0 •
MAGNESIUM	12500.0	1.90	0.0 •
MANGANESE	500.0	0.21	0.0 •
NICKEL	500.0	0.14	0.0 •
POTASSIUM	12500.0	89.57	0.7 •
SODIUM	12500.0	75.73	0.6 •
THALLIUM	500.0	0.24	0.0 •
VANADIUM	500.0	-0.05	0.0 •
ZINC	500.0	-0.02	0.0 •

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ26A Oct 27, 2007 0:18

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13.05	0.1 •
ANTIMONY	500.0	1.00	0.2 •
BERYLLIUM	500.0	-0.04	0.0 •
CALCIUM	12500.0	39.70	0.3 •
COBALT	500.0	-0.55	-0.1 •
COPPER	500.0	3.41	0.7 •
IRON	12500.0	-3.90	0.0 •
MAGNESIUM	12500.0	1.61	0.0 •
MANGANESE	500.0	0.11	0.0 •
NICKEL	500.0	0.24	0.0 •
POTASSIUM	12500.0	98.39	0.8 •
SODIUM	12500.0	69.42	0.6 •
THALLIUM	500.0	0.24	0.0 •
VANADIUM	500.0	-0.37	-0.1 •
ZINC	500.0	-0.03	0.0 •

SAMPLE: CCV

File: IXJ26A Oct 27, 2007 0:32

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13.73	0.1 •
ANTIMONY	500.0	1.57	0.3 •
BERYLLIUM	500.0	-0.04	0.0 •
CALCIUM	12500.0	78.67	0.6 •
COBALT	500.0	-0.46	-0.1 •
COPPER	500.0	3.46	0.7 •
IRON	12500.0	-4.06	0.0 •
MAGNESIUM	12500.0	7.58	0.1 •
MANGANESE	500.0	1.14	0.2 •
NICKEL	500.0	0.10	0.0 •
POTASSIUM	12500.0	118.10	0.9 •
SODIUM	12500.0	44.80	0.4 •
THALLIUM	500.0	0.00	0.0 •
VANADIUM	500.0	-0.20	0.0 •
ZINC	500.0	1.25	0.3 •

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ26A Oct 27, 2007 0:55

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	34.54	0.3 •
ANTIMONY	500.0	1.48	0.3 •
BERYLLIUM	500.0	-0.02	0.0 •
CALCIUM	12500.0	28.96	0.2 •
COBALT	500.0	-0.51	-0.1 •
COPPER	500.0	3.69	0.7 •
IRON	12500.0	12.14	0.1 •
MAGNESIUM	12500.0	20.60	0.2 •
MANGANESE	500.0	0.12	0.0 •
NICKEL	500.0	0.16	0.0 •
POTASSIUM	12500.0	101.80	0.8 •
SODIUM	12500.0	29.05	0.2 •
THALLIUM	500.0	0.39	0.1 •
VANADIUM	500.0	-0.25	-0.1 •
ZINC	500.0	0.06	0.0 •

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICV

File: IXJ29A Oct 29, 2007 15:30

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	9852.00	98.5
ARSENIC	400.0	377.30	94.3
BARIUM	400.0	398.30	99.6
CADMIUM	400.0	377.90	94.5
CALCIUM	10000.0	9872.00	98.7
CHROMIUM	400.0	390.00	97.5
IRON	10000.0	10030.00	100.3
LEAD	400.0	380.40	95.1
MAGNESIUM	10000.0	9949.00	99.5
SELENIUM	400.0	380.50	95.1
SILVER	400.0	388.70	97.2

SAMPLE: CCV

File: IXJ29A Oct 29, 2007 15:53

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12740.00	101.9
ARSENIC	500.0	498.60	99.7
BARIUM	500.0	506.70	101.3
CADMIUM	500.0	494.60	98.9
CALCIUM	12500.0	12840.00	102.7
CHROMIUM	500.0	506.80	101.4
IRON	12500.0	12780.00	102.2
LEAD	500.0	495.50	99.1
MAGNESIUM	12500.0	13170.00	105.4
SELENIUM	500.0	499.70	99.9
SILVER	500.0	514.70	102.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ29A Oct 29, 2007 16:49

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12910.00	103.3
ARSENIC	500.0	505.50	101.1
BARIUM	500.0	518.30	103.7
CADMIUM	500.0	497.20	99.4
CALCIUM	12500.0	13060.00	104.5
CHROMIUM	500.0	508.30	101.7
IRON	12500.0	12930.00	103.4
LEAD	500.0	497.90	99.6
MAGNESIUM	12500.0	13550.00	108.4
SELENIUM	500.0	508.50	101.7
SILVER	500.0	522.20	104.4

SAMPLE: CCV

File: IXJ29A Oct 29, 2007 17:45

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12970.00	103.8
ARSENIC	500.0	501.30	100.3
BARIUM	500.0	519.40	103.9
CADMIUM	500.0	507.50	101.5
CALCIUM	12500.0	12810.00	102.5
CHROMIUM	500.0	505.40	101.1
IRON	12500.0	12880.00	103.0
LEAD	500.0	511.10	102.2
MAGNESIUM	12500.0	13060.00	104.5
SELENIUM	500.0	499.50	99.9
SILVER	500.0	502.00	100.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ29A Oct 29, 2007 18:08

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12810.00	102.5
ARSENIC	500.0	499.00	99.8
BARIUM	500.0	515.00	103.0
CADMIUM	500.0	501.60	100.3
CALCIUM	12500.0	12660.00	101.3
CHROMIUM	500.0	507.40	101.5
IRON	12500.0	12710.00	101.7
LEAD	500.0	505.90	101.2
MAGNESIUM	12500.0	13020.00	104.2
SELENIUM	500.0	497.40	99.5
SILVER	500.0	508.80	101.8

SAMPLE: CCV

File: IXJ29A Oct 29, 2007 18:31

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13090.00	104.7
ARSENIC	500.0	496.20	99.2
BARIUM	500.0	519.70	103.9
CADMIUM	500.0	498.60	99.7
CALCIUM	12500.0	12950.00	103.6
CHROMIUM	500.0	469.80	94.0
IRON	12500.0	13020.00	104.2
LEAD	500.0	503.30	100.7
MAGNESIUM	12500.0	13230.00	105.8
SELENIUM	500.0	496.10	99.2
SILVER	500.0	476.00	95.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICV

File: IXJ29B Oct 29, 2007 19:32

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	9779.00	97.8
ANTIMONY	400.0	387.60	96.9
ARSENIC	400.0	382.90	95.7
BARIUM	400.0	395.80	99.0
BERYLLIUM	400.0	390.00	97.5
CADMIUM	400.0	387.70	96.9
CALCIUM	10000.0	9746.00	97.5
CHROMIUM	400.0	391.60	97.9
COBALT	400.0	396.50	99.1
COPPER	400.0	384.50	96.1
IRON	10000.0	9962.00	99.6
LEAD	400.0	389.70	97.4
MAGNESIUM	10000.0	9796.00	98.0
MANGANESE	400.0	391.10	97.8
NICKEL	400.0	394.20	98.5
POTASSIUM	13600.0	13160.00	96.8
SELENIUM	400.0	387.30	96.8
SILVER	400.0	380.40	95.1
SODIUM	10000.0	9823.00	98.2
THALLIUM	400.0	393.20	98.3
VANADIUM	400.0	383.90	96.0
ZINC	400.0	389.00	97.3

SAMPLE: CCV

File: IXJ29B Oct 29, 2007 19:55

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11830.00	94.6
ANTIMONY	500.0	481.40	96.3
ARSENIC	500.0	478.10	95.6
BARIUM	500.0	475.10	95.0
BERYLLIUM	500.0	475.80	95.2
CADMIUM	500.0	483.30	96.7
CALCIUM	12500.0	11750.00	94.0
CHROMIUM	500.0	478.40	95.7
COBALT	500.0	484.50	96.9
COPPER	500.0	473.80	94.8
IRON	12500.0	11990.00	95.9
LEAD	500.0	486.70	97.3
MAGNESIUM	12500.0	11920.00	95.4
MANGANESE	500.0	471.60	94.3
NICKEL	500.0	487.20	97.4
POTASSIUM	12500.0	11780.00	94.2
SELENIUM	500.0	476.90	95.4
SILVER	500.0	468.40	93.7
SODIUM	12500.0	11860.00	94.9
THALLIUM	500.0	485.80	97.2
VANADIUM	500.0	466.00	93.2
ZINC	500.0	482.80	96.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ29B Oct 29, 2007 20:50

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11810.00	94.5
ANTIMONY	500.0	476.30	95.3
ARSENIC	500.0	473.90	94.8
BARIUM	500.0	473.40	94.7
BERYLLIUM	500.0	475.00	95.0
CADMIUM	500.0	481.20	96.2
CALCIUM	12500.0	11720.00	93.8
CHROMIUM	500.0	476.50	95.3
COBALT	500.0	482.50	96.5
COPPER	500.0	471.90	94.4
IRON	12500.0	11920.00	95.4
LEAD	500.0	485.60	97.1
MAGNESIUM	12500.0	11900.00	95.2
MANGANESE	500.0	469.20	93.8
NICKEL	500.0	484.50	96.9
POTASSIUM	12500.0	11800.00	94.4
SELENIUM	500.0	474.40	94.9
SILVER	500.0	466.20	93.2
SODIUM	12500.0	11860.00	94.9
THALLIUM	500.0	483.60	96.7
VANADIUM	500.0	462.30	92.5
ZINC	500.0	480.50	96.1

SAMPLE: CCV

File: IXJ29B Oct 29, 2007 21:46

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11760.00	94.1
ANTIMONY	500.0	476.10	95.2
ARSENIC	500.0	472.80	94.6
BARIUM	500.0	473.30	94.7
BERYLLIUM	500.0	476.10	95.2
CADMIUM	500.0	478.30	95.7
CALCIUM	12500.0	11580.00	92.6
CHROMIUM	500.0	467.20	93.4
COBALT	500.0	476.50	95.3
COPPER	500.0	472.50	94.5
IRON	12500.0	11840.00	94.7
LEAD	500.0	484.10	96.8
MAGNESIUM	12500.0	11850.00	94.8
MANGANESE	500.0	469.40	93.9
NICKEL	500.0	480.80	96.2
POTASSIUM	12500.0	11680.00	93.4
SELENIUM	500.0	473.80	94.8
SILVER	500.0	460.80	92.2
SODIUM	12500.0	11910.00	95.3
THALLIUM	500.0	480.50	96.1
VANADIUM	500.0	452.50	90.5
ZINC	500.0	471.80	94.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ29B Oct 29, 2007 22:41

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11690.00	93.5
ANTIMONY	500.0	474.70	94.9
ARSENIC	500.0	469.80	94.0
BARIUM	500.0	470.10	94.0
BERYLLIUM	500.0	469.80	94.0
CADMIUM	500.0	478.40	95.7
CALCIUM	12500.0	11460.00	91.7
CHROMIUM	500.0	467.10	93.4
COBALT	500.0	473.00	94.6
COPPER	500.0	467.70	93.5
IRON	12500.0	11760.00	94.1
LEAD	500.0	484.00	96.8
MAGNESIUM	12500.0	11590.00	92.7
MANGANESE	500.0	466.10	93.2
NICKEL	500.0	480.00	96.0
POTASSIUM	12500.0	11580.00	92.6
SELENIUM	500.0	466.60	93.3
SILVER	500.0	454.40	90.9
SODIUM	12500.0	11830.00	94.6
THALLIUM	500.0	475.20	95.0
VANADIUM	500.0	451.60	90.3
ZINC	500.0	470.50	94.1

SAMPLE: CCV

File: IXJ29B Oct 29, 2007 23:37

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11750.00	94.0
ANTIMONY	500.0	471.60	94.3
ARSENIC	500.0	468.50	93.7
BARIUM	500.0	471.90	94.4
BERYLLIUM	500.0	470.40	94.1
CADMIUM	500.0	482.00	96.4
CALCIUM	12500.0	11430.00	91.4
CHROMIUM	500.0	467.10	93.4
COBALT	500.0	469.60	93.9
COPPER	500.0	464.50	92.9
IRON	12500.0	11770.00	94.2
LEAD	500.0	486.70	97.3
MAGNESIUM	12500.0	11560.00	92.5
MANGANESE	500.0	466.70	93.3
NICKEL	500.0	480.10	96.0
POTASSIUM	12500.0	11550.00	92.4
SELENIUM	500.0	464.10	92.8
SILVER	500.0	451.40	90.3
SODIUM	12500.0	11910.00	95.3
THALLIUM	500.0	470.40	94.1
VANADIUM	500.0	450.70	90.1
ZINC	500.0	472.20	94.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ29B Oct 30, 2007 0:32

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11740.00	93.9
ANTIMONY	500.0	467.30	93.5
ARSENIC	500.0	466.30	93.3
BARIUM	500.0	470.60	94.1
BERYLLIUM	500.0	470.60	94.1
CADMIUM	500.0	475.90	95.2
CALCIUM	12500.0	11480.00	91.8
CHROMIUM	500.0	464.50	92.9
COBALT	500.0	466.50	93.3
COPPER	500.0	461.00	92.2
IRON	12500.0	11760.00	94.1
LEAD	500.0	482.70	96.5
MAGNESIUM	12500.0	11570.00	92.6
MANGANESE	500.0	467.30	93.5
NICKEL	500.0	476.00	95.2
POTASSIUM	12500.0	11530.00	92.2
SELENIUM	500.0	459.60	91.9
SILVER	500.0	448.50	89.7
SODIUM	12500.0	11920.00	95.4
THALLIUM	500.0	467.20	93.4
VANADIUM	500.0	446.30	89.3 •
ZINC	500.0	465.80	93.2

SAMPLE: CCV

File: IXJ29B Oct 30, 2007 1:28

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11660.00	93.3
ANTIMONY	500.0	468.30	93.7
ARSENIC	500.0	465.70	93.1
BARIUM	500.0	468.00	93.6
BERYLLIUM	500.0	467.00	93.4
CADMIUM	500.0	479.80	96.0
CALCIUM	12500.0	11280.00	90.2
CHROMIUM	500.0	464.50	92.9
COBALT	500.0	465.50	93.1
COPPER	500.0	456.70	91.3
IRON	12500.0	11720.00	93.8
LEAD	500.0	485.70	97.1
MAGNESIUM	12500.0	11330.00	90.6
MANGANESE	500.0	457.90	91.6
NICKEL	500.0	476.70	95.3
POTASSIUM	12500.0	11420.00	91.4
SELENIUM	500.0	458.60	91.7
SILVER	500.0	443.30	88.7 •
SODIUM	12500.0	11820.00	94.6
THALLIUM	500.0	467.30	93.5
VANADIUM	500.0	440.30	88.1 •
ZINC	500.0	469.20	93.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ29B Oct 30, 2007 2:23

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11580.00	92.6
ANTIMONY	500.0	465.00	93.0
ARSENIC	500.0	464.00	92.8
BARIUM	500.0	463.40	92.7
BERYLLIUM	500.0	464.10	92.8
CADMIUM	500.0	478.80	95.8
CALCIUM	12500.0	11180.00	89.4 •
CHROMIUM	500.0	463.30	92.7
COBALT	500.0	463.50	92.7
COPPER	500.0	455.30	91.1
IRON	12500.0	11640.00	93.1
LEAD	500.0	485.10	97.0
MAGNESIUM	12500.0	11200.00	89.6
MANGANESE	500.0	455.80	91.2
NICKEL	500.0	475.00	95.0
POTASSIUM	12500.0	11320.00	90.6
SELENIUM	500.0	457.00	91.4
SILVER	500.0	440.20	88.0 •
SODIUM	12500.0	11740.00	93.9
THALLIUM	500.0	465.20	93.0
VANADIUM	500.0	438.00	87.6 •
ZINC	500.0	466.90	93.4

SAMPLE: CCV

File: IXJ29B Oct 30, 2007 3:18

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11720.00	93.8
ANTIMONY	500.0	467.10	93.4
ARSENIC	500.0	465.80	93.2
BARIUM	500.0	471.00	94.2
BERYLLIUM	500.0	468.80	93.8
CADMIUM	500.0	480.60	96.1
CALCIUM	12500.0	11250.00	90.0
CHROMIUM	500.0	466.10	93.2
COBALT	500.0	464.10	92.8
COPPER	500.0	460.50	92.1
IRON	12500.0	11770.00	94.2
LEAD	500.0	489.50	97.9
MAGNESIUM	12500.0	11310.00	90.5
MANGANESE	500.0	458.30	91.7
NICKEL	500.0	479.40	95.9
POTASSIUM	12500.0	11460.00	91.7
SELENIUM	500.0	457.00	91.4
SILVER	500.0	445.00	89.0 •
SODIUM	12500.0	11810.00	94.5
THALLIUM	500.0	465.80	93.2
VANADIUM	500.0	442.50	88.5 •
ZINC	500.0	467.40	93.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ29B Oct 30, 2007 4:13

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11610.00	92.9
ANTIMONY	500.0	464.80	93.0
ARSENIC	500.0	464.90	93.0
BARIUM	500.0	466.10	93.2
BERYLLIUM	500.0	467.10	93.4
CADMIUM	500.0	479.10	95.8
CALCIUM	12500.0	11240.00	89.9
CHROMIUM	500.0	463.80	92.8
COBALT	500.0	463.70	92.7
COPPER	500.0	459.20	91.8
IRON	12500.0	11730.00	93.8
LEAD	500.0	486.00	97.2
MAGNESIUM	12500.0	11290.00	90.3
MANGANESE	500.0	461.70	92.3
NICKEL	500.0	478.20	95.6
POTASSIUM	12500.0	11390.00	91.1
SELENIUM	500.0	458.50	91.7
SILVER	500.0	444.10	88.8 •
SODIUM	12500.0	11810.00	94.5
THALLIUM	500.0	465.60	93.1
VANADIUM	500.0	442.80	88.6 •
ZINC	500.0	467.60	93.5

SAMPLE: CCV

File: IXJ29B Oct 30, 2007 4:36

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11620.00	93.0
ANTIMONY	500.0	467.70	93.5
ARSENIC	500.0	467.20	93.4
BARIUM	500.0	466.80	93.4
BERYLLIUM	500.0	466.80	93.4
CADMIUM	500.0	480.50	96.1
CALCIUM	12500.0	11180.00	89.4 •
CHROMIUM	500.0	464.30	92.9
COBALT	500.0	463.60	92.7
COPPER	500.0	459.40	91.9
IRON	12500.0	11720.00	93.8
LEAD	500.0	488.20	97.6
MAGNESIUM	12500.0	11170.00	89.4 •
MANGANESE	500.0	456.20	91.2
NICKEL	500.0	479.40	95.9
POTASSIUM	12500.0	11400.00	91.2
SELENIUM	500.0	460.30	92.1
SILVER	500.0	441.90	88.4 •
SODIUM	12500.0	11750.00	94.0
THALLIUM	500.0	467.90	93.6
VANADIUM	500.0	437.20	87.4 •
ZINC	500.0	467.70	93.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ29B Oct 30, 2007 4:59

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11580.00	92.6
ANTIMONY	500.0	468.70	93.7
ARSENIC	500.0	467.10	93.4
BARIUM	500.0	466.00	93.2
BERYLLIUM	500.0	465.00	93.0
CADMIUM	500.0	480.90	96.2
CALCIUM	12500.0	11220.00	89.8
CHROMIUM	500.0	464.80	93.0
COBALT	500.0	464.40	92.9
COPPER	500.0	458.90	91.8
IRON	12500.0	11720.00	93.8
LEAD	500.0	486.40	97.3
MAGNESIUM	12500.0	11260.00	90.1
MANGANESE	500.0	459.30	91.9
NICKEL	500.0	479.80	96.0
POTASSIUM	12500.0	11370.00	91.0
SELENIUM	500.0	460.10	92.0
SILVER	500.0	444.20	88.8 •
SODIUM	12500.0	11770.00	94.2
THALLIUM	500.0	467.80	93.6
VANADIUM	500.0	443.90	88.8 •
ZINC	500.0	469.60	93.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICV

File: IXJ30A Oct 30, 2007 16:53

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	9605.00	96.0
ANTIMONY	400.0	383.80	96.0
ARSENIC	400.0	379.20	94.8
CADMIUM	400.0	385.20	96.3
CALCIUM	10000.0	9566.00	95.7
CHROMIUM	400.0	388.10	97.0
COBALT	400.0	391.00	97.8
IRON	10000.0	9860.00	98.6
LEAD	400.0	388.10	97.0
MAGNESIUM	10000.0	9724.00	97.2
NICKEL	400.0	389.70	97.4
SELENIUM	400.0	379.90	95.0
SILVER	400.0	381.70	95.4
THALLIUM	400.0	387.90	97.0
VANADIUM	400.0	381.30	95.3

SAMPLE: CCV

File: IXJ30A Oct 30, 2007 17:16

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11970.00	95.8
ANTIMONY	500.0	479.40	95.9
ARSENIC	500.0	476.40	95.3
CADMIUM	500.0	485.90	97.2
CALCIUM	12500.0	11830.00	94.6
CHROMIUM	500.0	481.90	96.4
COBALT	500.0	482.70	96.5
IRON	12500.0	12160.00	97.3
LEAD	500.0	490.50	98.1
MAGNESIUM	12500.0	12370.00	99.0
NICKEL	500.0	486.60	97.3
SELENIUM	500.0	474.80	95.0
SILVER	500.0	471.20	94.2
THALLIUM	500.0	483.70	96.7
VANADIUM	500.0	467.50	93.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ30A Oct 30, 2007 18:11

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12250.00	98.0
ANTIMONY	500.0	479.70	95.9
ARSENIC	500.0	477.10	95.4
CADMIUM	500.0	494.60	98.9
CALCIUM	12500.0	11670.00	93.4
CHROMIUM	500.0	479.60	95.9
COBALT	500.0	473.90	94.8
IRON	12500.0	12150.00	97.2
LEAD	500.0	500.80	100.2
MAGNESIUM	12500.0	12760.00	102.1
NICKEL	500.0	489.00	97.8
SELENIUM	500.0	469.40	93.9
SILVER	500.0	457.10	91.4
THALLIUM	500.0	475.70	95.1
VANADIUM	500.0	459.10	91.8

SAMPLE: CCV

File: IXJ30A Oct 30, 2007 19:06

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12250.00	98.0
ANTIMONY	500.0	486.50	97.3
ARSENIC	500.0	483.00	96.6
CADMIUM	500.0	495.50	99.1
CALCIUM	12500.0	11890.00	95.1
CHROMIUM	500.0	485.30	97.1
COBALT	500.0	482.80	96.6
IRON	12500.0	12240.00	97.9
LEAD	500.0	501.20	100.2
MAGNESIUM	12500.0	12700.00	101.6
NICKEL	500.0	493.00	98.6
SELENIUM	500.0	478.50	95.7
SILVER	500.0	472.80	94.6
THALLIUM	500.0	485.30	97.1
VANADIUM	500.0	474.30	94.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ30A Oct 30, 2007 20:02

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12260.00	98.1
ANTIMONY	500.0	486.40	97.3
ARSENIC	500.0	485.80	97.2
CADMIUM	500.0	495.00	99.0
CALCIUM	12500.0	12110.00	96.9
CHROMIUM	500.0	486.70	97.3
COBALT	500.0	487.40	97.5
IRON	12500.0	12280.00	98.2
LEAD	500.0	499.90	100.0
MAGNESIUM	12500.0	12740.00	101.9
NICKEL	500.0	494.90	99.0
SELENIUM	500.0	483.80	96.8
SILVER	500.0	479.00	95.8
THALLIUM	500.0	490.60	98.1
VANADIUM	500.0	482.60	96.5

SAMPLE: CCV

File: IXJ30A Oct 30, 2007 20:57

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12320.00	98.6
ANTIMONY	500.0	489.70	97.9
ARSENIC	500.0	484.10	96.8
CADMIUM	500.0	490.40	98.1
CALCIUM	12500.0	12230.00	97.8
CHROMIUM	500.0	485.90	97.2
COBALT	500.0	489.30	97.9
IRON	12500.0	12330.00	98.6
LEAD	500.0	494.70	98.9
MAGNESIUM	12500.0	12730.00	101.8
NICKEL	500.0	492.60	98.5
SELENIUM	500.0	485.50	97.1
SILVER	500.0	485.80	97.2
THALLIUM	500.0	492.00	98.4
VANADIUM	500.0	487.20	97.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ30A Oct 30, 2007 21:52

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12310.00	98.5
ANTIMONY	500.0	491.50	98.3
ARSENIC	500.0	486.30	97.3
CADMIUM	500.0	490.90	98.2
CALCIUM	12500.0	12260.00	98.1
CHROMIUM	500.0	487.20	97.4
COBALT	500.0	491.00	98.2
IRON	12500.0	12290.00	98.3
LEAD	500.0	497.40	99.5
MAGNESIUM	12500.0	12700.00	101.6
NICKEL	500.0	493.30	98.7
SELENIUM	500.0	486.70	97.3
SILVER	500.0	486.30	97.3
THALLIUM	500.0	494.20	98.8
VANADIUM	500.0	486.70	97.3

SAMPLE: CCV

File: IXJ30A Oct 30, 2007 22:46

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12290.00	98.3
ANTIMONY	500.0	490.60	98.1
ARSENIC	500.0	489.60	97.9
CADMIUM	500.0	493.20	98.6
CALCIUM	12500.0	12340.00	98.7
CHROMIUM	500.0	491.60	98.3
COBALT	500.0	493.60	98.7
IRON	12500.0	12370.00	99.0
LEAD	500.0	497.90	99.6
MAGNESIUM	12500.0	12700.00	101.6
NICKEL	500.0	496.00	99.2
SELENIUM	500.0	489.40	97.9
SILVER	500.0	490.90	98.2
THALLIUM	500.0	496.40	99.3
VANADIUM	500.0	492.00	98.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCV

File: IXJ30A Oct 30, 2007 23:41

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12340.00	98.7
ANTIMONY	500.0	488.90	97.8
ARSENIC	500.0	487.00	97.4
CADMIUM	500.0	492.60	98.5
CALCIUM	12500.0	12390.00	99.1
CHROMIUM	500.0	491.30	98.3
COBALT	500.0	492.20	98.4
IRON	12500.0	12320.00	98.6
LEAD	500.0	497.20	99.4
MAGNESIUM	12500.0	12750.00	102.0
NICKEL	500.0	495.10	99.0
SELENIUM	500.0	487.40	97.5
SILVER	500.0	490.50	98.1
THALLIUM	500.0	496.40	99.3
VANADIUM	500.0	493.10	98.6

SAMPLE: CCV

File: IXJ30A Oct 31, 2007 0:37

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12280.00	98.2
ANTIMONY	500.0	495.60	99.1
ARSENIC	500.0	492.00	98.4
CADMIUM	500.0	495.00	99.0
CALCIUM	12500.0	12230.00	97.8
CHROMIUM	500.0	489.80	98.0
COBALT	500.0	494.90	99.0
IRON	12500.0	12280.00	98.2
LEAD	500.0	501.00	100.2
MAGNESIUM	12500.0	12640.00	101.1
NICKEL	500.0	497.60	99.5
SELENIUM	500.0	490.40	98.1
SILVER	500.0	490.00	98.0
THALLIUM	500.0	499.60	99.9
VANADIUM	500.0	488.70	97.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

SAMPLE: PQL

File: HXJ24B Oct 24, 2007 14:08 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
MERCURY	0.2	0.19	95.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

SAMPLE: PQL

File: Hxj31a Oct 31, 2007 12:24 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
MERCURY	0.2	0.21	105.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

SAMPLE: PQL

File: IXJ26A Oct 26, 2007 15:46 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	310.10	103.4
ANTIMONY	8.0	8.58	107.3
BERYLLIUM	5.0	5.15	103.0
CALCIUM	50.0	47.83	95.7
COBALT	30.0	31.39	104.6
COPPER	25.0	23.18	92.7
IRON	100.0	100.80	100.8
MAGNESIUM	50.0	55.87	111.7
MANGANESE	5.0	5.21	104.2
NICKEL	40.0	42.57	106.4
POTASSIUM	1000.0	957.50	95.8
SODIUM	1000.0	996.20	99.6
THALLIUM	15.0	14.68	97.9
VANADIUM	25.0	22.97	91.9
ZINC	25.0	25.76	103.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

SAMPLE: PQL

File: IXJ26A Oct 26, 2007 20:20 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	302.20	100.7
ANTIMONY	8.0	7.77	97.1
BERYLLIUM	5.0	5.06	101.2
CALCIUM	50.0	75.41	150.8 *
COBALT	30.0	30.61	102.0
COPPER	25.0	24.53	98.1
IRON	100.0	106.60	106.6
MAGNESIUM	50.0	59.26	118.5
MANGANESE	5.0	6.66	133.2
NICKEL	40.0	42.42	106.1
POTASSIUM	1000.0	1002.00	100.2
SODIUM	1000.0	1054.00	105.4
THALLIUM	15.0	15.24	101.6
VANADIUM	25.0	23.79	95.2
ZINC	25.0	25.39	101.6

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

SAMPLE: PQL

File: IXJ26A Oct 27, 2007 00:41 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	310.80	103.6
ANTIMONY	8.0	8.51	106.4
BERYLLIUM	5.0	5.12	102.4
CALCIUM	50.0	51.70	103.4
COBALT	30.0	30.48	101.6
COPPER	25.0	24.95	99.8
IRON	100.0	105.40	105.4
MAGNESIUM	50.0	52.45	104.9
MANGANESE	5.0	5.74	114.8
NICKEL	40.0	43.03	107.6
POTASSIUM	1000.0	1006.00	100.6
SODIUM	1000.0	1093.00	109.3
THALLIUM	15.0	14.99	99.9
VANADIUM	25.0	23.19	92.8
ZINC	25.0	26.63	106.5

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

SAMPLE: PQL

File: IXJ29A Oct 29, 2007 15:40 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	284.10	94.7
ARSENIC	8.0	7.34	91.8
BARIUM	5.0	5.28	105.6
CADMIUM	10.0	10.28	102.8
CALCIUM	50.0	46.40	92.8
CHROMIUM	15.0	15.51	103.4
IRON	100.0	95.35	95.3
LEAD	5.0	4.37	87.4
MAGNESIUM	50.0	57.17	114.3
SELENIUM	10.0	14.20	142.0
SILVER	15.0	15.97	106.5

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

SAMPLE: PQL

File: IXJ29A Oct 29, 2007 18:17 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	316.20	105.4
ARSENIC	8.0	7.48	93.5
BARIUM	5.0	5.58	111.6
CADMIUM	10.0	10.63	106.3
CALCIUM	50.0	52.66	105.3
CHROMIUM	15.0	15.27	101.8
IRON	100.0	100.10	100.1
LEAD	5.0	5.47	109.4
MAGNESIUM	50.0	57.34	114.7
SELENIUM	10.0	13.18	131.8
SILVER	15.0	15.49	103.3

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

SAMPLE: PQL

File: IXJ29B Oct 29, 2007 19:41 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	303.70	101.2
ANTIMONY	8.0	7.32	91.5
ARSENIC	8.0	8.11	101.4
BARIUM	5.0	5.09	101.8
BERYLLIUM	5.0	5.10	102.0
CADMIUM	10.0	10.53	105.3
CALCIUM	50.0	51.44	102.9
CHROMIUM	15.0	15.15	101.0
COBALT	30.0	31.81	106.0
COPPER	25.0	23.77	95.1
IRON	100.0	98.36	98.4
LEAD	5.0	4.56	91.2
MAGNESIUM	50.0	56.42	112.8
MANGANESE	5.0	5.05	101.0
NICKEL	40.0	42.64	106.6
POTASSIUM	1000.0	986.70	98.7
SELENIUM	10.0	10.96	109.6
SILVER	15.0	14.81	98.7
SODIUM	1000.0	961.40	96.1
THALLIUM	15.0	15.32	102.1
VANADIUM	25.0	23.58	94.3
ZINC	25.0	26.02	104.1

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

SAMPLE: PQL

File: IXJ29B Oct 29, 2007 22:27 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	293.90	98.0
ANTIMONY	8.0	7.09	88.6
ARSENIC	8.0	7.54	94.3
BARIUM	5.0	4.90	98.0
BERYLLIUM	5.0	4.99	99.8
CADMIUM	10.0	10.29	102.9
CALCIUM	50.0	44.00	88.0
CHROMIUM	15.0	14.37	95.8
COBALT	30.0	30.89	103.0
COPPER	25.0	23.98	95.9
IRON	100.0	111.10	111.1
LEAD	5.0	4.60	92.0
MAGNESIUM	50.0	53.76	107.5
MANGANESE	5.0	5.02	100.4
NICKEL	40.0	41.75	104.4
POTASSIUM	1000.0	978.40	97.8
SELENIUM	10.0	9.95	99.5
SILVER	15.0	14.36	95.7
SODIUM	1000.0	987.00	98.7
THALLIUM	15.0	15.13	100.9
VANADIUM	25.0	22.71	90.8
ZINC	25.0	24.97	99.9

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

SAMPLE: PQL

File: IXJ29B Oct 30, 2007 01:14 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	286.30	95.4
ANTIMONY	8.0	7.62	95.3
ARSENIC	8.0	8.20	102.5
BARIUM	5.0	5.06	101.2
BERYLLIUM	5.0	4.98	99.6
CADMIUM	10.0	10.36	103.6
CALCIUM	50.0	49.75	99.5
CHROMIUM	15.0	14.57	97.1
COBALT	30.0	30.56	101.9
COPPER	25.0	23.47	93.9
IRON	100.0	95.07	95.1
LEAD	5.0	5.04	100.8
MAGNESIUM	50.0	52.22	104.4
MANGANESE	5.0	4.72	94.4
NICKEL	40.0	41.59	104.0
POTASSIUM	1000.0	936.10	93.6
SELENIUM	10.0	9.61	96.1
SILVER	15.0	13.92	92.8
SODIUM	1000.0	976.00	97.6
THALLIUM	15.0	14.60	97.3
VANADIUM	25.0	22.32	89.3
ZINC	25.0	25.41	101.6

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

SAMPLE: PQL

File: IXJ29B Oct 30, 2007 04:45 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	292.60	97.5
ANTIMONY	8.0	7.30	91.3
ARSENIC	8.0	7.87	98.4
BARIUM	5.0	5.04	100.8
BERYLLIUM	5.0	4.93	98.6
CADMIUM	10.0	10.38	103.8
CALCIUM	50.0	49.33	98.7
CHROMIUM	15.0	14.65	97.7
COBALT	30.0	30.43	101.4
COPPER	25.0	23.37	93.5
IRON	100.0	100.10	100.1
LEAD	5.0	5.54	110.8
MAGNESIUM	50.0	53.30	106.6
MANGANESE	5.0	4.98	99.6
NICKEL	40.0	41.59	104.0
POTASSIUM	1000.0	950.90	95.1
SELENIUM	10.0	10.29	102.9
SILVER	15.0	14.00	93.3
SODIUM	1000.0	954.40	95.4
THALLIUM	15.0	15.09	100.6
VANADIUM	25.0	22.16	88.6
ZINC	25.0	25.08	100.3

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

SAMPLE: PQL

File: IXJ30A Oct 30, 2007 17:02 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	280.90	93.6
ANTIMONY	8.0	6.71	83.9
ARSENIC	8.0	8.05	100.6
CADMIUM	10.0	10.34	103.4
CALCIUM	50.0	50.23	100.5
CHROMIUM	15.0	14.84	98.9
COBALT	30.0	31.24	104.1
IRON	100.0	101.00	101.0
LEAD	5.0	4.73	94.6
MAGNESIUM	50.0	49.34	98.7
NICKEL	40.0	41.96	104.9
SELENIUM	10.0	9.46	94.6
SILVER	15.0	14.92	99.5
THALLIUM	15.0	15.21	101.4
VANADIUM	25.0	23.70	94.8

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

SAMPLE: PQL

File: IXJ30A Oct 30, 2007 20:43 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	283.00	94.3
ANTIMONY	8.0	6.95	86.9
ARSENIC	8.0	7.80	97.5
CADMIUM	10.0	10.50	105.0
CALCIUM	50.0	56.48	113.0
CHROMIUM	15.0	14.92	99.5
COBALT	30.0	31.69	105.6
IRON	100.0	101.60	101.6
LEAD	5.0	4.72	94.4
MAGNESIUM	50.0	50.50	101.0
NICKEL	40.0	42.35	105.9
SELENIUM	10.0	10.46	104.6
SILVER	15.0	15.18	101.2
THALLIUM	15.0	15.66	104.4
VANADIUM	25.0	24.29	97.2

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

SAMPLE: PQL

File: IXJ30A Oct 31, 2007 00:23 Concentration Units: ug/L

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	280.30	93.4
ANTIMONY	8.0	7.17	89.6
ARSENIC	8.0	7.78	97.3
CADMIUM	10.0	10.48	104.8
CALCIUM	50.0	58.00	116.0
CHROMIUM	15.0	15.02	100.1
COBALT	30.0	31.78	105.9
IRON	100.0	136.00	136.0
LEAD	5.0	4.92	98.4
MAGNESIUM	50.0	50.40	100.8
NICKEL	40.0	42.57	106.4
SELENIUM	10.0	10.01	100.1
SILVER	15.0	15.45	103.0
THALLIUM	15.0	15.23	101.5
VANADIUM	25.0	24.22	96.9

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICB

File: HXJ24B Oct 24, 2007 14:06

Analyte	Result	C
MERCURY	-0.02	B

SAMPLE: CCB

File: HXJ24B Oct 24, 2007 14:32

Analyte	Result	C
MERCURY	0.07	B

SAMPLE: CCB

File: HXJ24B Oct 24, 2007 14:57

Analyte	Result	C
MERCURY	-0.02	B

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCB

File: HXJ24B Oct 24, 2007 15:42

Analyte	Result	C
MERCURY	-0.07	B

SAMPLE: CCB

File: HXJ24B Oct 24, 2007 15:59

Analyte	Result	C
MERCURY	-0.02	B

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICB

File: Hxj31a Oct 31, 2007 12:22

Analyte	Result	C
MERCURY	0.02	U

SAMPLE: CCB

File: Hxj31a Oct 31, 2007 12:47

Analyte	Result	C
MERCURY	-0.02	B

SAMPLE: CCB

File: Hxj31a Oct 31, 2007 13:13

Analyte	Result	C
MERCURY	-0.02	B

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCB

File: Hxj31a Oct 31, 2007 13:33

Analyte	Result	C
MERCURY	-0.02	B

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICB

File: IXJ26A Oct 26, 2007 15:41

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	1.38	B
BERYLLIUM	0.12	U
CALCIUM	-14.80	B
COBALT	0.26	U
COPPER	0.23	B
IRON	5.20	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: CCB

File: IXJ26A Oct 26, 2007 16:04

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	1.28	B
BERYLLIUM	0.12	U
CALCIUM	7.70	U
COBALT	0.26	U
COPPER	0.22	U
IRON	11.87	B
MAGNESIUM	12.31	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: CCB

File: IXJ26A Oct 26, 2007 16:59

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	1.77	B
BERYLLIUM	0.12	U
CALCIUM	7.70	U
COBALT	0.26	U
COPPER	0.50	B
IRON	9.02	B
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCB
File: IXJ26A Oct 26, 2007 17:53

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	1.64	B
BERYLLIUM	0.12	U
CALCIUM	7.70	U
COBALT	0.26	U
COPPER	0.48	B
IRON	10.52	B
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SODIUM	13.00	U
THALLIUM	1.34	B
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: CCB
File: IXJ26A Oct 26, 2007 18:48

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
BERYLLIUM	0.12	U
CALCIUM	7.70	U
COBALT	0.26	U
COPPER	0.57	B
IRON	12.97	B
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: CCB
File: IXJ26A Oct 26, 2007 19:43

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
BERYLLIUM	0.12	U
CALCIUM	7.70	U
COBALT	0.26	U
COPPER	0.33	B
IRON	7.82	B
MAGNESIUM	5.42	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SODIUM	19.59	B
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCB
File: IXJ26A Oct 26, 2007 20:39

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	1.17	B
BERYLLIUM	0.12	U
CALCIUM	7.70	U
COBALT	0.26	U
COPPER	0.87	B
IRON	13.74	B
MAGNESIUM	13.36	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SODIUM	24.50	B
THALLIUM	0.90	B
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: CCB
File: IXJ26A Oct 26, 2007 21:34

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	2.62	B
BERYLLIUM	0.12	U
CALCIUM	7.70	U
COBALT	0.26	U
COPPER	0.42	B
IRON	7.22	B
MAGNESIUM	5.42	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SODIUM	68.15	B
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: CCB
File: IXJ26A Oct 26, 2007 22:30

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	1.19	B
BERYLLIUM	0.12	U
CALCIUM	-7.75	B
COBALT	0.26	U
COPPER	0.42	B
IRON	8.18	B
MAGNESIUM	6.03	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SODIUM	52.99	B
THALLIUM	0.71	U
VANADIUM	-0.30	B
ZINC	0.23	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCB
File: IXJ26A Oct 26, 2007 23:26

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
BERYLLIUM	0.12	U
CALCIUM	8.40	B
COBALT	-0.56	B
COPPER	3.50	B
IRON	5.20	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	101.60	B
SODIUM	37.88	B
THALLIUM	0.71	U
VANADIUM	-0.36	B
ZINC	0.23	U

SAMPLE: CCB
File: IXJ26A Oct 27, 2007 0:23

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
BERYLLIUM	0.12	U
CALCIUM	13.21	B
COBALT	-0.56	B
COPPER	3.13	B
IRON	5.20	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	99.67	B
SODIUM	48.68	B
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: CCB
File: IXJ26A Oct 27, 2007 0:37

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	1.21	B
BERYLLIUM	0.12	U
CALCIUM	20.79	B
COBALT	-0.57	B
COPPER	3.50	B
IRON	5.20	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SODIUM	34.91	B
THALLIUM	0.71	U
VANADIUM	-0.33	B
ZINC	0.39	B

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCB

File: IXJ26A ~~Oct 27~~, 2007 1:00

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	1.18	B
BERYLLIUM	0.12	U
CALCIUM	15.14	B
COBALT	-0.53	B
COPPER	3.27	B
IRON	5.20	U
MAGNESIUM	5.83	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	91.31	B
SODIUM	26.45	B
THALLIUM	0.71	U
VANADIUM	-0.42	B
ZINC	0.23	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICB
File: IXJ29A Oct 29, 2007 15:35

Analyte	Result	C
ALUMINUM	19.00	U
ARSENIC	0.90	B
BARIUM	0.45	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	-0.37	B
IRON	5.20	U
LEAD	0.91	U
MAGNESIUM	6.22	B
SELENIUM	2.97	B
SILVER	0.72	B

SAMPLE: CCB
File: IXJ29A Oct 29, 2007 15:58

Analyte	Result	C
ALUMINUM	34.26	B
ARSENIC	0.83	U
BARIUM	0.45	U
CADMIUM	0.17	B
CALCIUM	23.55	B
CHROMIUM	0.28	U
IRON	21.08	B
LEAD	0.91	U
MAGNESIUM	35.92	B
SELENIUM	3.83	B
SILVER	0.97	B

SAMPLE: CCB
File: IXJ29A Oct 29, 2007 16:53

Analyte	Result	C
ALUMINUM	19.00	U
ARSENIC	1.18	B
BARIUM	0.45	U
CADMIUM	0.19	B
CALCIUM	18.18	B
CHROMIUM	0.28	U
IRON	14.73	B
LEAD	0.91	U
MAGNESIUM	21.87	B
SELENIUM	3.83	B
SILVER	0.50	B

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCB
File: IXJ29A Oct 29, 2007 17:50

Analyte	Result	C
ALUMINUM	19.00	U
ARSENIC	0.88	B
BARIUM	0.45	U
CADMIUM	0.28	B
CALCIUM	20.55	B
CHROMIUM	0.28	U
IRON	15.02	B
LEAD	1.28	B
MAGNESIUM	22.77	B
SELENIUM	2.92	B
SILVER	1.01	B

SAMPLE: CCB
File: IXJ29A Oct 29, 2007 18:13

Analyte	Result	C
ALUMINUM	19.37	B
ARSENIC	0.83	U
BARIUM	0.60	B
CADMIUM	0.16	B
CALCIUM	11.14	B
CHROMIUM	0.28	U
IRON	12.99	B
LEAD	0.91	U
MAGNESIUM	19.52	B
SELENIUM	2.42	B
SILVER	0.83	B

SAMPLE: CCB
File: IXJ29A Oct 29, 2007 18:36

Analyte	Result	C
ALUMINUM	19.00	U
ARSENIC	1.15	B
BARIUM	0.45	U
CADMIUM	0.19	B
CALCIUM	17.51	B
CHROMIUM	0.28	U
IRON	15.67	B
LEAD	0.91	U
MAGNESIUM	19.49	B
SELENIUM	4.20	B
SILVER	0.74	B

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICB
File: IXJ29B Oct 29, 2007 19:36

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.12	B
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	-0.41	B
IRON	5.20	U
LEAD	0.91	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	-14.03	B
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: CCB
File: IXJ29B Oct 29, 2007 19:59

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.89	B
ARSENIC	1.34	B
BARIUM	0.45	U
BERYLLIUM	0.15	B
CADMIUM	0.25	B
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.26	B
IRON	6.45	B
LEAD	0.91	U
MAGNESIUM	10.03	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.33	B

SAMPLE: CCB
File: IXJ29B Oct 29, 2007 20:55

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	1.40	B
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.22	B
CALCIUM	7.70	U
CHROMIUM	0.30	B
COBALT	0.26	U
COPPER	0.22	U
IRON	5.20	U
LEAD	0.91	U
MAGNESIUM	6.71	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCB
File: IXJ29B Oct 29, 2007 21:50

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.13	B
CADMIUM	0.26	B
CALCIUM	7.70	U
CHROMIUM	0.45	B
COBALT	0.26	U
COPPER	0.22	U
IRON	5.20	U
LEAD	0.91	U
MAGNESIUM	7.23	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.54	B
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: CCB
File: IXJ29B Oct 29, 2007 22:46

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	1.27	B
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.12	B
CADMIUM	0.21	B
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.22	U
IRON	6.64	B
LEAD	0.91	U
MAGNESIUM	7.60	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.26	B

SAMPLE: CCB
File: IXJ29B Oct 29, 2007 23:41

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	1.29	B
BARIUM	0.45	U
BERYLLIUM	0.14	B
CADMIUM	0.22	B
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.22	U
IRON	5.20	U
LEAD	0.91	U
MAGNESIUM	6.82	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.81	B
SILVER	0.57	B
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCB
File: IXJ29B Oct 30, 2007 0:37

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	1.51	B
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.20	B
CALCIUM	7.70	U
CHROMIUM	0.34	B
COBALT	0.26	U
COPPER	0.36	B
IRON	6.00	B
LEAD	0.91	U
MAGNESIUM	6.03	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	1.38	B
VANADIUM	0.29	U
ZINC	0.28	B

SAMPLE: CCB
File: IXJ29B Oct 30, 2007 1:33

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.15	B
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.22	U
IRON	6.53	B
LEAD	0.91	U
MAGNESIUM	7.69	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.60	B
SODIUM	13.00	U
THALLIUM	0.71	U
VANADIUM	-0.39	B
ZINC	0.23	U

SAMPLE: CCB
File: IXJ29B Oct 30, 2007 2:28

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	1.05	B
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.18	B
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	0.22	U
IRON	6.11	B
LEAD	0.91	U
MAGNESIUM	8.83	B
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	13.00	U
THALLIUM	0.84	B
VANADIUM	0.29	U
ZINC	0.23	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCB
File: IXJ29B Oct 30, 2007 3:23

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	1.05	B
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	-0.31	B
IRON	5.20	U
LEAD	1.20	B
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.51	B
SODIUM	-19.68	B
THALLIUM	0.98	B
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: CCB
File: IXJ29B Oct 30, 2007 4:18

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.16	B
CALCIUM	7.70	U
CHROMIUM	0.28	B
COBALT	0.26	U
COPPER	-0.23	B
IRON	5.20	B
LEAD	0.91	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	-19.50	B
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

SAMPLE: CCB
File: IXJ29B Oct 30, 2007 4:41

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	1.70	B
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.13	B
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	-0.30	B
IRON	7.03	B
LEAD	0.91	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	-29.25	B
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCB

File: IXJ29B Oct 30, 2007 5:04

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	1.12	B
ARSENIC	1.46	B
BARIUM	0.45	U
BERYLLIUM	0.12	U
CADMIUM	0.15	B
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
COPPER	-0.36	B
IRON	5.27	B
LEAD	0.91	U
MAGNESIUM	4.90	U
MANGANESE	0.57	U
NICKEL	0.41	U
POTASSIUM	86.00	U
SELENIUM	1.50	U
SILVER	0.46	U
SODIUM	-22.79	B
THALLIUM	0.71	U
VANADIUM	0.29	U
ZINC	0.23	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICB
File: IXJ30A Oct 30, 2007 16:57

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
IRON	5.20	U
LEAD	0.91	U
MAGNESIUM	4.90	U
NICKEL	0.41	U
SELENIUM	1.50	U
SILVER	0.46	U
THALLIUM	0.71	U
VANADIUM	-0.46	B

SAMPLE: CCB
File: IXJ30A Oct 30, 2007 17:20

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
IRON	8.92	B
LEAD	0.91	U
MAGNESIUM	4.90	U
NICKEL	0.41	U
SELENIUM	1.63	B
SILVER	0.46	B
THALLIUM	0.71	U
VANADIUM	0.29	U

SAMPLE: CCB
File: IXJ30A Oct 30, 2007 18:15

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
IRON	10.01	B
LEAD	0.91	U
MAGNESIUM	4.90	U
NICKEL	0.41	U
SELENIUM	1.50	U
SILVER	0.46	U
THALLIUM	0.71	U
VANADIUM	0.29	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCB
File: IXJ30A Oct 30, 2007 19:11

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
IRON	8.97	B
LEAD	0.91	U
MAGNESIUM	4.90	U
NICKEL	0.41	U
SELENIUM	1.50	U
SILVER	0.46	U
THALLIUM	1.22	B
VANADIUM	0.29	U

SAMPLE: CCB
File: IXJ30A Oct 30, 2007 20:06

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
CADMIUM	0.12	B
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
IRON	9.32	B
LEAD	0.91	U
MAGNESIUM	4.90	U
NICKEL	0.41	U
SELENIUM	1.65	B
SILVER	0.46	U
THALLIUM	2.19	B
VANADIUM	0.29	U

SAMPLE: CCB
File: IXJ30A Oct 30, 2007 21:02

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
IRON	12.13	B
LEAD	0.91	U
MAGNESIUM	6.25	B
NICKEL	0.41	U
SELENIUM	1.56	B
SILVER	0.46	U
THALLIUM	0.71	U
VANADIUM	-0.37	B

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCB
File: IXJ30A Oct 30, 2007 21:56

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
IRON	14.46	B
LEAD	1.04	B
MAGNESIUM	5.81	B
NICKEL	0.41	U
SELENIUM	1.50	U
SILVER	0.46	U
THALLIUM	0.71	U
VANADIUM	0.29	U

SAMPLE: CCB
File: IXJ30A Oct 30, 2007 22:51

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
CADMIUM	0.10	U
CALCIUM	10.84	B
CHROMIUM	0.38	B
COBALT	0.26	U
IRON	35.56	B
LEAD	0.91	U
MAGNESIUM	6.02	B
NICKEL	0.41	U
SELENIUM	1.50	U
SILVER	0.46	U
THALLIUM	0.72	B
VANADIUM	0.29	U

SAMPLE: CCB
File: IXJ30A Oct 30, 2007 23:46

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
CADMIUM	0.10	U
CALCIUM	9.30	B
CHROMIUM	0.28	U
COBALT	0.26	U
IRON	10.68	B
LEAD	0.91	U
MAGNESIUM	4.90	U
NICKEL	0.41	U
SELENIUM	1.50	U
SILVER	0.46	U
THALLIUM	0.82	B
VANADIUM	0.29	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: CCB

File: IXJ30A Oct 31, 2007 0:41

Analyte	Result	C
ALUMINUM	19.00	U
ANTIMONY	0.87	U
ARSENIC	0.83	U
CADMIUM	0.10	U
CALCIUM	7.70	U
CHROMIUM	0.28	U
COBALT	0.26	U
IRON	11.40	B
LEAD	0.91	U
MAGNESIUM	4.90	U
NICKEL	0.41	U
SELENIUM	1.50	U
SILVER	0.71	B
THALLIUM	0.71	U
VANADIUM	0.29	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSXJ26ICS0

Matrix: SOIL **SDG Name:** SA6037

QC Batch ID: XJ26ICS0

Concentration Units : mg/Kgdrywt

Analyte	RESULT	C
ALUMINUM	1.900	U
ANTIMONY	0.090	U
ARSENIC	0.080	U
BARIUM	0.050	U
BERYLLIUM	0.010	U
CADMIUM	0.010	U
CALCIUM	3.702	B
CHROMIUM	0.099	B
COBALT	0.030	U
COPPER	0.271	B
IRON	1.434	B
LEAD	0.090	U
MAGNESIUM	0.747	B
MANGANESE	0.070	B
NICKEL	0.040	U
POTASSIUM	8.600	U
SELENIUM	0.150	U
SILVER	0.050	U
SODIUM	2.955	B
THALLIUM	0.070	U
VANADIUM	0.030	U
ZINC	0.331	B

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSXJ30HGS0

Matrix: SOIL **SDG Name:** SA6037

QC Batch ID: XJ30HGS0

Concentration Units : mg/Kgdrywt

Analyte	RESULT	C
MERCURY	0.010	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWXJ24HGW0

Matrix: WATER **SDG Name:** SA6037

QC Batch ID: XJ24HGW0

Concentration Units : ug/L

Analyte	RESULT	C
MERCURY	0.020	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWXJ26ICW1

Matrix: WATER **SDG Name:** SA6037

QC Batch ID: XJ26ICW1

Concentration Units : ug/L

Analyte	RESULT	C
ALUMINUM	19.150	B
ANTIMONY	1.287	B
ARSENIC	0.873	B
BARIUM	0.450	U
BERYLLIUM	-0.380	B
CADMIUM	0.100	U
CALCIUM	23.620	B
CHROMIUM	0.280	U
COBALT	0.260	U
COPPER	0.852	B
IRON	10.240	B
LEAD	0.910	U
MAGNESIUM	5.403	B
MANGANESE	0.570	U
NICKEL	0.410	U
POTASSIUM	86.000	U
SELENIUM	1.500	U
SILVER	0.757	B
SODIUM	86.360	B
THALLIUM	0.710	U
VANADIUM	0.290	U
ZINC	4.131	B

SDG SA6037

Soil

Affected Analyte	Sample	Reported Result	Qualifier	Interferent	Interferent level in ICS	Conc. ICS	Interferent Level	Est. Interference	Validation Action	Validation Action
Mn	2W-SD-SD43-0001	262		Fe	180300	-6	70800	-2.36	na	na
Zn		654			180300	6	70800	2.36	na	na
Sb	2W-SD-SD44-0001	0.6	u	Fe	187300	-2	164000	-1.75	na	UJ Reject more sever.
Cd		1.1			187300	3	164000	2.63	J	na
Cr		19.6			187300	2	164000	1.75	na	na
Co		3.4			187300	-3	164000	-2.63	J	na
Cu		82.3			180300	-3	164000	-2.73	na	na
Mn		265			180300	-6	164000	-5.46	na	na
Ni		19.6			187300	9	164000	7.88	J	na
Ag		0.32	u		187300	-7	164000	-6.13	na	UJ Reject more sev.
Tl		0.86			187300	4	164000	3.50	J BC	na
Va		51.3			187300	1	164000	0.88	na	na
Zn		600			180300	6	164000	5.46	na	na
As	2W-SD-SD47-0001	9.1		Fe	180300	4	45300	1.00	J	na
Cd		1.7			180300	3	45300	0.75	J	na
Cr		29.6			180300	2	45300	0.50	na	na
Co		5.1			180300	-3	45300	-0.75	J	na
Cu		100			180300	5	45300	1.26	na	na
Mn		352			180300	-6	45300	-1.51	na	na
Ni		33.2			180300	9	45300	2.26	na	na
Se		0.57	u		180300	-4	45300	-1.00	na	UJ Reject more sev.
Ag		0.18	u		187300	-7	45300	-1.69	na	UJ
Tl		0.27	u		180300	0	45300	0.00	na	na
Va		83.7			187300	1	45300	0.24	na	na
Zn		344			180300	6	45300	1.51	na	na
Mn	2W-SD-SD48-0001	812		Fe	180300	-6	40000	-1.33	na	na
Zn		624			180300	6	40000	1.33	na	na
As	2W-SD-SD48-0204	11.9		Fe	180300	4	22600	0.50	na	na
Cd		0.54			180300	3	22600	0.38	J	na
Cr		75.8			180300	2	22600	0.25	na	na
Co		5.8			180300	-3	22600	-0.38	na	na
Cu		49.2			180300	5	22600	0.63	na	na
Mn		219			180300	-6	22600	-0.75	na	na

Ni		19.4			180300	9	22600	1.13	na	na
Se		0.31			180300	-4	22600	-0.50	J	na
Ag		0.05	u		187300	-7	22600	-0.84	na	UJ
Tl		0.55			180300	0	22600	0.00	na	na
Va		57.4			187300	1	22600	0.12	na	na
Zn		74			180300	6	22600	0.75	na	na

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICSA

File: IXJ26A Oct 26, 2007 15:50

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	505500	101.1
ANTIMONY	0	0	
BERYLLIUM	0	0	
CALCIUM	500000	473000	94.6
COBALT	0	-4	
COPPER	0	6	
IRON	200000	188500	94.3
MAGNESIUM	500000	556800	111.4
MANGANESE	2	-6	
NICKEL	0	8	
POTASSIUM	0	63	
SODIUM	0	16	
THALLIUM	0	2	
VANADIUM	0	-1	
ZINC	0	7	

SAMPLE: ICSAB

File: IXJ26A Oct 26, 2007 15:55

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	501700	100.3
ANTIMONY	600	604	100.7
BERYLLIUM	500	487	97.4
CALCIUM	500000	468500	93.7
COBALT	500	447	89.4
COPPER	500	521	104.2
IRON	200000	187400	93.7
MAGNESIUM	500000	552200	110.4
MANGANESE	502	476	94.8
NICKEL	1000	899	89.9
POTASSIUM	20000	20380	101.9
SODIUM	20000	20670	103.4
THALLIUM	100	90	90.0
VANADIUM	500	479	95.8
ZINC	1000	901	90.1

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICSA

File: IXJ26A Oct 26, 2007 20:25

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	512600	102.5
ANTIMONY	0	0	
BERYLLIUM	0	0	
CALCIUM	500000	458000	91.6
COBALT	0	-4	
COPPER	0	6	
IRON	200000	186800	93.4
MAGNESIUM	500000	544200	108.8
MANGANESE	2	-6	
NICKEL	0	9	
POTASSIUM	0	14	
SODIUM	0	31	
THALLIUM	0	1	
VANADIUM	0	1	
ZINC	0	7	

SAMPLE: ICSAB

File: IXJ26A Oct 26, 2007 20:30

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	509000	101.8
ANTIMONY	600	606	101.0
BERYLLIUM	500	486	97.2
CALCIUM	500000	455900	91.2
COBALT	500	438	87.6
COPPER	500	511	102.2
IRON	200000	185600	92.8
MAGNESIUM	500000	542900	108.6
MANGANESE	502	481	95.8
NICKEL	1000	905	90.5
POTASSIUM	20000	20020	100.1
SODIUM	20000	21260	106.3
THALLIUM	100	89	89.0
VANADIUM	500	471	94.2
ZINC	1000	887	88.7

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICSA

File: IXJ26A Oct 27, 2007 00:46

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	515900	103.2
ANTIMONY	0	1	
BERYLLIUM	0	0	
CALCIUM	500000	447200	89.4
COBALT	0	-4	
COPPER	0	6	
IRON	200000	189300	94.7
MAGNESIUM	500000	507500	101.5
MANGANESE	2	-5	
NICKEL	0	9	
POTASSIUM	0	2	
SODIUM	0	86	
THALLIUM	0	1	
VANADIUM	0	0	
ZINC	0	8	

SAMPLE: ICSAB

File: IXJ26A Oct 27, 2007 00:51

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	512100	102.4
ANTIMONY	600	605	100.8
BERYLLIUM	500	486	97.2
CALCIUM	500000	438700	87.7
COBALT	500	430	86.0
COPPER	500	508	101.6
IRON	200000	187600	93.8
MAGNESIUM	500000	509800	102.0
MANGANESE	502	470	93.6
NICKEL	1000	905	90.5
POTASSIUM	20000	20010	100.1
SODIUM	20000	21300	106.5
THALLIUM	100	87	87.0
VANADIUM	500	451	90.2
ZINC	1000	886	88.6

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICSA

File: IXJ29A Oct 29, 2007 15:44

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	507900	101.6
ARSENIC	0	0	
BARIUM	0	0	
CADMIUM	0	3	
CALCIUM	500000	482400	96.5
CHROMIUM	3	2	
IRON	200000	191300	95.7
LEAD	0	1	
MAGNESIUM	500000	573700	114.7
SELENIUM	0	2	
SILVER	0	-5	

SAMPLE: ICSAB

File: IXJ29A Oct 29, 2007 15:49

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	525300	105.1
ARSENIC	100	96	96.0
BARIUM	500	508	101.6
CADMIUM	1000	875	87.5
CALCIUM	500000	499400	99.9
CHROMIUM	503	467	92.8
IRON	200000	197600	98.8
LEAD	50	45	90.0
MAGNESIUM	500000	605800	121.2 •
SELENIUM	50	49	98.0
SILVER	200	208	104.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICSA

File: IXJ29A Oct 29, 2007 18:22

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	526100	105.2
ARSENIC	0	3	
BARIUM	0	0	
CADMIUM	0	2	
CALCIUM	500000	493000	98.6
CHROMIUM	3	2	
IRON	200000	195400	97.7
LEAD	0	3	
MAGNESIUM	500000	600600	120.1
SELENIUM	0	1	
SILVER	0	-4	

SAMPLE: ICSAB

File: IXJ29A Oct 29, 2007 18:27

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	496500	99.3
ARSENIC	100	99	99.0
BARIUM	500	478	95.6
CADMIUM	1000	910	91.0
CALCIUM	500000	465700	93.1
CHROMIUM	503	461	91.7
IRON	200000	185100	92.5
LEAD	50	44	88.0
MAGNESIUM	500000	550600	110.1
SELENIUM	50	49	98.0
SILVER	200	199	99.5

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICSA

File: IXJ29B Oct 29, 2007 19:46

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	494800	99.0
ANTIMONY	0	0	
ARSENIC	0	0	
BARIUM	0	0	
BERYLLIUM	0	0	
CADMIUM	0	4	
CALCIUM	500000	460500	92.1
CHROMIUM	3	2	
COBALT	0	-3	
COPPER	0	5	
IRON	200000	184800	92.4
LEAD	0	1	
MAGNESIUM	500000	540100	108.0
MANGANESE	2	-6	
NICKEL	0	9	
POTASSIUM	0	-32	
SELENIUM	0	-2	
SILVER	0	-4	
SODIUM	0	9	
THALLIUM	0	0	
VANADIUM	0	0	
ZINC	0	7	

SAMPLE: ICSAB

File: IXJ29B Oct 29, 2007 19:50

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	489000	97.8
ANTIMONY	600	569	94.8
ARSENIC	100	96	96.0
BARIUM	500	473	94.6
BERYLLIUM	500	454	90.8
CADMIUM	1000	877	87.7
CALCIUM	500000	452600	90.5
CHROMIUM	503	450	89.5
COBALT	500	430	86.0
COPPER	500	492	98.4
IRON	200000	182500	91.3
LEAD	50	42	84.0
MAGNESIUM	500000	531000	106.2
MANGANESE	502	438	87.3
NICKEL	1000	852	85.2
POTASSIUM	20000	20380	101.9
SELENIUM	50	45	90.0
SILVER	200	197	98.5
SODIUM	20000	20260	101.3
THALLIUM	100	86	86.0
VANADIUM	500	453	90.6
ZINC	1000	862	86.2

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICSA

File: IXJ29B Oct 29, 2007 22:32

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	487600	97.5
ANTIMONY	0	-1	
ARSENIC	0	1	
BARIUM	0	0	
BERYLLIUM	0	0	
CADMIUM	0	4	
CALCIUM	500000	443200	88.6
CHROMIUM	3	2	
COBALT	0	-3	
COPPER	0	5	
IRON	200000	179900	90.0
LEAD	0	1	
MAGNESIUM	500000	518800	103.8
MANGANESE	2	-6	
NICKEL	0	9	
POTASSIUM	0	-39	
SELENIUM	0	-2	
SILVER	0	-6	
SODIUM	0	30	
THALLIUM	0	1	
VANADIUM	0	1	
ZINC	0	6	

SAMPLE: ICSAB

File: IXJ29B Oct 29, 2007 22:37

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	498500	99.7
ANTIMONY	600	562	93.7
ARSENIC	100	97	97.0
BARIUM	500	482	96.4
BERYLLIUM	500	461	92.2
CADMIUM	1000	869	86.9
CALCIUM	500000	452000	90.4
CHROMIUM	503	438	87.1
COBALT	500	419	83.8
COPPER	500	484	96.8
IRON	200000	184700	92.3
LEAD	50	43	86.0
MAGNESIUM	500000	536000	107.2
MANGANESE	502	440	87.6
NICKEL	1000	840	84.0
POTASSIUM	20000	20240	101.2
SELENIUM	50	46	92.0
SILVER	200	189	94.5
SODIUM	20000	20730	103.6
THALLIUM	100	83	83.0
VANADIUM	500	437	87.4
ZINC	1000	837	83.7

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICSA

File: IXJ29B Oct 30, 2007 01:19

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	482600	96.5
ANTIMONY	0	0	
ARSENIC	0	4	
BARIUM	0	0	
BERYLLIUM	0	0	
CADMIUM	0	3	
CALCIUM	500000	433400	86.7
CHROMIUM	3	2	
COBALT	0	-3	
COPPER	0	5	
IRON	200000	179300	89.6
LEAD	0	0	
MAGNESIUM	500000	503000	100.6
MANGANESE	2	-6	
NICKEL	0	9	
POTASSIUM	0	-56	
SELENIUM	0	-4	
SILVER	0	-7	
SODIUM	0	9	
THALLIUM	0	0	
VANADIUM	0	1	
ZINC	0	6	

SAMPLE: ICSAB

File: IXJ29B Oct 30, 2007 01:23

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	477400	95.5
ANTIMONY	600	549	91.5
ARSENIC	100	94	94.0
BARIUM	500	461	92.2
BERYLLIUM	500	441	88.2
CADMIUM	1000	866	86.6
CALCIUM	500000	429500	85.9
CHROMIUM	503	433	86.1
COBALT	500	409	81.8
COPPER	500	468	93.6
IRON	200000	177700	88.8
LEAD	50	42	84.0
MAGNESIUM	500000	484600	96.9
MANGANESE	502	417	83.1
NICKEL	1000	830	83.0
POTASSIUM	20000	19400	97.0
SELENIUM	50	43	86.0
SILVER	200	179	89.5
SODIUM	20000	19830	99.2
THALLIUM	100	82	82.0
VANADIUM	500	416	83.2
ZINC	1000	830	83.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICSA

File: IXJ29B Oct 30, 2007 04:50

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	484800	97.0
ANTIMONY	0	-1	
ARSENIC	0	2	
BARIUM	0	0	
BERYLLIUM	0	0	
CADMIUM	0	3	
CALCIUM	500000	431500	86.3
CHROMIUM	3	2	
COBALT	0	-3	
COPPER	0	5	
IRON	200000	180300	90.1
LEAD	0	-1	
MAGNESIUM	500000	496400	99.3
MANGANESE	2	-6	
NICKEL	0	9	
POTASSIUM	0	19	
SELENIUM	0	-3	
SILVER	0	-7	
SODIUM	0	-3	
THALLIUM	0	2	
VANADIUM	0	1	
ZINC	0	6	

SAMPLE: ICSAB

File: IXJ29B Oct 30, 2007 04:55

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	485200	97.0
ANTIMONY	600	557	92.8
ARSENIC	100	96	96.0
BARIUM	500	467	93.4
BERYLLIUM	500	447	89.4
CADMIUM	1000	876	87.6
CALCIUM	500000	441200	88.2
CHROMIUM	503	437	86.9
COBALT	500	412	82.4
COPPER	500	474	94.8
IRON	200000	179500	89.8
LEAD	50	43	86.0
MAGNESIUM	500000	494500	98.9
MANGANESE	502	432	86.1
NICKEL	1000	838	83.8
POTASSIUM	20000	19630	98.2
SELENIUM	50	44	88.0
SILVER	200	180	90.0
SODIUM	20000	20390	102.0
THALLIUM	100	84	84.0
VANADIUM	500	422	84.4
ZINC	1000	837	83.7

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICSA

File: IXJ30A Oct 30, 2007 17:06

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	497800	99.6
ANTIMONY	0	-1	
ARSENIC	0	1	
CADMIUM	0	1	
CALCIUM	500000	454200	90.8
CHROMIUM	3	2	
COBALT	0	-3	
IRON	200000	187500	93.8
LEAD	0	3	
MAGNESIUM	500000	565100	113.0
NICKEL	0	9	
SELENIUM	0	0	
SILVER	0	-7	
THALLIUM	0	2	
VANADIUM	0	1	

SAMPLE: ICSAB

File: IXJ30A Oct 30, 2007 17:11

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	492200	98.4
ANTIMONY	600	574	95.7
ARSENIC	100	96	96.0
CADMIUM	1000	882	88.2
CALCIUM	500000	451500	90.3
CHROMIUM	503	452	89.9
COBALT	500	430	86.0
IRON	200000	185200	92.6
LEAD	50	43	86.0
MAGNESIUM	500000	555400	111.1
NICKEL	1000	855	85.5
SELENIUM	50	45	90.0
SILVER	200	192	96.0
THALLIUM	100	87	87.0
VANADIUM	500	444	88.8

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICSA

File: IXJ30A Oct 30, 2007 20:48

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	505200	101.0
ANTIMONY	0	-2	
ARSENIC	0	-1	
CADMIUM	0	3	
CALCIUM	500000	458000	91.6
CHROMIUM	3	2	
COBALT	0	-2	
IRON	200000	186800	93.4
LEAD	0	3	
MAGNESIUM	500000	574500	114.9
NICKEL	0	9	
SELENIUM	0	-1	
SILVER	0	-7	
THALLIUM	0	2	
VANADIUM	0	1	

SAMPLE: ICSAB

File: IXJ30A Oct 30, 2007 20:52

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	509800	102.0
ANTIMONY	600	588	98.0
ARSENIC	100	97	97.0
CADMIUM	1000	894	89.4
CALCIUM	500000	472700	94.5
CHROMIUM	503	459	91.3
COBALT	500	434	86.8
IRON	200000	188100	94.0
LEAD	50	46	92.0
MAGNESIUM	500000	578300	115.7
NICKEL	1000	867	86.7
SELENIUM	50	50	100.0
SILVER	200	200	100.0
THALLIUM	100	89	89.0
VANADIUM	500	472	94.4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Concentration Units: ug/L

SAMPLE: ICSA

File: IXJ30A Oct 31, 2007 00:28

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	508300	101.7
ANTIMONY	0	-2	
ARSENIC	0	0	
CADMIUM	0	2	
CALCIUM	500000	475000	95.0
CHROMIUM	3	2	
COBALT	0	-3	
IRON	200000	187300	93.7
LEAD	0	3	
MAGNESIUM	500000	582500	116.5
NICKEL	0	9	
SELENIUM	0	0	
SILVER	0	-7	
THALLIUM	0	4	
VANADIUM	0	1	

SAMPLE: ICSAB

File: IXJ30A Oct 31, 2007 00:32

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	501900	100.4
ANTIMONY	600	584	97.3
ARSENIC	100	97	97.0
CADMIUM	1000	884	88.4
CALCIUM	500000	466300	93.3
CHROMIUM	503	454	90.3
COBALT	500	431	86.2
IRON	200000	186100	93.0
LEAD	50	46	92.0
MAGNESIUM	500000	566500	113.3
NICKEL	1000	857	85.7
SELENIUM	50	47	94.0
SILVER	200	199	99.5
THALLIUM	100	89	89.0
VANADIUM	500	465	93.0

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSSXJ26ICS0

Matrix: SOIL **SDG Name:** SA6037

QC Batch ID: XJ26ICS0

Concentration Units : mg/Kgdrywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ALUMINUM	7870.0	8393.42	106.7	59	141
ANTIMONY	70.5	23.59	33.5	0.0	211
ARSENIC	289.0	269.22	93.2	81	119
BARIUM	211.0	206.42	97.8	82	117
BERYLLIUM	54.4	51.96	95.5	83	117
CADMIUM	101.0	97.58	96.6	82	118
CALCIUM	3680.0	3805.47	103.4	81	119
CHROMIUM	224.0	209.79	93.7	80	120
COBALT	101.0	94.45	93.5	82	118
COPPER	88.0	82.94	94.3	83	117
IRON	15700.0	13013.07	82.9	42	159
LEAD	158.0	152.99	96.8	82	118
MAGNESIUM	2260.0	2395.01	106.0	78	122
MANGANESE	420.0	386.29	92.0	82	118
NICKEL	120.0	114.08	95.1	83	118
POTASSIUM	3000.0	2866.48	95.5	73	127
SELENIUM	130.0	121.67	93.6	78	122
SILVER	104.0	104.02	100.0	66	134
SODIUM	1080.0	1083.99	100.4	64	136
THALLIUM	94.0	88.85	94.5	77	122
VANADIUM	111.0	105.61	95.1	77	123
ZINC	272.0	261.89	96.3	79	121

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSSXJ30HGS0

Matrix: SOIL **SDG Name:** SA6037

QC Batch ID: XJ30HGS0

Concentration Units : mg/Kgdrywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
MERCURY	5.2	4.85	93.3	66	133

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWXJ24HGW0

Matrix: WATER **SDG Name:** SA6037

QC Batch ID: XJ24HGW0

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
MERCURY	5.0	5.06	101.2	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWXJ26ICW1

Matrix: WATER **SDG Name:** SA6037

QC Batch ID: XJ26ICW1

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ALUMINUM	2000.0	2229.00	111.5	80	120
ANTIMONY	500.0	508.70	101.7	80	120
ARSENIC	500.0	512.90	102.6	80	120
BARIUM	2000.0	2392.00	119.6	80	120
BERYLLIUM	50.0	55.04	110.1	80	120
CADMIUM	250.0	256.70	102.7	80	120
CALCIUM	2500.0	2432.00	97.3	80	120
CHROMIUM	200.0	235.60	117.8	80	120
COBALT	500.0	547.20	109.4	80	120
COPPER	250.0	273.00	109.2	80	120
IRON	1000.0	1127.00	112.7	80	120
LEAD	500.0	514.40	102.9	80	120
MAGNESIUM	5000.0	4841.00	96.8	80	120
MANGANESE	500.0	558.50	111.7	80	120
NICKEL	500.0	571.10	114.2	80	120
POTASSIUM	10000.0	9581.00	95.8	80	120
SELENIUM	500.0	510.60	102.1	80	120
SILVER	50.0	57.89	115.8	80	120
SODIUM	7500.0	7870.00	104.9	80	120
THALLIUM	500.0	494.00	98.8	80	120
VANADIUM	500.0	516.10	103.2	80	120
ZINC	500.0	549.10	109.8	80	120

NSB NEW LONDON
SOIL DATA
SA6037

FRACTION	CHEMICAL	2W-SD-SD47-0001	UNITS	2W-FD-101007-01	RPD	D
M	ALUMINUM	18100	MG/KG	18400	1.64	300.00
M	ANTIMONY	ND	MG/KG	0.82	200.00	0.82
M	ARSENIC	9.1	MG/KG	7.5	19.28	1.60
M	BARIUM	198	MG/KG	184	7.33	14.00
M	BERYLLIUM	1.3	MG/KG	1.2	8.00	0.10
M	CADMIUM	1.7	MG/KG	2.6	41.86	0.90
M	CALCIUM	5770	MG/KG	5590	3.17	180.00
M	CHROMIUM	29.6	MG/KG	31.8	7.17	2.20
M	COBALT	5.1	MG/KG	5.8	12.84	0.70
M	COPPER	100	MG/KG	120	18.18	20.00
M	IRON	45300	MG/KG	36000	22.88	9300.00
M	LEAD	79.1	MG/KG	94.8	18.06	15.70
M	MAGNESIUM	4500	MG/KG	4660	3.49	160.00
M	MANGANESE	352	MG/KG	298	16.62	54.00
M	MERCURY	0.47	MG/KG	0.34	32.10	0.13
M	NICKEL	33.2	MG/KG	36	8.09	2.80
M	POTASSIUM	1790	MG/KG	1810	1.11	20.00
M	SELENIUM	ND	MG/KG	0.75	200.00	0.75
M	SODIUM	1070	MG/KG	1020	4.78	50.00
M	VANADIUM	83.7	MG/KG	85.4	2.01	1.70
M	ZINC	344	MG/KG	322	6.61	22.00

Current RPD Quality Control Limit: 55 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NSB NEW LONDON
SOIL DATA
SA6037

FRACTION	CHEMICAL	2W-SD-SD47-0001	UNITS	2W-FD-101907-01	RPD	RPD
MISC	PH	5.8	S.U.	5.9	1.71	0.10
MISC	TOTAL ORGANIC CARBON	400000	MG/KG	370000	7.79	30000.00
MISC	TOTAL SOLIDS	14	%	15	6.90	1.00

Current RPD Quality Control Limit: 55 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name CETAC M6100 **Date:** 8/1/2007

Concentration Units: ug/L

Analyte	CRDL	IDL	M
MERCURY	0.20	0.02	CV

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name THERMO ICAP 6500 **Date:** 4/20/2007

Concentration Units: ug/L

Analyte	CRDL	IDL	M
ALUMINUM	300	19.00	P
ANTIMONY	8.0	0.87	P
ARSENIC	8.0	0.83	P
BARIUM	5.0	0.45	P
BERYLLIUM	5.0	0.12	P
CADMIUM	10	0.10	P
CALCIUM	50	7.70	P
CHROMIUM	15	0.28	P
COBALT	30	0.26	P
COPPER	25	0.22	P
IRON	100	5.20	P
LEAD	5.0	0.91	P
MAGNESIUM	50	4.90	P
MANGANESE	5.0	0.57	P
NICKEL	40	0.41	P
POTASSIUM	1000	86.00	P
SELENIUM	10	1.50	P
SILVER	15	0.46	P
SODIUM	1000	13.00	P
THALLIUM	15	0.71	P
VANADIUM	25	0.29	P
ZINC	25	0.23	P

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name THERMO ICAP 6500 **Date:** 1/8/2007

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	5.00	1000000	P
ANTIMONY	60.00	20000	P
ARSENIC	60.00	20000	P
BARIUM	5.00	20000	P
BERYLLIUM	5.00	20000	P
CADMIUM	60.00	20000	P
CALCIUM	5.00	1000000	P
CHROMIUM	10.00	20000	P
COBALT	60.00	20000	P
COPPER	10.00	20000	P
IRON	5.00	400000	P
LEAD	60.00	20000	P
MAGNESIUM	5.00	500000	P
MANGANESE	5.00	20000	P
NICKEL	10.00	20000	P
POTASSIUM	5.00	1000000	P
SELENIUM	60.00	20000	P
SILVER	10.00	2000	P
SODIUM	5.00	1000000	P
THALLIUM	60.00	20000	P
VANADIUM	10.00	20000	P
ZINC	60.00	20000	P

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** XJ24HGW0

Matrix: WATER **SDG Name:** SA6037

Method: CV **Prep Date:** 10/24/2007

Client ID	Lab Sample ID	Initial (L)	Final (L)
LCSWXJ24HGW0	LCSWXJ24HGW0	0.025	0.025
PBWXJ24HGW0	PBWXJ24HGW0	0.025	0.025
2W-RB-101907-01	SA6037-008	0.025	0.025
2W-FB-101907-01	SA6037-009	0.025	0.025

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** XJ26ICS0

Matrix: SOIL **SDG Name:** SA6037

Method: P **Prep Date:** 10/26/2007

Client ID	Lab Sample ID	Initial (g)	Final (L)
LCSSXJ26ICS0	LCSSXJ26ICS0	0.5048	0.1
PBSXJ26ICS0	PBSXJ26ICS0	1	0.1
2W-SD-SD47-0001	SA6037-001	1.87	0.1
2W-FD-101907-01	SA6037-002	1.68	0.1
2W-SD-SD44-0001	SA6037-003	1.87	0.1
2W-SD-SD43-0001	SA6037-005	1.93	0.1
2W-SD-SD48-0001	SA6037-006	1.76	0.1
2W-SD-SD48-0204	SA6037-007	1.87	0.1

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** XJ26ICW1

Matrix: WATER **SDG Name:** SA6037

Method: P **Prep Date:** 10/26/2007

Client ID	Lab Sample ID	Initial (L)	Final (L)
LCSWXJ26ICW1	LCSWXJ26ICW1	0.05	0.05
PBWXJ26ICW1	PBWXJ26ICW1	0.05	0.05
2W-RB-101907-01	SA6037-008	0.05	0.05
2W-FB-101907-01	SA6037-009	0.05	0.05

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** XJ30HGS0

Matrix: SOIL **SDG Name:** SA6037

Method: CV **Prep Date:** 10/30/2007

Client ID	Lab Sample ID	Initial (g)	Final (L)
LCSSXJ30HGS0	LCSSXJ30HGS0	0.2008	0.1
PBSXJ30HGS0	PBSXJ30HGS0	0.6	0.1
2W-SD-SD47-0001	SA6037-001	0.64	0.1
2W-FD-101907-01	SA6037-002	0.77	0.1
2W-SD-SD44-0001	SA6037-003	0.64	0.1
2W-SD-SD43-0001	SA6037-005	0.64	0.1
2W-SD-SD48-0001	SA6037-006	0.67	0.1
2W-SD-SD48-0204	SA6037-007	0.61	0.1

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Instrument ID: CETAC M6100 **File Name:** HXJ24B

Date: 10/24/2007 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
Calibration Blank		1	13:51	Hg
Standard #1 (0.2 p		1	13:53	Hg
Standard #2 (0.5 p		1	13:56	Hg
Standard #3 (1.0 p		1	13:58	Hg
Standard #4 (5.0 p		1	14:00	Hg
Standard #5 (10.0		1	14:02	Hg
ICV		1	14:04	HG
ICB		1	14:06	HG
PQL		1	14:08	HG
LCSWXJ24HGW0		1	14:10	HG
PBWXJ24HGW0		1	14:12	HG
ZZZZZZ		1	14:15	
ZZZZZZ		1	14:17	
ZZZZZZ		1	14:19	
ZZZZZZ		1	14:21	
ZZZZZZ		1	14:23	
ZZZZZZ		1	14:25	
ZZZZZZ		1	14:27	
CCV		1	14:29	HG
CCB		1	14:32	HG
ZZZZZZ		1	14:34	
ZZZZZZ		1	14:36	
ZZZZZZ		1	14:38	
ZZZZZZ		1	14:40	
ZZZZZZ		1	14:42	
ZZZZZZ		1	14:44	
ZZZZZZ		1	14:46	
ZZZZZZ		1	14:49	
ZZZZZZ		1	14:51	
ZZZZZZ		1	14:53	
CCV		1	14:55	HG
CCB		1	14:57	HG
ZZZZZZ		1	14:59	
ZZZZZZ		1	15:01	
ZZZZZZ		1	15:04	
ZZZZZZ		1	15:06	
ZZZZZZ		1	15:08	
ZZZZZZ		5	15:10	
CCV		1	15:40	HG
CCB		1	15:42	HG
SA6037-008	2W-RB-101907-01	1	15:44	HG
SA6037-009	2W-FB-101907-01	1	15:46	HG
ZZZZZZ		1	15:48	
ZZZZZZ		1	15:50	
ZZZZZZ		1	15:52	
ZZZZZZ		5	15:55	
CCV		1	15:57	HG
CCB		1	15:59	HG

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Instrument ID: CETAC M6100 **File Name:** Hxj31a

Date: 10/31/2007 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
Calibration Blank		1	12:05	Hg
Standard #1 (0.2 p		1	12:07	Hg
Standard #2 (0.5 p		1	12:09	Hg
Standard #3 (1.0 p		1	12:11	Hg
Standard #4 (5.0 p		1	12:14	Hg
Standard #5 (10.0		1	12:16	Hg
ICV		1	12:20	HG
ICB		1	12:22	HG
PQL		1	12:24	HG
LCSSXJ30HGS0		2	12:26	HG
PBSXJ30HGS0		1	12:28	HG
ZZZZZZ		1	12:30	
ZZZZZZ		1	12:32	
ZZZZZZ		1	12:34	
ZZZZZZ		1	12:36	
ZZZZZZ		1	12:39	
ZZZZZZ		1	12:41	
ZZZZZZ		1	12:43	
CCV		1	12:45	HG
CCB		1	12:47	HG
ZZZZZZ		1	12:49	
ZZZZZZ		1	12:51	
ZZZZZZ		1	12:53	
ZZZZZZ		1	12:56	
ZZZZZZ		1	12:58	
SA6037-001	2W-SD-SD47-0001	1	13:00	HG
SA6037-002	2W-FD-101907-01	1	13:02	HG
SA6037-003	2W-SD-SD44-0001	1	13:04	HG
SA6037-005	2W-SD-SD43-0001	1	13:06	HG
SA6037-006	2W-SD-SD48-0001	1	13:08	HG
CCV		1	13:11	HG
CCB		1	13:13	HG
SA6037-007	2W-SD-SD48-0204	1	13:19	HG
ZZZZZZ		1	13:21	
ZZZZZZ		1	13:23	
ZZZZZZ		5	13:26	
ZZZZZZ		1	13:29	
CCV		1	13:31	HG
CCB		1	13:33	HG

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Instrument ID: THERMO ICAP 6500 **File Name:** IXJ26A

Date: 10/26/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements										
Blank		1	15:28	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
Std 1		1	15:32	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
ICV		1	15:37	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
ICB		1	15:41	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
PQL		1	15:46	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
ICSA		1	15:50	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
ICSAB		1	15:55	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
CCV		1	16:00	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
CCB		1	16:04	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
ZZZZZZ		1	16:09											
ZZZZZZ		1	16:13											
ZZZZZZ		1	16:18											
ZZZZZZ		1	16:22											
ZZZZZZ		1	16:27											
ZZZZZZ		1	16:32											
ZZZZZZ		1	16:36											
ZZZZZZ		1	16:41											
ZZZZZZ		1	16:45											
ZZZZZZ		1	16:50											
CCV		1	16:54	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
CCB		1	16:59	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
ZZZZZZ		1	17:03											
ZZZZZZ		1	17:08											
ZZZZZZ		1	17:13											
ZZZZZZ		1	17:17											
ZZZZZZ		1	17:22											
ZZZZZZ		1	17:26											
ZZZZZZ		5	17:31											
ZZZZZZ		1	17:35											
ZZZZZZ		1	17:40											
ZZZZZZ		1	17:44											
CCV		1	17:49	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
CCB		1	17:53	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
ZZZZZZ		1	17:58											
ZZZZZZ		1	18:02											
ZZZZZZ		1	18:07											
ZZZZZZ		1	18:12											
ZZZZZZ		1	18:16											
ZZZZZZ		1	18:21											
ZZZZZZ		1	18:26											
ZZZZZZ		1	18:30											
ZZZZZZ		1	18:35											
ZZZZZZ		1	18:39											
CCV		1	18:44	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
CCB		1	18:48	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
ZZZZZZ		1	18:53											
ZZZZZZ		1	18:57											
ZZZZZZ		1	19:02											
ZZZZZZ		1	19:07											
ZZZZZZ		1	19:11											

Lab Sample ID	Client ID	D.F.	Time	Elements										
Blank		1	15:28	NA	TL	V	ZN							
Std 1		1	15:32	NA	TL	V	ZN							
ICV		1	15:37	NA	TL	V	ZN							
ICB		1	15:41	NA	TL	V	ZN							
PQL		1	15:46	NA	TL	V	ZN							
ICSA		1	15:50	NA	TL	V	ZN							
ICSAB		1	15:55	NA	TL	V	ZN							
CCV		1	16:00	NA	TL	V	ZN							
CCB		1	16:04	NA	TL	V	ZN							
ZZZZZZ		1	16:09											
ZZZZZZ		1	16:13											
ZZZZZZ		1	16:18											
ZZZZZZ		1	16:22											
ZZZZZZ		1	16:27											
ZZZZZZ		1	16:32											
ZZZZZZ		1	16:36											
ZZZZZZ		1	16:41											
ZZZZZZ		1	16:45											
ZZZZZZ		1	16:50											
CCV		1	16:54	NA	TL	V	ZN							
CCB		1	16:59	NA	TL	V	ZN							
ZZZZZZ		1	17:03											
ZZZZZZ		1	17:08											
ZZZZZZ		1	17:13											
ZZZZZZ		1	17:17											
ZZZZZZ		1	17:22											
ZZZZZZ		1	17:26											
ZZZZZZ		5	17:31											
ZZZZZZ		1	17:35											
ZZZZZZ		1	17:40											
ZZZZZZ		1	17:44											
CCV		1	17:49	NA	TL	V	ZN							
CCB		1	17:53	NA	TL	V	ZN							
ZZZZZZ		1	17:58											
ZZZZZZ		1	18:02											
ZZZZZZ		1	18:07											
ZZZZZZ		1	18:12											
ZZZZZZ		1	18:16											
ZZZZZZ		1	18:21											
ZZZZZZ		1	18:26											
ZZZZZZ		1	18:30											
ZZZZZZ		1	18:35											
ZZZZZZ		1	18:39											
CCV		1	18:44	NA	TL	V	ZN							
CCB		1	18:48	NA	TL	V	ZN							
ZZZZZZ		1	18:53											
ZZZZZZ		1	18:57											
ZZZZZZ		1	19:02											
ZZZZZZ		1	19:07											
ZZZZZZ		1	19:11											

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Instrument ID: THERMO ICAP 6500 **File Name:** IXJ26A

Date: 10/26/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements									
ZZZZZZ		1	19:16										
ZZZZZZ		1	19:21										
ZZZZZZ		1	19:25										
ZZZZZZ		1	19:30										
ZZZZZZ		1	19:34										
CCV		1	19:39	AL SB	BE	CA	CO CU FE	MG MN	NI K	NA	TL	V ZN	
CCB		1	19:43	AL SB	BE	CA	CO CU FE	MG MN	NI K	NA	TL	V ZN	
ZZZZZZ		1	19:48										
ZZZZZZ		1	19:53										
ZZZZZZ		1	19:57										
ZZZZZZ		1	20:02										
ZZZZZZ		1	20:07										
ZZZZZZ		1	20:11										
ZZZZZZ		1	20:16										
PQL		1	20:20	AL SB	BE	CA	CO CU FE	MG MN	NI K	NA	TL	V ZN	
ICSA		1	20:25	AL SB	BE	CA	CO CU FE	MG MN	NI K	NA	TL	V ZN	
ICSAB		1	20:30	AL SB	BE	CA	CO CU FE	MG MN	NI K	NA	TL	V ZN	
CCV		1	20:34	AL SB	BE	CA	CO CU FE	MG MN	NI K	NA	TL	V ZN	
CCB		1	20:39	AL SB	BE	CA	CO CU FE	MG MN	NI K	NA	TL	V ZN	
ZZZZZZ		1	20:43										
ZZZZZZ		1	20:48										
ZZZZZZ		1	20:53										
ZZZZZZ		5	20:58										
ZZZZZZ		1	21:02										
ZZZZZZ		1	21:07										
ZZZZZZ		5	21:11										
ZZZZZZ		5	21:16										
ZZZZZZ		1	21:21										
ZZZZZZ		1	21:25										
CCV		1	21:30	AL SB	BE	CA	CO CU FE	MG MN	NI K	NA	TL	V ZN	
CCB		1	21:34	AL SB	BE	CA	CO CU FE	MG MN	NI K	NA	TL	V ZN	
ZZZZZZ		1	21:39										
ZZZZZZ		500	21:43										
ZZZZZZ		500	21:48										
ZZZZZZ		1	21:53										
ZZZZZZ		1	21:57										
ZZZZZZ		1	22:02										
PBWXJ26ICW1		1	22:07	AL SB	BE	CA	CO CU FE	MG	NI K	NA	TL	V ZN	
LCSWXJ26ICW1		1	22:11	AL SB	BE	CA	CO CU FE	MG MN	NI K	NA	TL	V ZN	
ZZZZZZ		5	22:16										
ZZZZZZ		1	22:21										
CCV		1	22:25	AL SB	BE	CA	CO CU FE	MG MN	NI K	NA	TL	V ZN	
CCB		1	22:30	AL SB	BE	CA	CO CU FE	MG MN	NI K	NA	TL	V ZN	
ZZZZZZ		1	22:34										
ZZZZZZ		1	22:39										
ZZZZZZ		1	22:44										
ZZZZZZ		1	22:48										
ZZZZZZ		1	22:53										
ZZZZZZ		1	22:58										
ZZZZZZ		5	23:02										
ZZZZZZ		5	23:07										

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Instrument ID: THERMO ICAP 6500 **File Name:** IXJ26A

Date: 10/26/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements										
ZZZZZZ		5	23:12											
ZZZZZZ		5	23:16											
CCV		1	23:21	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
CCB		1	23:26	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
ZZZZZZ		5	23:31											
ZZZZZZ		5	23:35											
ZZZZZZ		5	23:40											
ZZZZZZ		5	23:45											
ZZZZZZ		5	23:50											
ZZZZZZ		5	23:54											
ZZZZZZ		1	23:59											
ZZZZZZ		5	0:04											
ZZZZZZ		1	0:09											
ZZZZZZ		1	0:13											
CCV		1	0:18	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
CCB		1	0:23	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
ZZZZZZ		1	0:27											
CCV		1	0:32	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
CCB		1	0:37	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
PQL		1	0:41	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
ICSA		1	0:46	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
ICSAB		1	0:51	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
CCV		1	0:55	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K
CCB		1	1:00	AL	SB	BE	CA	CO	CU	FE	MG	MN	NI	K

Lab Sample ID	Client ID	D.F.	Time	Elements										
ZZZZZZ		5	23:12											
ZZZZZZ		5	23:16											
CCV		1	23:21	NA	TL	V	ZN							
CCB		1	23:26	NA	TL	V	ZN							
ZZZZZZ		5	23:31											
ZZZZZZ		5	23:35											
ZZZZZZ		5	23:40											
ZZZZZZ		5	23:45											
ZZZZZZ		5	23:50											
ZZZZZZ		5	23:54											
ZZZZZZ		1	23:59											
ZZZZZZ		5	0:04											
ZZZZZZ		1	0:09											
ZZZZZZ		1	0:13											
CCV		1	0:18	NA	TL	V	ZN							
CCB		1	0:23	NA	TL	V	ZN							
ZZZZZZ		1	0:27											
CCV		1	0:32	NA	TL	V	ZN							
CCB		1	0:37	NA	TL	V	ZN							
PQL		1	0:41	NA	TL	V	ZN							
ICSA		1	0:46	NA	TL	V	ZN							
ICSAB		1	0:51	NA	TL	V	ZN							
CCV		1	0:55	NA	TL	V	ZN							
CCB		1	1:00	NA	TL	V	ZN							

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Instrument ID: THERMO ICAP 6500 **File Name:** IXJ29A

Date: 10/29/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements					
Blank		1	15:21	AL	AS BA	CD CA CR	FE PB MG	SE	AG
Std 1		1	15:26	AL	AS BA	CD CA CR	FE PB MG	SE	AG
ICV		1	15:30	AL	AS BA	CD CA CR	FE PB MG	SE	AG
ICB		1	15:35	AL	AS BA	CD CA CR	FE PB MG	SE	AG
PQL		1	15:40	AL	AS BA	CD CA CR	FE PB MG	SE	AG
ICSA		1	15:44	AL	AS BA	CD CA CR	FE PB MG	SE	AG
ICSAB		1	15:49	AL	AS BA	CD CA CR	FE PB MG	SE	AG
CCV		1	15:53	AL	AS BA	CD CA CR	FE PB MG	SE	AG
CCB		1	15:58	AL	AS BA	CD CA CR	FE PB MG	SE	AG
PBWXJ26ICW1		1	16:03		AS BA	CD CR	PB	SE	AG
LCSWXJ26ICW1		1	16:07		AS BA	CD CR	PB	SE	AG
ZZZZZZ		5	16:12						
ZZZZZZ		1	16:16						
ZZZZZZ		1	16:21						
ZZZZZZ		1	16:25						
ZZZZZZ		1	16:30						
ZZZZZZ		5	16:35						
ZZZZZZ		5	16:39						
ZZZZZZ		5	16:44						
CCV		1	16:49	AL	AS BA	CD CA CR	FE PB MG	SE	AG
CCB		1	16:53	AL	AS BA	CD CA CR	FE PB MG	SE	AG
ZZZZZZ		5	16:58						
ZZZZZZ		5	17:03						
ZZZZZZ		5	17:08						
ZZZZZZ		5	17:12						
ZZZZZZ		5	17:17						
ZZZZZZ		5	17:22						
ZZZZZZ		5	17:27						
ZZZZZZ		5	17:31						
ZZZZZZ		5	17:36						
ZZZZZZ		1	17:41						
CCV		1	17:45	AL	AS BA	CD CA CR	FE PB MG	SE	AG
CCB		1	17:50	AL	AS BA	CD CA CR	FE PB MG	SE	AG
ZZZZZZ		1	17:54						
ZZZZZZ		5	17:59						
ZZZZZZ		1	18:04						
CCV		1	18:08	AL	AS BA	CD CA CR	FE PB MG	SE	AG
CCB		1	18:13	AL	AS BA	CD CA CR	FE PB MG	SE	AG
PQL		1	18:17	AL	AS BA	CD CA CR	FE PB MG	SE	AG
ICSA		1	18:22	AL	AS BA	CD CA CR	FE PB MG	SE	AG
ICSAB		1	18:27	AL	AS BA	CD CA CR	FE PB MG	SE	AG
CCV		1	18:31	AL	AS BA	CD CA CR	FE PB MG	SE	AG
CCB		1	18:36	AL	AS BA	CD CA CR	FE PB MG	SE	AG

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Instrument ID: THERMO ICAP 6500 **File Name:** IXJ29B

Date: 10/29/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements							
Blank		1	19:23	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
Std 1		1	19:28	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ICV		1	19:32	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ICB		1	19:36	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
PQL		1	19:41	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ICSA		1	19:46	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ICSAB		1	19:50	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
CCV		1	19:55	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
CCB		1	19:59	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
PBWXJ26ICW1		1	20:04		MN						
ZZZZZZ		1	20:09								
ZZZZZZ		1	20:13								
ZZZZZZ		1	20:18								
ZZZZZZ		1	20:22								
ZZZZZZ		1	20:27								
ZZZZZZ		1	20:32								
ZZZZZZ		1	20:36								
ZZZZZZ		1	20:41								
SA6037-008	2W-RB-101907-01	1	20:46	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
CCV		1	20:50	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
CCB		1	20:55	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
SA6037-009	2W-FB-101907-01	1	20:59	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ZZZZZZ		1	21:04								
ZZZZZZ		1	21:09								
ZZZZZZ		5	21:14								
ZZZZZZ		1	21:18								
ZZZZZZ		1	21:23								
ZZZZZZ		1	21:27								
ZZZZZZ		1	21:32								
ZZZZZZ		1	21:37								
ZZZZZZ		1	21:41								
CCV		1	21:46	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
CCB		1	21:50	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ZZZZZZ		1	21:55								
ZZZZZZ		5	22:00								
ZZZZZZ		1	22:04								
ZZZZZZ		1	22:09								
ZZZZZZ		1	22:13								
ZZZZZZ		1	22:18								
ZZZZZZ		1	22:23								
PQL		1	22:27	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ICSA		1	22:32	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ICSAB		1	22:37	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
CCV		1	22:41	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
CCB		1	22:46	AL SB AS BA BE	CD CA CR CO CU FE PB MG MN	NI K SE	AG NA	TL	V ZN		
ZZZZZZ		1	22:51								
ZZZZZZ		1	22:55								
ZZZZZZ		1	23:00								
ZZZZZZ		1	23:04								
ZZZZZZ		1	23:09								

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Instrument ID: THERMO ICAP 6500 **File Name:** IXJ29B

Date: 10/29/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements											
ZZZZZZ		1	23:14												
ZZZZZZ		1	23:18												
ZZZZZZ		1	23:23												
ZZZZZZ		1	23:28												
ZZZZZZ		1	23:32												
CCV		1	23:37	AL	SB	AS	BA	BE	CD CA CR CO CU FE PB MG MN	NI	K	SE	AG NA	TL	V ZN
CCB		1	23:41	AL	SB	AS	BA	BE	CD CA CR CO CU FE PB MG MN	NI	K	SE	AG NA	TL	V ZN
ZZZZZZ		1	23:46												
ZZZZZZ		1	23:51												
ZZZZZZ		1	23:56												
ZZZZZZ		2	0:00												
ZZZZZZ		2	0:05												
ZZZZZZ		2	0:09												
ZZZZZZ		2	0:14												
ZZZZZZ		1	0:18												
ZZZZZZ		1	0:23												
ZZZZZZ		1	0:28												
CCV		1	0:32	AL	SB	AS	BA	BE	CD CA CR CO CU FE PB MG MN	NI	K	SE	AG NA	TL	V ZN
CCB		1	0:37	AL	SB	AS	BA	BE	CD CA CR CO CU FE PB MG MN	NI	K	SE	AG NA	TL	V ZN
ZZZZZZ		1	0:41												
ZZZZZZ		1	0:46												
ZZZZZZ		1	0:51												
ZZZZZZ		1	0:55												
ZZZZZZ		1	1:00												
ZZZZZZ		1	1:05												
ZZZZZZ		1	1:09												
PQL		1	1:14	AL	SB	AS	BA	BE	CD CA CR CO CU FE PB MG MN	NI	K	SE	AG NA	TL	V ZN
ICSA		1	1:19	AL	SB	AS	BA	BE	CD CA CR CO CU FE PB MG MN	NI	K	SE	AG NA	TL	V ZN
ICSAB		1	1:23	AL	SB	AS	BA	BE	CD CA CR CO CU FE PB MG MN	NI	K	SE	AG NA	TL	V ZN
CCV		1	1:28	AL	SB	AS	BA	BE	CD CA CR CO CU FE PB MG MN	NI	K	SE	AG NA	TL	V ZN
CCB		1	1:33	AL	SB	AS	BA	BE	CD CA CR CO CU FE PB MG MN	NI	K	SE	AG NA	TL	V ZN
ZZZZZZ		1	1:37												
ZZZZZZ		1	1:42												
ZZZZZZ		1	1:47												
ZZZZZZ		5	1:51												
ZZZZZZ		1	1:56												
ZZZZZZ		1	2:00												
ZZZZZZ		1	2:05												
ZZZZZZ		1	2:10												
ZZZZZZ		1	2:14												
ZZZZZZ		1	2:19												
CCV		1	2:23	AL	SB	AS	BA	BE	CD CA CR CO CU FE PB MG MN	NI	K	SE	AG NA	TL	V ZN
CCB		1	2:28	AL	SB	AS	BA	BE	CD CA CR CO CU FE PB MG MN	NI	K	SE	AG NA	TL	V ZN
ZZZZZZ		1	2:33												
ZZZZZZ		1	2:37												
ZZZZZZ		1	2:42												
PBSXJ26ICS0		1	2:47	AL	SB	AS	BA	BE	CD CR CO CU FE PB MN	NI	K	SE	NA	TL	ZN
LCSSXJ26ICS0		1	2:51	AL	SB	AS	BA	BE	CD CR CO CU FE PB MN	NI	K	SE	NA	TL	ZN
ZZZZZZ		1	2:56												
ZZZZZZ		5	3:00												
ZZZZZZ		1	3:05												

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Instrument ID: THERMO ICAP 6500 **File Name:** IXJ29B

Date: 10/30/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements																									
ZZZZZZ		1	3:09																										
ZZZZZZ		1	3:14																										
CCV		1	3:18	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN				
CCB		1	3:23	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN				
ZZZZZZ		1	3:28																										
ZZZZZZ		1	3:32																										
ZZZZZZ		1	3:37																										
ZZZZZZ		1	3:41																										
ZZZZZZ		1	3:46																										
ZZZZZZ		1	3:50																										
ZZZZZZ		1	3:55																										
SA6037-001	2W-SD-SD47-0001	1	4:00	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE		NA	TL		ZN				
SA6037-002	2W-FD-101907-01	1	4:04	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE		NA	TL		ZN				
SA6037-003	2W-SD-SD44-0001	1	4:09	AL			BA	BE		CA			CU		PB	MG	MN		K			NA			ZN				
CCV		1	4:13	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN				
CCB		1	4:18	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN				
SA6037-005	2W-SD-SD43-0001	1	4:22	AL			BA	BE					CU	FE			MN		K			NA			ZN				
SA6037-006	2W-SD-SD48-0001	1	4:27	AL			BA	BE					CU	FE			MN		K			NA			ZN				
SA6037-007	2W-SD-SD48-0204	1	4:32	AL	SB	AS	BA	BE	CD		CR	CO	CU	FE	PB		MN	NI	K	SE		NA	TL		ZN				
CCV		1	4:36	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN				
CCB		1	4:41	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN				
PQL		1	4:45	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN				
ICSA		1	4:50	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN				
ICSAB		1	4:55	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN				
CCV		1	4:59	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN				
CCB		1	5:04	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN				

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Instrument ID: THERMO ICAP 6500 **File Name:** IXJ30A

Date: 10/30/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
Blank		1	16:44	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
Std 1		1	16:48	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
ICV		1	16:53	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
ICB		1	16:57	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
PQL		1	17:02	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
ICSA		1	17:06	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
ICSAB		1	17:11	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
CCV		1	17:16	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
CCB		1	17:20	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
ZZZZZZ		1	17:25								
ZZZZZZ		1	17:29								
ZZZZZZ		1	17:34								
ZZZZZZ		1	17:38								
ZZZZZZ		5	17:43								
ZZZZZZ		1	17:48								
ZZZZZZ		1	17:52								
ZZZZZZ		1	17:57								
ZZZZZZ		1	18:01								
ZZZZZZ		1	18:06								
CCV		1	18:11	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
CCB		1	18:15	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
ZZZZZZ		1	18:20								
ZZZZZZ		1	18:25								
ZZZZZZ		1	18:29								
ZZZZZZ		1	18:34								
ZZZZZZ		1	18:38								
ZZZZZZ		1	18:43								
ZZZZZZ		1	18:48								
ZZZZZZ		1	18:52								
ZZZZZZ		1	18:57								
ZZZZZZ		1	19:02								
CCV		1	19:06	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
CCB		1	19:11	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
ZZZZZZ		1	19:15								
ZZZZZZ		1	19:20								
ZZZZZZ		1	19:25								
ZZZZZZ		1	19:29								
ZZZZZZ		1	19:34								
ZZZZZZ		1	19:39								
ZZZZZZ		5	19:43								
ZZZZZZ		1	19:48								
ZZZZZZ		1	19:53								
ZZZZZZ		1	19:57								
CCV		1	20:02	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
CCB		1	20:06	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
ZZZZZZ		1	20:11								
ZZZZZZ		1	20:15								
ZZZZZZ		1	20:20								
ZZZZZZ		1	20:25								
ZZZZZZ		1	20:29								

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Instrument ID: THERMO ICAP 6500 **File Name:** IXJ30A

Date: 10/30/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements							
ZZZZZZ		1	20:34								
PBSXJ26ICS0		1	20:38		CA	MG			AG		V
PQL		1	20:43	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
ICSA		1	20:48	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
ICSAB		1	20:52	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
CCV		1	20:57	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
CCB		1	21:02	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
LCSSXJ26ICS0		1	21:06		CA	MG			AG		V
ZZZZZZ		1	21:11								
ZZZZZZ		5	21:15								
ZZZZZZ		1	21:20								
ZZZZZZ		1	21:24								
ZZZZZZ		2	21:29								
ZZZZZZ		10	21:33								
ZZZZZZ		2	21:38								
ZZZZZZ		2	21:42								
ZZZZZZ		1	21:47								
CCV		1	21:52	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
CCB		1	21:56	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
ZZZZZZ		1	22:01								
ZZZZZZ		1	22:05								
ZZZZZZ		1	22:10								
ZZZZZZ		1	22:14								
ZZZZZZ		1	22:19								
ZZZZZZ		1	22:23								
ZZZZZZ		1	22:28								
SA6037-001	2W-SD-SD47-0001	1	22:33						AG		V
SA6037-002	2W-FD-101907-01	1	22:37						AG		V
SA6037-003	2W-SD-SD44-0001	3	22:42	SB AS	CD CR CO	FE	NI	SE	AG	TL	V
CCV		1	22:46	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
CCB		1	22:51	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
SA6037-005	2W-SD-SD43-0001	2	22:55	SB AS	CD CA CR CO	PB MG	NI	SE	AG	TL	V
SA6037-006	2W-SD-SD48-0001	2	23:00	SB AS	CD CA CR CO	PB MG	NI	SE	AG	TL	V
SA6037-007	2W-SD-SD48-0204	1	23:04		CA	MG			AG		V
ZZZZZZ		1	23:09								
ZZZZZZ		1	23:14								
ZZZZZZ		1	23:18								
ZZZZZZ		1	23:23								
ZZZZZZ		1	23:28								
ZZZZZZ		1	23:32								
ZZZZZZ		1	23:37								
CCV		1	23:41	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
CCB		1	23:46	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
ZZZZZZ		1	23:50								
ZZZZZZ		5	23:55								
ZZZZZZ		1	0:00								
ZZZZZZ		1	0:04								
ZZZZZZ		1	0:09								
ZZZZZZ		1	0:14								
ZZZZZZ		1	0:18								
PQL		1	0:23	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SA6037

Instrument ID: THERMO ICAP 6500 **File Name:** IXJ30A

Date: 10/31/2007 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements								
ICSA		1	0:28	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
ICSAB		1	0:32	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
CCV		1	0:37	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V
CCB		1	0:41	AL SB AS	CD CA CR CO	FE PB MG	NI	SE	AG	TL	V

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Blank Sample Summary Report

TOC in Soil

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG45151	Lloyd Kahn	31-OCT-07	N/A	U 400 ug/gdrywt	400 ug/gdrywt

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG44913	CLP SOW 788	25-OCT-07	24-OCT-07	U 1 %	1 %

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Laboratory Control Sample Summary Report

TOC In Soil

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG45151-2	LCS	WG45151	31-OCT-07	N/A	ug/gdrywt	400000.000	460000	114	80-120	

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG44913-2	LCS	WG44913	25-OCT-07	24-OCT-07	%	90	90.	100	80-120	

pH(Soil)

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG44992-2	LCS	WG44992	24-OCT-07	24-OCT-07	pH	7	7.0	100	80-120	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Duplicate Sample Summary Report

Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG44913-4	SA6037-5	WG44913	25-OCT-07	%	22.	24.	11	20

pH(Soil)

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG44992-3	SA6037-1	WG44992	24-OCT-07	pH	5.8	5.8	0	20

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

SA6037-005

Acquire Date: 30-Oct-2007 4:22 am Sample Type: Unknown

Elem	Avg	Units	Stddev	%RSD
Ag3280_	-7.943	ug/L	1.0230	12.8789
Al3961_	121200.	ug/L	283.0016	0.2335
As1891_	61.83	ug/L	1.1411	1.8456
B_2089_	35.81	ug/L	0.1299	0.3628
Ba4554_	1388.	ug/L	3.9542	0.2849
Be3130_	12.30	ug/L	0.0433	0.3518
Ca3158_	15790.	ug/L	43.5963	0.2760
Cd2265_	10.01	ug/L	0.2073	2.0713
Co2286_	21.83	ug/L	0.2456	1.1253
Cr2677_	284.5	ug/L	1.1994	0.4215
Cu3273_	680.1	ug/L	2.4820	0.3649
Fe2599_	299400.	ug/L	3,324.3205	1.1102
K_7664_	12070.	ug/L	44.6164	0.3696
Mg2852	23160.	ug/L	96.0111	0.4145
Mn2576	1106.	ug/L	1.8304	0.1656
Mo2020	7.145	ug/L	0.1164	1.6296
Na5895_	4258.	ug/L	5.3564	0.1258
Ni2316_	116.6	ug/L	0.0624	0.0535
Pb2203_	487.4	ug/L	1.8826	0.3863
Sb2068_	.3411	ug/L	0.5360	157.1400
Se1960_	-.1682	ug/L	0.9191	546.4842
Si2516_	825.7	ug/L	2.0997	0.2543
Sn1899_	37.66	ug/L	0.5931	1.5748
Sr4215_	128.0	ug/L	0.8154	0.6372
Ti3349_	5113.	ug/L	0.0251	0.0005
Tl1908_	1.110	ug/L	0.4626	41.6717
V_2924_	999.4	ug/L	4.9579	0.4961
Zn2062_	2766.	ug/L	3.8295	0.1385
Y_2243_	7763.6	Cts/S	12.4113	0.1599
Y_3600_	14199.	Cts/S	65.1822	0.4591
Y_3600_	148750.	Cts/S	202.9542	0.1364

Sample
2W-SD-SD43-0001
Be rep result 2.9 mg/kg

$$\left(\frac{12.30\,ug}{L}\right)\left(\frac{100\,ml}{1.93g}\right)\left(\frac{1}{.219}\right)\left(\frac{1}{1000}\right) = 2.91\ mg/kg$$

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	DF
SA6036-017					UNK	10/31/07 12:51:50 pm	0.105	668	2.64		1.00
Replicates	666.3	649.9	663.2	692.1							
SA6036-018					UNK	10/31/07 12:53:58 pm	0.737	3859	0.49		1.00
Replicates	3844.2	3886.4	3849.9	3856.4							
SA6036-019					UNK	10/31/07 12:56:06 pm	0.705	3695	0.48		1.00
Replicates	3685.6	3720.6	3681.1	3693.1							
SA6036-020					UNK	10/31/07 12:58:14 pm	0.969	5028	0.90		1.00
Replicates	4989.8	5018.7	5093.2	5010.4							
SA6037-001					UNK	10/31/07 01:00:25 pm	0.423	2273	0.82		1.00
Replicates	2246.2	2285.1	2286.0	2275.3							
SA6037-002					UNK	10/31/07 01:02:32 pm	0.390	2109	1.78		1.00
Replicates	2057.3	2143.4	2128.1	2106.2							
SA6037-003					UNK	10/31/07 01:04:40 pm	0.388	2096	0.89		1.00
Replicates	2076.2	2106.2	2117.2	2086.2							
SA6037-005					UNK	10/31/07 01:06:48 pm	1.016	5267	1.53		1.00
Replicates	5148.3	5284.9	5318.2	5317.0							
SA6037-006					UNK	10/31/07 01:08:57 pm	0.544	2884	0.79		1.00
Replicates	2899.3	2888.5	2851.3	2898.8							
CCV					CCV	10/31/07 01:11:04 pm	5.473	27771	0.22		1.00
Replicates	27693.8	27824.0	27814.8	27752.3							
% Recovery	109.45										
CCB					CCB	10/31/07 01:13:10 pm	-0.023	23	94.77		1.00
Replicates	20.5	-6.7	36.4	41.8							
SA6037-007					UNK	10/31/07 01:19:36 pm	1.412	7268	0.80		1.00
Replicates	7184.3	7272.1	7306.6	7307.3							

Sample QW-SD-SD43-001 Hg rep. result 0.72 mg/kg

$$\left(\frac{1.016\ ug}{L}\right)\left(\frac{100\ ml}{.64g}\right)\left(\frac{1}{.219}\right)\left(\frac{1}{1000}\right) = 0.724\ mg/kg$$

APPENDIX C

POSITIVE DETECTION TABLES

SUMMARY OF POSITIVE DETECTIONS SURFACE SOIL SAMPLES
PHASE I RI
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WMW2S	2WMW39DS	2WMW45DS	2WMW5S	2WMW5S
NSAMPLE	082390-2WMW2(0-2)	2W-SU-39DS-00-99	2W-SU-45DS-00-99	090490-2WMW5(0-2)	090490-2WMW5(0-2)-D
SAMPLE	2WMW2(0-2)	2W-SU-39DS-00-99	2W-SU-45DS-00-99	2WMW5(0-2)	2WTB11(0-2)
PHASE	PH1			PH1	PH1
TOP DEPTH	0	0	0	0	0
BOTTOM DEPTH	2	2	2	2	2
SAMPLE DATE	08/23/90	05/18/99	05/16/99	09/04/90	09/04/90
Volatile Organics (ug/kg)					
2-BUTANONE	11 U	13 U	23 U	17 UJ	17 U
ACETONE	11 U	25	160	17 UJ	17 U
CARBON DISULFIDE	5 U	13 U	23 U	8 UJ	8 U
METHYLENE CHLORIDE	5 U	3	6	8 UJ	8 U
TETRACHLOROETHENE	5 U	13 U	23 U	3 UJ	8 U
TRICHLOROETHENE	5 U	13 U	23 U	8 UJ	8 U
Semivolatile Organics (ug/kg)					
ACENAPHTHENE	350 U	270	61 U	550 U	560 U
ACENAPHTHYLENE	350 U	88 U	120 U	550 U	59 J
ANTHRACENE	350 U	6.5 U	9.3 U	550 U	560 U
BENZO(A)ANTHRACENE	83 J	260	30	160 J	140 J
BENZO(A)PYRENE	81 J	310	52	550 U	560 U
BENZO(B)FLUORANTHENE	74 J	420	120	180 J	260 J
BENZO(G,H,I)PERYLENE	350 U	260	49	550 U	560 U
BENZO(K)FLUORANTHENE	71 J	180	9.3 U	120 J	180 J
BENZOIC ACID	1700 U			2700 U	2700 U
BIS(2-ETHYLHEXYL)PHTHALATE	350 U	51.4 J	290 U	790	590
CHRYSENE	110 J	290	9 3 U	230 J	330 J
DIBENZO(A,H)ANTHRACENE	350 U	32	15 U	550 U	560 U
FLUORANTHENE	160 J	890	83	180 J	240 J
INDENO(1,2,3-CD)PYRENE	350 U	140	9 3 U	550 U	560 U
PHENANTHRENE	120 J	300	9.3 U	130 J	160 J
PYRENE	150 J	810	120	320 J	330 J
TOTAL PAH	849	4162	454	1320	1699
Pesticides/PCBs (ug/kg)					
4,4'-DDD	17 U	40	40	27 U	27 U
4,4'-DDE	17 U	5 2	10	27 U	27 U
4,4'-DDT	17 U	28	5.8 U	27 U	27 U
TOTAL DDT	0	73.2	50	0	0
ALPHA-CHLORDANE	85 U	3	2.9 U	130 U	140 U
GAMMA-CHLORDANE	85 U	2.2	2.9 U	130 U	140 U
AROCLOR-1260	170 U	110	58 U	270 U	270 U

TABLE 1

SUMMARY OF POSITIVE DETECTIONS SURFACE SOIL SAMPLES
PHASE I RI
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WMW2S	2WMW39DS	2WMW45DS	2WMW5S	2WMW5S
NSAMPLE	082390-2WMW2(0-2)	2W-SU-39DS-00-99	2W-SU-45DS-00-99	090490-2WMW5(0-2)	090490-2WMW5(0-2)-D
SAMPLE	2WMW2(0-2)	2W-SU-39DS-00-99	2W-SU-45DS-00-99	2WMW5(0-2)	2WTB11(0-2)
PHASE	PH1			PH1	PH1
TOP DEPTH	0	0	0	0	0
BOTTOM DEPTH	2	2	2	2	2
SAMPLE DATE	08/23/90	05/18/99	05/16/99	09/04/90	09/04/90
Inorganics (mg/kg)					
ALUMINUM	13000	4860	17400	11200 J	11500 J
ARSENIC	2.5	1 2 B	15 1	7 J	7 6 J
BARIUM	53 3	28.3 B	48.9 B	45.7	41.3
BERYLLIUM	0.55	0.28 B	0.89 B	1.2 J	1 3 J
CADMIUM	6.9	0.16 B	0.55 B	4.7	4.9
CALCIUM	1170 J	1360	2070	1230 J	1310 J
CHROMIUM	20.5 J	12.2	43.2	57.1	65.2
COBALT	8.5	4.8 B	11.1 B	7.3	12.3
COPPER	26.1 J	21.7	16.9	38.5	35 2
IRON	14200	8100	30400	21500	23100
LEAD	16.3 J	22.4	11.8	38.5	26.8
MAGNESIUM	4170	2170	6480	5520	5590
MANGANESE	195 J	99.2	256	160 J	357 J
MERCURY	0.11 U	0.06 U	0 09 U	0 22	0.25
NICKEL	25.3 J	16.9	22.9	14.7	15.9
POTASSIUM	2130 J	1000 B	4160	3180	2420
SELENIUM	0.44 U	1.1 U	2 4	0 7	0.77
SILVER	1.8 U	0.2 U	0.28 U	2.5 U	2.5 U
SODIUM	118 J	224 B	954 B	957 J	930 J
VANADIUM	33.2	35.9	44.1	48 9 J	51.8 J
ZINC	125 J	49.7	58.9	54.6 J	61.3 J

TABLE 1

SUMMARY OF POSITIVE DETECTIONS SURFACE SOIL SAMPLES
PHASE I RI
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WMW5S	2WTB2	2WTB2	2WTB2	2WTB4
NSAMPLE	090490-2WMW5(0-2)-MAX	090690-2WTB2(0-2)	090690-2WTB2(0-2)-D	090690-2WTB2(0-2)-MAX	090690-2WTB4(0-2)
SAMPLE	2WMW5(0-2)MAX	2WTB2(0-2)	090690-2WTB9(4-6)	2WTB2(0-2)MAX	2WTB4(0-2)
PHASE	PH1	PH1	PH1	PH1	PH1
TOP DEPTH	0	0	0	0	0
BOTTOM DEPTH	2	2	2	2	2
SAMPLE DATE	09/04/90	09/06/90	09/06/90	09/06/90	09/06/90
Volatile Organics (ug/kg)					
2-BUTANONE	17 U	20 U	18 U	20 U	16 U
ACETONE	17 U	20 U	18 U	20 U	16 U
CARBON DISULFIDE	8 U	10 U	9 U	10 U	8 U
METHYLENE CHLORIDE	8 U	10 U	9 U	10 U	8 U
TETRACHLOROETHENE	8 U	10 U	9 U	10 U	8 U
TRICHLOROETHENE	8 U	10 U	9 U	10 U	4 J
Semivolatile Organics (ug/kg)					
ACENAPHTHENE	560 U	2600 U	590 U	2600 U	530 U
ACENAPHTHYLENE	59 J	2600 U	590 U	2600 U	77 J
ANTHRACENE	560 U	2600 U	590 U	2600 U	52 J
BENZO(A)ANTHRACENE	160 J	400 J	590 U	400 J	220 J
BENZO(A)PYRENE	560 U	2600 U	590 U	2600 U	230 J
BENZO(B)FLUORANTHENE	260 J	2600 U	590 U	2600 U	220 J
BENZO(G;H,I)PERYLENE	560 U	2600 U	590 U	2600 U	530 U
BENZO(K)FLUORANTHENE	180 J	2600 U	590 U	2600 U	310 J
BENZOIC ACID	2700 U	13000 U	2900 U	13000 U	160 J
BIS(2-ETHYLHEXYL)PHTHALATE	790	2600 U	590 U	2600 U	280 J
CHRYSENE	330 J	2600 U	590 U	2600 U	320 J
DIBENZO(A,H)ANTHRACENE	560 U	2600 U	590 U	2600 U	530 U
FLUORANTHENE	240 J	460 J	590 U	460 J	310 J
INDENO(1,2,3-CD)PYRENE	560 U	2600 U	590 U	2600 U	530 U
PHENANTHRENE	160 J	2600 U	590 U	2600 U	270 J
PYRENE	330 J	380 J	590 U	380 J	460 J
TOTAL PAH	1719	1240	0	1240	2469
Pesticides/PCBs (ug/kg)					
4,4'-DDD	27 U	31 U	29 U	31 U	26 UJ
4,4'-DDE	27 U	31 U	29 U	31 U	32 UJ
4,4'-DDT	27 U	31 U	29 U	31 U	26 UJ
TOTAL DDT	0	0	0	0	0
ALPHA-CHLORDANE	140 U	160 U	140 U	160 U	130 UJ
GAMMA-CHLORDANE	140 U	160 U	140 U	160 U	130 UJ
AROCLOR-1260	270 U	370 J	290 UJ	370 J	260 UJ

TABLE 1

SUMMARY OF POSITIVE DETECTIONS SURFACE SOIL SAMPLES
PHASE I RI
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WMW5S	2WTB2	2WTB2	2WTB2	2WTB4
NSAMPLE	090490-2WMW5(0-2)-MAX	090690-2WTB2(0-2)	090690-2WTB2(0-2)-D	090690-2WTB2(0-2)-MAX	090690-2WTB4(0-2)
SAMPLE	2WMW5(0-2)MAX	2WTB2(0-2)	090690-2WTB9(4-6)	2WTB2(0-2)MAX	2WTB4(0-2)
PHASE	PH1	PH1	PH1	PH1	PH1
TOP DEPTH	0	0	0	0	0
BOTTOM DEPTH	2	2	2	2	2
SAMPLE DATE	09/04/90	09/06/90	09/06/90	09/06/90	09/06/90
Inorganics (mg/kg)					
ALUMINUM	11500 J	14100 J	14500 J	14500 J	15300 J
ARSENIC	7.6 J	6.7 J	8.1 J	8.1 J	8 7
BARIUM	45.7	52.1	47.7	52.1	61.3
BERYLLIUM	1.3 J	1.8 J	1.7 J	1.8 J	0.3 U
CADMIUM	4.9	6.9	7.2	7.2	0.29 U
CALCIUM	1310 J	3300 J	3690 J	3690 J	1250
CHROMIUM	65.2	41.2	39.9	41.2	89
COBALT	12.3	11.1	10.8	11.1	8.5
COPPER	38.5	20.2	17.1	20.2	47.6 J
IRON	23100	27200	27600	27600	30800
LEAD	38.5	11.2 J	11.2	11.2	128 J
MAGNESIUM	5590	7230	7630	7630	6130
MANGANESE	357 J	306	376	376	188 J
MERCURY	0 25	0.18 U	0.17 U	0.18 U	0 69 J
NICKEL	15.9	25.9	26.8	26.8	16 7
POTASSIUM	3180	3530	3800	3800	4320
SELENIUM	0.77	0.71 U	0 7 U	0.71 U	1.2
SILVER	2.5 U	2.8 U	3.5	3 5	2.4 U
SODIUM	957 J	2040 J	1980 J	2040 J	232 J
VANADIUM	51 8 J	57.9 J	56 7 J	57.9 J	50.5 J
ZINC	61.3 J	75.5 J	66 4 J	75 5 J	60.8 J

SUMMARY OF POSITIVE DETECTIONS SURFACE SOIL SAMPLES
PHASE I RI
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WTB6	2WTB7	2WTB7	2WTB7	2WTB8
NSAMPLE	090690-2WTB6(0-2)	090590-2WTB7(0-2)	090590-2WTB7(0-2)-D	090590-2WTB7(0-2)-MAX	083090-2WTB8(1-3)
SAMPLE	2WTB6(0-2)	2WTB7(0-2)	2WTB7(25-27)	2WTB7(0-2)MAX	2WTB8(1-3)
PHASE	PH1	PH1	PH1	PH1	PH1
TOP DEPTH	0	0	0	0	1
BOTTOM DEPTH	2	2	2	2	3
SAMPLE DATE	09/06/90	09/05/90	09/05/90	09/05/90	08/30/90
Volatile Organics (ug/kg)					
2-BUTANONE	87	19 U	5 J	5 J	310
ACETONE	540	19 U	37	37	850
CARBON DISULFIDE	6 J	9 U	8 U	9 U	8 J
METHYLENE CHLORIDE	11 U	9 U	8 U	9 U	4 J
TETRACHLOROETHENE	11 U	9 U	8 U	9 U	7 J
TRICHLOROETHENE	11 U	9 U	8 U	9 U	10 U
Semivolatile Organics (ug/kg)					
ACENAPHTHENE	720 U	620 U	530 U	620 U	670 U
ACENAPHTHYLENE	720 U	620 U	530 U	620 U	120 J
ANTHRACENE	720 U	620 U	530 U	620 U	79 J
BENZO(A)ANTHRACENE	200 J	620 U	530 U	620 U	370 J
BENZO(A)PYRENE	190 J	620 U	530 U	620 U	390 J
BENZO(B)FLUORANTHENE	210 J	620 U	530 U	620 U	550 J
BENZO(G,H,I)PERYLENE	720 U	620 U	530 U	620 U	670 U
BENZO(K)FLUORANTHENE	250 J	620 U	530 U	620 U	390 J
BENZOIC ACID	130 J	3000 U	220 J	220 J	3300 U
BIS(2-ETHYLHEXYL)PHTHALATE	350 J	620 U	220 J	220 J	1300
CHRYSENE	250 J	620 U	530 U	620 U	600 J
DIBENZO(A,H)ANTHRACENE	720 U	620 U	530 U	620 U	670 U
FLUORANTHENE	300 J	72 J	53 J	72 J	600 J
INDENO(1,2,3-CD)PYRENE	720 U	620 U	530 U	620 U	270 J
PHENANTHRENE	160 J	620 U	530 U	620 U	340 J
PYRENE	270 J	98 J	530 U	98 J	570 J
TOTAL PAH	1830	170	53	170	4279
Pesticides/PCBs (ug/kg)					
4,4'-DDD	69 J	30 U	26 U	30 U	33 U
4,4'-DDE	35 UJ	30 U	26 U	30 U	33 U
4,4'-DDT	35 UR	30 U	26 U	30 U	33 U
TOTAL DDT	69	0	0	0	0
ALPHA-CHLORDANE	170 UJ	150 U	130 U	150 U	160 U
GAMMA-CHLORDANE	170 UJ	150 U	130 U	150 U	160 U
AROCLOR-1260	350 UJ	300 U	260 U	300 U	330 U

TABLE 1

SUMMARY OF POSITIVE DETECTIONS SURFACE SOIL SAMPLES
PHASE I RI
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WTB6	2WTB7	2WTB7	2WTB7	2WTB8
NSAMPLE	090690-2WTB6(0-2)	090590-2WTB7(0-2)	090590-2WTB7(0-2)-D	090590-2WTB7(0-2)-MAX	083090-2WTB8(1-3)
SAMPLE	2WTB6(0-2)	2WTB7(0-2)	2WTB7(25-27)	2WTB7(0-2)MAX	2WTB8(1-3)
PHASE	PH1	PH1	PH1	PH1	PH1
TOP DEPTH	0	0	0	0	1
BOTTOM DEPTH	2	2	2	2	3
SAMPLE DATE	09/06/90	09/05/90	09/05/90	09/05/90	08/30/90
Inorganics (mg/kg)					
ALUMINUM	16800 J	13900 J	15900 J	15900 J	17900 J
ARSENIC	8 4	7.2 J	6.9 J	7 2 J	6.8 J
BARIUM	60 7	49.3	45.1	49 3	93.8
BERYLLIUM	0.73 J	1.5 J	1 8 J	1.8 J	1 8 J
CADMIUM	1.9 J	4.5	6.7	6.7	6.7 J
CALCIUM	1660	1590 J	1530 J	1590 J	2360
CHROMIUM	101	72.7	41	72 7	102
COBALT	9 4	7 6	12.7	12.7	9.2
COPPER	64.1 J	35.4	39.1	39 1	55
IRON	27100	20200	23100	23100	27900
LEAD	44 J	49.5 J	12.7 J	49.5 J	83.7
MAGNESIUM	6540	6580	6950	6950	7840
MANGANESE	202 J	189	265	265	233
MERCURY	0.23 U	0.38	0.21	0 38	0.67 J
NICKEL	20.2	16.8	26 2	26 2	26.9
POTASSIUM	3680	2680	3520	3520	4040 J
SELENIUM	1.5	0.79 U	0.78 U	0 79 U	0 93 J
SILVER	3 2 U	3 U	3 U	3 U	4.5
SODIUM	1570 J	1310 J	1430 J	1430 J	3150
VANADIUM	52 J	56.9 J	60.6 J	60.6 J	75 J
ZINC	74.9 J	59.5 J	79.8 J	79.8 J	62 9 J

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT
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LOCATION	2WSD1	2WSD1	2WSD1	2WSD2	2WSD3	2WSD4	2WSD5	2WSD6	2WSD7	2WSD8
NSAMPLE	112690-2WSD1(0-0.5)	112690-2WSD1(0-0.5)-AVG	112690-2WSD1(0-0.5)-D	112690-2WSD2(0-0.5)	112690-2WSD3(0-0.5)	112690-2WSD4(0-0.5)	112690-2WSD5(0-0.5)	112690-2WSD6(0-0.5)	112690-2WSD7(0-0.5)	112690-2WSD8(0-0.5)
SAMPLE	112690-2WSD1(0-0.5)	112690-2WSD1(0-0.5)-AVG	112690-2WSD10(0-0.5)	112690-2WSD2(0-0.5)	112690-2WSD3(0-0.5)	112690-2WSD4(0-0.5)	112690-2WSD5(0-0.5)	112690-2WSD6(0-0.5)	112690-2WSD7(0-0.5)	112690-2WSD8(0-0.5)
SAMPLE CODE	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT	PH1	PH1	PH1	PH1	PH1	PH1	PH1	PH1	PH1	PH1
TOP DEPTH	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
SAMPLE DATE	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101
Volatile Organics (ug/kg)										
1,1,1-TRICHLOROETHANE	11 U	11 U	11 U	10 U	54 U	10 U	5 U	43 U	56 U	10 U
2-BUTANONE	140 J	91 J	42 J	100	110 U	20 U	11 U	86 U	110 U	20 U
ACETONE	210	255	300	130	230	20 U	11 U	240	720	190
CARBON DISULFIDE	11	14	17	16	18 J	10 U	5 U	9 J	56 U	15
CHLOROBENZENE	11 U	11 U	11 U	10 U	54 U	10 U	5 U	43 U	56 U	10 U
METHYLENE CHLORIDE	11 U	11 U	11 U	10 U	54 U	10 J	3 J	10 J	56 U	2 J
TETRACHLOROETHENE	11 U	11 U	11 U	10 U	54 U	16 J	4 J	10 J	56 U	10 U
TOLUENE	11 U	11 U	11 U	10 U	54 U	10 U	5 U	43 U	56 U	10 U
TOTAL XYLENES	11 U	11 U	11 U	10 U	54 U	10 U	5 U	43 U	56 U	10 U
TRICHLOROETHENE	11 U	11 U	11 U	10 U	54 U	11 J	3 J	43 U	56 U	10 U
Semivolatile Organics (ug/kg)										
1,4-DICHLOROBENZENE	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
2,4-DIMETHYLPHENOL	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
2-METHYLNAPHTHALENE	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
4-METHYLPHENOL	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
ACENAPHTHENE	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
ACENAPHTHYLENE	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
ANTHRACENE	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
BENZO(A)ANTHRACENE	670 J	670 J	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
BENZO(A)PYRENE	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
BENZO(B)FLUORANTHENE	380 J	380 J	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	420 J
BENZO(G,H,I)PERYLENE	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
BENZO(K)FLUORANTHENE	480 J	480 J	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	670 J
BENZOIC ACID	17000 U	17500 U	18000 U	16000 U	17000 U	16000 U	8700 U	14000 U	780 J	16000 U
BIS(2-ETHYLHEXYL)PHTHALATE	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
BUTYL BENZYL PHTHALATE	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
CARBAZOLE										
CHRYSENE	630 J	630 J	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	610 J
DI-N-BUTYL PHTHALATE	3500 U	3600 U	3700 U	6100 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
DI-N-OCTYL PHTHALATE	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
DIBENZO(A,H)ANTHRACENE	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
DIBENZOFURAN	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
FLUORANTHENE	970 J	970 J	3700 U	3400 U	390 J	410 J	1800 U	2800 U	470 J	1300 J
FLUORENE	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
INDENO(1,2,3-CD)PYRENE	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
NAPHTHALENE	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
PENTACHLOROPHENOL	17000 U	17500 U	18000 U	16000 U	17000 U	16000 U	8700 U	14000 U	18000 U	16000 U
PHENANTHRENE	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	440 J
PHENOL	3500 U	3600 U	3700 U	3400 U	3600 U	3400 U	1800 U	2800 U	3700 U	3300 U
PYRENE	1300 J	1300 J	3700 U	3400 U	670 J	460 J	1800 U	470 J	610 J	1500 J
TOTAL PAHS	4430	4430	0 U	0 U	1060	870	0 U	470	1080	4940

TABLE 2

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WSD1	2WSD1	2WSD1	2WSD2	2WSD3	2WSD4	2WSD5	2WSD6	2WSD7	2WSD8
NSAMPLE	112690-2WSD1(0-0.5)	112690-2WSD1(0-0.5)-AVG	112690-2WSD1(0-0.5)-D	112690-2WSD2(0-0.5)	112690-2WSD3(0-0.5)	112690-2WSD4(0-0.5)	112690-2WSD5(0-0 5)	112690-2WSD6(0-0.5)	112690-2WSD7(0-0.5)	112690-2WSD8(0-0 5)
SAMPLE	112690-2WSD1(0-0.5)	112690-2WSD1(0-0.5)-AVG	112690-2WSD10(0-0.5)	112690-2WSD2(0-0.5)	112690-2WSD3(0-0.5)	112690-2WSD4(0-0.5)	112690-2WSD5(0-0.5)	112690-2WSD6(0-0.5)	112690-2WSD7(0-0.5)	112690-2WSD8(0-0 5)
SAMPLE CODE	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT	PH1	PH1	PH1	PH1	PH1	PH1	PH1	PH1	PH1	PH1
TOP DEPTH	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	0.5	0.5	0.5	0.5	0 5	0.5	0.5	0.5	0 5	0 5
SAMPLE DATE	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101
Pesticides/PCBs (ug/kg)										
4,4'-DDD	140 J	140 J		33 UJ	35 UJ	33 UJ	17 UJ	28 UJ	36 UJ	32 UJ
4,4'-DDE	36 J	36 J		40 J	35 UJ	33 UJ	17 UJ	28 UJ	36 UJ	32 UJ
4,4'-DDT	34 UJ	34 UJ		33 UJ	57 J	33 UJ	17 UJ	28 UJ	36 UJ	32 UJ
TOTAL DDT	176	176		40	57	0 U	0 U	0 U	0 U	0 U
ALDRIN	17 UJ	17 UJ		16 UJ	17 UJ	16 UJ	8 7 UJ	14 UJ	18 UJ	16 UJ
ALPHA-CHLORDANE	170 UJ	170 UJ		160 UJ	170 UJ	160 UJ	87 UJ	140 UJ	180 UJ	160 UJ
BETA-BHC	17 UJ	17 UJ		16 UJ	17 UJ	16 UJ	8 7 UJ	14 UJ	18 UJ	16 UJ
DELTA-BHC	17 UJ	17 UJ		16 UJ	17 UJ	16 UJ	8 7 UJ	14 UJ	18 UJ	16 UJ
DIELDRIN	34 UJ	34 UJ		33 UJ	35 UJ	33 UJ	17 UJ	28 UJ	36 UJ	32 UJ
ENDOSULFAN I	17 UJ	17 UJ		16 UJ	17 UJ	16 UJ	8 7 UJ	14 UJ	18 UJ	16 UJ
ENDOSULFAN II	34 UJ	34 UJ		33 UJ	35 UJ	33 UJ	17 UJ	28 UJ	36 UJ	32 UJ
ENDOSULFAN SULFATE	34 UJ	34 UJ		33 UJ	35 UJ	33 UJ	17 UJ	28 UJ	36 UJ	32 UJ
ENDRIN	34 UJ	34 UJ		33 UJ	35 UJ	33 UJ	17 UJ	28 UJ	36 UJ	32 UJ
ENDRIN ALDEHYDE										
ENDRIN KETONE	34 UJ	34 UJ		33 UJ	35 UJ	33 UJ	17 UJ	28 UJ	36 UJ	32 UJ
GAMMA-BHC (LINDANE)	17 UJ	17 UJ		16 UJ	17 UJ	16 UJ	8 7 UJ	14 UJ	18 UJ	16 UJ
GAMMA-CHLORDANE	170 UJ	170 UJ		160 UJ	170 UJ	160 UJ	87 UJ	140 UJ	180 UJ	160 UJ
HEPTACHLOR	17 UJ	17 UJ		16 UJ	17 UJ	16 UJ	8 7 UJ	14 UJ	18 UJ	16 UJ
HEPTACHLOR EPOXIDE	17 UJ	17 UJ		16 UJ	17 UJ	16 UJ	8 7 UJ	14 UJ	18 UJ	16 UJ
METHOXYCHLOR	170 UJ	170 UJ		160 UJ	170 UJ	160 UJ	87 UJ	140 UJ	180 UJ	160 UJ
AROCLOR-1260	340 UJ	340 UJ		330 UJ	350 UJ	330 UJ	170 UJ	280 UJ	360 UJ	320 UJ
Inorganics (mg/kg)										
ALUMINUM	18900	18650	18400	22200	18800	16600	14200	19300	17800	18300
ANTIMONY	10 8 UR	11 05 UR	11 3 UR	10 1 UR	9 8 UR	8 2 UR	8 2 UR	10 1 UR	9 4 UR	10 1 UR
ARSENIC	9 2 J	9 7 J	10 2 J	9 5 J	9 5 J	10 J	8 5 J	10 5 J	13 9 J	8 1 J
BARIUM	55 6	55 1	54 6	64 6	56 6	56	53 6	59 9	59 7	64
BERYLLIUM	0 91	0 87	0 83	1 1	0 88	0 44	0 39	0 81	0 51	0 84
BORON	4100 R	4300 R	4500 R	4000 R	4400 R	1200 R	1300 R	730 R	450 R	3600 R
CADMIUM	4 2	4 5	4 8	4 8	5 3	3 8	3 7	3 5	3 5	5
CALCIUM	4670	4665	4660	4930	4220	1480	1090 J	2090	1830	6800
CHROMIUM	57 1	65 75	74 4	48 9	92 6	73 9	71 7	93 5	69 3	95 7
COBALT	10 8	10.7	10 6	11 9	11 1	7 3	6 8	8 4	7 6	10 2
COPPER	33 J	41.1 J	49 2 J	30 5 J	69 5 J	44 8 J	52 2 J	51 3 J	34 6 J	71 5
CYANIDE	2 7 U	2.75 U	2 8 U	2 6 U	2 4 U	2 U	2 U	2 5 U	2 4 U	2 5 U
IRON	28100	28650	29200	31700	29700	26700	28300	22900	24100	25500
LEAD	51	55 8	60 6	21 3 J	46 1	56 8	48 1	69	37 8	69 2
MAGNESIUM	7630	7715	7800	7870	7990	5950	5550	6700	6060	7300
MANGANESE	352	359	366	365	341	193	166	210	193	278
MERCURY	0 21 UJ	0.1925 J	0 28 J	0 19 UJ	0 31 J	0 25 J	0 35 J	0 32 J	0 42 J	0 48 J
NICKEL	26	26.2	26 4	28 2	27	17 8	16 7	19 9	17 6	24 2
POTASSIUM	4390	4295	4200	4920	4280	4560	4160	3980	3790	4070
SELENIUM	0 89	0 885	0 88	1 6	1 3	0 79	0 98	1 1	1 6	1 2
SILVER	3 UJ	3 1 UJ	3 2 UJ	2 8 UJ	2 7 UJ	2 3 UJ	2 3 UJ	2 8 UJ	2 6 UJ	2 8 UJ
SODIUM	3510	3600	3690	3290	6090	383 J	291 J	1150 J	464 J	6650
THALLIUM	0 86 U	0 88 U	0 9 U	0 81 U	0 78 U	0 66 U	0 65 U	0 81 U	0 76 U	0 81 U
VANADIUM	44 5	44 1	43 7	49 3	45 5	45 4	44 6	49 3	44 8	41
ZINC	90 6	100 3	110	126	127	63 2 J	58 1 J	57 6 J	51 5 J	124
Miscellaneous Parameters										
PH										
TOTAL ORGANIC CARBON (MG/KG)										
TOTAL SOLIDS (%)										

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT
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LOCATION	2WSD9	2WSD43	2WSD44	2WSD45	2WSD46	2WSD47	2WSD47	2WSD47	2WSD48	2WSD49	2WSD50
NSAMPLE	112690-2WSD9(0-0.5)	2W-SD-SD43-0001	2W-SD-SD44-0001	2W-SD-SD45-0001	2W-SD-SD46-0001	2W-SD-SD47-0001	2W-SD-SD47-0001-AVG	2W-SD-SD47-0001-D	2W-SD-SD48-0001	2W-SD-SD49-0001	2W-SD-SD50-0001
SAMPLE	112690-2WSD9(0-0.5)	2W-SD-SD43-0001	2W-SD-SD44-0001	2W-SD-SD45-0001	2W-SD-SD46-0001	2W-SD-SD47-0001	2W-SD-SD47-0001-AVG	2W-FD-101907-01	2W-SD-SD48-0001	2W-SD-SD49-0001	2W-SD-SD50-0001
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL
EVENT	PH1										
TOP DEPTH	0	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	0.5	0.3	0.3	0 3	0.3	0.5	0 5	0.5	0.3	0.3	0.3
SAMPLE DATE	99990101	20071019	20071019	20071018	20071019	20071019	20071019	20071019	20071019	20071018	20071018
Volatile Organics (ug/kg)											
1,1,1-TRICHLOROETHANE	20 U										
2-BUTANONE	40 U										
ACETONE	40 U										
CARBON DISULFIDE	20 U										
CHLOROBENZENE	20 U										
METHYLENE CHLORIDE	5 J										
TETRACHLOROETHENE	11 J										
TOLUENE	20 U										
TOTAL XYLENES	20 U										
TRICHLOROETHENE	6 J										
Semivolatile Organics (ug/kg)											
1,4-DICHLOROBENZENE	6600 U										
2,4-DIMETHYLPHENOL	6600 U										
2-METHYLNAPHTHALENE	6600 U	20 J	86 UR	120 UR	7 J	140 UR	135 UR	130 UR	12 J	65 U	96 UR
4-METHYLPHENOL	6600 U										
ACENAPHTHENE	6600 U	26 J	16 J	120 UR	11 J	140 UR	135 UR	130 UR	25 J	65 U	96 UR
ACENAPHTHYLENE	6600 U	58 J	54 J	120 UR	57	87 J	98 5 J	110 J	59	7 3 J	28 J
ANTHRACENE	2400 J	91 UR	62 J	120 UR	61	60 J	70 5 J	81 J	100	13 J	23 J
BENZO(A)ANTHRACENE	27000	220 J	740 J	77 J	590	560 J	630 J	700 J	1100 J	120 J	200 J
BENZO(A)PYRENE	35000	240 J	680 J	95 J	510	560 J	635 J	710 J	930	150	240 J
BENZO(B)FLUORANTHENE	55000	380 J	810 J	160 J	590	730 J	835 J	940 J	1100	230	300 J
BENZO(G,H,I)PERYLENE	23000	240 J	470 J	88 J	330	360 J	445 J	530 J	700	180	170 J
BENZO(K)FLUORANTHENE	45000	160 J	490 J	79 J	360 J	420 J	450 J	480 J	650	100 J	160 J
BENZOIC ACID	32000 J										
BIS(2-ETHYLHEXYL)PHTHALATE	6600 U										
BUTYL BENZYL PHTHALATE	6600 U										
CARBAZOLE											
CHRYSENE	42000	230 J	710 J	98 J	580	600 J	670 J	740 J	1000	160	220 J
DI-N-BUTYL PHTHALATE	7900 U										
DI-N-OCTYL PHTHALATE	6600 U										
DIBENZO(A,H)ANTHRACENE	6600 U	120 J	260 J	120 UR	180 J	220 J	265 J	310 J	390 J	65 UJ	110 J
DIBENZOFURAN	1000 J										
FLUORANTHENE	80000	490 J	1100 J	150 J	1100	950 J	1075 J	1200 J	2000	220	330 J
FLUORENE	1000 J	41 J	21 J	120 UR	21 J	24 J	27 J	30 J	43 J	5 8 J	96 UR
INDENO(1,2,3-CD)PYRENE	23000	270 J	660 J	100 J	460	500 J	610 J	720 J	870	180	230 J
NAPHTHALENE	6600 U	20 J	86 UR	120 UR	5 6 J	140 UR	135 UR	130 UR	9 6 J	65 U	96 UR
PENTACHLOROPHENOL	32000 U										
PHENANTHRENE	36000	170 J	360 J	52 J	360	330 J	375 J	420 J	690	84	99 J
PHENOL	6600 U										
PYRENE	42000 J	430 J	1200 J	120 J	1000	1000 J	1100 J	1200 J	1800 J	190	320 J
TOTAL PAHS	411400	3115	7633	1019	6222 6	6401	7286	8171	11478 6	1640 1	2430

TABLE 2

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WSD9	2WSD43	2WSD44	2WSD45	2WSD46	2WSD47	2WSD47	2WSD47	2WSD48	2WSD49	2WSD50
NSAMPLE	112690-2WSD9(0-0.5)	2W-SD-SD43-0001	2W-SD-SD44-0001	2W-SD-SD45-0001	2W-SD-SD46-0001	2W-SD-SD47-0001	2W-SD-SD47-0001-AVG	2W-SD-SD47-0001-D	2W-SD-SD48-0001	2W-SD-SD49-0001	2W-SD-SD50-0001
SAMPLE	112690-2WSD9(0-0.5)	2W-SD-SD43-0001	2W-SD-SD44-0001	2W-SD-SD45-0001	2W-SD-SD46-0001	2W-SD-SD47-0001	2W-SD-SD47-0001-AVG	2W-FD-101907-01	2W-SD-SD48-0001	2W-SD-SD49-0001	2W-SD-SD50-0001
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL
EVENT	PH1										
TOP DEPTH	0	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	0.5	0.3	0.3	0.3	0.3	0.5	0.5	0 5	0 3	0 3	0 3
SAMPLE DATE	99990101	20071019	20071019	20071018	20071019	20071019	20071019	20071019	20071019	20071018	20071018
Pesticides/PCBs (ug/kg)											
4,4'-DDD	64 UJ	1300 J	93 J	39 J	160 J	580 J	740 J	900 J	210 J	62 J	79 J
4,4'-DDE	64 UJ	55 J	10 J	9 5 J	40	23 J	30 J	37 J	95	11 J	12 J
4,4'-DDT	64 UJ	150 UR	19 J	20 UR	65 J	32 J	42 J	52 J	210 J	14 J	27 J
TOTAL DDT	0 U	1355	122	48.5	265	635	812	989	515	87	118
ALDRIN	32 UJ	78 UR	7 3 UR	10 UR	4 U	12 UR	17 UR	22 UR	4 5 U	5 6 U	8 2 UR
ALPHA-CHLORDANE	320 UJ	52 J	7 3 UR	10 UR	4 U	12 UR	17 UR	22 UR	4 5 U	16	11 J
BETA-BHC	32 UJ	78 UR	7 3 UR	10 UR	4 UJ	12 UR	17 UR	22 UR	4 5 U	5 6 UJ	8 2 UR
DELTA-BHC	32 UJ	78 UR	7 3 UR	10 UR	4 UJ	12 UR	17 UR	22 UR	4 5 UJ	5 6 UJ	8 2 UR
DIELDRIN	64 UJ	150 UR	14 UR	20 UR	7 8 U	23 UR	33 5 UR	44 UR	8 7 UJ	11 U	16 UR
ENDOSULFAN I	32 UJ	78 UR	7 3 UR	10 UR	4 U	12 UR	17 UR	22 UR	4 5 U	5 6 U	8 2 UR
ENDOSULFAN II	64 UJ	150 UR	14 UR	20 UR	7.8 U	23 UR	33 5 UR	44 UR	8 7 U	11 U	16 UR
ENDOSULFAN SULFATE	64 UJ	150 UR	14 UR	20 UR	7 8 UJ	23 UR	33 5 UR	44 UR	8 7 UJ	11 UJ	16 UR
ENDRIN	64 UJ	150 UR	14 UR	20 UR	7 8 UJ	23 UR	33 5 UR	44 UR	8 7 U	11 UJ	16 UR
ENDRIN ALDEHYDE		150 UR	14 UR	20 UR	7 8 U	23 UR	33 5 UR	44 UR	8 7 U	11 U	16 UR
ENDRIN KETONE	64 UJ	150 UR	14 UR	20 UR	7 8 UJ	23 UR	33 5 UR	44 UR	8 7 UJ	11 UJ	16 UR
GAMMA-BHC (LINDANE)	32 UJ	78 UR	7 3 UR	10 UR	4 UJ	12 UR	17 UR	22 UR	4 5 UJ	5 6 UJ	8 2 UR
GAMMA-CHLORDANE	320 UJ	59 J	7 3 UR	10 UR	4 U	12 UR	17 UR	22 UR	4 5 U	14 J	12 J
HEPTACHLOR	32 UJ	78 UR	7 3 UR	10 UR	4 UJ	12 UR	17 UR	22 UR	4 5 UJ	5 6 UJ	8 2 UR
HEPTACHLOR EPOXIDE	32 UJ	78 UR	7 3 UR	10 UR	4 U	12 UR	17 UR	22 UR	4 5 U	5 6 U	8 2 UR
METHOXYCHLOR	320 UJ	780 UR	73 UR	100 UR	40 UJ	120 UR	83 J	83 J	45 UJ	56 UJ	82 UR
AROCLOR-1260	640 UJ	300 J	150 J	100 UR	340	380 J	405 J	430 J	580	56 U	370 J
Inorganics (mg/kg)											
ALUMINUM	20800	28600 J	10400 J	3690 J	23800	18100 J	18250 J	18400 J	15800	3840	8280 J
ANTIMONY	9 9 UR	0.41 UR	0 60 UR	2 3 U	0 31 UJ	0 33 UR	0 82 U	0 82 U	0 26 U	2 U	1 25 UR
ARSENIC	11 8 J	16 6 J	12 8 J	16 9 J	17 4	9 1 J	8 3 J	7 5 J	11 5	14 6 J	43 6 J
BARIUM	72 8	328 J	146 J	314 J	152	198 J	191 J	184 J	131	176	394 J
BERYLLIUM	0 85	2 9 J	0 58 J	0 63 J	0 91	1 3 J	1 25 J	1 2 J	0 49	0 31	0 61 J
BORON	490 R										
CADMIUM	6 1	1 8 J	1 1 J	0 15 UR	0 30	1 7 J	2 15 J	2 6 J	1 2	1 2 J	0 14 UR
CALCIUM	2160	4490 J	2020 J	4740 J	4230	5770 J	5680 J	5590 J	4330	3580	5660 J
CHROMIUM	63 7	76 9 J	19 6 J	10 7 J	39.7	29 6 J	30 7 J	31 8 J	25 9	8 5 J	20 7 J
COBALT	8 6	6 1 J	3 4 J	0 40 UR	13 7	5 1 J	5 45 J	5 8 J	9 4	5 6 J	4 J
COPPER	39 6 J	161 J	82 3 J	25 4 J	97 2	100 J	110 J	120 J	59 9	92 3 J	64 J
CYANIDE	3 2										
IRON	44000	70800 J	164000 J	300000 J	57700	45300 J	40650 J	36000 J	40000	109000	315000 J
LEAD	241 J	127 J	45 2 J	14 J	78 5	79.1 J	86.95 J	94 8 J	49 7	39 2	54 J
MAGNESIUM	5880	6580 J	3360 J	887 J	10100 J	4500 J	4580 J	4660 J	5410	1520 J	2210 J
MANGANESE	357	262 J	265 J	636 J	579	352 J	325 J	298 J	812	389	1220 J
MERCURY	0 24 J	0 72 J	0 26 J	0 10 J	0 27	0 47 J	0 405 J	0 34 J	0 21	0 13	0.29 J
NICKEL	21 2	30 9 J	19 6 J	15 7 J	33 4	33 2 J	34 6 J	36 J	30 2	28 3 J	28 8 J
POTASSIUM	3310	2850 J	1740 J	625 J	3960	1790 J	1800 J	1810 J	2150	916	987 J
SELENIUM	1 3	0 71 UR	1 03 UR	9 U	1 4 U	0 57 UR	0 75 J	0 75 J	0 45 U	3 4 U	9 8 J
SILVER	2 8 UJ	0 22 UR	0 32 UR	0 71 UR	0 16 UJ	0 18 UR	0 18 UR	0 18 UR	0 14 U	0 22 UJ	0 66 UR
SODIUM	321 J	1010 J	318 J	653 J	571	1070 J	1045 J	1020 J	292	208 J	769 J
THALLIUM	0 8 U	0 44 J	0 86 U	1 1 J	0 25 U	0 27 UR	0 275 UR	0 28 UR	1	0 34 U	1 02 UR
VANADIUM	55 9	289 J	51.3 J	30 6 J	69 1	83 7 J	84 55 J	85 4 J	96 1	24 1	114 J
ZINC	109	654 J	600 J	342 J	320	344 J	333 J	322 J	624	646	447 J
Miscellaneous Parameters											
PH		5 5	5.7	5 9	6 4	5 8	5 85	5 9	6 5	6 2	6 2
TOTAL ORGANIC CARBON (MG/KG)		180000 J	160000 J	270000 J	86000 J	400000 J	385000 J	370000 J	120000	130000 J	200000 J
TOTAL SOLIDS (%)		22	23	16	42	14	14 5	15	38	30	21

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WSD51	2WSD52	2WSD53	2WSD53	2WSD53	2WSD54	2WSD55	2WSD56	2WSD57	2WSD58	2WCSD10
NSAMPLE	2W-SD-SD51-0001	2W-SD-SD52-0001	2W-SD-SD53-0001	2W-SD-SD53-0001-AVG	2W-SD-SD53-0001-D	2W-SD-SD54-0001	2W-SD-SD55-0001	2W-SD-SD56-0001	2W-SD-SD57-0001	2W-SD-SD58-0001	2WCSD10
SAMPLE	2W-SD-SD51-0001	2W-SD-SD52-0001	2W-SD-SD53-0001	2W-SD-SD53-0001-AVG	2W-FD-101807-01	2W-SD-SD54-0001	2W-SD-SD55-0001	2W-SD-SD56-0001	2W-SD-SD57-0001	2W-SD-SD58-0001	2WCSD10
SAMPLE CODE	NORMAL	NORMAL	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT											
TOP DEPTH	0	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	0.5	0.5	0.5	0.5	0.5	0 5	0.5	0.3	0.3	0.3	1
SAMPLE DATE	20071018	20071018	20071018	20071018	20071018	20071018	20071018	20071018	20071018	20071018	99990101
Volatile Organics (ug/kg)											
1,1,1-TRICHLOROETHANE											
2-BUTANONE											
ACETONE											
CARBON DISULFIDE											
CHLOROBENZENE											
METHYLENE CHLORIDE											
TETRACHLOROETHENE											
TOLUENE											
TOTAL XYLENES											
TRICHLOROETHENE											
Semivolatile Organics (ug/kg)											
1,4-DICHLOROBENZENE											510 U
2,4-DIMETHYLPHENOL											510 U
2-METHYLNAPHTHALENE	140 UR	54 U	58 U	58 5 U	59 U	140 UR	86 UR	33 U	32 U		510 U
4-METHYLPHENOL											510 U
ACENAPHTHENE	140 UR	5 5 J	5.2 J	4 85 J	4 5 J	140 UR	86 UR	15 J	61		510 U
ACENAPHTHYLENE	140 UR	24 J	20 J	19 5 J	19 J	140 UR	10 J	28 J	22 J		510 U
ANTHRACENE	140 UR	22 J	28 J	26 J	24 J	140 UR	16 J	70	390		510 U
BENZO(A)ANTHRACENE	45 J	160	240	250	260	120 J	140 J	1200	4000		180 J
BENZO(A)PYRENE	63 J	200	260 J	265 J	270	160 J	190 J	1500	3500		140 J
BENZO(B)FLUORANTHENE	99 J	240	340 J	345 J	350	230 J	310 J	1800	4600		350 J
BENZO(G,H,I)PERYLENE	49 J	140	170 J	170 J	170	160 J	160 J	1200	2600		510 U
BENZO(K)FLUORANTHENE	49 J	150	220 J	200 J	180	140 J	150 J	1100 J	2900 J		510 U
BENZOIC ACID											61 J
BIS(2-ETHYLHEXYL)PHTHALATE											530 U
BUTYL BENZYL PHTHALATE											510 U
CARBAZOLE											510 U
CHRYSENE	66 J	200	280	290	300	190 J	180 J	1400	4100		660
DI-N-BUTYL PHTHALATE											510 U
DI-N-OCTYL PHTHALATE											510 U
DIBENZO(A,H)ANTHRACENE	140 UR	79 J	100 J	99 J	98 J	100 J	92 J	370 J	1400 J		510 U
DIBENZOFURAN											510 U
FLUORANTHENE	140 J	320	440	440	440	290 J	370 J	2800 J	8400		180 J
FLUORENE	140 UR	9 8 J	9 J	8 7 J.	8 4 J	140 UR	7 6 J	24 J	130		510 U
INDENO(1,2,3-CD)PYRENE	64 J	190	250 J	250 J	250	220 J	220 J	1600	3500		86 J
NAPHTHALENE	140 UR	54 U	58 U	58 5 U	59 U	140 UR	86 UR	4 J	6 J		510 U
PENTACHLOROPHENOL											1200 U
PHENANTHRENE	47 J	170	170	175	180	110 J	140 J	860	4300		110 J
PHENOL											510 U
PYRENE	140 UR	320	340	370	400	180 J	260 J	2200	8200		270 J
TOTAL PAHS	622	2230 3	2872 2	2913 05	2953 9	1900	2245 6	16171	48109		1976

TABLE 2

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WSD51	2WSD52	2WSD53	2WSD53	2WSD53	2WSD54	2WSD55	2WSD56	2WSD57	2WSD58	2WCSD10
NSAMPLE	2W-SD-SD51-0001	2W-SD-SD52-0001	2W-SD-SD53-0001	2W-SD-SD53-0001-AVG	2W-SD-SD53-0001-D	2W-SD-SD54-0001	2W-SD-SD55-0001	2W-SD-SD56-0001	2W-SD-SD57-0001	2W-SD-SD58-0001	2WCSD10
SAMPLE	2W-SD-SD51-0001	2W-SD-SD52-0001	2W-SD-SD53-0001	2W-SD-SD53-0001-AVG	2W-FD-101807-01	2W-SD-SD54-0001	2W-SD-SD55-0001	2W-SD-SD56-0001	2W-SD-SD57-0001	2W-SD-SD58-0001	2WCSD10
SAMPLE CODE	NORMAL	NORMAL	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT											
TOP DEPTH	0	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	0.5	0.5	0.5	0 5	0.5	0.5	0.5	0.3	0 3	0.3	1
SAMPLE DATE	20071018	20071018	20071018	20071018	20071018	20071018	20071018	20071018	20071018	20071018	99990101
Pesticides/PCBs (ug/kg)											
4,4'-DDD	110 J	340 J	4 4 J	4 5 J	4 6 J	23 UR	14 UR	5 5 U			
4,4'-DDE	13 J	34 J	3 J	3 2 J	3 4 J	6 4 J	3 9 J	2 7 J			
4,4'-DDT	16 J	420 J	4 4 J	4 4 J	9 8 UJ	23 UR	14 UR	6 J			
TOTAL DDT	139	794	11 8	12 1	8	6 4	3 9	8 7			
ALDRIN	12 UR	23 U	5 U	5 U	5 U	12 UR	7 3 UR	2 8 U			
ALPHA-CHLORDANE	12 UR	23 U	5 UJ	5 UJ	5 UJ	12 UR	7 3 UR	2 8 UJ			
BETA-BHC	12 UR	23 UJ	5 UJ	5 UJ	5 UJ	12 UR	7 3 UR	2 8 UJ			
DELTA-BHC	12 UR	23 UJ	5 UJ	5 UJ	5 UJ	12 UR	7 3 UR	2 8 UJ			
DIELDRIN	24 UR	44 U	9.6 U	9 7 U	9 8 U	23 UR	14 UR	5 5 U			
ENDOSULFAN I	12 UR	23 U	5 UJ	5 UJ	5 UJ	12 UR	7 3 UR	2 8 UJ			
ENDOSULFAN II	24 UR	44 U	9 6 UJ	9 7 UJ	9 8 UJ	23 UR	14 UR	5 5 UJ			
ENDOSULFAN SULFATE	24 UR	44 UJ	9 6 UJ	9 7 UJ	9 8 UJ	23 UR	14 UR	5 5 UJ			
ENDRIN	24 UR	44 UJ	9 6 UJ	9 7 UJ	9 8 UJ	23 UR	14 UR	5 5 UJ			
ENDRIN ALDEHYDE	24 UR	44 U	9 6 UJ	9 7 UJ	9 8 UJ	23 UR	14 UR	5 5 UJ			
ENDRIN KETONE	24 UR	44 UJ	9 6 UJ	9 7 UJ	9 8 UJ	23 UR	14 UR	5 5 UJ			
GAMMA-BHC (LINDANE)	12 UR	23 UJ	5 UJ	5 UJ	5 UJ	12 UR	7 3 UR	8 2 J			
GAMMA-CHLORDANE	12 UR	23 U	5 UJ	5 UJ	5 UJ	12 UR	7 3 UR	2 8 UJ			
HEPTACHLOR	12 UR	23 UJ	5 UJ	5 UJ	5 UJ	12 UR	7 3 UR	2 8 UJ			
HEPTACHLOR EPOXIDE	12 UR	23 U	5 UJ	5 UJ	5 UJ	12 UR	7 3 UR	2 8 UJ			
METHOXYCHLOR	120 UR	230 UJ	50 UJ	50 UJ	50 UJ	120 UR	73 UR	28 UJ			
AROCLOR-1260	120 UR	46 U	50 U	50 U	50 U	120 UR	73 UR	28 U			
Inorganics (mg/kg)											
ALUMINUM	8520 J	26500	17100	16150	15200	10200 J	10700 J	11800	5470		12200
ANTIMONY	0 86 U	0 27 U	0 86 UJ	0 76 UJ	0 66 UJ	1 2 U	1 3 U	0 17 UJ	0 16 UJ		7 8 J
ARSENIC	13 9 J	13 5	28 2 J	28 7 J	29 2 J	24 3 J	52 5 J	7 3	4 3 J		6 2 J
BARIUM	107 J	51 2	48 5	44 25	40	44 4 J	13 7 J	59 3	47 7		78 8 J
BERYLLIUM	1 6 J	1.3	1 1	1 05	1	1 1 J	1 4 J	0 31	0 27		0 53 J
BORON											15 9 U
CADMIUM	1.2 J	1 1 J	0 10 UJ	0.09 UJ	0 08 UJ	0.88 J	0.10 UR	0 02 U	1 1 J	0 03 U	0 64 U
CALCIUM	3370 J	2160	2660	2565	2470	2730 J	1760 J	2040	1730		1660 J
CHROMIUM	16 3 J	63 6	47 3	43 45	39 6	36 8 J	51 2 J	29 2	9 5		41 4
COBALT	5.6 J	5 5 J	2 7 J	2 55 J	2 4 J	1 1 J	0.27 UR	4 4	4 9 J		7 1 J
COPPER	36 1 J	96.7	57 3 J	57 25 J	57 2 J	55 J	41 2 J	20	19 2		16 8 J
CYANIDE											
IRON	83600 J	46100	199000	198500	198000	130000 J	249000 J	37300	37900		23800
LEAD	24.6 J	119	65 8	63 6	61 4	48 J	33 4 J	58 4	159		28
MAGNESIUM	682 J	4380 J	3340 J	3000 J	2660 J	1180 J	726 J	3760 J	2240 J		4720
MANGANESE	326 J	208	231	218	205	149 J	89 2 J	402	469		153
MERCURY	0 12 J	0 31	0 20	0.205	0 21	0 26 J	0 23 J	0 10	0 02		0 27 J
NICKEL	25 9 J	23 5	19 2 J	18 45 J	17 7 J	15 9 J	15 2 J	12 4	11 2 J		13 1 J
POTASSIUM	525 J	2380	1810	1620	1430	728 J	434 J	2070	1140		2350 J
SELENIUM	0 84 UR	0 61 U	6 6 U	5 95 U	5 3 U	1 U	7 8 U	1 3 U	1 2 U		0 67 J
SILVER	0 26 UR	0 11 UJ	0 45 UJ	0 40 UJ	0 35 UJ	0 24 UR	0 47 UR	0 09 UJ	0 08 UJ		0 64 U
SODIUM	847 J	431	344 J	333 5 J	323 J	739 J	967 J	202 J	149 J		356 J
THALLIUM	0 40 UR	0 17 U	0 70 U	0 62 U	0 54 U	0 37 UR	0 73 UR	0 14 U	0 13 U		0 96 U
VANADIUM	38 9 J	52 9	57 3	54 25	51 2	63 6 J	60 6 J	34 7	22 9		47 1
ZINC	82 4 J	60 6	138	131 5	125	39 7 J	80 1 J	78 6	339		40 5 J
Miscellaneous Parameters											
PH	5 3	5 6	5 1	5 2	5 3	4 8	4 5	5 9			
TOTAL ORGANIC CARBON (MG/KG)	440000 J	250000 J	200000 J	195000 J	190000 J	370000 J	220000 J	38000 J	24000 J		
TOTAL SOLIDS (%)	14	37	34	34	34	14	23	60	63	57	

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WCSD11	2WCSD12	2WCSD13	2WCSD14	2WCSD14	2WCSD14	2WCSD15	2WCSD4	2WCSD5	2WCSD6	2WCSD7	2WCSD8
NSAMPLE	2WCSD11	2WCSD12	2WCSD13	2WCSD14	2WCSD14-AVG	2WCSD14-D	2WCSD15	2WCSD4	2WCSD5	2WCSD6	2WCSD7	2WCSD8
SAMPLE	2WCSD11	2WCSD12	2WCSD13	2WCSD14	2WCSD14-AVG	2WCSD14D	2WCSD15	2WCSD4	2WCSD5	2WCSD6	2WCSD7	2WCSD8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT												
TOP DEPTH	0	0	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	1	1	1	1	1	1	1	1	1	1	1	1
SAMPLE DATE	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101
Volatile Organics (ug/kg)												
1,1,1-TRICHLOROETHANE	12 U							18 U	13 J		11 U	
2-BUTANONE	12 U							18 U	19 U		11 U	
ACETONE	12 UJ							18 UJ	19 UJ		11 U	
CARBON DISULFIDE	12 U							18 U	19 U		11 U	
CHLOROBENZENE	12 U							18 U	19 UJ		11 U	
METHYLENE CHLORIDE	12 J							22	10 J		11	
TETRACHLOROETHENE	12 U							18 U	8 J		11 U	
TOLUENE	12 U							18 U	4 J		11 U	
TOTAL XYLENES	12 U							18 U	19 UJ		11 U	
TRICHLOROETHENE	12 U							18 U	22		11 U	
Semivolatile Organics (ug/kg)												
1,4-DICHLOROBENZENE	410 U	560 U	600 U	660 U	630 U	600 U	690 U	600 U	630 U	700 U	350 U	530 U
2,4-DIMETHYLPHENOL	410 U	560 U	600 U	660 U	630 U	600 U	690 U	600 U	630 U	700 U	350 U	530 U
2-METHYLNAPHTHALENE	410 U	560 U	600 U	660 U	630 U	600 U	690 U	31 J	630 U	700 U	350 U	530 U
4-METHYLPHENOL	410 U	560 U	600 U	660 U	630 U	600 U	690 U	600 U	630 U	700 U	350 U	530 U
ACENAPHTHENE	410 U	560 U	600 U	70 J	65 J	60 J	690 U	38 J	630 U	700 U	43 J	530 U
ACENAPHTHYLENE	410 U	560 U	600 U	74 J	69 5 J	65 J	690 U	90 J	630 U	700 U	350 U	530 U
ANTHRACENE	410 UJ	560 U	600 U	290 J	290 J	290 J	51 J	160 J	630 U	65 J	190	530 U
BENZO(A)ANTHRACENE	410 UJ	95 J	120 J	1800	1850	1900	160 J	2700 J	250 J	250 J	900	63 J
BENZO(A)PYRENE	410 UJ	110 J	130 J	2700	2600	2500	690 U	2400 J	210 J	700 U	800	78 J
BENZO(B)FLUORANTHENE	410 UJ	220 J	140 J	4800	4600	4400	350 J	2500 J	220 J	320 J	990	150 J
BENZO(G,H,I)PERYLENE	410 UJ	59 J	100 J	1700	2050	2400	170 J	760 J	54 J	240 J	260	47 J
BENZO(K)FLUORANTHENE	410 UJ	560 U	120 J	2100	1950	1800	690 U	2100 J	240 J	290 J	620	530 U
BENZOIC ACID	77 J	93 J	600 U	190 J	190 J	600 U	690 U	190 J	110 J	700 U	150 J	530 U
BIS(2-ETHYLHEXYL)PHTHALATE	1100 J	560 U	600 U	780 U	690 U	600 U	690 U	710 U	630 U	700 U	350 U	530 U
BUTYL BENZYL PHTHALATE	410 UJ	560 U	600 U	52 J	52 J	600 U	690 U	600 UJ	630 U	700 U	350 U	530 U
CARBAZOLE	410 UJ	560 U	600 U	660	645	630	690 U	50 J	630 U	700 U	230	530 U
CHRYSENE	410 UJ	190 J	160 J	3200	3050	2900	250 J	3300 J	420 J	430 J	1100	110 J
DI-N-BUTYL PHTHALATE	180 J	560 U	600 U	660 U	630 U	600 U	690 U	600 U	630 U	700 U	350 U	530 U
DI-N-OCTYL PHTHALATE	26 J	560 U	600 U	660 U	630 U	600 U	690 U	72 J	630 U	700 U	350 U	530 U
DIBENZO(A,H)ANTHRACENE	410 UJ	560 U	600 U	790	830	870	690 U	160 J	630 U	700 U	52	530 U
DIBENZOFURAN	410 U	560 U	600 U	87 J	84 5 J	82 J	690 U	600 U	630 U	700 U	45	530 U
FLUORANTHENE	410 UJ	190 J	170 J	4600	4900	5200	270 J	2800	470 J	330 J	1600	120 J
FLUORENE	410 U	560 U	600 U	110 J	110 J	110 J	690 U	80 J	630 U	700 U	76	530 U
INDENO(1,2,3-CD)PYRENE	410 UJ	71 J	99 J	2200	2300	2400	160 J	1200 J	98 J	200 J	480	51 J
NAPHTHALENE	410 U	560 U	600 U	660 U	630 U	600 U	690 U	87 J	160 J	700 U	36 J	530 U
PENTACHLOROPHENOL	990 UJ	1400 U	1400 U	1600 U	1500 U	1400 U	1700 U	1400 U	1500 U	1700 U	850 U	1300 U
PHENANTHRENE	230 J	120 J	600 U	2300	2300	2300	140 J	720	250 J	210 J	1300	77 J
PHENOL	32 J	560 U	600 U	660 U	630 U	600 U	690 U	600 U	630 U	700 U	350 U	530 U
PYRENE	410 UJ	210 J	270 J	4600	4300	4000	370 J	5200	610 J	530 J	2500	150 J
TOTAL PAHS	230	1265	1309	31334	31264 5	31195	1921	24326	2982	2865	10947	846

TABLE 2

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WCSD11	2WCSD12	2WCSD13	2WCSD14	2WCSD14	2WCSD14	2WCSD15	2WCSD4	2WCSD5	2WCSD6	2WCSD7	2WCSD8
NSAMPLE	2WCSD11	2WCSD12	2WCSD13	2WCSD14	2WCSD14-AVG	2WCSD14-D	2WCSD15	2WCSD4	2WCSD5	2WCSD6	2WCSD7	2WCSD8
SAMPLE	2WCSD11	2WCSD12	2WCSD13	2WCSD14	2WCSD14-AVG	2WCSD14D	2WCSD15	2WCSD4	2WCSD5	2WCSD6	2WCSD7	2WCSD8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT												
TOP DEPTH	0	0	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	1	1	1	1	1	1	1	1	1	1	1	1
SAMPLE DATE	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101
Pesticides/PCBs (ug/kg)												
4,4'-DDD	41 UJ							6 5 J	63 UJ		35 UJ	
4,4'-DDE	41 UJ							60 UJ	63 UJ		35 UJ	
4,4'-DDT	41 UJ							60 J	10 J		35 UJ	
TOTAL DDT	0 U							66 5	10		0 U	
ALDRIN	21 UJ							31 UJ	33 UJ		18 UJ	
ALPHA-CHLORDANE	21 UJ							31 UJ	6 4 J		18 UJ	
BETA-BHC	21 UJ							31 UJ	33 UJ		18 UJ	
DELTA-BHC	21 UJ							31 UJ	33 UJ		18 UJ	
DIELDRIN	41 UJ							60 UJ	63 UJ		35 UJ	
ENDOSULFAN I	21 UJ							31 UJ	33 UJ		18 UJ	
ENDOSULFAN II	41 UJ							60 UJ	63 UJ		35 UJ	
ENDOSULFAN SULFATE	41 UJ							60 UJ	7 6 J		35 UJ	
ENDRIN	10 J							15 J	18 J		35 UJ	
ENDRIN ALDEHYDE	41 UJ							59 J	140 J		35 UJ	
ENDRIN KETONE	41 UJ							60 UJ	63 UJ		35 UJ	
GAMMA-BHC (LINDANE)	21 UJ							31 UJ	33 UJ		18 UJ	
GAMMA-CHLORDANE	21 UJ							31 UJ	7 J		18 UJ	
HEPTACHLOR	21 UJ							31 UJ	33 UJ		18 UJ	
HEPTACHLOR EPOXIDE	21 UJ							31 UJ	33 UJ		18 UJ	
METHOXYCHLOR	210 UJ							310 UJ	37 J		180 UJ	
AROCLOR-1260	410 UJ							600 UJ	630 UJ		350 UJ	
Inorganics (mg/kg)												
ALUMINUM	2560	13700	12200	26400	22450	18500	16900	15900	10600	16900	3510	12600
ANTIMONY	3 7 U	9 4 U	14 6 U	17 4 U	17 9 U	18 4 U	6 5 U	5 9 U	5 1 U	6 4 U	3 2 U	4 9 U
ARSENIC	1 4	8 4	11 4	11 5	10 25	9	9 6	6 9	5 6	13 5	1 2	6 7
BARIUM	17 9	72 9	50	103	93 2	83 4	57 8	81 1	94 1	71 2	17	73 2
BERYLLIUM	0 57 U	1 2 U	1 3 U	2 3 U	2 U	1 7 U	1 7 U	1 5 U	1.5 U	1 U	0 55 U	1 2 U
BORON	12 3 U	30 2 J	26 3 J	37 5 J	32 15 J	26 8 J	25.8 J	39 7	27 8 J	34 9 J	11 J	29 3 J
CADMIUM	0 49 U	0 73 U	0 74 U	0 8 U	0 76 U	0 72 U	0 82 U	1 1 J	29 5	0 85 U	0 43 U	0 63 U
CALCIUM	680 J	1800 J	1230 J	3250 J	3075 J	2900 J	1750 J	2340 J	3290 J	1920 J	922 J	2150 J
CHROMIUM	11 4	50 5	53 1	36 1	31 85	27 6	65 2	66 3	27 8	97 5	5 7 U	45 4
COBALT	2 3	5 3	4 8	13 4	11.35	9 3	4 3	5 6	14 4	6 2	2 2	5 6
COPPER	5 U	23 4	29 5	37 7	33 2	28 7	26	39 4	57 2	52 8	4 6 U	23 6
CYANIDE												
IRON	6430	24600	24600	40700	34850	29000	14700	32700	23700	31100	6940	31200
LEAD	7 9	27.1	30 9	127	105 8	84 6	35 1	49 9	204	69 6	3 5	22 6
MAGNESIUM	1490	5080	5020	5310	5010	4710	5380	5540	4310	6140	1160	4860
MANGANESE	150	168	160	1480	1217	954	172	220	2640	196	101	483
MERCURY	0 12 U	0 29	0 42	0 2 U	0 19 U	0 18 U	0 52	0 38	0 18	0 6	0 11 U	0 18
NICKEL	5 6	15 5	14	25 8	22 25	18 7	16 3	18 5	31 5	21 5	3 3 J	13 8
POTASSIUM	822 U	3090	4020	3170	3110	3050	3920	3580	2060	4020	870 U	2640
SELENIUM	0 49 UJ	0 73 UJ	0 96 U	1 2 U	1 085 U	0 97 U	1 5 U	1 U	0 75 U	0 98 U	0 43 UJ	0 66 U
SILVER	0 49 UJ	0 73 UJ	0 74 UJ	0 8 UJ	0 76 UJ	0 72 UJ	0 82 UJ	0 79 UJ	1 1 U	0 85 UJ	0 43 UJ	0 63 UJ
SODIUM	28 4 U	209 U	273 U	169 U	165 5 U	162 U	334 U	580	156 U	1120	36 U	163 U
THALLIUM	0 25 U	0 37 U	0 37 U	0 4 U	0 36 J	0 36 J	0 41 U	0 39 U	0 34 J	0 42 U	0 21 U	0 31 U
VANADIUM	8	41 5	37 2	62 2	53 75	45 3	38 1	44 5	56 7	54 9	12 8	33 4
ZINC	50 4	43 4	40 5	173	153 5	134	42 6	61 9	292	54 9	10 3 U	82 2
Miscellaneous Parameters												
PH												
TOTAL ORGANIC CARBON (MG/KG)	510								16000			
TOTAL SOLIDS (%)												

TABLE 2

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WCSD9	2WSD1	2WSD1	2WSD1	2WSD10	2WSD11	2WSD12	2WSD13
NSAMPLE	2WCSD9	2WSD1(0-0.5)	2WSD1(0-0.5)-AVG	2WSD1(0-0.5)-D	2WSD10(FIELD)	2WSD11(FIELD)	2WSD12(FIELD)	2WSD13(FIELD)
SAMPLE	2WCSD9	112690-2WSD1(0-0.5)	2WSD1(0-0.5)-AVG	112690-2WSD10(0-0.5)	2WSD10(FIELD)	2WSD11(FIELD)	2WSD12(FIELD)	2WSD13(FIELD)
SAMPLE CODE	NORMAL	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL
EVENT		PH1	PH1	PH1	PH2-1	PH2-1	PH2-1	PH2-1
TOP DEPTH	0	0	0	0	0	0	0	0
BOTTOM DEPTH	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5
SAMPLE DATE	99990101	19901126	19901126	19901126	99990101	99990101	99990101	99990101
Volatile Organics (ug/kg)								
1,1,1-TRICHLOROETHANE								
2-BUTANONE								
ACETONE								
CARBON DISULFIDE								
CHLOROBENZENE								
METHYLENE CHLORIDE								
TETRACHLOROETHENE								
TOLUENE								
TOTAL XYLENES								
TRICHLOROETHENE								
Semivolatile Organics (ug/kg)								
1,4-DICHLOROBENZENE	430 U							
2,4-DIMETHYLPHENOL	430 U							
2-METHYLNAPHTHALENE	430 U							
4-METHYLPHENOL	430 U							
ACENAPHTHENE	430 U							
ACENAPHTHYLENE	430 U							
ANTHRACENE	430 U							
BENZO(A)ANTHRACENE	70 J							
BENZO(A)PYRENE	73 J							
BENZO(B)FLUORANTHENE	160 J							
BENZO(G,H,I)PERYLENE	47 J							
BENZO(K)FLUORANTHENE	430 U							
BENZOIC ACID	430 U							
BIS(2-ETHYLHEXYL)PHTHALATE	430 U							
BUTYL BENZYL PHTHALATE	430 U							
CARBAZOLE	430 U							
CHRYSENE	130 J							
DI-N-BUTYL PHTHALATE	430 U							
DI-N-OCTYL PHTHALATE	430 U							
DIBENZO(A,H)ANTHRACENE	430 U							
DIBENZOFURAN	430 U							
FLUORANTHENE	100 J							
FLUORENE	430 U							
INDENO(1,2,3-CD)PYRENE	49 J							
NAPHTHALENE	430 U							
PENTACHLOROPHENOL	1000 U							
PHENANTHRENE	430 U							
PHENOL	430 U							
PYRENE	120 J							
TOTAL PAHS	749							

TABLE 2

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WCSD9	2WSD1	2WSD1	2WSD1	2WSD10	2WSD11	2WSD12	2WSD13
NSAMPLE	2WCSD9	2WSD1(0-0.5)	2WSD1(0-0.5)-AVG	2WSD1(0-0.5)-D	2WSD10(FIELD)	2WSD11(FIELD)	2WSD12(FIELD)	2WSD13(FIELD)
SAMPLE	2WCSD9	112690-2WSD1(0-0.5)	2WSD1(0-0.5)-AVG	112690-2WSD10(0-0.5)	2WSD10(FIELD)	2WSD11(FIELD)	2WSD12(FIELD)	2WSD13(FIELD)
SAMPLE CODE	NORMAL	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL
EVENT		PH1	PH1	PH1	PH2-1	PH2-1	PH2-1	PH2-1
TOP DEPTH	0	0	0	0	0	0	0	0
BOTTOM DEPTH	1	0.5	0.5	0 5	0.5	0.5	0.5	0.5
SAMPLE DATE	99990101	19901126	19901126	19901126	99990101	99990101	99990101	99990101
Pesticides/PCBs (ug/kg)								
4,4'-DDD					29 25 U	35 13 U	35 33 U	29 79 U
4,4'-DDE					29 25 U	35 13 U	35 33 U	29 79 U
4,4'-DDT					29 25 U	35 13 U	35 33 U	29 79 U
TOTAL DDT					0 U	0 U	0 U	0 U
ALDRIN								
ALPHA-CHLORDANE								
BETA-BHC								
DELTA-BHC								
DIELDRIN					29 25 U	35 13 U	35 33 U	29 79 U
ENDOSULFAN I								
ENDOSULFAN II								
ENDOSULFAN SULFATE								
ENDRIN								
ENDRIN ALDEHYDE								
ENDRIN KETONE								
GAMMA-BHC (LINDANE)								
GAMMA-CHLORDANE								
HEPTACHLOR								
HEPTACHLOR EPOXIDE								
METHOXYCHLOR								
AROCLOR-1260								
Inorganics (mg/kg)								
ALUMINUM	4550							
ANTIMONY	3 9 U							
ARSENIC	1 6							
BARIUM	56 5							
BERYLLIUM	0 63 U							
BORON	12 9 U							
CADMIUM	0 51 U							
CALCIUM	1440 J							
CHROMIUM	8							
COBALT	2.2							
COPPER	6.1 U							
CYANIDE								
IRON	6920							
LEAD	6 7							
MAGNESIUM	2630							
MANGANESE	79 8							
MERCURY	0 14							
NICKEL	4 7 J							
POTASSIUM	2150							
SELENIUM	0 51 UJ							
SILVER	0 51 UJ							
SODIUM	69 3 U							
THALLIUM	0.26 U							
VANADIUM	17 5							
ZINC	17 3							
Miscellaneous Parameters								
PH								
TOTAL ORGANIC CARBON (MG/KG)								
TOTAL SOLIDS (%)								

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WSD14	2WSD14	2WSD15	2WSD16	2WSD17	2WSD18	2WSD19	2WSD20	2WSD21	2WSD22	2WSD23
NSAMPLE	2WSD14	2WSD14(FIELD)	2WSD15(FIELD)	2WSD16(FIELD)	2WSD17(FIELD)	2WSD18(FIELD)	2WSD19(FIELD)	2WSD20(FIELD)	2WSD21(FIELD)	2WSD22(FIELD)	2WSD23(0.0-1.0)
SAMPLE	2WSD14	2WSD14(FIELD)	2WSD15(FIELD)	2WSD16(FIELD)	2WSD17(FIELD)	2WSD18(FIELD)	2WSD19(FIELD)	2WSD20(FIELD)	2WSD21(FIELD)	2WSD22(FIELD)	2WSD23 (0 0-1 0)
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT	PH2-1	PH2-1	PH2-1.	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	FFS
TOP DEPTH	0	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	0.5	0.5	0.5	0 5	0.5	0 5	0.5	0.5	0.5	0.5	1
SAMPLE DATE	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101
Volatile Organics (ug/kg)											
1,1,1-TRICHLOROETHANE											
2-BUTANONE											
ACETONE											
CARBON DISULFIDE											
CHLOROBENZENE											
METHYLENE CHLORIDE											
TETRACHLOROETHENE											
TOLUENE											
TOTAL XYLENES											
TRICHLOROETHENE											
Semivolatile Organics (ug/kg)											
1,4-DICHLOROBENZENE											
2,4-DIMETHYLPHENOL											
2-METHYLNAPHTHALENE											
4-METHYLPHENOL											
ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZO(A)ANTHRACENE											
BENZO(A)PYRENE											
BENZO(B)FLUORANTHENE											
BENZO(G,H,I)PERYLENE											
BENZO(K)FLUORANTHENE											
BENZOIC ACID											
BIS(2-ETHYLHEXYL)PHTHALATE											
BUTYL BENZYL PHTHALATE											
CARBAZOLE											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H)ANTHRACENE											
DIBENZOFURAN											
FLUORANTHENE											
FLUORENE											
INDENO(1,2,3-CD)PYRENE											
NAPHTHALENE											
PENTACHLOROPHENOL											
PHENANTHRENE											
PHENOL											
PYRENE											
TOTAL PAHS											

TABLE 2

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WSD14	2WSD14	2WSD15	2WSD16	2WSD17	2WSD18	2WSD19	2WSD20	2WSD21	2WSD22	2WSD23
NSAMPLE	2WSD14	2WSD14(FIELD)	2WSD15(FIELD)	2WSD16(FIELD)	2WSD17(FIELD)	2WSD18(FIELD)	2WSD19(FIELD)	2WSD20(FIELD)	2WSD21(FIELD)	2WSD22(FIELD)	2WSD23(0.0-1 0)
SAMPLE	2WSD14	2WSD14(FIELD)	2WSD15(FIELD)	2WSD16(FIELD)	2WSD17(FIELD)	2WSD18(FIELD)	2WSD19(FIELD)	2WSD20(FIELD)	2WSD21(FIELD)	2WSD22(FIELD)	2WSD23 (0.0-1.0)
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	FFS
TOP DEPTH	0	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	0.5	0.5	0.5	0 5	0.5	0.5	0 5	0.5	0.5	0.5	1
SAMPLE DATE	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101
Pesticides/PCBs (ug/kg)											
4,4'-DDD	4 9 UJ	28 46 U	27 03 U	23 36 U	26 45 U	36 95 U	27 16 U	30 35 U	29 72 U	43 49 U	410 J
4,4'-DDE	4 9 UJ	28 46 U	27 03 U	23 36 U	26 45 U	36 95 U	27 16 U	30 35 U	29 72 U	43 49 U	93
4,4'-DDT	4 9 UJ	28 46 U	27 03 U	23 36 U	26 45 U	36 95 U	27 16 U	30 35 U	29 72 U	43 49 U	190
TOTAL DDT	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	693
ALDRIN	2 5 UJ										7 6 U
ALPHA-CHLORDANE	2 5 UJ										9 5
BETA-BHC	2 5 UJ										7 6 U
DELTA-BHC	2 5 UJ										7 6 U
DIELDRIN	4 9 UJ	28 46 U	27 03 U	23 36 U	26 45 U	36 95 U	27 16 U	30 35 U	29 72 U	43 49 U	15 U
ENDOSULFAN I	2 5 UJ										7 6 U
ENDOSULFAN II	4 9 UJ										15 U
ENDOSULFAN SULFATE	4 9 UJ										15 U
ENDRIN	4 9 UJ										15 U
ENDRIN ALDEHYDE	4 9 UJ										15 U
ENDRIN KETONE	4 9 UJ										15 U
GAMMA-BHC (LINDANE)	2 5 UJ										7 6 U
GAMMA-CHLORDANE	2 5 UJ										6 J
HEPTACHLOR	2 5 UJ										7 6 U
HEPTACHLOR EPOXIDE	2 5 UJ										7 6 U
METHOXYCHLOR	25 UJ										76 U
AROCLOR-1260											150 U
Inorganics (mg/kg)											
ALUMINUM											
ANTIMONY											
ARSENIC											
BARIUM											
BERYLLIUM											
BORON											
CADMIUM											
CALCIUM											
CHROMIUM											
COBALT											
COPPER											
CYANIDE											
IRON											
LEAD											
MAGNESIUM											
MANGANESE											
MERCURY											
NICKEL											
POTASSIUM											
SELENIUM											
SILVER											
SODIUM											
THALLIUM											
VANADIUM											
ZINC											
Miscellaneous Parameters											
PH											
TOTAL ORGANIC CARBON (MG/KG)											-65000
TOTAL SOLIDS (%)											

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WSD24	2WSD25	2WSD26	2WSD27	2WSD28	2WSD29	2WSD30	2WSD31	2WSD32	2WSD33	2WSD34	2WSD34
NSAMPLE	2WSD24(0.0-1.0)	2WSD25(0.0-1.0)	2WSD26(0.0-1 0)	2WSD27(FIELD)	2WSD28(FIELD)	2WSD29(FIELD)	2WSD30(FIELD)	2WSD31(FIELD)	2WSD32(FIELD)	2WSD33(FIELD)	2WSD34	2WSD34(FIELD)
SAMPLE	2WSD24 (0.0-1.0)	2WSD25 (0.0-1.0)	2WSD26 (0.0-1.0)	2WSD27(FIELD)	2WSD28(FIELD)	2WSD29(FIELD)	2WSD30(FIELD)	2WSD31(FIELD)	2WSD32(FIELD)	2WSD33(FIELD)	2WSD34	2WSD34(FIELD)
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT	FFS	FFS	FFS	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1
TOP DEPTH	0	0	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	1	1	1	0.5	0.5	0.5	0.5	0 5	0.5	0.5	0.5	0.5
SAMPLE DATE	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101
Volatile Organics (ug/kg)												
1,1,1-TRICHLOROETHANE												
2-BUTANONE												
ACETONE												
CARBON DISULFIDE												
CHLOROBENZENE												
METHYLENE CHLORIDE												
TETRACHLOROETHENE												
TOLUENE												
TOTAL XYLENES												
TRICHLOROETHENE												
Semivolatile Organics (ug/kg)												
1,4-DICHLOROBENZENE												
2,4-DIMETHYLPHENOL												
2-METHYLNAPHTHALENE												
4-METHYLPHENOL												
ACENAPHTHENE												
ACENAPHTHYLENE												
ANTHRACENE												
BENZO(A)ANTHRACENE												
BENZO(A)PYRENE												
BENZO(B)FLUORANTHENE												
BENZO(G,H,I)PERYLENE												
BENZO(K)FLUORANTHENE												
BENZOIC ACID												
BIS(2-ETHYLHEXYL)PHTHALATE												
BUTYL BENZYL PHTHALATE												
CARBAZOLE												
CHRYSENE												
DI-N-BUTYL PHTHALATE												
DI-N-OCTYL PHTHALATE												
DIBENZO(A,H)ANTHRACENE												
DIBENZOFURAN												
FLUORANTHENE												
FLUORENE												
INDENO(1,2,3-CD)PYRENE												
NAPHTHALENE												
PENTACHLOROPHENOL												
PHENANTHRENE												
PHENOL												
PYRENE												
TOTAL PAHS												

TABLE 2

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WSD24	2WSD25	2WSD26	2WSD27	2WSD28	2WSD29	2WSD30	2WSD31	2WSD32	2WSD33	2WSD34	2WSD34
NSAMPLE	2WSD24(0.0-1.0)	2WSD25(0.0-1.0)	2WSD26(0.0-1.0)	2WSD27(FIELD)	2WSD28(FIELD)	2WSD29(FIELD)	2WSD30(FIELD)	2WSD31(FIELD)	2WSD32(FIELD)	2WSD33(FIELD)	2WSD34	2WSD34(FIELD)
SAMPLE	2WSD24 (0.0-1.0)	2WSD25 (0.0-1.0)	2WSD26 (0 0-1.0)	2WSD27(FIELD)	2WSD28(FIELD)	2WSD29(FIELD)	2WSD30(FIELD)	2WSD31(FIELD)	2WSD32(FIELD)	2WSD33(FIELD)	2WSD34	2WSD34(FIELD)
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT	FFS	FFS	FFS	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1
TOP DEPTH	0	0	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	1	1	1	0.5	0 5	0.5	0.5	0.5	0.5	0.5	0.5	0 5
SAMPLE DATE	99990101	99990101	99990101	99990101-	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101
Pesticides/PCBs (ug/kg)												
4;4'-DDD	3100 J	4800 J	23 U	26 61 U	25 93 U	24 87 U	34 62 U	47 23 U	36 37 U	32 94 U	5 9 UJ	29 48 U
4,4'-DDE	240 J	720 J	6 2 J	26 61 U	25 93 U	24 87 U	34 62 U	47 23 U	36 37 U	32 94 U	5 9 UJ	29 48 U
4,4'-DDT	47 U	2900	6 9 UJ	26 61 U	25 93 U	24 87 U	34 62 U	47 23 U	36 37 U	32 94 U	13 J	29 48 U
TOTAL DDT	3340	8420	6 2	0 U	0 U	0 U	0 U	0 U	0 U	0 U	13	0 U
ALDRIN	24 UJ	25 UJ	3 6 UJ								3 UJ	
ALPHA-CHLORDANE	24 UJ	25 UJ	3 6 UJ								3 UJ	
BETA-BHC	24 UJ	25 UJ	3 6 UJ								3 UJ	
DELTA-BHC	24 UJ	25 UJ	3 6 UJ								3 UJ	
DIELDRIN	47 UJ	48 UJ	6 9 UJ	26 61 U	25 93 U	24 87 U	34 62 U	47 23 U	36 37 U	32 94 U	5 9 UJ	29 48 U
ENDOSULFAN I	24 UJ	25 UJ	3 6 UJ								3 UJ	
ENDOSULFAN II	47 U	48 U	6 9 U								5 9 UJ	
ENDOSULFAN SULFATE	47 U	48 U	6 9 U								5 9 UJ	
ENDRIN	47 U	48 U	6 9 U								5 9 UJ	
ENDRIN ALDEHYDE	47 U	48 U	6 9 U								5 9 UJ	
ENDRIN KETONE	47 U	48 U	6 9 U								5 9 UJ	
GAMMA-BHC (LINDANE)	24 UJ	25 UJ	3 6 UJ								3 UJ	
GAMMA-CHLORDANE	14 J	25 UJ	3 6 UJ								3 UJ	
HEPTACHLOR	24 UJ	25 UJ	3 6 UJ								3 1 J	
HEPTACHLOR EPOXIDE	24 UJ	25 UJ	3 6 UJ								3 UJ	
METHOXYCHLOR	240 U	250 U	36 U								30 UJ	
AROCLOR-1260	470 U	480 U	69 U									
Inorganics (mg/kg)												
ALUMINUM												
ANTIMONY												
ARSENIC												
BARIUM												
BERYLLIUM												
BORON												
CADMIUM												
CALCIUM												
CHROMIUM												
COBALT												
COPPER												
CYANIDE												
IRON												
LEAD												
MAGNESIUM												
MANGANESE												
MERCURY												
NICKEL												
POTASSIUM												
SELENIUM												
SILVER												
SODIUM												
THALLIUM												
VANADIUM												
ZINC												
Miscellaneous Parameters												
PH												
TOTAL ORGANIC CARBON (MG/KG)	91000	28000	26000									
TOTAL SOLIDS (%)												

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WSD35	2WSD36	2WSD37	2WSD38	2WSD38	2WSD39	2WSD39	2WSD40	2WSD40	2WSD41	2WSD41	2WSD42
NSAMPLE	2WSD35(FIELD)	2WSD36(FIELD)	2WSD37(FIELD)	2WSD38	2WSD38(FIELD)	2WSD39	2WSD39(FIELD)	2WSD40	2WSD40(FIELD)	2WSD41	2WSD41(FIELD)	2WSD42(FIELD)
SAMPLE	2WSD35(FIELD)	2WSD36(FIELD)	2WSD37(FIELD)	2WSD38	2WSD38(FIELD)	2WSD39	2WSD39(FIELD)	2WSD40	2WSD40(FIELD)	2WSD41	2WSD41(FIELD)	2WSD42(FIELD)
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1
TOP DEPTH	0	0	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	0.5	0.5	0.5	0.5	0 5	0 5	0 5	0.5	0.5	0.5	0.5	0.5
SAMPLE DATE	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101
Volatile Organics (ug/kg)												
1,1,1-TRICHLOROETHANE												
2-BUTANONE												
ACETONE												
CARBON DISULFIDE												
CHLOROBENZENE												
METHYLENE CHLORIDE												
TETRACHLOROETHENE												
TOLUENE												
TOTAL XYLENES												
TRICHLOROETHENE												
Semivolatile Organics (ug/kg)												
1,4-DICHLOROBENZENE												
2,4-DIMETHYLPHENOL												
2-METHYLNAPHTHALENE												
4-METHYLPHENOL												
ACENAPHTHENE												
ACENAPHTHYLENE												
ANTHRACENE												
BENZO(A)ANTHRACENE												
BENZO(A)PYRENE												
BENZO(B)FLUORANTHENE												
BENZO(G,H,I)PERYLENE												
BENZO(K)FLUORANTHENE												
BENZOIC ACID												
BIS(2-ETHYLHEXYL)PHTHALATE												
BUTYL BENZYL PHTHALATE												
CARBAZOLE												
CHRYSENE												
DI-N-BUTYL PHTHALATE												
DI-N-OCTYL PHTHALATE												
DIBENZO(A,H)ANTHRACENE												
DIBENZOFURAN												
FLUORANTHENE												
FLUORENE												
INDENO(1,2,3-CD)PYRENE												
NAPHTHALENE												
PENTACHLOROPHENOL												
PHENANTHRENE												
PHENOL												
PYRENE												
TOTAL PAHS												

TABLE 2

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WSD35	2WSD36	2WSD37	2WSD38	2WSD38	2WSD39	2WSD39	2WSD40	2WSD40	2WSD41	2WSD41	2WSD42
NSAMPLE	2WSD35(FIELD)	2WSD36(FIELD)	2WSD37(FIELD)	2WSD38	2WSD38(FIELD)	2WSD39	2WSD39(FIELD)	2WSD40	2WSD40(FIELD)	2WSD41	2WSD41(FIELD)	2WSD42(FIELD)
SAMPLE	2WSD35(FIELD)	2WSD36(FIELD)	2WSD37(FIELD)	2WSD38	2WSD38(FIELD)	2WSD39	2WSD39(FIELD)	2WSD40	2WSD40(FIELD)	2WSD41	2WSD41(FIELD)	2WSD42(FIELD)
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1	PH2-1
TOP DEPTH	0	0	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	0.5	0.5	0.5	0 5	0.5	0 5	0.5	0.5	0 5	0.5	0.5	0 5
SAMPLE DATE	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101
Pesticides/PCBs (ug/kg)												
4,4'-DDD	35 7 U	37 63 U	29 01 U	6 9 U	29 67 U	7 3 U	30 75 U	7 5 UJ	32 42 U	12 J	19 32 U	19 51 U
4,4'-DDE	35 7 U	37 63 U	29 01 U	6 9 U	29 67 U	7 3 U	30 75 U	7 5 UJ	32 42 U	3 8 U	19 32 U	19 51 U
4,4'-DDT	35 7 U	37 63 U	29.01 U	6 9 U	29 67 U	7 3 U	30 75 U	7 5 UJ	32 42 U	8	19 32 U	19 51 U
TOTAL DDT	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	20	0 U	0 U
ALDRIN				3 5 U		3 8 U		3 9 UJ		2 U		
ALPHA-CHLORDANE				3 5 U		3 8 U		3 9 UJ		2 U		
BETA-BHC				3 5 U		3 8 U		3 9 UJ		2 U		
DELTA-BHC				3 5 U		3 8 U		3 9 UJ		2 U		
DIELDRIN	35 7 U	37 63 U	29 01 U	6 9 U	29 67 U	7 3 U	30 75 U	7 5 UJ	32 42 U	3 8 U	19 32 U	19 51 U
ENDOSULFAN I				3 5 U		3 8 U		3 9 UJ		2 U		
ENDOSULFAN II				6 9 U		7 3 U		7 5 UJ		3 8 U		
ENDOSULFAN SULFATE				6 9 U		7 3 U		7 5 UJ		3 8 U		
ENDRIN				6 9 U		7 3 U		7 5 UJ		3 8 U		
ENDRIN ALDEHYDE				6 9 U		7 3 U		7 5 UJ		3 8 U		
ENDRIN KETONE				6 9 U		7 3 U		7 5 UJ		3 8 U		
GAMMA-BHC (LINDANE)				3 5 U		3 8 U		3 9 UJ		2 U		
GAMMA-CHLORDANE				3 5 U		3 8 U		3 9 UJ		2 U		
HEPTACHLOR				3 5 U		3 8 U		3 9 UJ		2 U		
HEPTACHLOR EPOXIDE				3 5 U		3 8 U		3 9 UJ		2 U		
METHOXYCHLOR				35 U		38 U		39 UJ		20 U		
AROCLOR-1260												
Inorganics (mg/kg)												
ALUMINUM												
ANTIMONY												
ARSENIC												
BARIUM												
BERYLLIUM												
BORON												
CADMIUM												
CALCIUM												
CHROMIUM												
COBALT												
COPPER												
CYANIDE												
IRON												
LEAD												
MAGNESIUM												
MANGANESE												
MERCURY												
NICKEL												
POTASSIUM												
SELENIUM												
SILVER												
SODIUM												
THALLIUM												
VANADIUM												
ZINC												
Miscellaneous Parameters												
PH												
TOTAL ORGANIC CARBON (MG/KG)						14000						
TOTAL SOLIDS (%)												

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	T1A	T1B	T10A	T10B	T2A	T2A	T2A	T2B	T3A	T3B	T4A	T4B	T5A	T5B
NSAMPLE	T1-A	T1-B	T10-A	T10-B	T2-A	T2-A-AVG	T2-A-D	T2-B	T3-A	T3-B	T4-A	T4-B	T5-A	T5-B
SAMPLE	T1-A	T1-B	T10-A	T10-B	T2-A	T2-A-AVG	DUP-03	T2-B	T3-A	T3-B	T4-A	T4-B	T5-A	T5-B
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS
TOP DEPTH	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	1	1	1	1	1	1	1	1	1	1	1	1	1	1
SAMPLE DATE	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101
Volatile Organics (ug/kg)														
1,1,1-TRICHLOROETHANE	12 U	11 U	14 U	22 U	16 U	15.5 U	15 U	17 U	12 U	15 U	12 U	12 U	14 U	12 U
2-BUTANONE	12 U	11 U	14 U	21 U	520	470	420	32 U	12 U	15 U	12 U	12 U	17 U	12 U
ACETONE	12 U	11 U	25 U	67 U	49 U	67 U	85 U	53 U	12 U	18 U	12 U	12 U	30 U	12 U
CARBON DISULFIDE	12 U	11 U	14 U	12 J	16 U	15.5 U	15 U	17 U	12 U	15 U	12 U	12 U	14 U	12 U
CHLOROBENZENE	12 U	11 U	14 U	22 U	16 U	2 J	2 J	17 U	12 U	15 U	12 U	12 U	14 U	12 U
METHYLENE CHLORIDE	12 U	12 U	14 U	32 U	16 U	17.5 U	19 U	17 U	12 U	19 U	24 U	35 U	39 U	29 U
TETRACHLOROETHENE	12 U	11 U	14 U	22 U	16 U	15.5 UJ	15 UJ	17 U	12 U	15 U	12 U	12 U	14 U	12 U
TOLUENE	12 U	11 U	3 J	22 U	5 J	3.5 J	2 J	17 U	12 U	3 J	12 U	12 U	14 U	12 U
TOTAL XYLENES	12 U	11 U	14 U	22 UJ	16 U	15.5 UJ	15 UJ	17 U	12 U	15 U	12 U	12 U	14 U	12 U
TRICHLOROETHENE	12 U	11 U	14 U	22 U	16 U	15.5 U	15 U	17 U	12 U	15 U	12 U	12 U	14 U	12 U
Semivolatile Organics (ug/kg)														
1,4-DICHLOROBENZENE	410 U	380 U	470 U	730 U	520 U	500 U	480 U	550 U	390 U	500 U	380 U	400 U	480 U	380 U
2,4-DIMETHYLPHENOL	410 U	380 UJ	470 U	730 U	520 U	500 UJ	480 UJ	550 U	390 U	500 U	380 U	400 U	480 U	380 U
2-METHYLNAPHTHALENE	410 U	380 UJ	40 J	730 U	520 U	500 UJ	480 UJ	550 U	55 J	500 U	380 U	400 U	480 U	380 U
4-METHYLPHENOL	410 U	380 U	470 U	730 U	520 U	500 U	480 U	550 U	390 U	500 U	380 U	400 U	480 U	380 U
ACENAPHTHENE	410 U	380 UJ	110 J	730 U	30 J	60.5 J	91 J	550 U	58 J	500 U	380 U	400 U	220 J	380 U
ACENAPHTHYLENE	410 U	380 UJ	470 U	730 U	520 U	500 UJ	480 UJ	550 U	390	70 J	380 U	400 U	34 J	380 U
ANTHRACENE	410 U	40 J	48 J	730 U	71 J	135.5 J	200 J	58 J	450	90 J	45 J	400 U	43 J	380 U
BENZO(A)ANTHRACENE	45 J	180 J	290 J	90 J	260 J	470 J	680 J	260 J	3000	480 J	120 J	77 J	180 J	25 J
BENZO(A)PYRENE	55 J	190 J	320 J	110 J	290 J	490 J	690 J	300 J	2600	480 J	130 J	74 J	220 J	30 J
BENZO(B)FLUORANTHENE	54 J	220 J	270 J	110 J	310 J	485 J	660 J	550 U	390 U	420 J	130 J	85 J	210 J	44 J
BENZO(G,H,I)PERYLENE	50 J	160 J	290 J	730 U	230 J	430 J	630 J	240 J	1100	320 J	100 J	66 J	230 J	27 J
BENZO(K)FLUORANTHENE	62 J	150 J	300 J	120 J	220 J	370 J	520 J	440 J	3700	510	130 J	75 J	270 J	380 U
BENZOIC ACID	2100 U	2000 U	2500 U	3800 U	2600 U	2550 U	2500 U	2800 U	2000 U	2600 U	1800 U	2000 U	2400 U	2000 U
BIS(2-ETHYLHEXYL)PHTHALATE	410 U	380 U	470 U	3500 J	520 U	500 U	480 U	550 U	400 U	500 U	380 U	400 U	480 U	380 U
BUTYL BENZYL PHTHALATE	410 U	380 U	36 J	730 U	520 U	500 U	480 U	550 U	390 U	61 J	21 J	400 U	480 U	380 U
CARBAZOLE	410 U	380 U	470 U	730 U	32 J	32 J	480 U	550 U	57 J	32 J	25 J	400 U	130 J	380 U
CHRYSENE	65 J	220 J	360 J	110 J	340 J	560 J	780 J	350 J	3700	590	150 J	90 J	280 J	38 J
DI-N-BUTYL PHTHALATE	410 U	380 U	470 U	730 U	520 U	31 J	31 J	550 U	390 U	63 J	26 J	23 J	44 J	26 J
DI-N-OCTYL PHTHALATE	410 U	380 U	470 U	730 U	520 U	500 U	480 U	550 U	390 U	500 U	380 U	400 U	480 U	380 U
DIBENZO(A,H)ANTHRACENE	410 U	380 U	470 U	730 U	100 J	205 J	310 J	87 J	390 U	170 J	380 U	400 U	480 U	380 U
DIBENZOFURAN	410 U	380 UJ	62 J	730 U	520 U	44 J	44 J	550 U	35 J	500 U	380 U	400 U	72 J	380 U
FLUORANTHENE	110 J	240 J	490	100 J	490 J	745 J	1000 J	450 J	4200	890	260 J	180 J	520	56 J
FLUORENE	410 U	380 UJ	83 J	730 U	37 J	66 J	95 J	550 U	160 J	38 J	21 J	400 U	29 J	380 U
INDENO(1,2,3-CD)PYRENE	41 J	140 J	260 J	86 J	200 J	375 J	550 J	200 J	1000	300 J	92 J	57 J	180 J	22 J
NAPHTHALENE	410 U	380 UJ	73 J	730 U	520 U	500 UJ	480 UJ	550 U	56 J	500 U	380 U	400 U	76 J	380 U
PENTACHLOROPHENOL	1000 U	240 J	1100 U	1800 U	1200 U	1200 U	1200 U	1300 U	950 U	1200 U	930 U	960 U	1200 U	930 U
PHENANTHRENE	43 J	190 J	280 J	79 J	260 J	590 J	920 J	230 J	1800	320 J	180 J	93 J	240 J	22 J
PHENOL	410 U	380 U	470 U	730 U	520 U	500 U	480 U	550 U	390 U	500 U	380 U	400 U	480 U	380 U
PYRENE	96 J	470	720	320 J	560 J	1280 J	2000 J	620	4600	910	220 J	150 J	440 J	46 J
TOTAL PAHS	621	2200	3934	1125	3398	6262	9126	3235	26869	5588	1578	947	3172	310

TABLE 2

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	T1A	T1B	T10A	T10B	T2A	T2A	T2A	T2B	T3A	T3B	T4A	T4B	T5A	T5B
NSAMPLE	T1-A	T1-B	T10-A	T10-B	T2-A	T2-A-AVG	T2-A-D	T2-B	T3-A	T3-B	T4-A	T4-B	T5-A	T5-B
SAMPLE	T1-A	T1-B	T10-A	T10-B	T2-A	T2-A-AVG	DUP-03	T2-B	T3-A	T3-B	T4-A	T4-B	T5-A	T5-B
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS
TOP DEPTH	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	1	1	1	1	1	1	1	1	1	1	1	1	1	1
SAMPLE DATE	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101
Pesticides/PCBs (ug/kg)														
4,4'-DDD	9 J	12 R	190 J	35 J	650 J	450 J	250 J	210 J	390	1400	3 8 U	4 5 J	1300	3 8 U
4,4'-DDE	4.1 U	3.8 U	23 J	7.4 J	30 J	21 5 J	13 J	19 J	260	330	3 8 U	4 U	57 J	3 8 U
4,4'-DDT	15 R	45	85 J	7 3 UR	44	52 J	60 J	88 J	890	2900	3 8 U	4 U	380	4 4 J
TOTAL DDT	9	45	298	42 4	724	523 5	323	317	1540	4630	0 U	4 5	1737	4 4
ALDRIN	2 1 U	2 U	2 4 UJ	3 8 UJ	2 7 U	2 6 U	2 5 U	2 8 U	20 U	26 U	2 U	2 U	3 2 J	2 U
ALPHA-CHLORDANE	4 8 J	2 9 J	5 5 J	3 8 U	2 7 U	2 6 U	2 5 U	7 6	4 4 J	12 J	2 U	2 U	13	2 U
BETA-BHC	2.1 U	2 U	2 4 UJ	3 8 UJ	2 7 U	2 6 U	2 5 U	2 8 U	20 U	26 U	2 UJ	2 UJ	2 7 J	2 UJ
DELTA-BHC	2.1 U	2 U	2 4 U	3 8 U	2 7 U	2 6 U	2 5 U	2 8 U	20 U	26 U	2 U	2 U	4 2 J	2 U
DIELDRIN	4 1 U	3 8 U	4 7 U	7 3 U	5 2 U	5 05 U	4 9 U	5 5 U	39 U	50 U	3 8 U	4 U	8 4 J	3 8 U
ENDOSULFAN I	2 4 J	2 1 J	4 8 J	3 8 U	2 7 U	2 6 U	2 5 U	2 8 U	11 J	26 U	2 U	2 U	12 U	2 U
ENDOSULFAN II	4 1 U	3 8 U	4 7 U	7 3 U	31 J	16 725 J	4 9 UJ	6 9 J	39 U	50 U	3 8 U	4 U	24 U	3 8 U
ENDOSULFAN SULFATE	4 1 U	3 8 U	4 7 U	7 3 U	5 2 U	5 05 U	4 9 U	5 5 U	14 J	50 U	3 8 U	4 U	6 9 J	3 8 U
ENDRIN	4 1 U	3 8 U	4 7 U	7 3 U	5 2 U	5 05 U	4 9 U	5 5 U	39 U	50 U	3 8 U	4 U	16 J	3 8 U
ENDRIN ALDEHYDE	4.1 U	5.6 J	4 7 U	7 3 U	16 J	9 225 J	4 9 UJ	5 5 U	39 U	16 J	3 8 UJ	4 UJ	10 J	3 8 UJ
ENDRIN KETONE	4 1 U	3 8 U	4 7 U	7 3 U	5 2 U	5 05 U	4 9 U	5.5 U	39 U	50 U	3 8 U	4 U	20 J	3 8 U
GAMMA-BHC (LINDANE)	2 1 U	2 U	2 4 UJ	3 8 UJ	2 7 U	2 6 U	2 5 U	2 8 U	20 U	26 U	2 U	2 U	3 5 J	2 U
GAMMA-CHLORDANE	5.7 J	3 7 J	4 5 J	3 8 U	4 8 J	3 025 J	2 5 UJ	5 1	20 U	13 J	2 U	2 U	8 7 J	2 U
HEPTACHLOR	2 8 J	2 U	2 4 U	3 8 U	2 7 U	2 6 U	2 5 U	2 8 U	20 U	26 U	2 U	2 U	4 5 J	2 U
HEPTACHLOR EPOXIDE	3 7 J	4 5	2 4 U	3 8 U	2 7 U	2 6 U	2 5 U	3 7 J	20 U	26 U	2 U	2 U	2 2 J	2 U
METHOXYCHLOR	21 U	20 U	24 UJ	38 UJ	27 U	26 U	25 U	28 U	200 U	260 U	20 U	20 U	38 J	20 U
AROCLOR-1260	150 J	180	47 U	73 U	52 U	50 5 U	49 U	55 U	390 U	500 U	38 U	40 U	240 U	38 U
Inorganics (mg/kg)														
ALUMINUM	3530	4240	6700	12800	4470	4585	4700	6020	3820	5040	3670	2980	5080	2690
ANTIMONY	0 48 J	0 48 UJ	0 56 U	0 81 U	0 72 J	0 515 J	0 62 UJ	0 62 UJ	0 53 UJ	0 58 UJ	0 47 UJ	0 47 UJ	0 6 UJ	0 47 UJ
ARSENIC	1 9	1 6	3 4	9 1	2 5	2 5	2 5	2 2	3	2 6	1 4	1 4	2 1	1 J
BARIUM	27 9	33 9	57	42 9	46 7	51 6	56 5	73 8	28 8	38 4	29 2	41 1	59 4	11 9
BERYLLIUM	0 23	0 24	0 24 J	0 62	0 48	0 59	0 7	0 32	0 21 J	0 33	0 16 J	0 14 J	0 26 J	0 14 J
BORON	0 35 U	0 36 U	2 1 U	29 5	2 2 U	4 9 U	7 6 U	0 46 UJ	0 4 U	0 51 U	0 35 U	0 36 U	1 3 U	0 35 U
CADMIUM	0 29	0 12 J	0 37	0 34 J	0 29	0 375	0 46	0 3	0 26	0 43	0 12 U	0 21 J	0 15 U	0 12 U
CALCIUM	1130	1240	1650	3330	1510	1510	1510	1300	900	868	1060	934	1630	1220
CHROMIUM	8.1	9 6	15 4	39 9	15 2	16 05	16 9	19 5	8 6	11 1	8	7	15	7 7
COBALT	3 6	4 3	3 9	7 7	6 8	7 6	8 4	5	4 4	7 9	3	3 2	4 2	3 3
COPPER	79 6	45 5	31 4	18 8	104	102 5	101	44 9	34 5	52 6	14 7	36 7	28 4	19 5
CYANIDE			0 7 UJ	1 UJ							1 5	0 59 U	0 9 J	0 9 J
IRON	5980	7740	12400	27500	10300	12950	15600	12500	9390	8020	5800	5630	10600	5660
LEAD	23.9	28 7	71 3	16 1	123	132 5	142	42	32 1	61 5	26 5	32 4	40 6	16 2
MAGNESIUM	1750	2120	2770	7340	1940	1970	2000	2860	1650	2200	1770	1570	2280	1820
MANGANESE	132	125	121	323	78 8	89 25	99 7	132	310	99.8	90 1	55 3	101	89 3
MERCURY	0 12 UR	0 36 J	0 28 U	0 28 U	0 17 J	0 205 J	0 24 J	0 32 J	0 15 J	0 19 J	0 12 UR	0 12 UR	0 15 UR	0 12 UR
NICKEL	6 6 J	9 1 J	12 7	20 8	61 5 J	57.25 J	53 J	17 J	8 6 J	18 9 J	6 7 J	10 3 J	13 8 J	8 5 J
POTASSIUM	890	1080	1630 J	3770 J	1120	1095	1070	1890	813	1100	1120	926	1290	659
SELENIUM	0 58 UJ	0 6 UJ	0 7 U	1 5 J	0 68 UJ	0 725 UJ	0 77 UJ	0 77 UJ	0 67 UJ	0 73 UJ	0 59 UJ	0 59 UJ	0 75 UJ	0 58 UJ
SILVER	0 37	0 73	0 14 U	0 2 U	0 17 J	0 195 J	0 22	0 15 U	0 13 U	0 15 U	0 12 U	0 12 U	0 15 U	0 12 U
SODIUM	114	215	253	3870	512	534	556	516	285	1050	250	462	2480	388
THALLIUM	0.7 U	0.72 U	0 84 U	1 2 U	0 82 U	0 87 U	0.92 U	0 92 U	0 8 U	0.87 U	0 71 U	0 71 U	0 9 U	0 7 U
VANADIUM	17 2 J	13 2 J	38 7	39 1	161 J	172 J	183 J	66 4 J	17 J	18 5 J	12 8 J	11 2 J	37 4 J	8 9 J
ZINC	63 6 J	100 J	133 J	66 5 J	225 J	301 5 J	378 J	95 4 J	87 4 J	284 J	39 2 J	45 1 J	68 2 J	35 J
Miscellaneous Parameters														
PH														
TOTAL ORGANIC CARBON (MG/KG)	32100	24500	52400	68300		47500	47500	63400	31100	33500	9960	8420	16900	9410
TOTAL SOLIDS (%)														

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	T6A	T6A	T6A	T6B	T7A	T7B	T8A	T8B	T9A	T9B
NSAMPLE	T6-A	T6-A-AVG	T6-A-D	T6-B	T7-A	T7-B	T8-A	T8-B	T9-A	T9-B
SAMPLE	T6-A	T6-A-AVG	DUP-5	T6-B	T7-A	T7-B	T8-A	T8-B	T9-A	T9-B
SAMPLE CODE	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS
TOP DEPTH	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	1	1	1	1	1	1	1	1	1	1
SAMPLE DATE	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101
Volatile Organics (ug/kg)										
1,1,1-TRICHLOROETHANE	19 UJ	19 UJ	19 U	24 U	19 U	67 UR	21 U	22 U	17 U	21 U
2-BUTANONE	19 UJ	19 UJ	19 U	21 U	37 U	120 UR	27 U	1400	34 U	59
ACETONE	19 U	19 U	19 U	40 U	76 U	260 UR	67 U	110 U	90 U	21 U
CARBON DISULFIDE	19 UJ	19 UJ	19 U	24 U	19 U	67 UR	21 U	22 U	17 U	3 J
CHLOROBENZENE	19 UJ	19 UJ	19 UJ	3 J	19 U	14 J	21 U	22 U	17 UJ	21 U
METHYLENE CHLORIDE	62 U	61.5 U	61 U	74 U	38 U	210 UR	21 U	42 U	17 U	21 U
TETRACHLOROETHENE	19 UJ	19 UJ	19 UJ	24 UJ	19 U	67 UR	21 U	22 U	17 UJ	21 U
TOLUENE	3 J	3 J	3 J	24 UJ	5 J	67 UR	21 U	6 J	17 UJ	21 U
TOTAL XYLENES	19 UJ	19 UJ	19 UJ	3 J	19 U	67 UR	21 U	22 UJ	17 UJ	21 U
TRICHLOROETHENE	19 UJ	19 UJ	19 U	24 U	19 U	67 UR	21 U	22 U	17 U	21 U
Semivolatile Organics (ug/kg)										
1,4-DICHLOROBENZENE	620 U	625 UJ	630 UJ	42 J	620 U	2200 UR	690 U	730 U	570 U	700 U
2,4-DIMETHYLPHENOL	620 U	625 UJ	630 UJ	800 UJ	620 U	2200 UR	690 U	210 J	570 U	700 U
2-METHYLNAPHTHALENE	620 U	625 UJ	630 UJ	800 UJ	620 U	2200 UR	49 J	730 U	51 J	700 U
4-METHYLPHENOL	620 U	625 UJ	630 UJ	800 UJ	620 U	2200 UR	690 U	730 U	43 J	700 U
ACENAPHTHENE	620 U	625 UJ	630 UJ	110 J	77 J	380 J	35 J	730 U	48 J	700 U
ACENAPHTHYLENE	52 J	52 J	630 UJ	800 UJ	620 U	2200 UR	690 U	730 U	570 U	700 U
ANTHRACENE	56 J	45 J	34 J	800 U	79 J	2200 UR	71 J	38 J	34 J	52 J
BENZO(A)ANTHRACENE	190 J	235 J	280 J	140 J	390 J	240 J	370 J	210 J	140 J	230 J
BENZO(A)PYRENE	230 J	270 J	310 J	160 J	430 J	340 J	340 J	210 J	160 J	260 J
BENZO(B)FLUORANTHENE	220 J	305 J	390 J	240 J	430 J	370 J	370 J	210 J	130 J	240 J
BENZO(G,H,I)PERYLENE	250 J	335 J	420 J	290 J	350 J	340 J	300 J	180 J	220 J	190 J
BENZO(K)FLUORANTHENE	330 J	285 J	240 J	140 J	320 J	270 J	350 J	210 J	140 J	200 J
BENZOIC ACID	3200 U	3200 U	3200 U	4100 U	3200 U	11000 UR	3500 U	3800 U	3000 U	3600 U
BIS(2-ETHYLHEXYL)PHTHALATE	620 U	625 U	630 U	800 U	620 U	4900 UR	690 U	730 U	570 U	700 U
BUTYL BENZYL PHTHALATE	50 J	50 J	630 U	800 U	620 U	390 J	690 U	730 U	570 UJ	700 U
CARBAZOLE	43 J	43 J	630 UJ	800 U	620 U	2200 UR	690 U	730 U	570 U	700 U
CHRYSENE	300 J	365 J	430 J	230 J	410 J	340 J	490 J	280 J	230 J	260 J
DI-N-BUTYL PHTHALATE	56 J	45 J	34 J	800 U	33 J	2200 UR	690 U	730 U	570 U	700 U
DI-N-OCTYL PHTHALATE	620 U	625 U	630 U	800 U	620 U	2200 UR	690 UJ	730 U	570 UJ	700 U
DIBENZO(A,H)ANTHRACENE	86 J	86 J	630 U	800 U	130 J	2200 UR	690 UJ	730 U	72 J	700 U
DIBENZOFURAN	620 U	625 UJ	630 UJ	68 J	55 J	280 J	40 J	730 U	35 J	700 U
FLUORANTHENE	500 J	415 J	330 J	200 J	650	560 J	520 J	310 J	160 J	220 J
FLUORENE	620 U	625 UJ	630 UJ	69 J	90 J	340 J	79 J	730 U	47 J	700 U
INDENO(1,2,3-CD)PYRENE	210 J	270 J	330 J	220 J	360 J	350 J	260 J	150 J	140 J	170 J
NAPHTHALENE	620 U	625 UJ	630 UJ	800 UJ	620 U	2200 UR	57 J	730 U	77 J	700 U
PENTACHLOROPHENOL	1500 U	1500 UJ	1500 UJ	2000 U	1500 U	5300 UR	1700 U	1800 U	1400 U	1700 U
PHENANTHRENE	200 J	210 J	220 J	140 J	350 J	300 J	260 J	180 J	160 J	140 J
PHENOL	620 U	625 UJ	630 UJ	800 UJ	620 U	2200 UR	690 U	730 U	570 U	700 U
PYRENE	470 J	685 J	900 J	370 J	530 J	450 J	1300	630 J	430 J	690 J
TOTAL PAHS	3094	3558	3884	2309	4596	4280	4851	2608	2239	2652

TABLE 2

SUMMARY OF SURFACE SEDIMENT POSITIVE DETECTIONS - PHASE I, II AND III RIs AND FFS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	T6A	T6A	T6A	T6B	T7A	T7B	T8A	T8B	T9A	T9B
NSAMPLE	T6-A	T6-A-AVG	T6-A-D	T6-B	T7-A	T7-B	T8-A	T8-B	T9-A	T9-B
SAMPLE	T6-A	T6-A-AVG	DUP-5	T6-B	T7-A	T7-B	T8-A	T8-B	T9-A	T9-B
SAMPLE CODE	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
EVENT	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS	FFS
TOP DEPTH	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	1	1	1	1	1	1	1	1	1	1
SAMPLE DATE	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101	99990101
Pesticides/PCBs (ug/kg)										
4,4'-DDD	46 R	47.5 R	49 R	410	6.2 U	22 UR	86 J	7.3 UJ	630 J	7 UJ
4,4'-DDE	10 J	12.5 J	15 J	38	6.2 U	140 J	19 J	7.3 UJ	49 J	7 UJ
4,4'-DDT	55 R	47 R	39 R	8 U	6.2 U	23 R	6.9 UR	7.3 UJ	5.7 UR	7 UJ
TOTAL DDT	10	12.5	15	448	0 U	140	105	0 U	679	0 U
ALDRIN	3.2 U	3.25 U	3.3 U	4.1 U	3.2 U	11 UR	3.5 UJ	3.8 UJ	2.9 UJ	3.6 UJ
ALPHA-CHLORDANE	29	29	29	15 J	3.2 U	22 J	3.5 U	3.8 U	6 J	3.6 U
BETA-BHC	3.2 U	3.25 U	3.3 U	4.1 U	3.2 U	11 UR	3.5 UJ	3.8 UJ	2.9 UJ	3.6 UJ
DELTA-BHC	3.2 U	3.25 U	3.3 U	4.1 U	3.2 U	11 UR	3.5 U	3.8 U	2.9 U	3.6 U
DIELDRIN	26	24.5	23	8 U	6.2 U	22 UR	6.9 U	7.3 U	5.7 U	7 U
ENDOSULFAN I	3.2 U	3.25 U	3.3 U	4.1 U	3.2 U	11 UR	3.5 U	3.8 U	2.9 U	3.6 U
ENDOSULFAN II	48 R	49 R	50 R	17 R	6.2 U	22 UR	6.9 U	7.3 U	5.7 U	7 U
ENDOSULFAN SULFATE	9.7 R	9.85 R	10 R	8 U	6.2 U	22 UR	6.9 U	7.3 U	5.7 U	7 U
ENDRIN	8.2 J	8 J	7.8 J	8 U	6.2 U	22 UR	6.9 U	7.3 U	5.7 U	7 U
ENDRIN ALDEHYDE	22 R	22.5 R	23 R	8 U	6.2 U	22 UR	6.9 U	7.3 U	5.7 U	7 U
ENDRIN KETONE	5.4 R	8.7 R	12 R	8 U	6.2 U	22 UR	6.9 U	7.3 U	5.7 U	7 U
GAMMA-BHC (LINDANE)	3.2 U	3.25 U	3.3 U	4.1 U	3.2 U	11 UR	3.5 UJ	3.8 UJ	2.9 UJ	3.6 UJ
GAMMA-CHLORDANE	21 J	22 J	23 J	11 J	3.2 U	11 UR	3.5 U	3.8 U	2.9 U	3.6 U
HEPTACHLOR	3.2 U	3.25 U	3.3 U	4.1 U	3.2 U	11 UR	3.5 U	3.8 U	2.9 U	3.6 U
HEPTACHLOR EPOXIDE	3.2 U	3.25 U	3.3 U	4.1 U	3.2 U	11 UR	3.5 U	3.8 U	2.9 U	3.6 U
METHOXYCHLOR	31 R	35 R	39 R	41 U	32 U	110 UR	35 UJ	38 UJ	29 UJ	36 UJ
AROCLOR-1260	1400	1450	1500	530	82 J	550 J	69 U	73 U	57 U	70 U
Inorganics (mg/kg)										
ALUMINUM	15800	15300	14800	9820	7150	27100 J	14200	19900	18100	15100
ANTIMONY	0.85 UJ	0.81 UJ	0.77 UJ	1.1 J	1.2 J	3.1 UR	0.84 U	0.95 U	0.72 U	0.85 U
ARSENIC	7.2	7.65	8.1	4.8	2.5	8.1 J	11	14.1	7.2	10.8
BARIUM	113	116.5	120	94.1	124	318 J	53.4	77.9	86.8	47.7
BERYLLIUM	1.3	1.25	1.2	1.3	0.28 J	4.1 J	0.66	0.98	0.81	0.73
BORON	0.64 UJ	0.61 UJ	0.58 UJ	0.77 UJ	0.9 U	2.3 UR	28.7	39.3	14.7	39.6
CADMIUM	0.72	0.675	0.63	0.68	0.23 J	1.6 J	0.41 J	0.47 J	0.57	0.43 J
CALCIUM	3290	3125	2960	2230	3350	5330 J	2790	3610	2640	4110
CHROMIUM	44.5	47.15	49.8	40.2	13.7	44.3 J	80.3	96.8	48.5	59.9
COBALT	10	9.6	9.2	4.7	8.1	13.6 J	8.1	9.6	8.1	9
COPPER	133	123.5	114	82	33.8	173 J	48.4	64.2	48.1	37.2
CYANIDE	2 J	2.05 J	2.1	1.8 J	1.1 U	6.1 J	1.1 UJ	1.2 UJ	0.9 UJ	1.1 UJ
IRON	47500	50300	53100	35700	19200	198000 J	24500	37100	25500	30300
LEAD	141	125	109	78.4	17.4	110 J	61.2	66.6	40.6	39.3
MAGNESIUM	5550	5175	4800	2660	4170	3900 J	7230	9150	6100	8450
MANGANESE	285	278	271	134	154	269 J	240	338	313	355
MERCURY	0.21 UR	0.43 J	0.43 J	1.2 J	0.44 J	0.76 UR	0.4 U	0.51 U	0.27 U	0.21 UJ
NICKEL	29 J	27.6 J	26.2 J	15.8 J	12.2 J	47.7 J	21.7	27.8	20.7	23.8
POTASSIUM	2980	2815	2650	1490	3000	2030 J	3880 J	5170 J	3300 J	4410 J
SELENIUM	1.1 UJ	1.375 J	2.2 J	1.3 UJ	1.1 UJ	6.8 J	2.2 J	3 J	1.8 J	1.9 J
SILVER	0.96	0.885	0.81	0.85	0.22 U	0.86 J	0.33 J	0.47 J	0.18 J	0.21 U
SODIUM	1130	1048	966	725	926	1410 J	2980	3320	1930	4980
THALLIUM	1.3 U	1.25 U	1.2 U	1.5 U	1.3 U	4.6 UR	1.3 U	1.4 U	1.1 U	1.3 U
VANADIUM	176 J	164 J	152 J	120 J	38.2 J	203 J	45.3	59.5	49	43.8
ZINC	213 J	204 J	195 J	172 J	76.3 J	702 J	73 J	95.5 J	132 J	82.8 J
Miscellaneous Parameters										
PH										
TOTAL ORGANIC CARBON (MG/KG)	11200	21900	32600	25000	54800	63000	84100	79600	34700	61600
TOTAL SOLIDS (%)										

SUMMARY OF SUBSURFACE SEDIMENT POSITIVE DETECTIONS - PHASE III RI
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

LOCATION	2WSD44	2WSD45	2WSD46	2WSD48	2WSD50	2WSD53	2WSD55	2WSD56	2WSD57
NSAMPLE	2W-SD-SD44-0002	2W-SD-SD45-0002	2W-SD-SD46-0204	2W-SD-SD48-0204	2W-SD-SD50-0204	2W-SD-SD53-0204	2W-SD-SD55-0002	2W-SD-SD56-0002	2W-SD-SD57-0002
SAMPLE	2W-SD-SD44-0002	2W-SD-SD45-0002	2W-SD-SD46-0204	2W-SD-SD48-0204	2W-SD-SD50-0204	2W-SD-SD53-0204	2W-SD-SD55-0002	2W-SD-SD56-0002	2W-SD-SD57-0002
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
TOP DEPTH	1	2.5	2	2	2	2	2.25	2	1.25
BOTTOM DEPTH	2	3.3	3	3	4	4	2.5	2 25	1.6
SAMPLE DATE	20071019	20071018	20071019	20071019	20071018	20071018	20071018	20071018	20071018
Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE		54 U	9 7 J	12 J	8 6 J	14 J			
ACENAPHTHENE		54 U	12 J	8 4 J	5 8 J	37 U			
ACENAPHTHYLENE		67	52	41 J	29 J	50			
ANTHRACENE		58	59	38 J	29 J	58			
BENZO(A)ANTHRACENE		360	430	270	170	350			
BENZO(A)PYRENE		360	370	250	170 J	350 J			
BENZO(B)FLUORANTHENE		480	450	260	160 J	340 J			
BENZO(G,H,I)PERYLENE		180	220	190	95 J	200 J			
BENZO(K)FLUORANTHENE		270	240 J	180	100 J	220 J			
CHRYSENE		410	410	280	160	320			
DIBENZO(A,H)ANTHRACENE		110 J	130 J	110 J	62 J	130 J			
FLUORANTHENE		590	570	300	190	360			
FLUORENE		53 J	25 J	20 J	14 J	23 J			
INDENO(1,2,3-CD)PYRENE		230	320	250 J	130 J	290 J			
NAPHTHALENE		12 J	8 5 J	12 J	8 9 J	14 J			
PHENANTHRENE		220	250	170	98	200			
PYRENE		730	820	510 J	310	710			
TOTAL PAHS		4130	4376 2	2901 4	1740 3	3629			
Pesticides/PCBs (ug/kg)									
4,4'-DDD		1200 J	180 J	200	22 J	24 J			
4,4'-DDE		180 J	11 J	36 J	6 1 J	19 J			
4,4'-DDT		79 J	16 J	71 U	4 5 J	61 UJ			
TOTAL DDT		1459	207	236	32 6	43			
AROCLOR-1260		46 U	220	37 U	28 J	32 U			
Inorganics (mg/kg)									
ALUMINUM		23300	17600	17400	18400	18300			
ARSENIC		12 4	9 5	11 9	10 7	10 4			
BARIUM		83 9	75 6	77 1	62 7	58 7			
BERYLLIUM		1 6	0 51	0 50	0 68	0 61			
CADMIUM		2 5 J	0 76 J	0 54 J	0 96 J	1 1 J			
CALCIUM		4050	3160	3430	3970	3410			
CHROMIUM		66 6	44 8	75 8	57 4	79 5			
COBALT		9 1	6 9	5 8	7 8	7 3			
COPPER		60 6	42	49 2	35 6	50 4			
IRON		36500	22300	22600	28500	27800			
LEAD		51 3	51 1	53 9	31 5	55 5			
MAGNESIUM		6940 J	5960 J	7100	6890 J	7730 J			
MANGANESE		326	242	219	306	278			
MERCURY		0 28	0 24	0 50	0 35	0 47			
NICKEL		28 7	21 1	19 4	23 9	22 5			
POTASSIUM		4030	3260	3690	4020	4320			
SELENIUM		0 28 U	0 30 U	0 31 J	0 35 U	0 77 U			
SODIUM		2320	944	1110	1570	4060			
THALLIUM		0 64 J	0 68 J	0 55 U	0 79 J	0 82 J			
VANADIUM		54 7	48 6	57 4	49	45 1			
ZINC		200	98 5	74	93 7	99 2			
Miscellaneous Parameters									
PH		6 7	6 6	6 9	6 9	7 2			
TOTAL ORGANIC CARBON (mg/kg)	59000	81000 J	40000 J	64000	45000 J	57000 J	56000 J	39000 J	50000 J
TOTAL SOLIDS (%)	47	37	58	46	49	54	52	59	56

APPENDIX D

CHEMICAL CONCENTRATION FIGURES

General Legend for the Concentration Figures

Green Symbols

The locations designated with a green symbol have detected concentrations (their reporting limit for non-detected chemicals) that are less than their respective screening level. The screening levels are the Threshold Effects Levels (TECs) from MacDonald et al., (2000).

Yellow Symbols

The locations designated with a yellow symbol have detected concentrations (or their reporting limit for non-detected chemicals) that are greater than their respective screening level, but less than their respective Probable Effects Concentration (PEC) from MacDonald et al., (2000).

Red Symbols

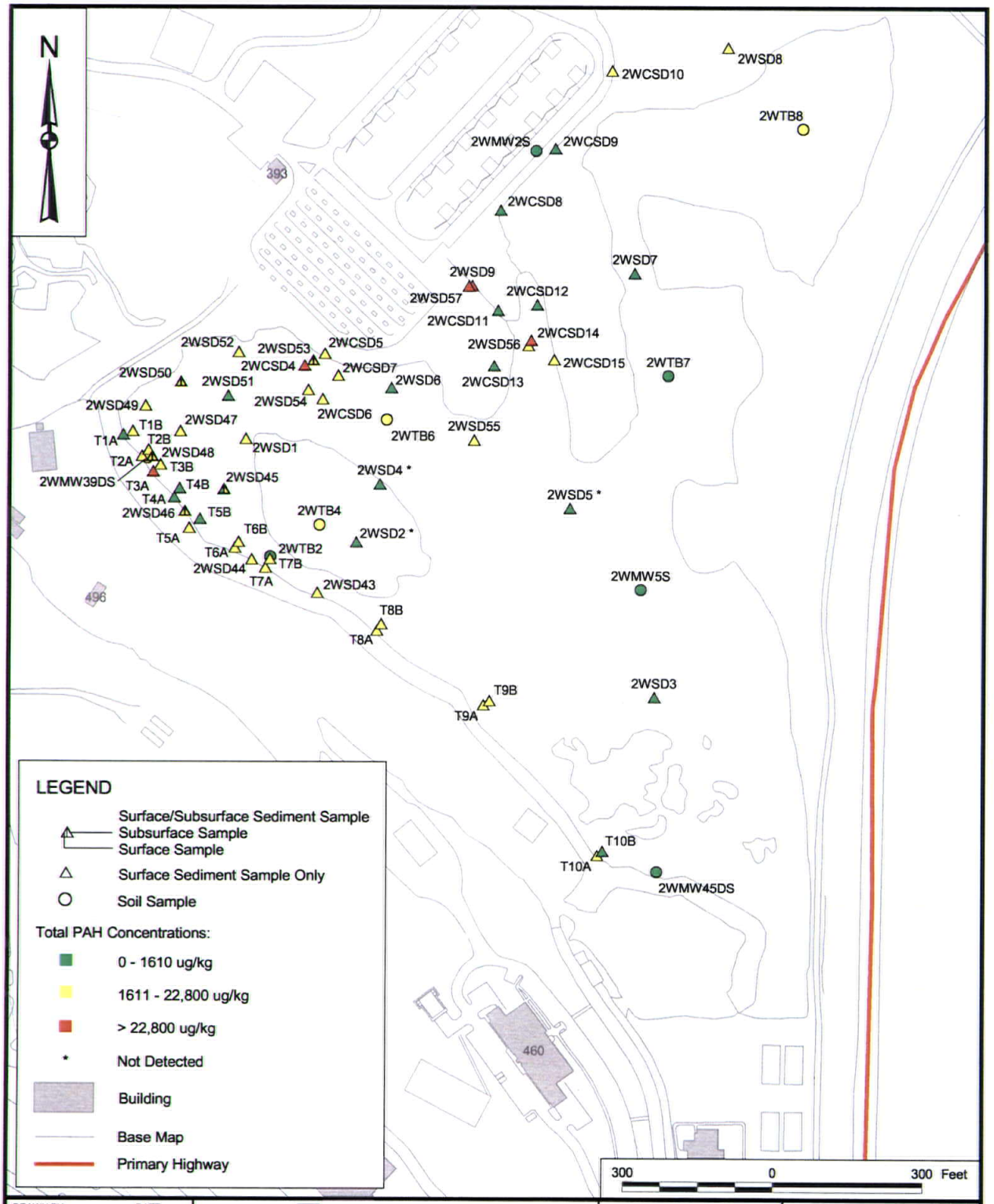
The locations designated with a red symbol have detected concentrations (or their reporting limit for non-detected chemicals) that are greater than their respective PEC.

General Notes:

1. For the total organic carbon (TOC) plot, the colors were selected to represent ranges of the TOC concentrations based on professional judgment. They are not meant to represent any particular "risk" threshold.

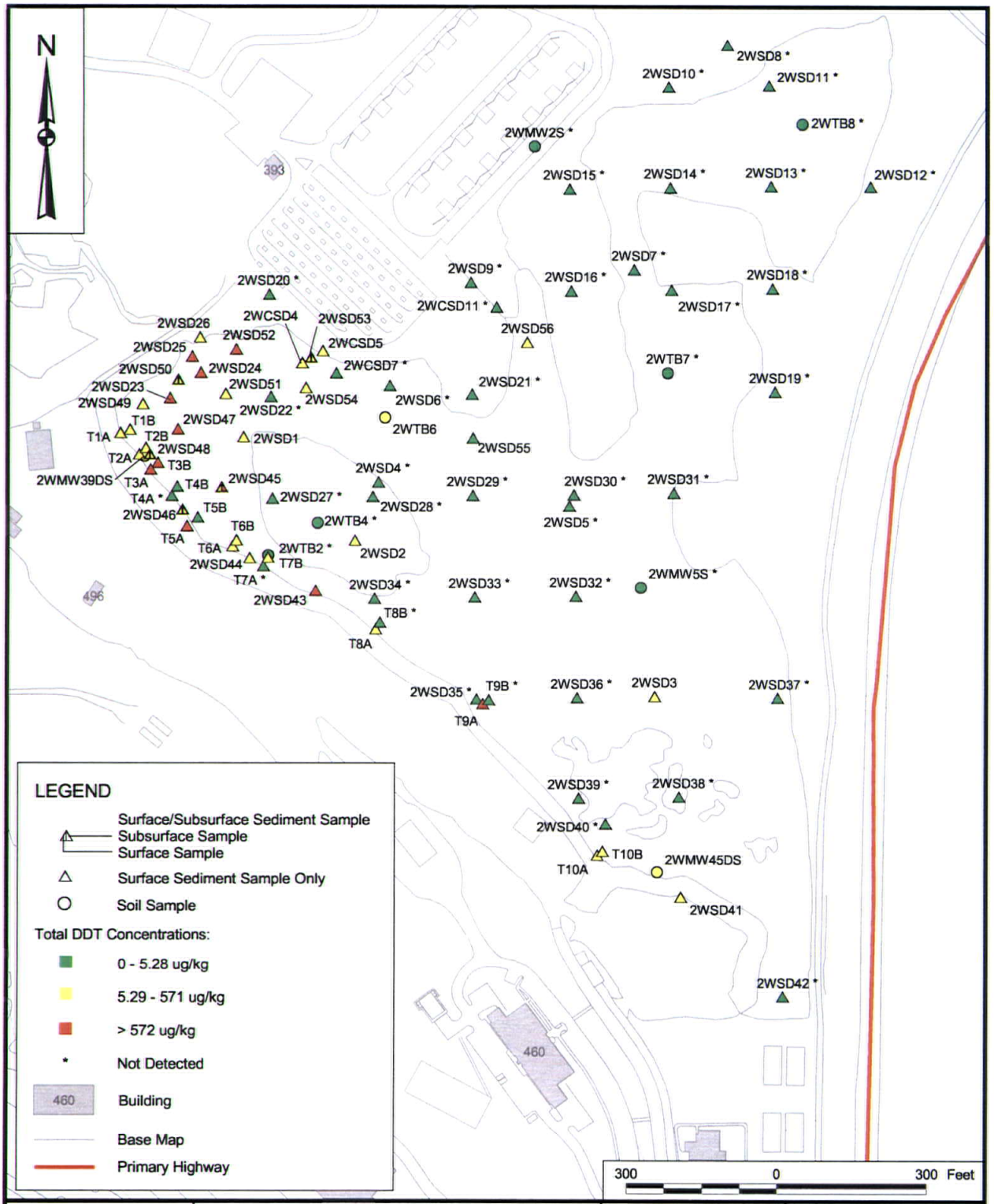
2. For total PAHs and total DDT, the results are based on summing positive results only. If no PAHs or DDT compounds were detected at a location, a value of zero was used for that location.

3. Non-detected results are noted by an asterisk next to the sample location name. The color in the symbol of a non-detected result is based on the reporting limit for the chemical at that location.



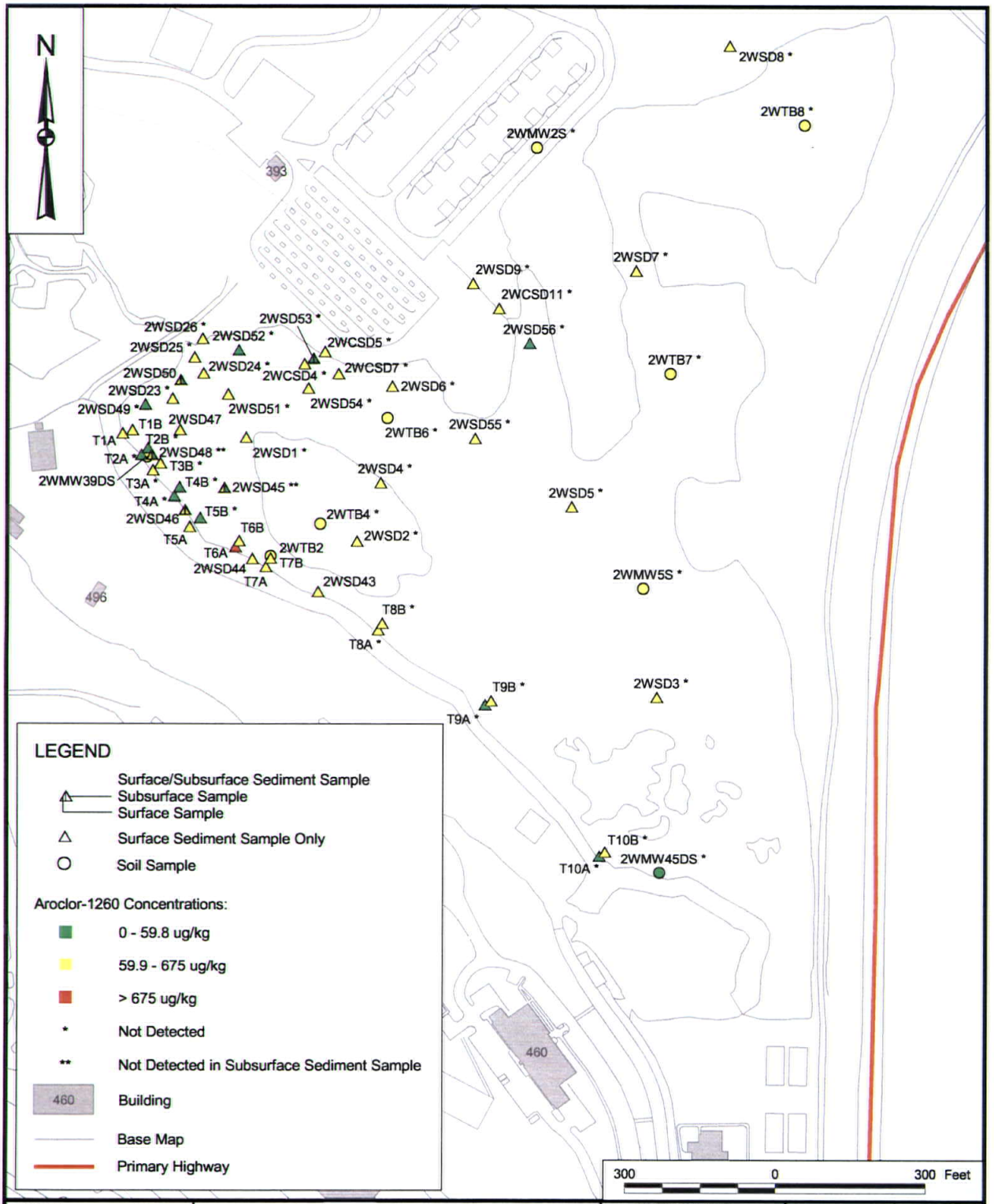
DRAWN BY J. ENGLISH — DATE 01/30/08	Tetra Tech NUS, Inc.	CONTRACT NUMBER CTO 0439	OWNER NO. —
CHECKED BY A. BERNHARDT — DATE 03/10/08	TOTAL PAH SAMPLE RESULTS AREA A WETLAND NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — DATE —	
COST/SCHEDULE-AREA		APPROVED BY — DATE —	
SCALE AS NOTED		DRAWING NO. FIGURE 1	REV 0

P:\GIS\NLON\APR\AREA A SITE LOCATION.APR AREA A PHASE III TOTAL PAH RESULTS LAYOUT 03/10/08 JEE



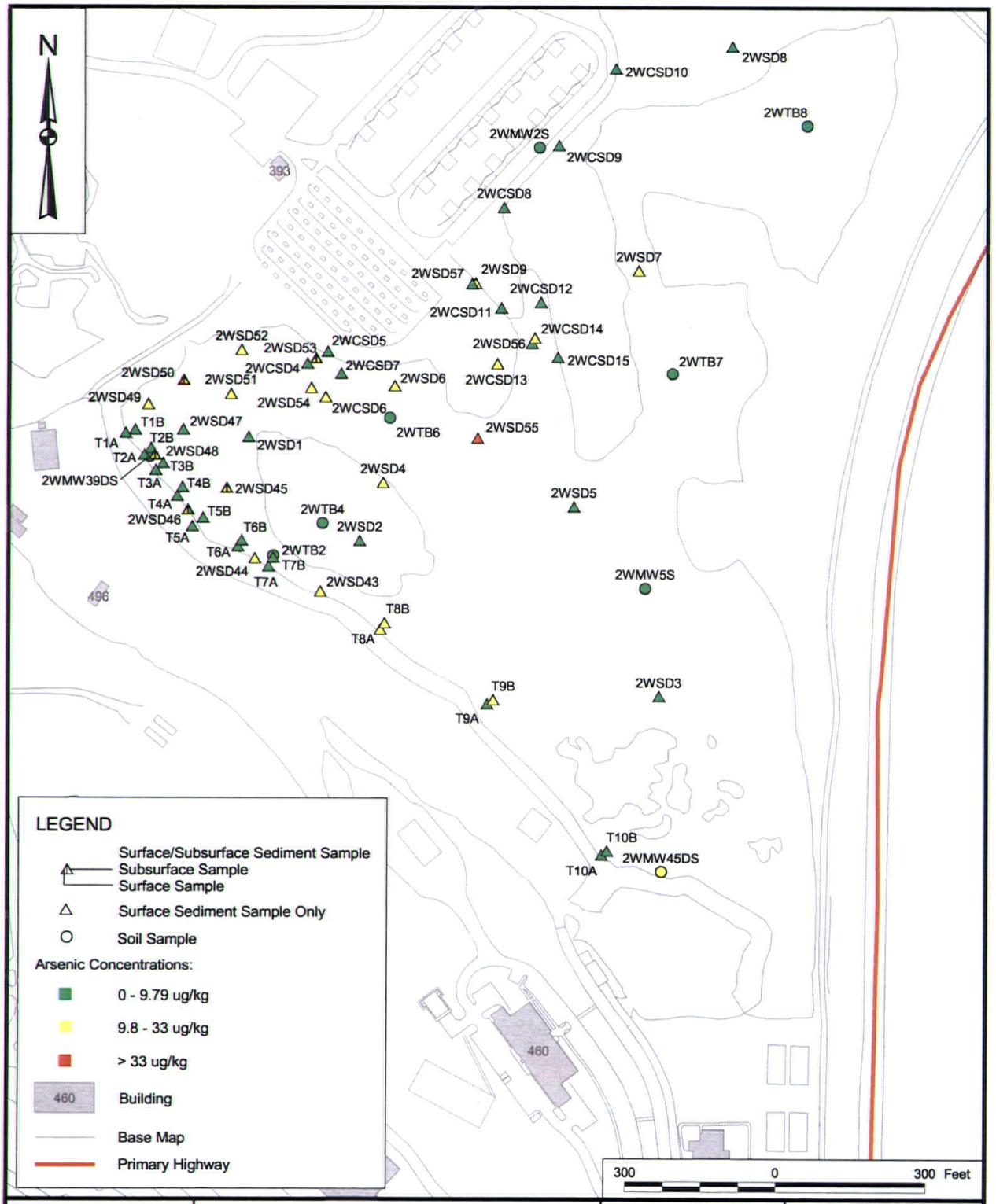
DRAWN BY J. ENGLISH — DATE 02/01/08	Tetra Tech NUS, Inc.	CONTRACT NUMBER CTO 0439	OWNER NO. —
CHECKED BY A. BERNHARDT — DATE 03/1008	TOTAL DDT SAMPLE RESULTS AREA A WETLAND NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — DATE —	
COST/SCHEDULE-AREA		APPROVED BY — DATE —	
SCALE AS NOTED		DRAWING NO. FIGURE 2	REV 0

P:\GIS\NLON\APR\AREA A SITE LOCATION.APR AREA A PHASE III TOTAL DDT RESULTS LAYOUT 03/10/08 JEE



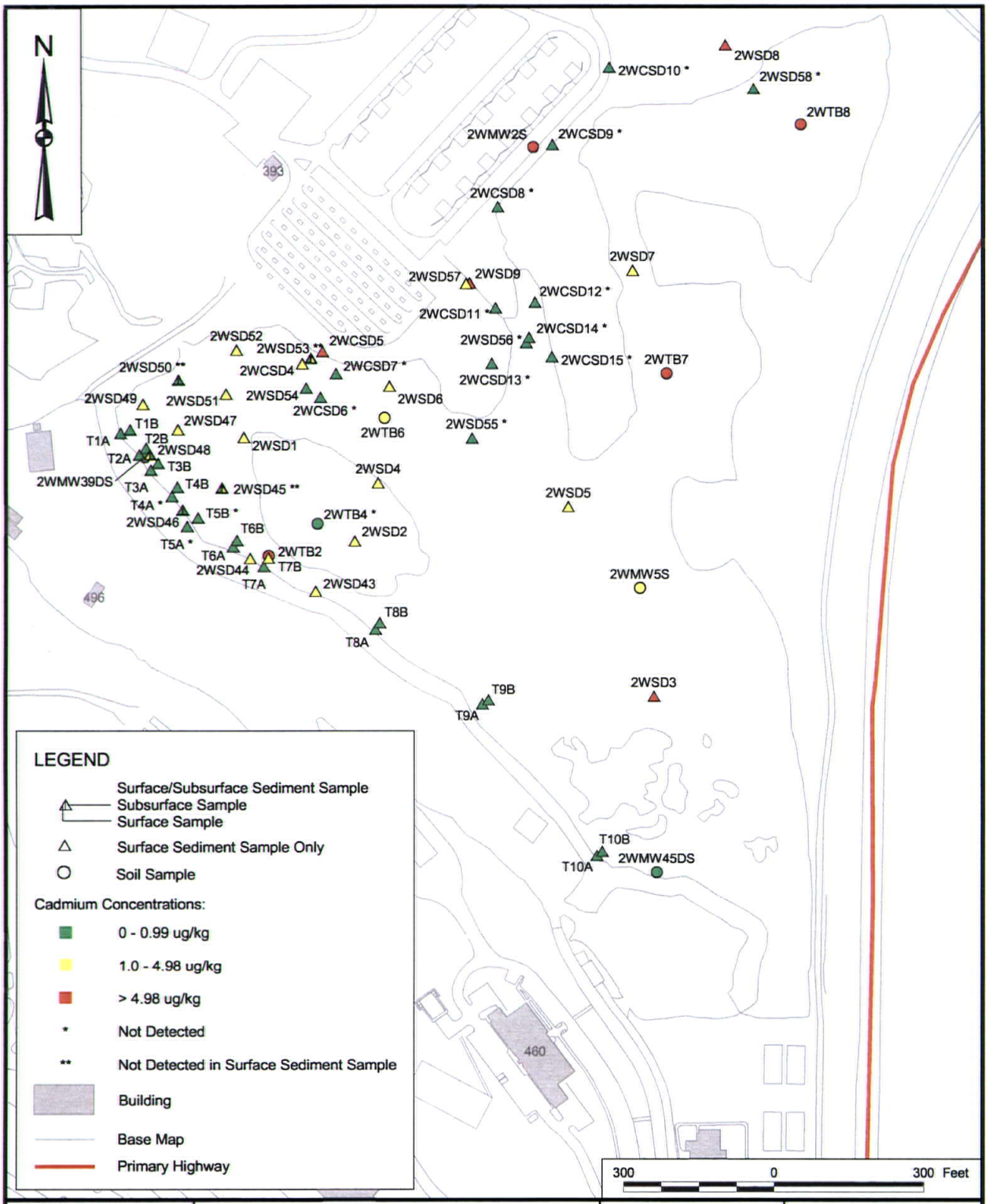
DRAWN BY J. ENGLISH — DATE 01/31/08	Tetra Tech NUS, Inc.	CONTRACT NUMBER CTO 0439	OWNER NO. —
CHECKED BY A. BERNHARDT — DATE 02/12/08	AROCLOR-1260 SAMPLE RESULTS AREA A WETLAND NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — DATE —	
COST/SCHEDULE-AREA		APPROVED BY — DATE —	
SCALE AS NOTED		DRAWING NO. FIGURE 3	REV 0

P:\GIS\NLON\APR\AREA A SITE LOCATION.APR AREA A PHASE III AROCLOR-1260 RESULTS LAYOUT 03/10/08 JEE



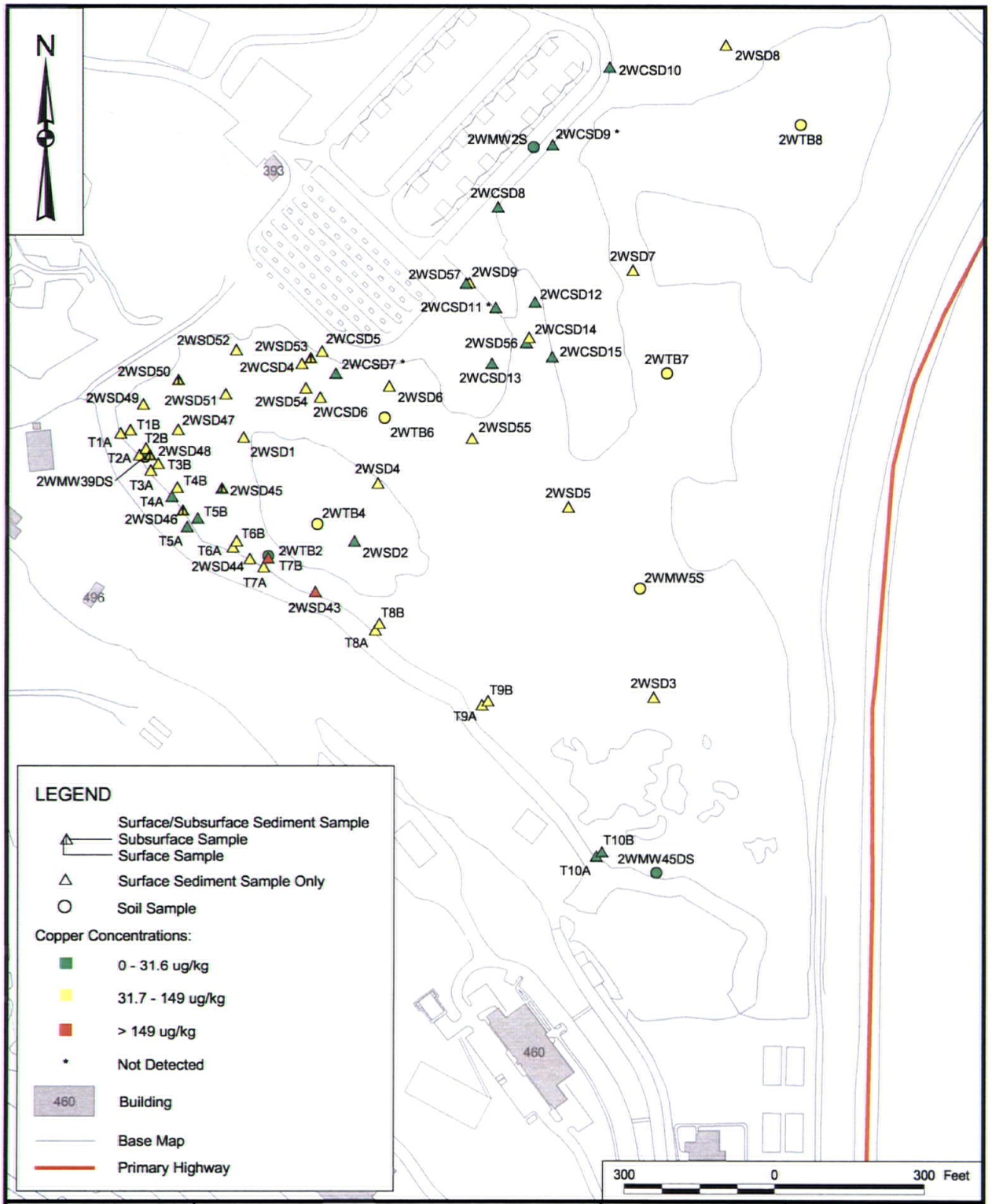
DRAWN BY J. ENGLISH — DATE 01/30/08	Tetra Tech NUS, Inc.	CONTRACT NUMBER CTO 0439	OWNER NO. —
CHECKED BY A. BERNHARDT — DATE 03/10/08	ARSENIC SAMPLE RESULTS AREA A WETLAND NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — DATE —	
COST/SCHEDULE-AREA		APPROVED BY — DATE —	
SCALE AS NOTED		DRAWING NO. FIGURE 4	REV 0

P:\GIS\NLON\APR\AREA A SITE LOCATION.APR AREA A PHASE III ARSENIC RESULTS LAYOUT 03/10/08 JEE



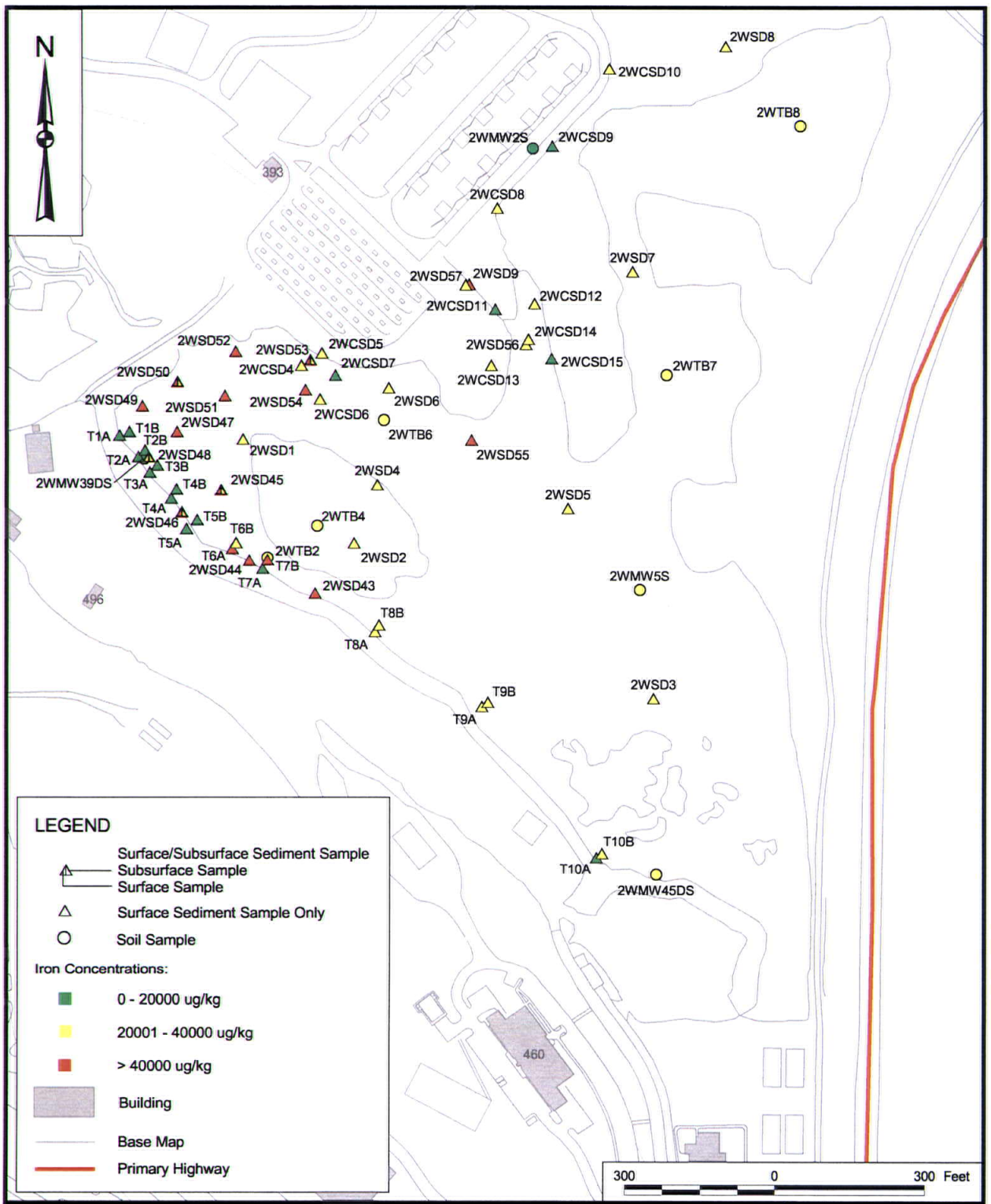
DRAWN BY J. ENGLISH — DATE 02/04/08	Tetra Tech NUS, Inc.	CONTRACT NUMBER CTO 0439	OWNER NO. —
CHECKED BY A. BERNHARDT — DATE 03/10/08	CADMIUM SAMPLE RESULTS AREA A WETLAND NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — DATE —	
COST/SCHEDULE-AREA		APPROVED BY — DATE —	
SCALE AS NOTED		DRAWING NO. FIGURE 5	REV 0

P:\GIS\NLON\APR\AREA A SITE LOCATION.APR AREA A PHASE III CADMIUM RESULTS LAYOUT 03/10/08 JEE



DRAWN BY J. ENGLISH — DATE 02/04/08	Tetra Tech NUS, Inc.	CONTRACT NUMBER CTO 0439	OWNER NO. —
CHECKED BY A. BERNHARDT — DATE 03/10/08	COPPER SAMPLE RESULTS AREA A WETLAND NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — DATE —	
COST/SCHEDULE-AREA		APPROVED BY — DATE —	
SCALE AS NOTED		DRAWING NO. FIGURE 6	REV 0

P:\GIS\NLON\APR\AREA A SITE LOCATION.APR AREA A PHASE III COPPER RESULTS LAYOUT 03/10/08 JEE



DRAWN BY J. ENGLISH — DATE 02/04/08	Tetra Tech NUS, Inc.	CONTRACT NUMBER CTO 0439	OWNER NO. —
CHECKED BY A. BERNHARDT — DATE 03/10/08	IRON SAMPLE RESULTS AREA A WETLAND NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — DATE —	
COST/SCHEDULE-AREA		APPROVED BY — DATE —	
SCALE AS NOTED		DRAWING NO. FIGURE 7	REV 0

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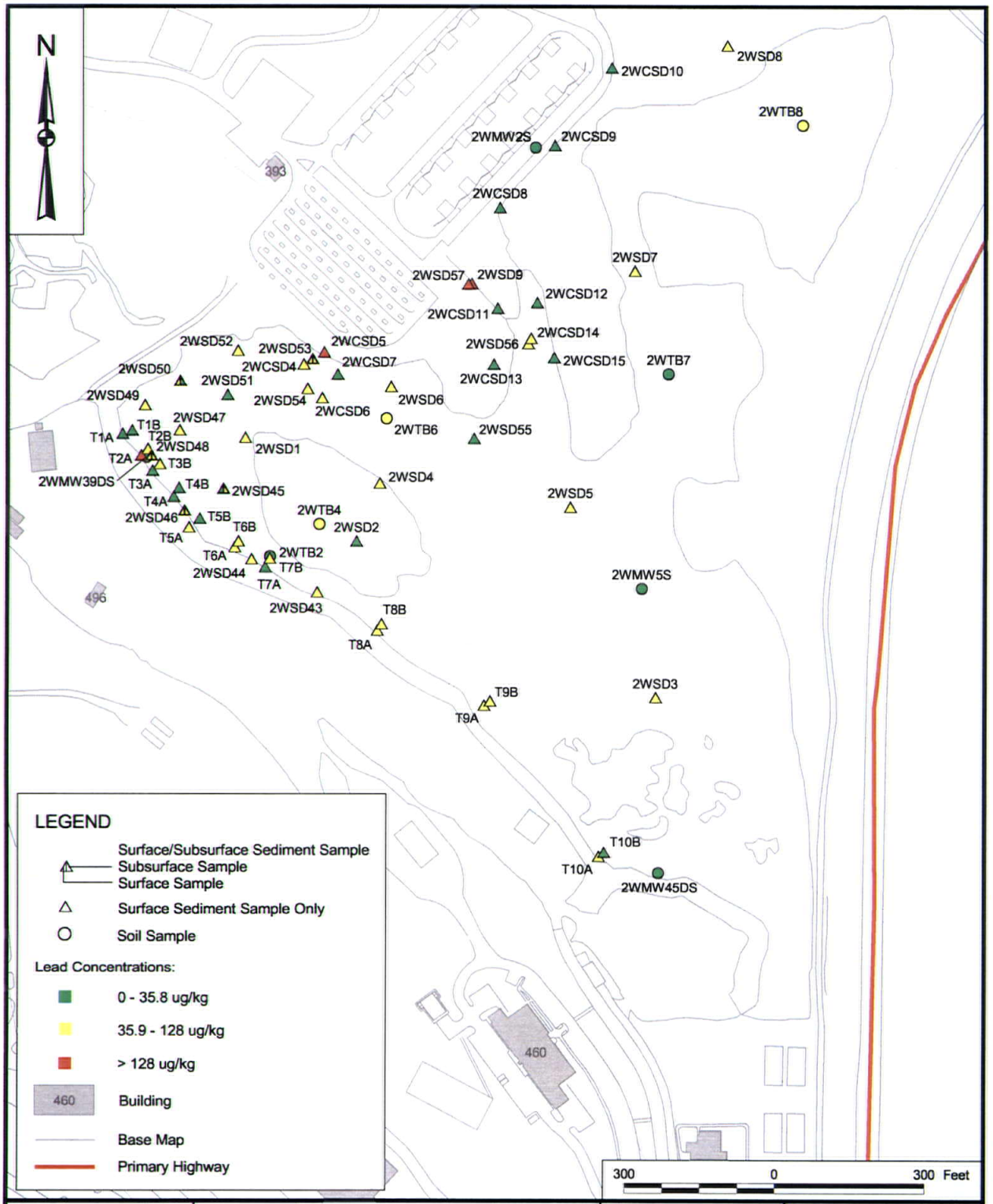
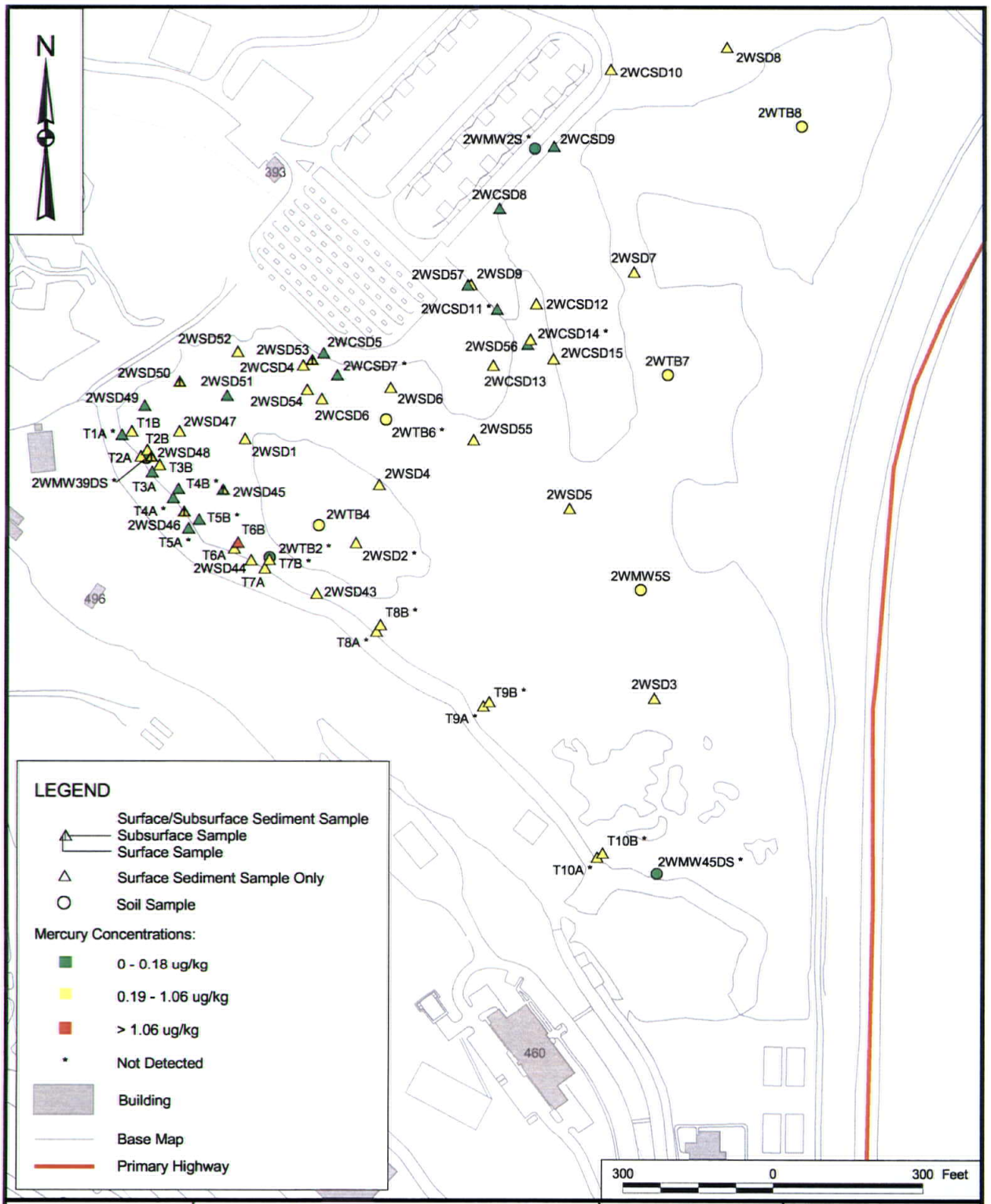


DRAWN BY J. ENGLISH — DATE 02/04/08	Tetra Tech NUS, Inc.	CONTRACT NUMBER CTO 0439	OWNER NO. —
CHECKED BY A. BERNHARDT — DATE 03/10/08	LEAD SAMPLE RESULTS AREA A WETLAND NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — DATE —	
COST/SCHEDULE-AREA		APPROVED BY — DATE —	
SCALE AS NOTED		DRAWING NO. FIGURE 8	REV 0

P:\GIS\NLON\APR\AREA A SITE LOCATION.APR AREA A PHASE III LEAD RESULTS LAYOUT 03/10/08 JEE



LEGEND

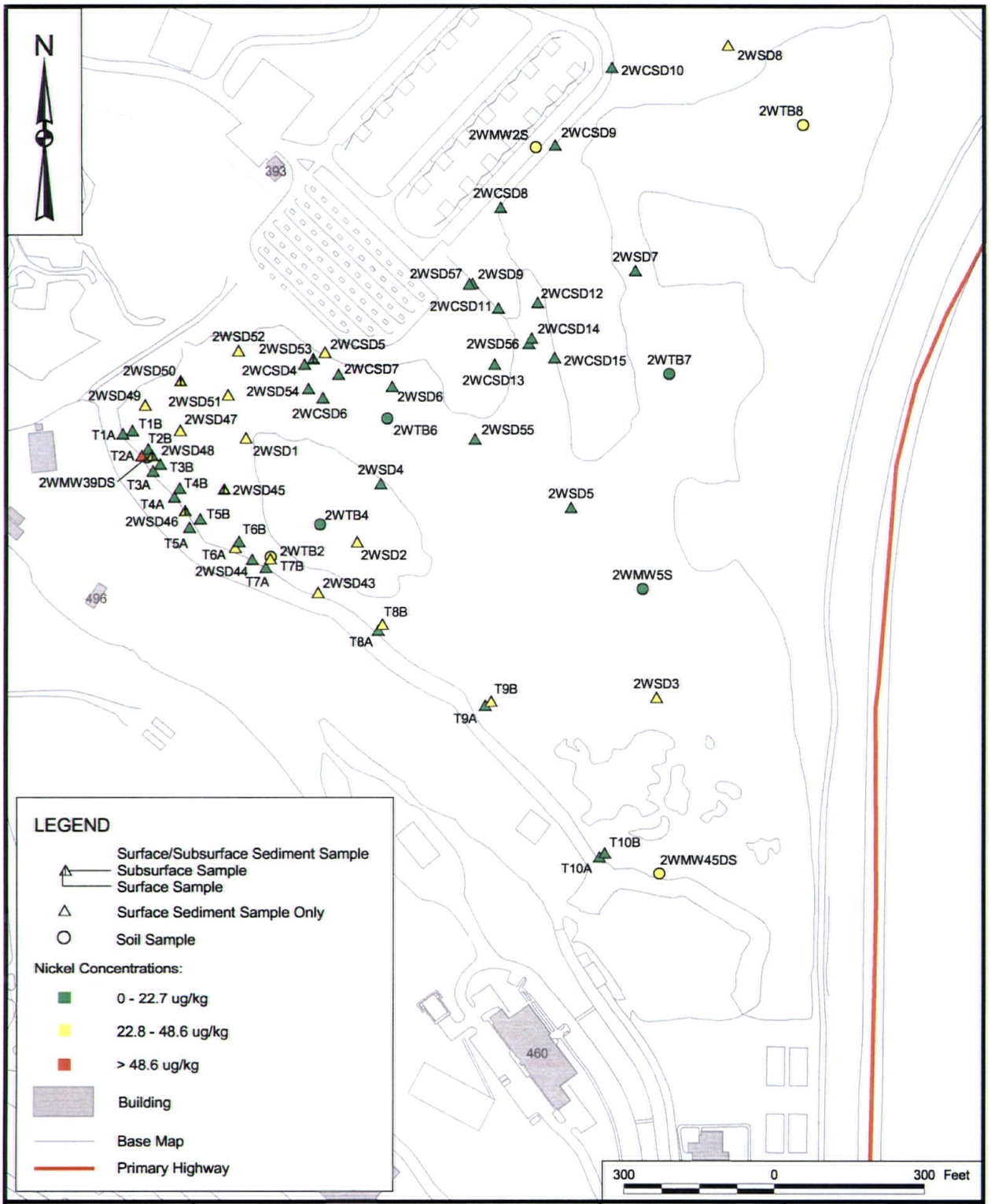
- Surface/Subsurface Sediment Sample
- Subsurface Sample
- Surface Sample
- Surface Sediment Sample Only
- Soil Sample

Mercury Concentrations:

- 0 - 0.18 ug/kg
- 0.19 - 1.06 ug/kg
- > 1.06 ug/kg
- * Not Detected
- Building
- Base Map
- Primary Highway

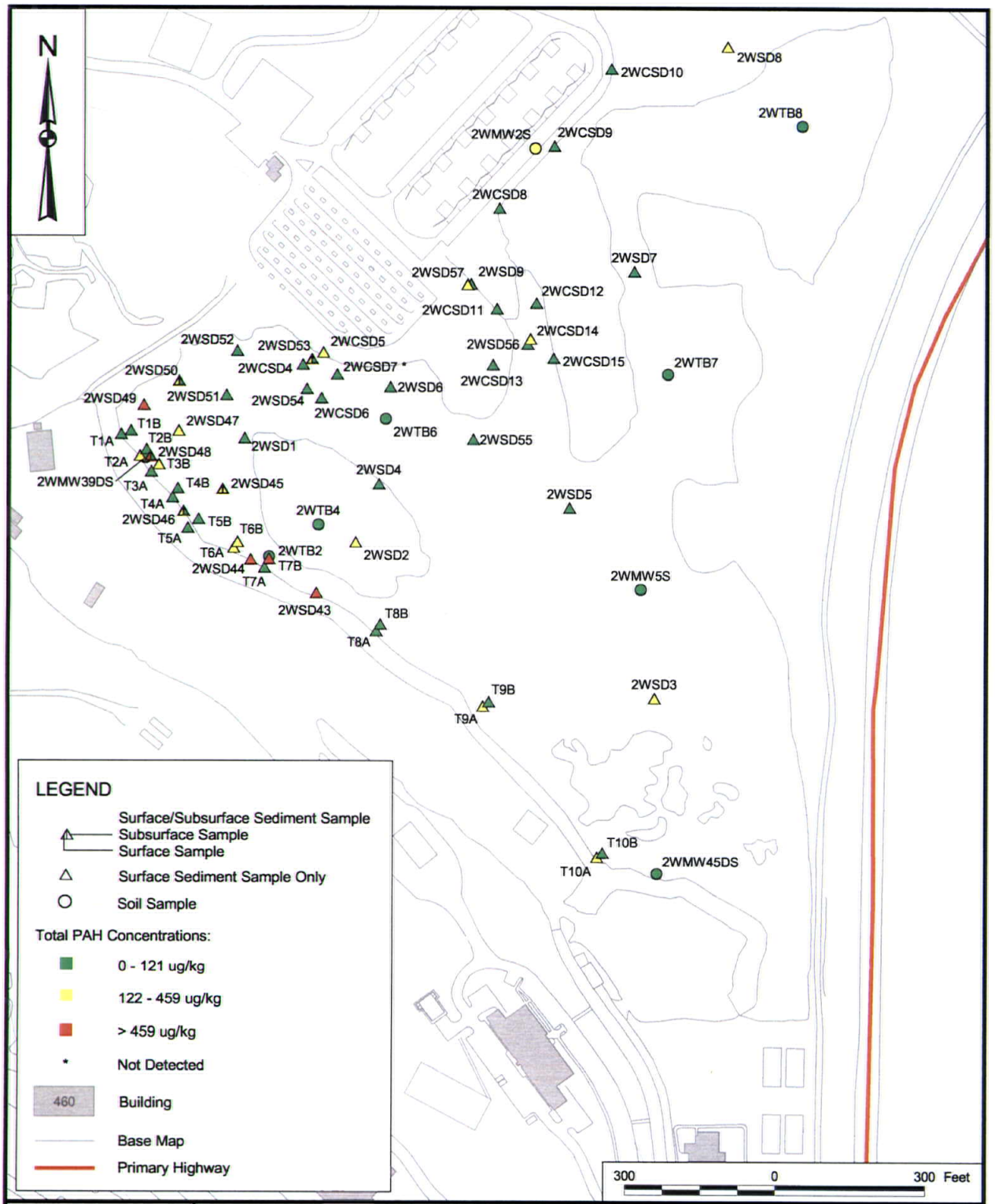
DRAWN BY J. ENGLISH — DATE 02/04/08	Tetra Tech NUS, Inc.	CONTRACT NUMBER CTO 0439	OWNER NO. —
CHECKED BY A. BERNHARDT — DATE 03/10/08	MERCURY SAMPLE RESULTS AREA A WETLAND NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — DATE —	
COST/SCHEDULE-AREA		APPROVED BY — DATE —	
SCALE AS NOTED		DRAWING NO. FIGURE 9	REV 0

P:\GIS\NLON\APR\AREA A SITE LOCATION.APR AREA A PHASE III MERCURY RESULTS LAYOUT 03/10/08 JEE



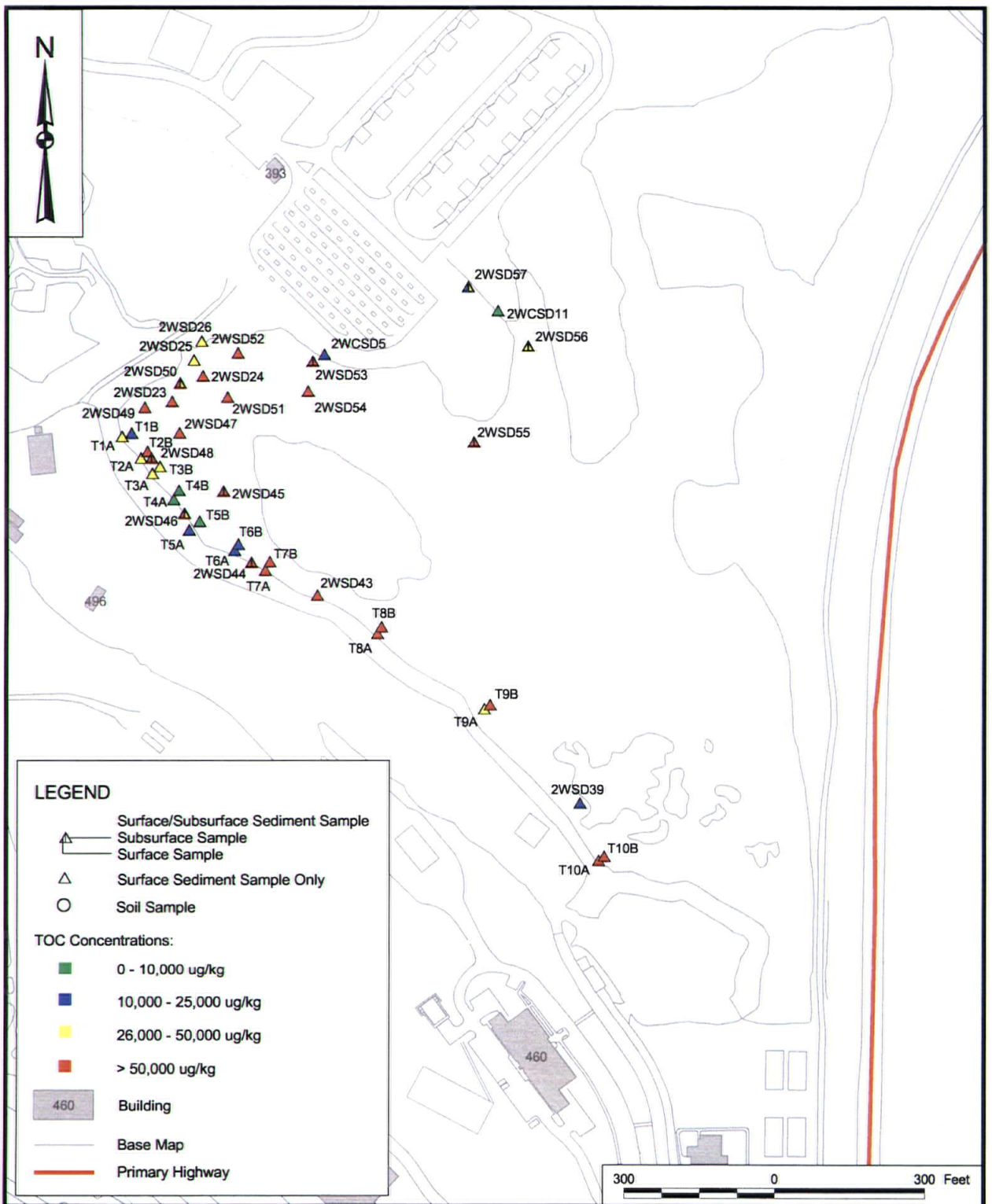
DRAWN BY	DATE	Tetra Tech NUS, Inc.	CONTRACT NUMBER	OWNER NO.
J. ENGLISH	02/04/08		CTO 0439	—
CHECKED BY	DATE	NICKEL SAMPLE RESULTS	APPROVED BY	DATE
A. BERNHARDT	03/10/08	AREA A WETLAND	—	—
COST/SCHEDULE-AREA		NAVAL SUBMARINE BASE NEW LONDON	APPROVED BY	DATE
		GROTON, CONNECTICUT	—	—
SCALE			DRAWING NO.	REV
AS NOTED			FIGURE 10	0

P:\GIS\NLON\APR\AREA A SITE LOCATION.APR AREA A PHASE III NICKEL RESULTS LAYOUT 03/10/08 JEE



DRAWN BY J. ENGLISH — DATE 02/04/08	Tetra Tech NUS, Inc.	CONTRACT NUMBER CTO 0439	OWNER NO. —
CHECKED BY A. BERNHARDT — DATE 03/10/08	ZINC SAMPLE RESULTS AREA A WETLAND NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT	APPROVED BY — DATE —	
COST/SCHEDULE-AREA		APPROVED BY — DATE —	
SCALE AS NOTED		DRAWING NO. FIGURE 11	REV 0

P:\GIS\NLON\APR\AREA A SITE LOCATION.APR AREA A PHASE III ZINC RESULTS LAYOUT 03/10/08 JEE



DRAWN BY	DATE	Tetra Tech NUS, Inc.	CONTRACT NUMBER	OWNER NO.
J. ENGLISH	02/01/08		CTO 0439	—
CHECKED BY	DATE	TOTAL ORGANIC CARBON RESULTS	APPROVED BY	DATE
A. BERNHARDT	03/10/08	AREA A WETLAND	—	—
COST/SCHEDULE-AREA		NAVAL SUBMARINE BASE NEW LONDON	APPROVED BY	DATE
		GROTON, CONNECTICUT	—	—
SCALE			DRAWING NO.	REV
AS NOTED			FIGURE 12	0

P:\GIS\NLON\APR\AREA A SITE LOCATION.APR AREA A PHASE III TOC RESULTS LAYOUT 03/10/08 JEE

APPENDIX E

FOOD CHAIN MODEL EXPOSURE PARAMETERS

RECEPTOR PROFILES
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

The following sections present the receptor profiles for the short-tailed shrew, American robin, meadow vole, northern bobwhite quail, raccoon, and mallard duck. The majority of the information for the profiles was obtained from the Wildlife Exposure Factors Handbook (USEPA, 1993). The data for the incidental soil ingestion rates were obtained from the Estimates of Soil Ingestion by Wildlife (Beyer, 1994) or the USEPA Ecological Soil Screening Guidance (USEPA, 2007).

The food and water ingestion rates are listed in g/g (of body weight)-day on a wet weight basis but were converted to dry weight for the ERA. The home ranges are presented in hectares in USEPA (December 1993) but were converted to acres by multiplying the number of hectares by 2.471. Also note that the estimated percent of soil in the diets are listed in dry weight. The attached table presents the calculation of the exposure parameters and how the calculations were done.

Short-Tailed Shrew (*Blarina brevicauda*)

Shrews inhabit a wide variety of habitats and are common in areas with abundant vegetative cover. They need cool, moist habitats because of their high metabolic and water-loss rates. The short-tailed shrew is primarily carnivorous, eating insects such as earthworms, slugs, and snails.

The adult body weight for the short-tailed shrew in various habitats ranged from 0.015 to 0.01921 kg with an average of 0.0161 kg. The listed food ingestion rates for shrews are 0.49 and 0.62 g/g-day (wet-weight). The water ingestion rate was listed as 0.223 g/g-day. The food and water ingestion rates in kg/day and L/day, respectively, were calculated as shown in the attached table. The food ingestion rates were then multiplied by 0.16, which is the percent solids of worms (Sample et al., 1997) to convert the ingestion rate from a wet-weight value to a dry-weight value. The incidental soil ingestion rate was calculated by multiplying the ingestion rate by the percentage of soil that is incidentally ingested (assumed 3 percent for conservative food chain model and 0.9 percent for the average food chain model) from USEPA (2007). 3 percent is the 90th percentile value and 0.9 percent is the 50th percentile value from USEPA (2007).

The home range for the shrew (0. 9699 acres) was calculated using data from a tamarek bog in Manitoba (only value available).

American Robin (*Turdus migratorius*)

American robins' habitats include parks, lawns, moist forests, swamps, open woodlands, and orchards. Robins forage on the ground in open areas, along habitat edges, or the edges of streams. They also may forage above ground in shrubs and within the lower branches of trees. In the months preceding and during the breeding season, robins feed primarily on invertebrates and on some fruits. During the rest of the year their diet consists primarily of fruits.

The adult body weight for the American robin in New York woodlands and forests and in Pennsylvania ranged from 0.0773 to 0.0862 kg with an average of 0.0804 kg. The only listed food ingestion rates were for robins in Kansas (1.52 g/g-day) and California (0.89 g/g-day), with an average of 1.205 g/g-day. The water ingestion rate was estimated as 0.14 g/g-day. Studies calculating ingestion rates for the robin included in the USEPA (December 1993) are based on a diet comprised of berries. However, because it is assumed that 100 percent of the robin's diet is worms for the food chain models, the ingestion rate for the robin was calculated using field metabolism scaling as presented on the attached table (Nagy et al., 1999). These are the values that were used in the food chain model for this site. The incidental soil ingestion rate was calculated by multiplying the ingestion rate by the percentage of soil that is incidentally ingested (assumed 16.4 percent for conservative food chain model and 6.4 percent for the average food chain model) from USEPA (2007). The 16.4 percent and 6.4 percent values are based on the American woodcock.

The home range for the robin was calculated using data from Tennessee and a New York dense conifer forest. The values ranged from 0.27 to 1.04 acres with an average home range of 0.61 acres.

Meadow Vole (*Microtus pennsylvanicus*)

Meadow voles inhabit grassy fields, marshes, and bogs; however, they prefer fields with more grass, more cover, and fewer woody plants. They typically consume green succulent vegetation, sedges, seeds, roots, bark, fungi, insects, and animal matter. However, green succulent vegetation makes up the majority of their diet.

The adult body weight for the vole ranges from 0.017 to 0.0524 kg with an average of 0.0358 kg. The only listed food ingestion rates for voles range from 0.30 to 0.35 g/g-day (wet-weight), with an average of 0.325 g/g-day. The water ingestion rates are 0.14 (estimated) and 0.21 g/g-day, with an average of 0.175 g/g-day. The food and water ingestion rates in kg/day and L/day, respectively, were calculated as shown in the attached table. The food ingestion rates were then multiplied by 0.30, which is the percent solids of young grass (Sample et al., 1997) to convert the ingestion rate from a wet-weight value to a dry-weight value. The incidental soil ingestion rate was calculated by multiplying the ingestion rate by the percentage of soil that is incidentally ingested (assumed 3.2 percent for conservative food chain model and 1.2 percent for the average

food chain model) from USEPA (2007). 3.2 percent is the 90th percentile value and 1.2 percent is the 50th percentile value from USEPA (2007).

The home range for the meadow vole ranges from 0.000494 to 0.2051 acres with an average home range of 0.0659 acres.

Northern Bobwhite Quail (*Colinus virginianus*)

Quails inhabit grasslands, idle fields, pastures, and large clumps of grasses. Bobwhite quails forage in areas with open vegetation, some bare ground, and light litter. Seeds from weeds, woody plants, and grasses comprise the majority of an adult's diet, although green vegetation has been found to dominate the diet of this species in winter in the southern areas of the United States.

The adult body weight for the bobwhite quail ranges from 0.154 to 0.1939 kg with an average of 0.1751 kg. The listed food ingestion rates for quails range from 0.067 to 0.093 g/g-day (wet-weight), with an average of 0.078 g/g-day. The water ingestion rate is estimated as 0.10 and 0.11 g/g-day, and measured as 0.10 to 0.13 g/g-day, for an average water ingestion rate of 0.11 g/g-day. The food and water ingestion rates in kg/day and L/day, respectively, were calculated as shown in the attached table. The food ingestion rates were then multiplied by 0.30, which is the percent solids of young grass (Sample et al., 1997) to convert the ingestion rate from a wet-weight value to a dry-weight value. The incidental soil ingestion rate was calculated by multiplying the ingestion rate by the percentage of soil that is incidentally ingested (assumed 13.9 percent for conservative food chain model and 6.1 percent for the average food chain model) from USEPA (2007). The 13.9 percent and 6.1 percent values are based on the mourning dove.

The home range for the quail ranges from 8.9 to 41.3 acres with an average home range of 18.8 acres.

Raccoon (*Procyon lotor*)

Raccoons are found near virtually every aquatic habitat, particularly in hardwood swamps, mangroves, floodplain forests, and freshwater and saltwater marshes. They are also common in suburban residential areas. They use surface waters for both drinking and foraging. They feed primarily on fleshy fruits, nuts, acorns, and corn, but also eat grains, insects, frogs, crayfish, eggs, and virtually any animal and vegetable matter.

The adult body weight for the raccoon ranges from 3.67 to 7.6 kg, with an average of 5.64 kg. The water ingestion rate ranges from 0.082 to 0.083 g/g. The food and water ingestion rates in kg/day and L/day, respectively, were calculated as shown in the attached table. The incidental sediment ingestion rate is calculated by multiplying the ingestion rate by the percentage of sediment that is incidentally ingested (9.4 percent), as cited in Beyer (1994).

The home range for the conservative model is assumed to be equal to the size of the site indicating that the raccoon will spend all of its time at the site. The typical home range sizes for the raccoon are 96 to 6,325 acres for an average home range of 1,558 acres.

Mallard Duck *(Anas platyrhynchos)*

The mallard duck is a surface-feeding duck in that it feeds in shallow water, sifting and filtering through soft mud for food. Mallards are found in freshwater and saltwater wetlands nesting in areas that are dense with grassy vegetation approximately a half meter high. The mallard feeds mostly on seeds and grains of aquatic plants and aquatic invertebrates depending on the season, foraging and dabbling through sediment.

The male mallard duck is generally heavier than the female mallard duck with the average body weights ranging from 1.043 kg to 1.246 kg, with an average of 1.17 kg. The food and water ingestion rates in kg/day and L/day, respectively, were calculated as shown in the attached table. The incidental sediment ingestion rate is calculated by multiplying the ingestion rate by the percentage of sediment that is incidentally ingested (3.3 percent), as cited in Beyer (1994).

Based on data from Minnesota wetlands/river, mallard ducks have home ranges from 98.84 acres to 3558 with an average home range of 1433 acres.

References:

Beyer, N., E. Connor, and S. Gerould. 1994. Estimates of Soil Ingestion by Wildlife. Journal of Wildlife Management 58(2) pp. 375-382.

Nagy, K.A., I.A. Girard, and T.K. Brown. 1999. Energetics of Free-Ranging Mammals, Reptiles, and Birds. Annu. Rev. Nutr. 19. pp. 247-277.

Sample, B.E., M.S. Aplin, R.A. Efroymson, G.W., Suter II, and C.J.E. Welsh. 1997. Methods and Tools for Estimation of the Exposure of Terrestrial Wildlife to Contaminants. Oak Ridge National Laboratory. October. ORNL/TM-13391.

USEPA (U.S. Environmental Protection Agency), 1993. Wildlife Exposure Factors Handbook. U.S. Environmental Protection Agency. Office of Research and Development. Washington, D.C. December 1993. EPA/600/R-93/187a.

USEPA, 2007. Guidance for Developing Ecological Soil Screening Level, Attachment 4-1, Exposure Factors and Bioaccumulation Models for Derivation of Wildlife Eco-SSLs. Office of Solid Waste and Emergency and Response. OSWER Directive 9285.7-55. April.

DRY WEIGHT DERIVATION OF BODY WEIGHT, FOOD INTAKE, AN[illegible]ER INTAKE FACTORS FOR TERRESTRIAL FOOD CHAIN MODELS
AREA A WETLAND
NAVAL SUBMARINE BASE, NEW LONDON, GROTON, CONNECTICUT

Species/Factor	Data from EPA (1993) Age/Sex/ Cond./Seas.	Value	Study Average	Derivation of Factors for Modeling: Calculation of Values		Notes
American Robin						
Body Weight (g)	A B	77.3	77.3	Minimum Value	0.0773 kg	
				Maximum Value	0 0862 kg	
	A M nonbreeding	86.2		Overall Study Average	0 0804 kg	
	A F nonbreeding	83.6	84.9			
	A M breeding	77.4				
	A F breeding	80.6	79			
Food Ingestion Rate (g/g-day)	B B free-living	0.89		*For Eating Mostly Fruit*		
				Conservative value	0.0281 kg/day	Maximum ingestion rate * Average Body weight * 0 23[1]
	- B free-living	1.52				
				Average value	0 0223 kg/day	Average ingestion rate * Average Body weight * 0.23[1]
						[1] - 0 23 = percent solids in fruit to convert to a dry weight ingestion rate
	Overall Study Average		1.21			
				Based on Metabolic Scaling		
					0.01247 kg/day	Used maximum body weight in below equation
					0.01188 kg/day	Used average body weight in below equation
						Food ingestion rates were calculated from Nagy et al., (1999) for insectivores as follows: $FI = (9.7*BW(g)^{0.705})/18kJ/g/1000$
Water Ingestion Rate (g/g-day)	A B	0 14		Conservative value	0.012 L/day	Ingestion rate * Maximum Body weight
				Average value	0 011 L/day	Ingestion rate * Average Body weight
Short-Tailed Shrew						
Body Weight (g)	A B	15	15	Minimum Value	0 0150 kg	
				Maximum Value	0 01921 kg	
	M summer	19 21	17.27	Overall Study Average	0.01613 kg	
	F summer	17.4				
	M fall	16 87				
	M fall	15.58				
Food Ingestion Rate (g/g-day)	A B	0.49		Conservative value:	0.0016 kg/day	Maximum ingestion rate * Average Body weight * 0 16[1]
	A B	0 62		Average value	0.00143 kg/day	Average ingestion rate * Average Body weight * 0.16[1]
	Overall Study Average		0.555			[1] - 0 16 = percent solids in earthworms to convert to a dry weight ingestion rate
Water Ingestion Rate (g/g-day)	A B	0.223		Conservative value:	0 00428 L/day	Ingestion rate * Maximum Body weight
				Average value	0 00360 L/day	Ingestion rate * Average Body weight

DRY WEIGHT DERIVATION OF BODY WEIGHT, FOOD INTAKE, AND WATER INTAKE FACTORS FOR TERRESTRIAL FOOD CHAIN MODELS
AREA A WETLAND
NAVAL SUBMARINE BASE, NEW LONDON, GROTON, CONNECTICUT

	Data from EPA (1993)			Derivation of Factors for Modeling		
Species/Factor	Age/Sex/ Cond./Seas.	Value	Study Average	Calculation of Values		Notes
Meadow Vole						
Body Weight (g)	A M summer	40	36.7	Minimum Value	0.017 kg	
	A F summer	33.4		Maximum Value	0 052 kg	
				Overall Study Average	0.0358 kg	
	A M spring	52.4	48.0			
	A F spring	43.5				
	A B spring	26	21 2			
	A B summer	24.3				
	A B fall	17				
	A B winter	17.5				
	A M	35.5	37.3			
	A F	39				
Food Ingestion Rate (g/g-day)		0.3	0.33	Conservative value:	0.003756 kg/day	Maximum ingestion rate * Average Body weight * 0.3 [1]
		0.35				
				Average value	0.003488 kg/day	Average ingestion rate * Average Body weight * 0 3[1]
						[1] - 0.30 = percent solids in grass to convert to a dry weight ingestion rate
Water Ingestion Rate	A B	0.21	0.18	Conservative value:	0.007513 L/day	Maximum ingestion rate * Average Body weight
	A B	0.14		Average value	0.006261 L/day	Average ingestion rate * Average Body weight
Northern Bobwhite Quail						
Body Weight (g)	A B fall	189.9	191	Minimum Value	0 154 kg	
	A B winter	193.9		Maximum Value	0.194 kg	
	A B spring	190		Overall Study Average	0.1751 kg	
	A M winter	181	177			
	A M summer	163				
	A F winter	183				
	A F summer	180				
	A M winter	161	157			
	A M summer	154				
	A F winter	157				
	A F summer	157				
Food Ingestion Rate (g/g-day)	A B winter	0.093	0.078	Conservative value:	0 00488 kg/day	Maximum ingestion rate * Average Body weight * 0.3[1]
	A B spring	0.067				
	A B summer	0.079		Average value	0.00408 kg/day	Average ingestion rate * Average Body weight * 0 3[1]
	A B fall	0.072				
						[1] - 0 30 = percent solids in grass to convert to a dry weight ingestion rate
Water Ingestion Rate (g/g-day)	A M summer	0.1	0.11	Conservative value:	0.0227616 L/day	Maximum ingestion rate * Average Body weight
	A F summer	0.13				
	A M summer	0.11		Average value	0.0192598 L/day	Average ingestion rate * Average Body weight
	A F summer	0.1				

DRY WEIGHT DERIVATION OF BODY WEIGHT, FOOD INTAKE, AN[illegible]ER INTAKE FACTORS FOR TERRESTRIAL FOOD CHAIN MODELS
AREA A [illegible]TLAND
NAVAL SUBMARINE BASE, NEW LONDON, GROTON, CONNECTICUT

	Data from EPA (1993)			Derivation of Factors for Modeling		
Species/Factor	Age/Sex/ Cond./Seas.	Value	Study Average	Calculation of Values		Notes
Raccoon						
Body Weight (kg)	A M	7.6	6.7	Minimum Value	3.67 kg	
	A F parous	6.4		Maximum Value	7 6 kg	
	A F nulliparous	6		Overall Study Average	5 636 kg	
	A M	6 76	6.25			
	A F	5.74				
	A M	4 31	3.99			
	A F	3 67				
Food Ingestion Rate (g/g-day)			No Value	Conservative value:	0.237 kg/day	Used maximum body weight in below equation
				Average value	0 184 kg/day	Used average body weight in below equation
						Food ingestion rates were calculated from Nagy et al., (1999) for carnivores as follows: $FI = ((2\ 23)*BW(g)^{0\ 85})/1000$
Water Ingestion Rate (g/g-day)	A M	0.082	0.083	Conservative value:	0.468 L/day	Maximum ingestion rate * Average Body weight
	A F	0.083				
				Average value	0.465 L/day	Average ingestion rate * Average Body weight
Mallard						
Body Weight (kg)	A M	1.225	1.134	Minimum Value	1.043 kg	
	A F	1.043		Maximum Value	1 246 kg	
				Overall Study Average	1.166 kg	
	A M	1.246	1.171			
	A F	1.095				
	A M	1.237	1.163			
	A F	1.088				
	A F	1.197	1.197			
Food Ingestion Rate (g/g-day)				Conservative value:	0.08200 kg/day	Used maximum body weight in below equation
				Average value	0.07826 kg/day	Used average body weight in below equation
						Food ingestion rates were calculated from Nagy et al., (1999) for insectivores as follows: $FI = ((9.7*BW(g)^{0\ 705})/18kJ/g)/1000$
Water Ingestion Rate (g/g-day)	A M	0.058	0.0565	Conservative value:	0.067628 L/day	Maximum ingestion rate * Average Body weight
	A F	0.055				
				Average value	0.065879 L/day	Average ingestion rate * Average Body weight

Notes:
A = Adult
F = Female, M = Male, B = Both
BW = Body Weight

Lipid Data By Organism Group

Lipid Data By Organism Groups

Group	Wet/Dry	% Lipid (GM)	(n)	RMSE	Not Used	Min Value	Max Value
Birds	Wet	47.048	6	11.127	10	1.900	91.200
	Dry	N/A	0	N/A	2	12.700	12.800
	???	9.418	2	1.167	8	1.141	9.680
Crustacea - Freshwater	Wet	4.956	5	1.254	8	0.660	11.590
	Dry	* 11.364	37	10.227	2	1.000	26.700
	???	1.351	2	0.229	1	0.718	3.000
Crustacea - Marine	Wet	2.984	8	1.935	29	0.470	17.700
	Dry	16.121	81	37.020	1	1.600	52.600
	???	5.954	11	3.579	3	0.213	9.600
Echinoderms	Wet	N/A	0	N/A	0	0	0
	Dry	5.554	20	1.897	8	0.001	32.100
	???	N/A	0	N/A	0	0	0
Fish - Bottom Feeders	Wet	4.342	41	10.573	46	0.050	52.000
	Dry	7.950	2	3.380	15	3.830	18.000
	???	7.444	77	5.286	44	0.180	45.000
Fish - Mid-Water Feeders	Wet	6.676	56	7.200	51	0.053	72.000
	Dry	N/A	0	N/A	6	9.300	51.100
	???	26.316	10	3.613	29	0.020	66.000
Fish - Plankton Feeders	Wet	N/A	0	N/A	9	3.300	11.600
	Dry	N/A	0	N/A	4	15.000	21.430
	???	3.071	6	3.003	3	1.015	14.000
Mammals - Marine	Wet	32.169	2	71.428	12	3.500	92.000
	Dry	N/A	0	N/A	0	0	0
	???	N/A	0	N/A	8	1.200	79.100
Misc	Wet	N/A	0	N/A	4	0.100	1.000
	Dry	5.200	1	4.700	0	5.200	5.200
	???	N/A	0	N/A	0	0	0
Molluscs - Freshwater	Wet	1.358	34	0.215	19	0.160	9.000
	Dry	* 10.500	4	0.691	7	5.800	12.200

	???	N/A	0	N/A	1	0.900	0.900
Molluscs - Marine/Estuarine	Wet	1.419	12	0.092	20	0.150	6.310
	Dry	4.963	9	2.326	40	1.385	26.700
	???	7.615	4	0.682	11	0.300	9.400
Turtles/Amphibians	Wet	10.480	1	2.234	0	10.480	10.480
	Dry	N/A	0	N/A	0	0	0
	???	N/A	0	N/A	0	0	0
Worms - Freshwater	Wet	1.272	8	1.729	7	0.550	13.000
	Dry	✗ 6.464	30	2.852	4	0.600	13.200
	???	2.864	12	9.367	1	0.130	3.700
Worms - Terrestrial	Wet	1.210	1	0.061	0	1.210	1.210
	Dry	N/A	0	N/A	0	0	0
	???	N/A	0	N/A	0	0	0

Please Click Your Back Button To Select A Specific Organism

Data shown are **Grand Means (GM) and Root Mean Square Error (RMSE)** except where (n) = 1. Those data are simple means and standard deviation from the citation. The *Not Used* column indicates available records that were missing (n) or error data and could not be used to calculate the grand mean. N/A indicates no data available to calculate a grand mean. Minimum and maximum data are calculated from ALL entires in the database

The column ***Type*** indicates the type of error reported for these data. SE was converted to SD for statistical calculations.

The error type abbreviations are ***SD*** = standard deviation, ***SE*** = standard error, ***CI*** = confidence interval, ***SEM*** = standard error of the mean, ***CV*** = Coefficient of Variation, ***PE*** = propogated error and ***NA*** = not available (unknown),

The column ***Wet/Dry*** indicates wet or dry weight. ***Wet*** = all values were wet weight, ***Dry*** = all values were dry weight, ***Both*** = sediment was dry weight, tissue was wet weight, ***???*** = Unknown, not specified in reference.

The column ***Used?*** indicates whether or not the %Lipid data were used in the Grand Mean and Error calculations. Only data containing mean, error, and number were used in Grand Mean and RMS Error calculations.

These data have been compiled by personnel of The US Army Engineer Research and Development Center, Waterways Experiment Station, Environmental Laboratory (CEERD-EP-R). It is strongly suggested that users verify that the displayed data are appropriate for their use before basing any decisions on them.

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Lipid Data were last updated on March 12, 2007

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APPENDIX F

FOOD CHAIN MODEL TRV AND BAF SUPPORT DOCUMENTS

APPENDIX F TABLE 1

TOXICITY REFERENCE VALUES FOR TERRESTRIAL FOOR CHAIN MODELS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

PARAMETER	Mammal		Bird	
	NOAEL	LOAEL	NOAEL	LOAEL
VOLATILES				
1,1,1-Trichloroethane	1000	10000	NV	NV
2-Butanone	1771	4571	NV	NV
Acetone	10	50	NV	NV
Carbon Disulfide	12.6	25 6	NV	NV
Chlorobenzene	2.725	5.45	NV	NV
Methylene Chloride	5.85	50	NV	NV
Tetrachloroethene	1.4	7	NV	NV
Toluene	26	260	NV	NV
Trichloroethene	0.7	7	NV	NV
Xylenes, Total	2.06	2.58	NV	NV
SEMIVOLATILES				
2,4-Dimethylphenol	5	25	NV	NV
2-Methylnaphthalene	65 6	356	2	20
4-Methylphenol	5	15	NV	NV
Acenaphthene	65.6	356	2	20
Acenaphthylene	65.6	356	2	20
Anthracene	65.6	356	2	20
Benzo(a)anthracene	0.615	38.4	2	20
Benzo(a)pyrene	0.615	38 4	2	20
Benzo(b)fluoranthene	0.615	38.4	2	20
Benzo(g,h,i)perylene	0.615	38.4	2	20
Benzo(k)fluoranthene	0.615	38.4	2	20
Benzoic acid	NV	NV	NV	NV
Bis(2-Ethylhexyl)phthalate	18.3	183	NV	NV
Butylbenzyl Phthalate	15.9	47	NV	NV
Carbazole	0.615	38.4	2	20
Chrysene	0.615	38.4	2	20
Dibenzo(a,h)anthracene	0.615	38.4	2	20
Dibenzofuran	0.615	38.4	2	20
1,4-Dichlorobenzene	30	300	NV	NV
Di-n-butyl phthalate	550	1833	NV	NV
Fluoranthene	65 6	356	2	20
Fluorene	65.6	356	2	20
Indeno(1,2,3-cd)pyrene	0.615	38.4	2	20
Naphthalene	65.6	356	2	20
Pentachlorophenol	8.42	22.65	6.73	52.01
Phenanthrene	65.6	356	2	20
Pyrene	0.615	38.4	2	20
PESTICIDES/PCBs				
4,4'-DDD	0.147	5.56	0.227	2.7
4,4'-DDE	0.147	5.56	0.227	2.7
4,4'-DDT	0.147	5.56	0.227	2.7
Aldrin	0.2	1	NV	NV
Alpha-Chlordane	4.58	9.16	2.14	10.7
Aroclor-1260	0.068	0.68	0.18	1.8
beta-BHC	0.4	2	0.56	2.25
delta-BHC	0.014	0.14	0.56	2.25
Dieldrin	0.015	1.27	0.0709	0.8
Endosulfan I	0.15	1.5	10	100
Endosulfan II	0.15	1.5	10	100
Endosulfan Sulfate	0.15	1.5	10	100
Endrin	0.092	0.92	0.01035	0.1035
Endrin Aldehyde	0.092	0.92	0.01035	0.1035
Endrin Ketone	0.092	0.92	0.01035	0.1035
Gamma-BHC (Lindane)	8	80	2	20
Gamma-Chlordane	4.58	9.16	2.14	10.7
Heptachlor	0.1	1	NV	NV
Heptachlor Epoxide	0.1	1	NV	NV
Methoxychlor	4	8	NV	NV

APPENDIX F TABLE 1

TOXICITY REFERENCE VALUES FOR TERRESTRIAL FOOR CHAIN MODELS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

PARAMETER	Mammal		Bird	
	NOAEL	LOAEL	NOAEL	LOAEL
INORGANICS				
Aluminum	1.93	19 3	109.7	1097
Antimony	0 059	2.76	NV	NV
Arsenic	1.04	4.55	2.24	4.51
Barium	51.8	82.7	NV	NV
Beryllium	0.532	0.673	NV	NV
Boron	28	93.6	28.8	100
Cadmium	0.77	6.9	1.47	6.35
Chromium	2.40	58.17	2.66	15.63
Cobalt	7.33	18.90	7.61	18.34
Copper	5.6	82.7	4.05	34.87
Cyanide	68.7	687	NV	NV
Iron	50	500	100	1000
Lead	4.7	186.4	1.63	44.63
Manganese	51.5	146	179	377
Mercury	0.032	0.16	0.0064	0.064
Nickel	1.70	14.77	6.71	18.57
Selenium	0.143	0.66	0.29	0 82
Silver	6.02	118.6	2.02	60.47
Thallium	0.0074	0.074	NV	NV
Vanadium	4.16	9.44	0.34	1.70
Zinc	75.4	298	66.1	171

Notes:

NV = No value
NOAEL = No Observed Adverse Effects Level
LOAEL = Lowest Observed Adverse Effects Level

The sources of these NOAELS and LOAELS are presented in the table titled "Sources and Endpoints for NOAELS and LOAELS for Terrestrial Wildlife" in this appendix.

The NOAELS and LOAELS in the source table were divided by 10 if a subchronic study was the basis for the value. Also, if only a NOAEL was available, the value was multiplied by 10 to estimate the LOAEL. If only a LOAEL was available, the value was divided by 10 to estimate the NOAEL.

APPENDIX F TABLE 2

SOURCES AND ENDPOINTS FOR NOAELS AND LOAELS FOR TERRESTRIAL WILDLIFE
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Parameters	Concentration (mg/kg-day)	Endpoint	Effect	Chronic/ Subchronic	Species	Primary Reference	Source of Reference
Volatile Organics							
Acetone	100	NOEL	systemic	subchronic	rat	USEPA, 1986	Sample et al , 1996
Acetone	500	LOAEL	systemic	subchronic	rat	USEPA, 1986	Sample et al , 1996
2-Butanone	1771	NOAEL	reproduction	chronic	rat	Cox et al., 1975	Sample et al , 1996
2-Butanone	4571	LOAEL	reproduction	chronic	rat	Cox et al , 1975	Sample et al , 1996
Carbon Disulfide	126	NOAEL	systemic	subchronic	rat	Hoffman and Klapperstuck, 1990	ATSDR, 1996
Carbon Disulfide	256	LOAEL	systemic	subchronic	rat	Hoffman and Klapperstuck, 1990	ATSDR, 1996
Chlorobenzene	27 25	NOAEL	systemic	subchronic	dog	Monsanto, 1967 & Knapp et al, 1971	IRIS, 1999
Chlorobenzene	54 5	LOAEL	systemic	subchronic	dog	Monsanto, 1967 & Knapp et al, 1971	IRIS, 1999
Methylene Chloride	5 85	NOAEL	systemic	chronic	rat	NCA, 1982	Sample et al., 1996
Methylene Chloride	50	LOAEL	systemic	chronic	rat	NCA, 1982	Sample et.al , 1996
1,1,1-Trichloroethane	1000	NOAEL	reproductive	chronic	mouse	Lane, et al , 1982	Sample et.al , 1996
Tetrachloroethene	14	NOAEL	systemic	subchronic	mouse	Buben and O'Flaherty, 1985	Sample et al , 1996
Tetrachloroethene	70	LOAEL	systemic	subchronic	mouse	Buben and O'Flaherty, 1985	Sample et al , 1996
Toluene	260	LOAEL	reproductive	chronic	mouse	Nawrot and Staples, 1989	Sample et al , 1996
Trichloroethene	70	LOAEL	hepatotoxicity	subchronic	mouse	Buben and O'Flaherty, 1985	Sample et al , 1996
Xylene	2 06	NOAEL	reproduction	chronic	mouse	Marks et al., 1982	Sample et.al , 1996
Xylene	2.58	LOAEL	reproduction	chronic	mouse	Marks et al , 1982	Sample et al , 1996
Semivolatiles Organics							
Low Molecular Weight PAHs	65 6	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
Low Molecular Weight PAHs	356	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
High Molecular Weight PAHs	0 615	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
High Molecular Weight PAHs	38 4	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
Bis(2-ethylhexyl)phthalate	18 33	NOAEL	reproductive	chronic	mouse	Lamb et al , 1987	Sample et al , 1996
Bis(2-ethylhexyl)phthalate	183 3	LOAEL	reproductive	chronic	mouse	Lamb et al , 1987	Sample et al , 1996
Butylbenzylphthalate	159	NOAEL	systemic	subchronic	rat	NTP, 1985a	IRIS, 2002
Butylbenzylphthalate	470	LOAEL	systemic	subchronic	rat	NTP, 1985a	IRIS, 2002
1,4-Dichlorobenzene	300	LOAEL	mortality	chronic	rat	NTP, 1987	ATSDR, 1998
7,12-Dimethylbenz(a)anthracene	2	NOAEL	systemic	chronic	nestling/starlings	Trust et al , 1994	
7,12-Dimethylbenz(a)anthracene	20	LOAEL	systemic	chronic	nestling/starlings	Trust et al , 1994	
2,4-Dimethylphenol	50	NOAEL	systemic	subchronic	mouse	USEPA, 1989	IRIS, 2007
2,4-Dimethylphenol	250	LOAEL	systemic	subchronic	mouse	USEPA, 1989	IRIS, 2007
Di-n-butylphthalate	550	NOAEL	reproductive	chronic	mouse	Lamb et al., 1987	Sample et al., 1996
Di-n-butylphthalate	1833	LOAEL	reproductive	chronic	mouse	Lamb et al , 1987	Sample et al , 1996
2-Methylphenol	50	NOAEL	neurotoxicity	subchronic	rat	USEPA, 1986 and 1987	IRIS, 2002
2-Methylphenol	150	LOAEL	neurotoxicity	Subchronic	rat	USEPA, 1986 and 1987	IRIS, 2002
Pentachlorophenol	8 42	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
Pentachlorophenol	22 65	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
Pentachlorophenol	6 73	NOAEL	reproduction & growth	chronic	birds	USEPA, 2007	
Pentachlorophenol	52 01	LOAEL	reproduction & growth	chronic	birds	USEPA, 2007	
Pesticides							
Aldrin	0 2	NOAEL	reproductive	chronic	rat	Treon and Cleveland, 1955	Sample et al , 1996
Aldrin	1	LOAEL	reproductive	chronic	rat	Treon and Cleveland, 1955	Sample et al , 1996
BHC (mixed isomers)	0.137	LOAEL	reproductive	chronic	mink	Bleavins et al , 1984	Sample et.al , 1996
BHC (mixed isomers)	0.563	NOAEL	reproductive	chronic	Japanese quail	Vos et al , 1971	Sample et.al , 1996
BHC (mixed isomers)	2 25	LOAEL	reproductive	chronic	Japanese quail	Vos et al , 1971	Sample et al , 1996
beta-BHC	4	NOAEL	systemic	subchronic	rat	Van Velsen et al , 1986	Sample et al , 1996
beta-BHC	20	LOAEL	systemic	subchronic	rat	Van Velsen et al , 1986	Sample et al , 1996
gamma-BHC (lindane)	8	NOAEL	reproductive	chronic	rat	Palmer et al , 1978	Sample et al , 1996
gamma-BHC (lindane)	20	LOAEL	reproductive	chronic	mallard duck	Chakravarty and Lahiri, 1986	Sample et al , 1996
Chlordane	2 14	NOAEL	mortality	chronic	red-winged blackbird	Stickel et al , 1983	Sample et al , 1996
Chlordane	10.7	LOAEL	mortality	chronic	red-winged blackbird	Stickel et al., 1983	Sample et.al , 1996
Chlordane	4 58	NOAEL	reproduction	chronic	mouse	WHO, 1984	Sample et.al , 1996
Chlordane	9 16	LOAEL	reproduction	chronic	mouse	WHO, 1984	Sample et al , 1996
4,4'-DDT	0 147	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
4,4'-DDT	5 56	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
4,4'-DDT	0 227	NOAEL	reproduction & growth	chronic	birds	USEPA, 2007	
4,4'-DDT	2 7	LOAEL	reproduction & growth	chronic	birds	USEPA, 2007	
Dieldrin	0 0709	NOAEL	reproduction & growth	chronic	birds	USEPA, 2005	

APPENDIX F TABLE 2

SOURCES AND ENDPOINTS FOR NOAELS AND LOAELS FOR TERRESTRIAL WILDLIFE
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Parameters	Concentration (mg/kg-day)	Endpoint	Effect	Chronic/ Subchronic	Species	Primary Reference	Source of Reference
Dieldrin	0 8	LOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Dieldrin	0 015	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Dieldrin	1 27	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Endosulfan	1 5	NOAEL	reproduction	subchronic	rat	Dikshith et al , 1984	ATSDR, 1993
Endosulfan	10	NOAEL	reproduction	chronic	gray partridge	Abiola, 1992	Sample et al , 1996
Endrin	0.92	LOAEL	reproduction	chronic	mouse	Good and Ware, 1969	Sample et al , 1996
Endrin	0 1035	LOAEL	reproduction	chronic	screech owl	Fleming et al , 1982	Sample et al., 1996
Heptachlor	1	LOAEL	reproduction	chronic	mink	Crum et al , 1993	Sample et al , 1996
Methoxychlor	4	NOAEL	reproduction	chronic	rat	Gray et al , 1988	Sample et al , 1996
Methoxychlor	8	LOAEL	reproduction	chronic	rat	Gray et al , 1988	Sample et al , 1996
Aroclor-1254	1 8	LOAEL	reproductive	chronic	pheasant	Dahlgren et al , 1972	Sample et al , 1996
Aroclor-1254	0 68	LOAEL	reproduction	chronic	mouse	McCoy et al , 1995	Sample et al , 1996
Inorganics							
Aluminum	109 7	NOAEL	reproductive	chronic	ringed dove	Carriere et al , 1986	Sample et al , 1996
Aluminum	19 3	LOAEL	reproductive	chronic	mouse	Ondreicka et al , 1966	Sample et al , 1996
Antimony	0 059	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Antimony	2.76	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2006	
Arsenic	2.24	NOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Arsenic	4 51	LOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Arsenic	1 04	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Arsenic	4 55	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Barium	51 8	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Barium	82 7	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Beryllium	0 532	NOAEL	Survival	chronic	rat	USEPA, 2005	
Beryllium	0 673	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Boron	28	NOAEL	reproduction	chronic	rat	Weir and Fisher, 1972	Sample et al , 1996
Boron	93.6	LOAEL	reproduction	chronic	rat	Weir and Fisher, 1972	Sample et al., 1996
Boron	28 8	NOAEL	reproduction	chronic	mallard duck	Smith and Anders 1989	Sample et al , 1996
Boron	100	LOAEL	reproduction	chronic	mallard duck	Smith and Anders 1989	Sample et al , 1996
Cadmium	1 47	NOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Cadmium	6.35	LOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Cadmium	0 77	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Cadmium	6 9	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Chromium(III)	2.66	NOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Chromium(III)	15 63	LOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Chromium(III)	2 4	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Chromium(III)	58 17	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Chromium(VI)	5 66	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Chromium(VI)	38 37	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Cobalt	7 61	NOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Cobalt	18.34	LOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Cobalt	7 33	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Cobalt	18 9	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Copper	4 05	NOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Copper	34 87	LOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Copper	5.6	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	

APPENDIX F TABLE 2

SOURCES AND ENDPOINTS FOR NOAELS AND LOAELS FOR TERRESTRIAL WILDLIFE
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Parameters	Concentration (mg/kg-day)	Endpoint	Effect	Chronic/ Subchronic	Species	Primary Reference	Source of Reference
Copper	82 7	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Cyanide	68.7	NOAEL	reproductive	chronic	rat	Tewe and Maner, 1981	Sample et al., 1996
Iron	500	LOAEL	unknown	chronic	rabbit	NAS, 1980	
Iron	1000	LOAEL	unknown	chronic	poultry	NAS, 1980	
Lead	1 63	NOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Lead	44 6	LOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Lead	4 7	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Lead	186 4	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Manganese	179	NOAEL	reproduction & growth	chronic	birds	USEPA, 2007	
Manganese	376 6	LOAEL	growth	chronic	birds	USEPA, 2007	
Manganese	51 5	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
Manganese	145 67	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
Mercury	0 064	LOAEL	reproductive	chronic	mallard duck	Heinz, 1979	Sample et al , 1996
Mercury	0 032	NOAEL	reproductive	chronic	rat	Verschuuren et al , 1976	Sample et al , 1996
Mercury	0 16	LOAEL	reproductive	chronic	rat	Verschuuren et al., 1976	Sample et al , 1996
Nickel	6 71	NOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Nickel	18.57	LOAEL	reproduction & growth	chronic	birds	USEPA, 2007	
Nickel	1 7	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
Nickel	14 77	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
Selenium	0 29	NOAEL	reproduction & growth	chronic	birds	USEPA, 2007	
Selenium	0 819	LOAEL	reproduction & growth	chronic	birds	USEPA, 2007	
Selenium	0 143	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
Selenium	0 661	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
Silver	2 02	NOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Silver	60 47	LOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Silver	6 02	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Silver	118 62	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Thallium	0 74	LOAEL	reproductive	subchronic	rat	Formigli et al , 1986	Sample et al., 1996
Vanadium	0 344	NOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Vanadium	1 686	LOAEL	reproduction & growth	chronic	birds	USEPA, 2005	
Vanadium	4 16	NOAEL	reproduction & growth	chronic	mammals	USEPA 2005	
Vanadium	9 436	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2005	
Zinc	75.4	NOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
Zinc	297 58	LOAEL	reproduction & growth	chronic	mammals	USEPA, 2007	
Zinc	66 1	NOAEL	reproduction & growth	chronic	birds	USEPA, 2007	
Zinc	171 44	LOAEL	reproduction & growth	chronic	birds	USEPA, 2007	

Notes

NOAEL = No Observed Adverse Effects Level

LOAEL = Lowest Observed Adverse Effects Level

The NOAELS and LOAELS for the following PAHs are based on the Low Molecular Weight PAH values· acenapthylene, acenaphthene, anthracene, fluoranthene, fluorene, phenanthrene, 2-methylnaphthalene, and naphthalene.

The NOAELS and LOAELS for the following PAHs are based on the High Molecular Weight PAH values benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, chrysene, dibenzo(a,h)anthracene, dibenzofuran, indeno(1,2,3-c,d)pyrene, and pyrene.

The NOAELS and LOAELS for the PAHs for birds were based on 7,12-dimethylbenz(a)anthracene

The LOAELs used for dieldrin, pentachlorophenol and several metals were calculated as the geometric mean of growth and reproduction data from the Ecological Soil Screening Levels (U.S. EPA, 2005, 2006, 2007).

The NOAELS and LOAELs for 2-methylphenol was used as a surrogate for 4-methylphenol

References for the NOAELS and LOAELs are presented in this Attachment and Titled "TRV Source and Endpoint References"

APPENDIX F

TRV SOURCE AND ENDPOINT REFERENCES

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APPENDIX F
BIOACCUMULATION FACTORS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

This attachment presents the bioaccumulation factors (BAFs) and biota-sediment accumulation factors (BSAFs) that were used in the food chain models. The following sources of BAFs and BSAFs were used in the ecological risk assessment for most of the chemicals:

- Plant and Soil Invertebrate BAFs: EPA Guidance for Developing Ecological Soil Screening Levels, Attachment 4-1 (USEPA, 2007).
- Plant BAFs (organic chemicals): Toxicity and Chemical-Specific Factors Database (ORNL, 2007).
- Plant BAFs (metals): Empirical Model for the Uptake of Inorganic Chemicals from Soil by Plants (ORNL, September 1998).
- Soil Invertebrate BAFs: Development and Validation of Bioaccumulation Models for Earthworms (Sample et al., 1998).
- Sediment Invertebrate BSAFs: Biota Sediment Accumulation Factors for Invertebrates: Review and recommendations for the Oak Ridge Reservation. (ORNL, August 1998).
- Fish BSAFs: The Incidence and Severity of Sediment Contamination in Surface Waters of the United States, Volume 1:National Sediment Quality Survey (USEPA, 2004).

Appendix F Table 3 presents the BAFs and BSAFs that were used in the food-chain models for the individual constituents that were detected in the Area A Wetland. Note that dry weight BAFs and BSAFs were used for this ERA.

The EPA Guidance for Developing Ecological Soil Screening Levels (Eco SSLs) was the source of the BAFs for some of the chemicals. The majority of these BAFs are actually regression or BAF equations that are used to calculate the tissue concentration from the soil concentration.

Appendix F Table 4 presents the derivation of the soil to earthworm BAFs for PAHs. The BAFs for the PAHs in the Eco-SSL guidance document are based on equilibrium partitioning. The

article on which the BAFs in the Eco-SSL document are based (Jager et al., 2003) indicates that the equilibrium partitioning may overestimate BAFs by up to two orders of magnitude. Two sets of BAF studies were found for PAHs based on empirical data (Appendix F Table 4). In Ma et al., (1998), BAFs were calculated for PAHs in different soil types and the BAFs were presented as values for total PAHs. The second study, reported in Beyer (1990), presented average soil and earthworm concentrations for individual PAHs. The data were used to calculate the BAFs by dividing the PAH concentrations in the earthworm samples by the PAH concentrations in the soil samples. For the conservative food chain model, 1.606 [the maximum BAF from Ma et al., (1998)] was used while the BAF of 0.609 was used for the average food chain model. These values were used because they are more conservative than those from Beyer (1990) and were based on more than one study. Although the selected BAFs are about one order of magnitude lower than those in the Eco-SSL document, the BAFs from Ma et al. (1998) were used as they likely provide a more representative assessment of bioaccumulation because they are based on empirical data.

The average BAFs for pesticides were calculated from field studies summarized in various studies. The sources of the BAF are listed in the footnotes in Appendix F Table 5. BAFs were calculated by dividing the worm concentration by the soil concentration (if the BAFs were not calculated within the study). The BAFs were either presented on a wet-weight or dry weight basis. Wet weight BAFs were derived by multiplying the dry weight BAF by 0.16, which is the percent solids of soil invertebrates (Sample et. al., 1997), while dry-weight BAFs were derived by dividing the wet weight BAF by 0.16. For this ERA, the dry-weight BAFs were used in the food chain models. The derived value for gamma-BHC was used as a surrogate BAF for beta- and delta-BHC. The derived value for endrin was used as a surrogate BAF for endrin aldehyde and endrin ketone. The derived value for chlordane was used as a surrogate BAF for alpha- and gamma-chlordane.

The BSAFs above were used to calculate chemical concentrations in the tissues of sediment invertebrates from the chemical concentrations in the sediment. BSAFs were available for some metals and PCBs for sediment invertebrates. For inorganics without BSAFs, the sediment invertebrate BSAFs were calculated using the geometric mean of the bioaccumulative inorganics that have BSAFs (Appendix F Table 3 for calculations). Invertebrate BSAFs are not available for organic chemicals, so fish BSAFs were used for the organic chemicals (except PCBs).

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APPENDIX TABLE 3

DRY WEIGHT BAFS AND/OR BSAFS FOR PLANTS, EARTHWORMS, SEDIMENT INVERTEBRATES AND FISH
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT
PAGE 1 OF 2

Chemicals	Plant BAFs[1,2,3]		Earthworm BAFs[3,4,5]		Fish BSAFs[6]		Sediment Invertebrate BSAFs[7]	
	Conservative[8]	Average[8]	Conservative[8]	Average[8]	Conservative[8]	Average[8]	Conservative[8]	Average[8]
VOLATILES								
1,1,1-Trichloroethane	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00
2-Butanone	1 00E+00	1 00E+00	1 00E+00	1.00E+00	1 00E+00	1 00E+00	1 00E+00	1.00E+00
Acetone	5 20E+00	5.20E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1.00E+00	1 00E+00
Carbon Disulfide	2 00E+00	2 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00
Chlorobenzene	9 00E-01	9.00E-01	1 00E+00	1.00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00
Methylene Chloride	6 70E+00	6.70E+00	1 00E+00	1.00E+00	1 00E+00	1 00E+00	1.00E+00	1 00E+00
Tetrachloroethene	1 20E+00	1 20E+00	1 00E+00	1.00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00
Toluene	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00
Trichloroethene	1 50E+00	1 50E+00	1 00E+00	1 00E+00	1.00E+00	1 00E+00	1 00E+00	1.00E+00
Total Xylenes	4 60E+00	4 60E+00	1.00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00
Semivolatile Organics								
1,4-Dichlorobenzene	4 10E-01	4 10E-01	1 00E+00	1 00E+00	1 00E+00	1.00E+00	1 00E+00	1 00E+00
2,4-Dimethylphenol	1.80E+00	1 80E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00
2-Methylnaphthalene	2 10E+00	2 10E+00	1 00E+00	1 00E+00	1.00E+00	1 00E+00	1 00E+00	1.00E+00
2-Methylphenol	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00
4-Methylphenol	1.00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00
Acenaphthene	Eco-SSL	Eco-SSL	1 61E+00	6.09E-01	2 90E-01	2.90E-01	1 00E+00	1 00E+00
Acenaphthylene	Eco-SSL	Eco-SSL	1 61E+00	6.09E-01	2 90E-01	2 90E-01	1 00E+00	1 00E+00
Anthracene	Eco-SSL	Eco-SSL	1 61E+00	6 09E-01	2 90E-01	2 90E-01	1 00E+00	1 00E+00
Benzo(a)anthracene	Eco-SSL	Eco-SSL	1 61E+00	6 09E-01	2 90E-01	2 90E-01	1 00E+00	1 00E+00
Benzo(a)pyrene	Eco-SSL	Eco-SSL	1 61E+00	6 09E-01	2 90E-01	2 90E-01	1 00E+00	1 00E+00
Benzo(b)fluoranthene	Eco-SSL	Eco-SSL	1 61E+00	6 09E-01	2 90E-01	2 90E-01	1.00E+00	1 00E+00
Benzo(g,h,i)perylene	Eco-SSL	Eco-SSL	1 61E+00	6 09E-01	2 90E-01	2 90E-01	1 00E+00	1 00E+00
Benzo(k)Fluoranthene	Eco-SSL	Eco-SSL	1 61E+00	6 09E-01	2 90E-01	2 90E-01	1 00E+00	1.00E+00
Benzoic acid	3 00E+00	3 00E+00	1 00E+00	1.00E+00	1 00E+00	1.00E+00	1 00E+00	1 00E+00
Bis(2-ethylhexyl)phthalate	5.50E-02	5 50E-02	1 00E+00	1.00E+00	1 00E+00	1 00E+00	1.00E+00	1.00E+00
Butyl benzyl Phthalate	5 50E-02	5 50E-02	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00
Carbazole	2 40E-01	2 40E-01	1 61E+00	6 09E-01	2 90E-01	2.90E-01	1 00E+00	1 00E+00
Chrysene	Eco-SSL	Eco-SSL	1 61E+00	6 09E-01	2 90E-01	2.90E-01	1 00E+00	1 00E+00
Dibenzo(a,h)Anthracene	Eco-SSL	Eco-SSL	1 61E+00	6 09E-01	2 90E-01	2 90E-01	1 00E+00	1 00E+00
Dibenzofuran	1.50E-01	1 50E-01	1 61E+00	6 09E-01	1 00E+00	1 00E+00	1 00E+00	1 00E+00
Di-n-butyl Phthalate	5.50E-02	5 50E-02	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00	1 00E+00
Fluoranthene	Eco-SSL	Eco-SSL	1 61E+00	6 09E-01	2 90E-01	2 90E-01	1.00E+00	1 00E+00
Fluorene	1 10E-01	1.10E-01	1 61E+00	6 09E-01	2 90E-01	2 90E-01	1 00E+00	1 00E+00
Indeno(1,2,3-cd)pyrene	Eco-SSL	Eco-SSL	1 61E+00	6 09E-01	2 90E-01	2 90E-01	1 00E+00	1 00E+00
Naphthalene	4.60E-01	4 60E-01	1 61E+00	6 09E-01	2 90E-01	2 90E-01	1 00E+00	1 00E+00
Pentachlorophenol	1 40E-02	1 40E-02	1 00E+00	1 00E+00	1 00E+00	1.00E+00	1 00E+00	1 00E+00
Phenanthrene	Eco-SSL	Eco-SSL	1 61E+00	6.09E-01	2 90E-01	2 90E-01	1 00E+00	1 00E+00
Pyrene	Eco-SSL	Eco-SSL	1 61E+00	6 09E-01	2 90E-01	2 90E-01	1 00E+00	1 00E+00
Pesticides/ PCBs								
4,4'-DDD	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	2 80E-01	2 80E-01	1 00E+00	1 00E+00
4,4'-DDE	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	7.70E+00	7 70E+00	1 00E+00	1 00E+00
4,4'-DDT	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	1 67E+00	1 67E+00	1 00E+00	1 00E+00
Aldrin	6 90E-01	6 90E-01	3 30E+00	3 30E+00	1 80E+00	1 80E+00	1 00E+00	1 00E+00
Alpha-Chlordane	2 50E-02	2 50E-02	5 00E+00	5 00E+00	4 77E+00	4.77E+00	1 00E+00	1 00E+00
Aroclor-1260	2 90E-03	2 90E-03	1 59E+01	6 67E+00	1 85E+00	1 85E+00	6 41E+01	3 62E+01
Dieldrin	8 20E-02	8 20E-02	6 64E+00	6 64E+00	1 80E+00	1 80E+00	1 00E+00	1 00E+00
Gamma-Chlordane	2 50E-02	2 50E-02	5 00E+00	5.00E+00	2 22E+00	2 22E+00	1 00E+00	1 00E+00
Endosulfan I	3.30E-01	3.30E-01	1 00E+00	1 00E+00	1 80E+00	1 80E+00	1 00E+00	1 00E+00
Endosulfan II	3 30E-01	3 30E-01	1 00E+00	1 00E+00	1 80E+00	1 80E+00	1 00E+00	1 00E+00
Endosulfan Sulfate	3 30E-01	3 30E-01	1 00E+00	1 00E+00	1 80E+00	1 80E+00	1 00E+00	1 00E+00
Endrin	8 20E-02	8 20E-02	3 60E+00	3 60E+00	1 80E+00	1 80E+00	1 00E+00	1 00E+00
Endrin Aldehyde	8 20E-02	8 20E-02	3.60E+00	3 60E+00	1 80E+00	1 80E+00	1 00E+00	1 00E+00
Endrin Ketone	8 20E-02	8.20E-02	3 60E+00	3 60E+00	1 80E+00	1 80E+00	1 00E+00	1 00E+00
Heptachlor	1 20E-01	1.20E-01	1 00E+01	1 00E+01	1 80E+00	1.80E+00	1 00E+00	1 00E+00
Heptachlor Epoxide	2 80E-02	2.80E-02	3 00E+00	3 00E+00	1 80E+00	1 80E+00	1 00E+00	1 00E+00
Methoxychlor	1.10E-01	1 10E-01	1 00E+00	1 00E+00	1 80E+00	1 80E+00	1 00E+00	1 00E+00
beta-BHC	1 80E-01	1 80E-01	5 00E+00	5.00E+00	1 80E+00	1 80E+00	1 00E+00	1 00E+00
delta-BHC	9.00E-01	9 00E-01	5 00E+00	5 00E+00	1.80E+00	1 80E+00	1 00E+00	1 00E+00
gamma-BHC (Lindane)	2 70E-01	2 70E-01	5 00E+00	5 00E+00	1 80E+00	1 80E+00	1 00E+00	1 00E+00

APPENDIX F TABLE 3

DRY WEIGHT BAFS AND/OR BSAFS FOR PLANTS, EARTHWORMS, SEDIMENT INVERTEBRATES AND FISH
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

	Plant BAFs[1,2,3]		Earthworm BAFs[3,4,5]		Fish BSAFs[6]		Sediment Invertebrate BSAFs[7]	
Chemicals	Conservative[8]	Average[8]	Conservative[8]	Average[8]	Conservative[8]	Average[8]	Conservative[8]	Average[8]
Inorganics								
Aluminum	5 00E-03	2 87E-03	1.18E-01	4 30E-02	1 00E+00	1.00E+00	2 12E+00	4 22E-01
Antimony	1.14E-02	1 02E-02	1 00E+00	1 00E+00	1 00E+00	1.00E+00	2.12E+00	4 22E-01
Arsenic	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	1 00E+00	1 00E+00	6 90E-01	1 43E-01
Barium	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	1 00E+00	1 00E+00	2 12E+00	4.22E-01
Beryllium	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	1 00E+00	1 00E+00	2 12E+00	4 22E-01
Boron	1 00E+00	1.00E+00	1.00E+00	1 00E+00	1 00E+00	1.00E+00	2.12E+00	4 22E-01
Cadmium	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	1 00E+00	1 00E+00	7 99E+00	6.00E-01
Chromium	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	1 00E+00	1 00E+00	4 68E-01	1 00E-01
Cobalt	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	1 00E+00	1 00E+00	2 12E+00	4 22E-01
Copper	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	1 00E+00	1.00E+00	5 25E+00	1 56E+00
Cyanide	1 80E+00	1 00E+00	1.00E+00	1 00E+00	1 00E+00	1 00E+00	2 12E+00	4.22E-01
Iron	1 00E-02	4 25E-03	7 80E-02	3 60E-02	1 00E+00	1.00E+00	2 12E+00	4 22E-01
Lead	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	1 00E+00	1 00E+00	6 07E-01	7 10E-02
Manganese	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	1 00E+00	1 00E+00	2 12E+00	4 22E-01
Mercury	5 00E+00	6 52E-01	Regression	Regression	1 00E+00	1 00E+00	2 87E+00	1 14E+00
Nickel	Eco-SSL	Eco-SSL	4.73E+00	1 06E+00	1 00E+00	1 00E+00	2 32E+00	4 86E-01
Selenium	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	1 00E+00	1 00E+00	2 12E+00	4 22E-01
Silver	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	1 00E+00	1 00E+00	2 12E+00	4 22E-01
Thallium	1 00E+00	1 00E+00	1 00E+00	1.00E+00	1 00E+00	1 00E+00	2 12E+00	4 22E-01
Vanadium	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	1 00E+00	1.00E+00	2.12E+00	4.22E-01
Zinc	Eco-SSL	Eco-SSL	Eco-SSL	Eco-SSL	1 00E+00	1 00E+00	7 53E+00	1 94E+00

Notes:
BAF - Bioaccumulation Factor
BSAF - Biota Sediment Accumulation Factor
Eco-SSL - USEPA Ecological Screening Level
1 - ORNL (2007) for organics, only one value is available for conservative and average exposures
2 - ORNL, (September, 1998) for inorganics, conservative value is 90th percentile, average value is median value
3 - Where "Eco-SSL" is given, values were calculated using regression of BAF equations from USEPA (2007), Attachment 4-1, Tables 4a (inorganics) and 4b (organics)
4 - Sample et al (February, 1998) for aluminum (Table C 1), iron (Table C.1), mercury (Table 4), and nickel (Table 11)
5 - See Attachment Tables F-4 and F-5 for the derivation of the PAH and pesticide BAFs, respectively
6 - U.S. EPA, November 2004, only one value is available for conservative and average exposures
These were used as surrogates for invertebrate BASFs for the organics, expect Aroclor-1260.
7 - ORNL (August, 1998), conservative value is 90th percentile, average value is median value
8 - Conservative and average refers to the exposure scenarios for which the uptake factors are used

Default value of 1 is assigned to parameters without uptake factors
References and rationale for the BAFs are provided in this Attachment titled "Bioaccumulation Factors"
The sediment invertebrate BSAFs for inorganics without BSAFs were calculated using the geometric mean of the values for inorganics with BSAFs as follows

	Sediment Invertebrate BSAFs[7]	
Chemicals	Conservative[8]	Average[8]
arsenic	6.90E-01	1 43E-01
cadmium	7.99E+00	6 00E-01
chromium	4 68E-01	1.00E-01
copper	5.25E+00	1 56E+00
lead	6.07E-01	7 10E-02
mercury	2 87E+00	1 14E+00
nickel	2 32E+00	4 86E-01
zinc	7 53E+00	1 94E+00
Geometric mean	**2.12E+00**	**4.22E-01**

APPENDIX F TABLE 4

SOIL TO EARTHWORM BIOACCUMULATION FACTORS FOR PAHS
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Soil	Wet-Weight BAFs[1]	Dry-Weight BAFs[2]	Soil Type
OT1	0.081	0.506	Silty clay loam
OT2	0.026	0.163	Light sandy loam
OT3	0.105	0.656	Silty clay loam
OT4	0.257	1.606	Silty clay loam
OT5	0.192	1.200	Silty clay loam
OT6	0.091	0.569	Silty clay loam
GP1	0.069	0.431	Silty clay loam
GP2	0.072	0.450	Silty clay loam
GP3	0.062	0.388	Silty clay loam
GP4	0.11	0.688	Silty clay
GP5	0.042	0.263	Silty clay
GP6	0.062	0.388	Silty clay
Minimum BAF	**0.026**	**0.163**	
Maximum BAF	**0.257**	**1.606**	
Average BAF	**0.097**	**0.609**	

Notes:
Source of data is Ma et al., (1998)
1 - BAFs from the study are based on wet weight and normalized to the percent of organic carbon and percent lipids.
2 - These BAFs were calculated by dividing the wet weight BAF by 0.16 (percent solids of an earthworm)

	Earthworm Bioaccuumulation Factors[1]			
Chemical	**Soil Concentration (mg/kg)**	**Earthworm Concentration (mg/kg)**	**BAF (dry weight)**	**BAF (wet weight)[2]**
Acenaphthylene	ND	ND	ND	ND
Anthanthrene	1.2	0.11	0.092	0.015
Anthracene	0.92	0.047	0.051	0.008
Benzo(a)anthracene	2	0.25	0.13	0.020
Benzo(a)pyrene	3.8	1.3	0.34	0.055
Benzo(b)fluoranthene	2.6	0.83	0.32	0.051
Benzo(e)pryene	2.1	0.91	0.43	0.069
Benzo(g,h,i)perylene	4.5	1.1	0.24	0.039
Benzo(k)fluoranthene	1.5	0.38	0.25	0.041
Chrysene	2	0.35	0.18	0.028
Dibenzo(a,i)pyrene	1.4	0.44	0.31	0.050
Dibenzo(a,j)anthracene	0.87	0.32	0.37	0.059
Fluoranthene	2.4	0.19	0.079	0.013
Fluorene	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	3.1	1.3	0.42	0.067
Naphthalene	ND	ND	ND	ND
Perylene	1.2	0.3	0.25	0.040
Phenanthrene	2.3	0.28	0.12	0.019
Pyrene	2.5	0.23	0.092	0.015
Triphenylene	1.3	0.87	0.67	0.107
		Minimum BAF	**0.051**	**0.0082**
		Maximum BAF	**0.669**	**0.107**
		Average BAF	**0.256**	**0.041**

Notes:
ND = No data available
1 - Source of data is Table 25 in Beyer (1990)
2 - Wet weight BAF was calculated by multiplying the dry weight BAF by 0.16 (percent solids of an earthworm)

APPENDIX F TABLE 5

SOIL TO EARTHWORM BIOACCUMULATION FACTORS FOR PESTICIDES
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Parameter	Study Values					Calculated Values		Reference	Comments
	Worm Concentration		Soil Conc. (dry weight)	Dry Weight BAF	Wet Weight BAF	Final Dry Weight[1] BAF	Final Wet Weight[2] BAF		
	Dry Weight	Wet Weight							
Dieldrin	NA	NA	NA	8	NA	8	1.28	1	soil type unknown (11-year field study)
	NA	NA	NA	2.4	NA	2.4	0.38	2	compost (lab) (17 ppm dieldrin in compost)
	NA	NA	NA	5.6	NA	5.6	0.90	2	compost (lab) (17 ppm dieldrin in compost)
	NA	18.4	25	NA	0.74	4.6	0.7	5	compost (20-day lab study)
	NA	24.4	25	NA	0.98	6.1	1.0	5	compost (20-day lab study)
	NA	4.6	10	NA	0.46	2.9	0.5	6	90-day lab study
	NA	9.7	30	NA	0.32	2.0	0.3	6	90-day lab study
	NA	12.4	50	NA	0.25	1.6	0.2	6	90-day lab study
	NA	13.9	100	NA	0.14	0.87	0.1	6	90-day lab study
	NA	NA	NA	NA	0.97-4	6.16-25	0.97-4	4	agricultural soil (1.36 ppm total aldrin and dieldrin in soil)
Average dry/wet weight BAF from field studies[3]				***NA***	***NA***	***6.64***	***1.06***		
gamma-BHC	NA	NA	NA	5	1.5-4.2	5	1.5-4.2	4	agricultural soil (0.004 ppm gamma-BHC in soil)
Average dry/wet weight BAF from field studies[3]				***NA***	***NA***	***5***	***2.85***		
Heptachlor	NA	NA	NA	10	NA	10	1.60	4	soil type unknown (11-year field study)
Average dry/wet weight BAF from field studies[3]				***NA***	***NA***	***10***	***1.6***		
Aldrin	NA	NA	NA	3.3	NA	3.3	0.528	3	from data collected in 7 agricultural fields
Chlordane	NA	NA	NA	5	NA	5.0	0.8	3	from data collected in 7 agricultural fields
Endrin	NA	NA	NA	3.6	NA	3.6	0.576	3	from data collected in 26 agricultural fields
Heptachlor epoxide	NA	NA	NA	3	NA	3.0	0.48	3	from data collected in 9 agricultural fields

Notes:

BAF - bioaccumulation factor = worm concentration/soil concentration

NA - Not applicable

The percent solids of earthworms is assummed to be 0.16 [Sample et al., 1997])

1 - The calculated dry weight BAF was either obtained directly from the study or was calculated by dividing the wet weight BAF by 0.16

2 - The calculated wet weight BAF was either obtained directly from the study or was calculated by multiplying the dry weight BAF by 0.16

Reference

1 - Beyer and Gish, 1980 and Beyer and Krynitsky, 1989

2 - Davis, 1971

3 - Gish, 1970

4 - Wheatly and Hardman, 1968

5 - Jeffries and Davis, 1968

6 - Venter and Reinecke, 1985

APPENDIX G

FOOD CHAIN MODEL CALCULATION SHEETS

CHEMICAL CONCENTRAT[illegible] SURFACE SOIL AND TISSUE
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Surface Soil Concentrations (mg/kg)				Surface Water Concentrations (mg/L)		Earthworm Bioaccumulation Factors		Earthworm Concentrations (mg/kg)		Plant Bioaccumulation Factors		Plant Concentrations (mg/kg)	
	Maximum Detection	Average All	Average of Positive Detections	Average [1]	Maximum Detection	Average Concentration	Conservative	Average	Maximum Detection	Average	Conservative	Average	Maximum Detection	Average
Volatile Organics														
2-BUTANONE	3 10E-01	5 02E-02	1 34E-01	5.02E-02	0 00E+00	0 00E+00	1 00E+00	1 00E+00	3 10E-01	5 02E-02	1 00E+00	1 00E+00	3 10E-01	5 02E-02
ACETONE	8 50E-01	1 81E-01	3 20E-01	1 81E-01	0 00E+00	0 00E+00	1 00E+00	1 00E+00	8 50E-01	1 81E-01	5 20E+00	5 20E+00	4 42E+00	9 42E-01
CARBON DISULFIDE	8 00E-03	5.72E-03	7 00E-03	5 72E-03	0 00E+00	0 00E+00	1 00E+00	1 00E+00	8 00E-03	5 72E-03	2 00E+00	2 00E+00	1 60E-02	1 14E-02
METHYLENE CHLORIDE	6 00E-03	4 22E-03	4 33E-03	4 22E-03	0 00E+00	0 00E+00	1 00E+00	1 00E+00	6 00E-03	4 22E-03	6 70E+00	6 70E+00	4 02E-02	2 83E-02
TETRACHLOROETHENE	7 00E-03	5 42E-03	7 00E-03	5 42E-03	0 00E+00	0 00E+00	1 00E+00	1 00E+00	7 00E-03	5 42E-03	1 20E+00	1 20E+00	8 40E-03	6 50E-03
TRICHLOROETHENE	4 00E-03	5 33E-03	4 00E-03	4.00E-03	0 00E+00	0 00E+00	1 00E+00	1 00E+00	4 00E-03	4 00E-03	1 50E+00	1 50E+00	6 00E-03	6 00E-03
Semivolatile Organics														
ACENAPHTHENE	2 70E-01	3 11E-01	2 70E-01	2 70E-01	0 00E+00	0 00E+00	1 61E+00	6 09E-01	4 34E-01	1 64E-01	Regression or BAF from Eco SSL		1 18E-02	1 18E-02
ACENAPHTHYLENE	1 20E-01	2 20E-01	8 53E-02	8 53E-02	0 00E+00	0 00E+00	1 61E+00	6 09E-01	1 93E-01	5 20E-02	Regression or BAF from Eco SSL		5 95E-02	4 55E-02
ANTHRACENE	7 90E-02	2 26E-01	6 55E-02	6 55E-02	0 00E+00	0 00E+00	1 61E+00	6 09E-01	1 27E-01	3 99E-02	Regression or BAF from Eco SSL		5 16E-02	4 46E-02
BENZO(A)ANTHRACENE	4 00E-01	2 22E-01	2 14E-01	2 22E-01	0 00E+00	0 00E+00	1 61E+00	6 09E-01	6 43E-01	1 35E-01	Regression or BAF from Eco SSL		3 87E-02	2 73E 02
BENZO(A)PYRENE	3 90E-01	2 91E-01	2 09E-01	2.91E-01	0 00E+00	0 00E+00	1 61E+00	6 09E-01	6 26E-01	1 77E-01	Regression or BAF from Eco SSL		5 08E-02	3 81E 02
BENZO(B)FLUORANTHENE	5 50E-01	3 22E-01	2 59E-01	3 22E-01	0 00E+00	0 00E+00	1 61E+00	6 09E-01	8 83E-01	1 96E-01	Regression or BAF from Eco SSL		1 71E 01	9 99E 02
BENZO(G,H,I)PERYLENE	2 60E-01	3 12E-01	1 55E-01	1 55E-01	0 00E+00	0 00E+00	1 61E+00	6 09E-01	4 18E-01	9 41E-02	Regression or BAF from Eco SSL		8 01E-02	4 33E 02
BENZO(K)FLUORANTHENE	3 90E-01	2 71E-01	2 25E-01	2 71E-01	0 00E+00	0 00E+00	1 61E+00	6 09E-01	6 26E-01	1 65E-01	Regression or BAF from Eco SSL		5 14E-02	3 76E-02
BENZOIC ACID	2 20E-01	1 19E+00	1 70E-01	1.70E-01	0 00E+00	0 00E+00	1 00E+00	1 00E+00	2 20E-01	1 70E-01	3 00E+00	3 00E+00	6 60E-01	5 10E-01
BIS(2-ETHYLHEXYL)PHTHALATE	1 30E+00	4 45E-01	4 82E-01	4 45E-01	0 00E+00	0 00E+00	1 00E+00	1 00E+00	1 30E+00	4 45E-01	5 50E-02	5 50E-02	7 15E-02	2 45E 02
CHRYSENE	6 00E-01	3 27E-01	3 08E-01	3 27E-01	0 00E+00	0 00E+00	1 61E+00	6 09E-01	9 64E-01	1 99E-01	Regression or BAF from Eco SSL		4 92E-02	3 43E-02
DIBENZO(A,H)ANTHRACENE	3 20E-02	2 82E-01	3 20E-02	3 20E-02	0 00E+00	0 00E+00	1 61E+00	6 09E-01	5 14E-02	1 95E-02	Regression or BAF from Eco SSL		4 16E-03	4 16E-03
FLUORANTHENE	8 90E-01	3 42E-01	3 42E-01	3.42E-01	0 00E+00	0 00E+00	1 61E+00	6 09E-01	1 43E+00	2 08E-01	Regression or BAF from Eco SSL		4 45E-01	1 71E-01
INDENO(1,2,3-CD)PYRENE	2 70E-01	2 86E-01	2 05E-01	2 05E-01	0 00E+00	0 00E+00	1 61E+00	6 09E-01	4 34E-01	1 25E-01	Regression or BAF from Eco SSL		2 97E-02	2 26E-02
PHENANTHRENE	3 40E-01	2 69E-01	2 23E-01	2 69E-01	0 00E+00	0 00E+00	1 61E+00	6 09E-01	5 46E-01	1 64E-01	Regression or BAF from Eco SSL		4 34E-01	3 75E-01
PYRENE	8 10E-01	3 54E-01	3 54E-01	3 54E-01	0 00E+00	0 00E+00	1 61E+00	6 09E-01	1 30E+00	2 15E-01	Regression or BAF from Eco SSL		5 83E-01	2 55E-01
Pesticides/PCBs														
4,4'-DDD	6 90E-02	2 55E-02	4 97E-02	2 55E-02	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		4 95E-01	2 47E-01	Regression or BAF from Eco SSL		1 09E-02	5 13E-03
4,4'-DDE	1 00E-02	1 29E-02	7 60E-03	7 60E-03	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		2 07E-01	1 62E-01	Regression or BAF from Eco SSL		2 54E-03	2 06E-03
4,4'-DDT	2 80E-02	1 39E-02	2 80E-02	1 39E-02	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		3 75E-01	2 04E-01	Regression or BAF from Eco SSL		5 50E-03	3 25E-03
ALPHA-CHLORDANE	3 00E-03	5 44E-02	3 00E-03	3 00E-03	0 00E+00	0 00E+00	5 00E+00	5 00E+00	1 50E-02	1 50E-02	2 50E-02	2 50E-02	7 50E-05	7 50E-05
AROCLOR-1260	3 70E-01	1 36E-01	1 84E-01	1.36E-01	0 00E+00	0 00E+00	1 59E+01	6 67E+00	5 89E+00	9 09E-01	2 90E-03	2 90E-03	1 07E-03	3 95E-04
GAMMA-CHLORDANE	2 20E-03	5 43E-02	2 20E-03	2.20E-03	0 00E+00	0 00E+00	5 00E+00	5 00E+00	1 10E-02	1 10E-02	2 50E-02	2 50E-02	5 50E-05	5 50E-05
Inorganics														
ALUMINUM	1 79E+04	1 40E+04	1 40E+04	1 40E+04	0 00E+00	0 00E+00	1 18E-01	4 30E-02	2 11E+03	6 01E+02	5 00E-03	2 87E-03	8 95E+01	4 01E+01
ARSENIC	1 51E+01	7 16E+00	7 16E+00	7 16E+00	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		1 64E+00	9 69E-01	Regression or BAF from Eco SSL		5 67E-01	2 69E-01
BARIUM	9 38E+01	5 41E+01	5 41E+01	5.41E+01	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		8 54E+00	4 92E+00	Regression or BAF from Eco SSL		1 46E+01	8 44E+00
BERYLLIUM	1 80E+00	1 01E+00	1 11E+00	1.01E+00	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		8 10E-02	4 52E-02	Regression or BAF from Eco SSL		9 01E-01	5 87E-01
CADMIUM	7 20E+00	3 76E+00	4 21E+00	3 76E+00	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		3 98E+01	2 37E+01	Regression or BAF from Eco SSL		1 83E+00	1 28E+00
CHROMIUM	1 02E+02	5 85E+01	5 85E+01	5 85E+01	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		3 12E+01	1 79E+01	Regression or BAF from Eco SSL		4 18E+00	2 40E+00
COBALT	1 27E+01	9 16E+00	9 16E+00	9 16E+00	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		1 55E+00	1 12E+00	Regression or BAF from Eco SSL		9 53E-02	6 87E-02
COPPER	6 41E+01	3 60E+01	3 60E+01	3 60E+01	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		3 30E+01	1 85E+01	Regression or BAF from Eco SSL		1 00E+01	8 01E+00
IRON	3 08E+04	2 33E+04	2 33E+04	2 33E+04	0 00E+00	0 00E+00	7 80E-02	3 60E-02	2 40E+03	8 39E+02	1 00E 02	4 25E-03	3 08E+02	9 91E+01
LEAD	1 28E+02	4 24E+01	4 24E+01	4.24E+01	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		4 03E+01	1 65E+01	Regression or BAF from Eco SSL		4 03E+00	2 17E+00
MANGANESE	3 76E+02	2 22E+02	2 22E+02	2 22E+02	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		2 54E+01	1 77E+01	Regression or BAF from Eco SSL		2 97E+01	1 76E+01
MERCURY	6 90E-01	2 47E-01	4 73E-01	2.47E-01	0 00E+00	0 00E+00	Regression - Sample et al , (1998)		9 54E-01	6 75E-01	5 00E+00	6 52E-01	3 45E+00	1 61E-01
NICKEL	2 69E+01	2 13E+01	2 13E+01	2 13E+01	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		1 27E+02	2 26E+01	Regression or BAF from Eco SSL		1 27E+00	1 07E+00
SELENIUM	2 40E+00	9 20E-01	1 35E+00	9 20E-01	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		1 76E+00	8 73E-01	Regression or BAF from Eco SSL		1 34E+00	4 63E-01
SILVER	4 50E+00	1 52E+00	3 48E+00	1.52E+00	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		9 20E+00	3 10E+00	Regression or BAF from Eco SSL		6 30E-02	2 12E-02
VANADIUM	7 50E+01	5 08E+01	5 08E+01	5 08E+01	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		3 15E+00	2 13E+00	Regression or BAF from Eco SSL		3 64E-01	2 46E-01
ZINC	1 25E+02	7 01E+01	7 01E+01	7 01E+01	0 00E+00	0 00E+00	Regression or BAF from Eco SSL		4 17E+02	3 45E+02	Regression or BAF from Eco SSL		7 01E+01	5 09E+01

1 - If the average of all value is the greater than the maximum detection, the average of the positive detections was used as the average value

CHEMICAL CONCENTRATIONS IN SEDIMENT AND TISSUE
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Sediment Concentrations (mg/kg)				Surface Water Concentrations (mg/L)		Invertebrate Bioaccumulation Factors		Invertebrate Concentrations (mg/kg)	
	Maximum Detection	Average All	Average of Positive Detections	Average [1]	Maximum Detection	Average Concentration	Conservative	Average	Maximum Detection	Average
Volatile Organics										
1,1,1-TRICHLOROETHANE	1.30E-02	9 34E-03	1 30E-02	9 34E-03	0 00E+00	0 00E+00	1 00E+00	1 00E+00	1 25E-02	8 96E-03
2-BUTANONE	1 40E+00	7.82E-02	4 24E-01	7 82E-02	0.00E+00	0 00E+00	1 00E+00	1 00E+00	1 34E+00	7 50E-02
ACETONE	7 20E-01	6 90E-02	2.94E-01	6 90E-02	0 00E+00	0 00E+00	1 00E+00	1 00E+00	6 91E-01	6 62E-02
CARBON DISULFIDE	1 80E-02	9 27E-03	1 24E-02	9 27E-03	0 00E+00	0 00E+00	1 00E+00	1 00E+00	1 73E-02	8 90E-03
CHLOROBENZENE	1 40E-02	8 92E-03	6 33E-03	8 92E-03	0 00E+00	0 00E+00	1 00E+00	1 00E+00	1 34E-02	8 56E-03
METHYLENE CHLORIDE	2 20E-02	1 31E-02	9 44E-03	1 31E-02	0 00E+00	0 00E+00	1 00E+00	1 00E+00	2 11E-02	1 26E-02
TETRACHLOROETHENE	1 60E-02	9 24E-03	9 80E-03	9 24E-03	0 00E+00	0 00E+00	1 00E+00	1 00E+00	1 54E-02	8 87E-03
TOLUENE	6 00E-03	8.16E-03	3 93E-03	3 93E-03	0 00E+00	0 00E+00	1 00E+00	1 00E+00	5 76E-03	3 77E-03
TOTAL XYLENES	3 00E-03	8 95E-03	3 00E-03	3 00E-03	0 00E+00	0 00E+00	1 00E+00	1 00E+00	2 88E-03	2 88E-03
TRICHLOROETHENE	2 20E-02	9 70E-03	1 05E-02	9 70E-03	0 00E+00	0 00E+00	1 00E+00	1 00E+00	2 11E-02	9 30E-03
Semivolatile Organics										
1,4-DICHLOROBENZENE	4 20E-02	6 05E-01	4 20E-02	4.20E-02	0 00E+00	0 00E+00	1 00E+00	1 00E+00	4 03E-02	4 03E-02
2,4-DIMETHYLPHENOL	2 10E-01	6.10E-01	2 10E-01	2 10E-01	0 00E+00	0 00E+00	1 00E+00	1 00E+00	2 02E-01	2 02E-01
2-METHYLNAPHTHALENE	5 50E-02	4 92E-01	3.31E-02	3 31E-02	0 00E+00	0 00E+00	1 00E+00	1 00E+00	5 28E-02	3 18E-02
4-METHYLPHENOL	4 30E-02	6 08E-01	4 30E-02	4 30E-02	0 00E+00	0 00E+00	1 00E+00	1 00E+00	4 13E-02	4 13E 02
ACENAPHTHENE	3 80E-01	4 59E-01	7 04E 02	7 04E-02	0 00E+00	0 00E+00	2 90E-01	2 90E-01	1 06E 01	1 96E-02
ACENAPHTHYLENE	3 90E-01	4 64E-01	6.50E-02	6 50E-02	0 00E+00	0 00E+00	2 90E-01	2 90E-01	1 09E-01	1 81E-02
ANTHRACENE	2 40E+00	4.16E-01	1 69E-01	4 16E-01	0 00E+00	0 00E+00	2 90E-01	2 90E-01	6 68E-01	1 16E-01
BENZO(A)ANTHRACENE	2 70E+01	1 11E+00	1 06E+00	1 11E+00	0 00E+00	0 00E+00	2 90E-01	2 90E-01	7 51E+00	3 09E-01
BENZO(A)PYRENE	3 50E+01	1.28E+00	1 29E+00	1 28E+00	0 00E+00	0 00E+00	2 90E-01	2 90E-01	9 74E+00	3 57E-01
BENZO(B)FLUORANTHENE	5 50E+01	1 65E+00	1 75E+00	1 65E+00	0 00E+00	0 00E+00	2 90E-01	2 90E-01	1 53E+01	4.58E-01
BENZO(G,H,I)PERYLENE	2 30E+01	9 42E-01	8 69E-01	9.42E-01	0 00E+00	0 00E+00	2 90E-01	2 90E-01	6 40E+00	2 62E-01
BENZO(K)FLUORANTHENE	4 50E+01	1 39E+00	1 55E+00	1 39E+00	0 00E+00	0 00E+00	2 90E-01	2 90E-01	1 25E+01	3.86E-01
BENZOIC ACID	3 20E+01	2 86E+00	3.74E+00	2.86E+00	0 00E+00	0 00E+00	1 00E+00	1 00E+00	3 07E+01	2 74E+00
BIS(2-ETHYLHEXYL)PHTHALATE	3 50E+00	7 18E-01	2 30E+00	7 18E-01	0 00E+00	0 00E+00	1 00E+00	1 00E+00	3 36E+00	6 89E-01
BUTYL BENZYL PHTHALATE	3.90E-01	5 82E-01	1 02E-01	1 02E-01	0 00E+00	0 00E+00	1 00E+00	1 00E+00	3 74E-01	9 76E-02
CARBAZOLE	6 60E-01	2.42E-01	1 38E-01	2 42E-01	0 00E+00	0 00E+00	2 90E-01	2 90E-01	1 84E-01	6 72E-02
CHRYSENE	4 20E+01	1 46E+00	1 47E+00	1 46E+00	0 00E+00	0.00E+00	2.90E-01	2 90E-01	1 17E+01	4 07E-01
DIBENZO(A,H)ANTHRACENE	1.40E+00	5 17E-01	2 50E-01	5 17E-01	0.00E+00	0 00E+00	2 90E-01	2 90E-01	3 90E-01	1 44E-01
DIBENZOFURAN	1 00E+00	4.96E-01	1.52E-01	4 96E-01	0 00E+00	0 00E+00	1 00E+00	1 00E+00	9 60E-01	4.76E-01
DI-N-BUTYL PHTHALATE	1 80E-01	6 22E-01	5 23E-02	5 23E-02	0 00E+00	0 00E+00	1 00E+00	1 00E+00	1 73E-01	5.02E-02
FLUORANTHENE	8 00E+01	2 31E+00	2 41E+00	2.31E+00	0 00E+00	0.00E+00	2.90E-01	2 90E-01	2.23E+01	6 43E-01
FLUORENE	1 00E+00	3.92E-01	1.01E-01	3 92E-01	0.00E+00	0 00E+00	2 90E-01	2 90E-01	2 78E-01	1 09E-01
INDENO(1,2,3-CD)PYRENE	2 30E+01	9 80E-01	8 91E-01	9.80E-01	0 00E+00	0 00E+00	2 90E-01	2 90E-01	6 40E+00	2 73E-01
NAPHTHALENE	1.60E-01	4.84E-01	5 13E-02	5 13E-02	0 00E+00	0 00E+00	2 90E-01	2 90E-01	4 45E-02	1 43E-02
PENTACHLOROPHENOL	2 40E-01	2 45E+00	2 40E-01	2.40E-01	0 00E+00	0 00E+00	1 00E+00	1 00E+00	2 30E-01	2 30E-01
PHENANTHRENE	3 60E+01	1 20E+00	1 19E+00	1 20E+00	0 00E+00	0 00E+00	2 90E-01	2 90E-01	1 00E+01	3 35E-01
PYRENE	4 20E+01	1 76E+00	1 81E+00	1 76E+00	0 00E+00	0 00E+00	2 90E-01	2 90E-01	1 17E+01	4 91E-01
Pesticides/PCBs										
4,4'-DDD	4 80E+00	2 31E-01	5 77E-01	2 31E-01	0 00E+00	0 00E+00	2 80E-01	2 80E-01	1 29E+00	6.21E-02
4,4'-DDE	7 20E-01	3 82E-02	7 62E-02	3 82E-02	0 00E+00	0 00E+00	7 70E+00	7 70E+00	5 32E+00	2 83E-01
4,4'-DDT	2.90E+00	1.30E-01	3 40E-01	1 30E-01	0 00E+00	0 00E+00	1 67E+00	1 67E+00	4 65E+00	2 08E-01
ALDRIN	3 20E-03	5 00E-03	3 20E-03	3 20E-03	0 00E+00	0 00E+00	1 80E+00	1 80E+00	5 53E-03	5 53E-03
ALPHA-CHLORDANE	5 20E-02	2 15E-02	1 36E-02	2 15E-02	0 00E+00	0 00E+00	4 77E+00	4 77E+00	2 38E-01	9 82E-02
AROCLOR-1260	1 50E+00	1 95E-01	4 24E-01	1 95E-01	0 00E+00	0 00E+00	6 41E+01	3 62E+01	9 23E+01	6 79E+00
BETA-BHC	2 70E-03	4 99E-03	2 70E-03	2 70E-03	0 00E+00	0 00E+00	1 80E+00	1 80E+00	4 66E-03	4 66E-03
DELTA-BHC	4.20E-03	5.02E-03	4 20E-03	4 20E-03	0 00E+00	0 00E+00	1 80E+00	1 80E+00	7 25E-03	7 25E-03
DIELDRIN	2 60E-02	1 21E-02	1 65E-02	1 21E-02	0 00E+00	0 00E+00	1 80E+00	1 80E+00	4 49E-02	2 08E-02
ENDOSULFAN I	1 10E-02	5 20E-03	5 08E-03	5 20E-03	0 00E+00	0 00E+00	1 80E+00	1 80E+00	1 90E-02	8 99E-03
ENDOSULFAN II	3 10E-02	1 06E-02	1 18E-02	1 06E-02	0 00E+00	0 00E+00	1.80E+00	1 80E+00	5 35E-02	1 83E-02
ENDOSULFAN SULFATE	1 40E-02	9 34E-03	9.50E-03	9 34E-03	0 00E+00	0 00E+00	1 80E+00	1 80E+00	2 42E-02	1 61E-02
ENDRIN	1 80E-02	9 30E-03	1 34E-02	9 30E-03	0.00E+00	0 00E+00	1 80E+00	1 80E+00	3 11E-02	1.61E-02
ENDRIN ALDEHYDE	1 40E-01	1 20E-02	4 00E-02	1 20E-02	0 00E+00	0 00E+00	1 80E+00	1 80E+00	2 42E-01	2 07E-02
ENDRIN KETONE	2 00E-02	1 02E-02	2 00E-02	1 02E-02	0 00E+00	0 00E+00	1 80E+00	1 80E+00	3 45E-02	1.77E-02
GAMMA-BHC (LINDANE)	8.20E-03	5 15E-03	5.85E-03	5 15E-03	0 00E+00	0 00E+00	1 80E+00	1 80E+00	1 42E-02	8 89E-03
GAMMA-CHLORDANE	5 90E-02	2 13E-02	1 26E-02	2 13E-02	0 00E+00	0 00E+00	2 22E+00	2 22E+00	1 26E-01	4 53E-02
HEPTACHLOR	4 50E-03	5 10E-03	3 47E-03	3 47E-03	0 00E+00	0 00E+00	1 80E+00	1 80E+00	7 77E-03	5 99E-03
HEPTACHLOR EPOXIDE	4.50E-03	5 15E-03	3 53E-03	3 53E-03	0.00E+00	0 00E+00	1 80E+00	1 80E+00	7 77E-03	6 09E-03
METHOXYCHLOR	8 30E-02	4.81E-02	3 75E-02	4.81E-02	0 00E+00	0 00E+00	1 80E+00	1 80E+00	1 43E-01	8 31E-[illegible]

CHEMICAL CONCENTRA[illegible] IN SEDIMENT AND TISSUE
SITE 2B - [illegible] A WETLAND
NSB-NLON, GR[illegible]ON, CONNECTICUT

Chemical	Sediment Concentrations (mg/kg)				Surface Water Concentrations (mg/L)		Invertebrate Bioaccumulation Factors		Invertebrate Concentrations (mg/kg)	
	Maximum Detection	Average All	Average of Positive Detections	Average [1]	Maximum Detection	Average Concentration	Conservative	Average	Maximum Detection	Average
Inorganics										
ALUMINUM	2 86E+04	1 25E+04	1.25E+04	1 25E+04	0 00E+00	0 00E+00	2 12E+00	4 22E-01	6 07E+04	5 28E+03
ANTIMONY	7 80E+00	1 46E+00	2 22E+00	1 46E+00	0 00E+00	0 00E+00	2 12E+00	4.22E-01	1 66E+01	6.19E-01
ARSENIC	5 25E+01	9.98E+00	9 98E+00	9 98E+00	0 00E+00	0 00E+00	6 90E-01	1 43E-01	3 62E+01	1 43E+00
BARIUM	3.94E+02	8 79E+01	8 79E+01	8 79E+01	0 00E+00	0 00E+00	2 12E+00	4 22E-01	8 36E+02	3 71E+01
BERYLLIUM	4 10E+00	7 52E-01	7 89E-01	7 52E-01	0.00E+00	0 00E+00	2.12E+00	4 22E-01	8 70E+00	3 18E-01
BORON	3 97E+01	1 41E+01	2 92E+01	1.41E+01	0 00E+00	0 00E+00	2 12E+00	4 22E-01	8 43E+01	5 95E+00
CADMIUM	2 95E+01	1 74E+00	2.38E+00	1 74E+00	0 00E+00	0 00E+00	7 99E+00	6 00E-01	2 36E+02	1 05E+00
CHROMIUM	9 75E+01	4 03E+01	4 10E+01	4 03E+01	0 00E+00	0 00E+00	4 68E-01	1 00E-01	4.56E+01	4 03E+00
COBALT	1 44E+01	6 57E+00	6 57E+00	6.57E+00	0 00E+00	0 00E+00	2 12E+00	4 22E-01	3 06E+01	2 77E+00
COPPER	1.73E+02	5 15E+01	5.42E+01	5 15E+01	0 00E+00	0 00E+00	5.25E+00	1 56E+00	9 08E+02	8 01E+01
CYANIDE	6.10E+00	1 30E+00	2.35E+00	1 30E+00	0.00E+00	0 00E+00	2 12E+00	4.22E-01	1 29E+01	5 49E-01
IRON	3.15E+05	5 26E+04	5 26E+04	5 26E+04	0 00E+00	0 00E+00	2 12E+00	4 22E-01	6 69E+05	2 22E+04
LEAD	2 41E+02	5 89E+01	5 89E+01	5 89E+01	0 00E+00	0 00E+00	6 07E-01	7 10E-02	1 46E+02	4 18E+00
MANGANESE	2 64E+03	3 27E+02	3 27E+02	3 27E+02	0 00E+00	0 00E+00	2 12E+00	4 22E-01	5 60E+03	1 38E+02
MERCURY	1.20E+00	2 72E-01	3 09E-01	2 72E-01	0 00E+00	0 00E+00	2 87E+00	1 14E+00	3.44E+00	3 09E-01
NICKEL	6 15E+01	1 98E+01	1 98E+01	1.98E+01	0 00E+00	0 00E+00	2 32E+00	4 86E-01	1 43E+02	9 64E+00
SELENIUM	9 80E+00	1 25E+00	2 21E+00	1 25E+00	0.00E+00	0 00E+00	2 12E+00	4 22E-01	2 08E+01	5 30E-01
SILVER	9 60E-01	4 72E-01	5 41E-01	4 72E-01	0 00E+00	0 00E+00	2 12E+00	4 22E-01	2 04E+00	1 99E-01
THALLIUM	1.10E+00	3 90E-01	6 48E-01	3 90E-01	0 00E+00	0 00E+00	2 12E+00	4 22E-01	2.33E+00	1 65E-01
VANADIUM	2 89E+02	5 58E+01	5 58E+01	5 58E+01	0 00E+00	0 00E+00	2 12E+00	4 22E-01	6 13E+02	2 36E+01
ZINC	7 02E+02	1 67E+02	1 70E+02	1 67E+02	0 00E+00	0 00E+00	7 53E+00	1 94E+00	5 28E+03	3 23E+02

Percent TOC	9.84E+00
percent Lipids	9.44E+00

1 - If the average of all value is the greater than the maximum detection, the average of the positive detections was used as the average value

MEADOW VOLE - CONSERVATIVE INPUTS
TERRESTRIAL WILDLIFE MODEL ECOLOGICAL EFFECTS QUOTIENT CALCULATION
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Max Soil Conc. (mg/kg)	Max SW Conc. (mg/L)	Vegetation Conc. (mg/kg)	Dose (mg/kg/d) from: Soil	Surface Water	Veget.	Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients NOAEL	LOAEL
Volatile Organics											
2-BUTANONE	3 10E-01	0.00E+00	3 10E-01	2 19E-03	0 00E+00	6 85E-02	7 07E-02	1 77E+03	4 57E+03	4 0E-05	1 5E-05
ACETONE	8 50E-01	0 00E+00	4 42E+00	6 01E-03	0 00E+00	9 77E-01	9 83E-01	1 00E+01	5 00E+01	9 8E-02	2 0E-02
CARBON DISULFIDE	8 00E-03	0.00E+00	1 60E-02	5 66E-05	0 00E+00	3 54E-03	3 59E-03	1 26E+01	2 56E+01	2 9E-04	1 4E-04
METHYLENE CHLORIDE	6 00E-03	0 00E+00	4 02E-02	4 24E-05	0 00E+00	8 88E-03	8 93E-03	5 85E+00	5 00E+01	1 5E-03	1 8E-04
TETRACHLOROETHENE	7 00E-03	0.00E+00	8 40E-03	4 95E-05	0 00E+00	1 86E-03	1 91E-03	1 40E+00	7 00E+00	1 4E-03	2 7E-04
TRICHLOROETHENE	4 00E-03	0.00E+00	6.00E-03	2 83E-05	0 00E+00	1 33E-03	1 35E-03	7 00E-01	7 00E+00	1 9E-03	1 9E-04
Semivolatile Organics											
ACENAPHTHENE	2 70E-01	0 00E+00	1 18E-02	1.91E-03	0 00E+00	2.60E-03	4 51E-03	6 56E+01	3 56E+02	6 9E-05	1 3E-05
ACENAPHTHYLENE	1 20E-01	0 00E+00	5 95E-02	8 48E-04	0 00E+00	1 32E-02	1 40E-02	6 56E+01	3.56E+02	2 1E-04	3 9E-05
ANTHRACENE	7 90E-02	0 00E+00	5 16E-02	5 59E-04	0 00E+00	1 14E-02	1 20E-02	6 56E+01	3 56E+02	1 8E-04	3 4E-05
BENZO(A)ANTHRACENE	4 00E-01	0.00E+00	3 87E-02	2 83E-03	0 00E+00	8 55E-03	1 14E-02	6 15E-01	3 84E+01	1 8E-02	3 0E-04
BENZO(A)PYRENE	3 90E-01	0 00E+00	5 08E-02	2 76E-03	0 00E+00	1 12E-02	1 40E-02	6 15E-01	3 84E+01	2 3E-02	3 6E-04
BENZO(B)FLUORANTHENE	5 50E-01	0 00E+00	1 71E-01	3 89E-03	0 00E+00	3.77E-02	4 16E-02	6 15E-01	3 84E+01	6 8E-02	1 1E-03
BENZO(G,H,I)PERYLENE	2 60E-01	0 00E+00	8 01E-02	1 84E-03	0 00E+00	1 77E-02	1 95E-02	6 15E-01	3 84E+01	3 2E-02	5 1E-04
BENZO(K)FLUORANTHENE	3 90E-01	0.00E+00	5 14E-02	2 76E-03	0 00E+00	1 14E-02	1 41E-02	6 15E-01	3 84E+01	2 3E-02	3 7E-04
BENZOIC ACID	2 20E-01	0 00E+00	6 60E-01	1 56E-03	0 00E+00	1 46E-01	1 47E-01	NV	NV	NV	NV
BIS(2-ETHYLHEXYL)PHTHAL	1 30E+00	0 00E+00	7 15E-02	9 19E-03	0 00E+00	1 58E-02	2 50E-02	1 83E+01	1 83E+02	1 4E-03	1 4E-04
CHRYSENE	6 00E-01	0 00E+00	4 92E-02	4.24E-03	0 00E+00	1 09E-02	1 51E-02	6 15E-01	3 84E+01	2 5E-02	3 9E-04
DIBENZO(A,H)ANTHRACENE	3 20E-02	0 00E+00	4 16E-03	2 26E-04	0 00E+00	9 19E-04	1.15E-03	6 15E-01	3 84E+01	1 9E-03	3 0E-05
FLUORANTHENE	8 90E-01	0 00E+00	4 45E-01	6 29E-03	0 00E+00	9 83E-02	1 05E-01	6 56E+01	3 56E+02	1 6E-03	2.9E-04
INDENO(1,2,3-CD)PYRENE	2 70E-01	0 00E+00	2 97E-02	1 91E-03	0 00E+00	6 56E-03	8 47E-03	6 15E-01	3 84E+01	1 4E-02	2 2E-04
PHENANTHRENE	3 40E-01	0 00E+00	4 34E-01	2 40E-03	0 00E+00	9 58E-02	9 82E-02	6 56E+01	3 56E+02	1 5E-03	2 8E-04
PYRENE	8 10E-01	0 00E+00	5 83E-01	5 73E-03	0 00E+00	1 29E-01	1 35E-01	6 15E-01	3 84E+01	2 2E-01	3 5E-03
Pesticides/PCBs											
4,4'-DDD	6 90E-02	0 00E+00	1 09E-02	4.88E-04	0.00E+00	2 40E-03	2 89E-03	1 47E-01	5 56E+00	2 0E-02	5 2E-04
4,4'-DDE	1 00E-02	0 00E+00	2 54E-03	7 07E-05	0 00E+00	5 61E-04	6 31E-04	1 47E-01	5.56E+00	4 3E-03	1 1E-04
4,4'-DDT	2 80E-02	0 00E+00	5 50E-03	1 98E-04	0 00E+00	1.22E-03	1 41E-03	1 47E-01	5.56E+00	9 6E-03	2 5E-04
ALPHA-CHLORDANE	3 00E-03	0.00E+00	7.50E-05	2.12E-05	0 00E+00	1 66E-05	3 78E-05	4 58E+00	9 16E+00	8 2E-06	4 1E-06
AROCLOR-1260	3 70E-01	0 00E+00	1 07E-03	2.62E-03	0 00E+00	2 37E-04	2 85E-03	6 80E-02	6 80E-01	4 2E-02	4 2E-03
GAMMA-CHLORDANE	2.20E-03	0.00E+00	5 50E-05	1.56E-05	0.00E+00	1 22E-05	2 77E-05	4 58E+00	9 16E+00	6 0E-06	3 0E-06
Inorganics											
ALUMINUM	1 79E+04	0 00E+00	8 95E+01	1 27E+02	0 00E+00	1 98E+01	1 46E+02	1 93E+00	1 93E+01	7.6E+01	7.6E+00
ARSENIC	1 51E+01	0 00E+00	5.67E-01	1 07E-01	0 00E+00	1.25E-01	2 32E-01	1 04E+00	4 55E+00	2 2E-01	5 1E-02
BARIUM	9 38E+01	0 00E+00	1 46E+01	6 63E-01	0 00E+00	3 23E+00	3.90E+00	5 18E+01	8 27E+01	7 5E-02	4.7E-02
BERYLLIUM	1.80E+00	0.00E+00	9 01E-01	1 27E-02	0 00E+00	1 99E-01	2 12E-01	5 32E-01	6 73E-01	4 0E-01	3 1E-01
CADMIUM	7 20E+00	0.00E+00	1 83E+00	5 09E-02	0 00E+00	4 04E-01	4 55E-01	7 70E-01	6 90E+00	5 9E-01	6.6E-02
CHROMIUM	1 02E+02	0.00E+00	4 18E+00	7 21E-01	0 00E+00	9 24E-01	1 65E+00	2 40E+00	5 82E+01	6 8E-01	2 8E-02
COBALT	1 27E+01	0.00E+00	9 53E-02	8 98E-02	0 00E+00	2.10E-02	1 11E-01	7 33E+00	1 89E+01	1 5E-02	5 9E-03
COPPER	6 41E+01	0 00E+00	1 00E+01	4 53E-01	0 00E+00	2 22E+00	2 67E+00	5 60E+00	8 27E+01	4 8E-01	3.2E-02
IRON	3 08E+04	0 00E+00	3 08E+02	2 18E+02	0 00E+00	6 81E+01	2 86E+02	5 00E+01	5 00E+02	5.7E+00	5 7E-01
LEAD	1 28E+02	0 00E+00	4 03E+00	9 05E-01	0 00E+00	8 91E-01	1 80E+00	4 70E+00	1 86E+02	3 8E-01	9 6E-03
MANGANESE	3 76E+02	0 00E+00	2 97E+01	2 66E+00	0 00E+00	6 56E+00	9 22E+00	5 15E+01	1 46E+02	1 8E-01	6 3E-02
MERCURY	6 90E-01	0 00E+00	3 45E+00	4 88E-03	0 00E+00	7 62E-01	7 67E-01	3 20E-02	1 60E-01	2.4E+01	4.8E+00
NICKEL	2 69E+01	0 00E+00	1 27E+00	1 90E-01	0 00E+00	2 81E-01	4 71E-01	1 70E+00	1.48E+01	2 8E-01	3 2E-02
SELENIUM	2 40E+00	0 00E+00	1 34E+00	1 70E-02	0 00E+00	2 95E-01	3 12E-01	1.43E-01	6 60E-01	2.2E+00	4 7E-01
SILVER	4 50E+00	0 00E+00	6 30E-02	3 18E-02	0 00E+00	1 39E-02	4 57E-02	6 02E+00	1 19E+02	7 6E-03	3 9E-04
VANADIUM	7.50E+01	0 00E+00	3 64E-01	5 30E-01	0 00E+00	8 04E-02	6 11E-01	4 16E+00	9 44E+00	1 5E-01	6 5E-02
ZINC	1.25E+02	0 00E+00	7 01E+01	8 84E-01	0 00E+00	1 55E+01	1 64E+01	7 54E+01	2 98E+02	2 2E-01	5 5E-02

Cells are shaded if the value is greater than 1 0

Body Weight = (BW)	1 70E-02	kg
Food Ingestion Rate = (If)	3 76E-03	kg/day
Water Ingestion Rate = (Iw)	7 51E-03	L/day
Soil Ingestion Rate = (Is)	1 20E-04	kg/day
Home Range = (HR)	Assume 100% on site	
Contaminated Area = (CA)	Assume equal to home range	

Dose (soil) = (Cs * Is)(H)/BW
Dose (vegetation) = (Cv * If)(H)/BW
Dose (water) = (Cw * Iw)(H)/BW
Cv = Contaminant concentration in vegetation
Cs = Contaminant concentration in soil
Cw = Contaminant concentration in water
Total Dose = Dose (soil) + Dose (vegetation) + Dose (water)
H=HR/CA (Assume = to 1)

Conc = Concentration
LOAEL = Lowest Observed Adverse Effects Concentration
NOAEL = No Observed Adverse Effects Concentration
SW = Surface Water
NV = No value, Value not able to be calculated

MEADOW VOLE - LESS CONSERVATIVE INPUTS
TERRESTRIAL WILDLIFE MODEL ECOLOGICAL EFFECTS QUOTIENT CALCULATION
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Avg Soil Conc. (mg/kg)	Avg SW Conc. (mg/L)	Vegetation Conc. (mg/kg)	Dose (mg/kg/d) from:			Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients	
				Soil	Surface Water	Veget.				NOAEL	LOAEL
Inorganics											
ALUMINUM	1.40E+04	0 00E+00	4.01E+01	1.63E+01	0.00E+00	3 91E+00	2 03E+01	1 93E+00	1.93E+01	1.0E+01	1.0E+00
IRON	2.33E+04	0 00E+00	9.91E+01	2 73E+01	0.00E+00	9 66E+00	3 69E+01	5 00E+01	5.00E+02	7 4E-01	7 4E-02
MERCURY	2 47E-01	0 00E+00	1 61E-01	2 89E-04	0.00E+00	1 57E-02	1.60E-02	3 20E-02	1.60E-01	5 0E-01	1 0E-01
SELENIUM	9.20E-01	0.00E+00	4 63E-01	1.08E-03	0 00E+00	4 52E-02	4.62E-02	1 43E-01	6.60E-01	3.2E-01	7 0E-02

Chemicals are shown only if their ecological effects quotients were greater than 1.0 in the conservative food chain model.
Cells are shaded if the value is greater than 1 0

Body Weight = (BW)	3.58E-02	kg
Food Ingestion Rate = (If)	3.49E-03	kg/day
Water Ingestion Rate = (Iw)	6.26E-03	L/day
Soil Ingestion Rate = (Is)	4.19E-05	kg/day
Home Range = (HR)	6.59E-02	acres
Contaminated Area = (CA)	Assume equal to home range	

Dose (soil) = (Cs * Is)(H)/BW
Dose (vegetation) = (Cv * If)(H)/BW
Dose (water) = (Cw * Iw)(H)/BW
Cv = Contaminant concentration in vegetation
Cs = Contaminant concentration in soil
Cw = Contaminant concentration in water
Total Dose = Dose (soil) + Dose (vegetation) + Dose (water)
H=HR/CA (Assume = to 1)

Conc = Concentration
LOAEL = Lowest Observed Adverse Effects Concentration
NOAEL = No Observed Adverse Effects Concentration
SW = Surface Water

BOBWHITE QUAIL - CONSERVATIVE INPUTS
TERRESTRIAL WILDLIFE MODEL ECOLOGICAL EFFECTS QUOTIENT CALCULATION
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Max Soil Conc. (mg/kg)	Max SW Conc. (mg/L)	Vegetation Conc. (mg/kg)	Dose (mg/kg/d) from: Soil	Surface Water	Veget.	Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients NOAEL	LOAEL
Volatile Organics											
2-BUTANONE	3.10E-01	0 00E+00	3 10E-01	1 37E-03	0 00E+00	9 82E-03	1.12E-02	NV	NV	NV	NV
ACETONE	8 50E-01	0 00E+00	4 42E+00	3 74E-03	0 00E+00	1 40E-01	1 44E-01	NV	NV	NV	NV
CARBON DISULFIDE	8 00E-03	0.00E+00	1 60E-02	3 52E-05	0 00E+00	5 07E-04	5 42E-04	NV	NV	NV	NV
METHYLENE CHLORIDE	6 00E-03	0.00E+00	4 02E-02	2.64E-05	0 00E+00	1 27E-03	1 30E-03	NV	NV	NV	NV
TETRACHLOROETHENE	7 00E-03	0 00E+00	8 40E-03	3 08E-05	0 00E+00	2 66E-04	2 97E-04	NV	NV	NV	NV
TRICHLOROETHENE	4.00E-03	0 00E+00	6 00E-03	1 76E-05	0 00E+00	1 90E-04	2 08E-04	NV	NV	NV	NV
Semivolatile Organics											
ACENAPHTHENE	2 70E-01	0.00E+00	1 18E-02	1 19E-03	0 00E+00	3 73E-04	1 56E-03	2 00E+00	2 00E+01	7 8E-04	7 8E-05
ACENAPHTHYLENE	1 20E-01	0 00E+00	5 95E-02	5 29E-04	0 00E+00	1 89E-03	2 42E-03	2 00E+00	2 00E+01	1 2E-03	1 2E-04
ANTHRACENE	7 90E-02	0 00E+00	5.16E-02	3 48E-04	0 00E+00	1 63E-03	1 98E-03	2 00E+00	2 00E+01	9 9E-04	9 9E-05
BENZO(A)ANTHRACENE	4 00E-01	0 00E+00	3 87E-02	1 76E-03	0 00E+00	1 23E-03	2.99E-03	2 00E+00	2 00E+01	1 5E-03	1.5E-04
BENZO(A)PYRENE	3 90E-01	0 00E+00	5 08E-02	1 72E-03	0 00E+00	1 61E-03	3 33E-03	2 00E+00	2 00E+01	1 7E-03	1 7E-04
BENZO(B)FLUORANTHENE	5 50E-01	0 00E+00	1 71E-01	2 42E-03	0 00E+00	5 40E-03	7 83E-03	2 00E+00	2 00E+01	3 9E-03	3 9E-04
BENZO(G,H,I)PERYLENE	2 60E-01	0 00E+00	8 01E-02	1 15E-03	0 00E+00	2 54E-03	3 68E-03	2 00E+00	2 00E+01	1 8E-03	1.8E-04
BENZO(K)FLUORANTHENE	3 90E-01	0 00E+00	5.14E-02	1 72E-03	0 00E+00	1 63E-03	3 35E-03	2 00E+00	2 00E+01	1 7E-03	1 7E-04
BENZOIC ACID	2.20E-01	0 00E+00	6.60E-01	9 69E-04	0 00E+00	2 09E-02	2 19E-02	NV	NV	NV	NV
BIS(2-ETHYLHEXYL)PHTHALATE	1 30E+00	0 00E+00	7.15E-02	5.73E-03	0.00E+00	2 27E-03	7 99E-03	NV	NV	NV	NV
CHRYSENE	6 00E-01	0.00E+00	4 92E-02	2 64E-03	0 00E+00	1 56E-03	4 20E-03	2 00E+00	2 00E+01	2 1E-03	2 1E-04
DIBENZO(A,H)ANTHRACENE	3.20E-02	0 00E+00	4.16E-03	1 41E-04	0 00E+00	1 32E-04	2 73E-04	2 00E+00	2 00E+01	1.4E-04	1.4E-05
FLUORANTHENE	8.90E-01	0 00E+00	4 45E-01	3 92E-03	0 00E+00	1 41E-02	1 80E-02	2 00E+00	2 00E+01	9 0E-03	9 0E-04
INDENO(1,2,3-CD)PYRENE	2 70E-01	0 00E+00	2.97E-02	1 19E-03	0 00E+00	9 41E-04	2 13E-03	2 00E+00	2 00E+01	1 1E-03	1 1E-04
PHENANTHRENE	3.40E-01	0 00E+00	4.34E-01	1 50E-03	0.00E+00	1 37E-02	1 52E-02	2 00E+00	2 00E+01	7 6E-03	7 6E-04
PYRENE	8 10E-01	0 00E+00	5 83E-01	3 57E-03	0 00E+00	1 85E-02	2 20E-02	2 00E+00	2 00E+01	1 1E-02	1 1E-03
Pesticides/PCBs											
4,4'-DDD	6 90E-02	0 00E+00	1 09E-02	3 04E-04	0 00E+00	3 44E-04	6 48E-04	2 27E-01	2 70E+00	2 9E-03	2 4E-04
4,4'-DDE	1 00E-02	0 00E+00	2 54E-03	4 40E-05	0 00E+00	8 04E-05	1 24E-04	2 27E-01	2 70E+00	5 5E-04	4 6E-05
4,4'-DDT	2 80E-02	0 00E+00	5 50E-03	1 23E-04	0 00E+00	1 74E-04	2 98E-04	2 27E-01	2.70E+00	1 3E-03	1.1E-04
ALPHA-CHLORDANE	3 00E-03	0.00E+00	7 50E-05	1 32E-05	0 00E+00	2 38E-06	1 56E-05	2 14E+00	1 07E+01	7 3E-06	1 5E-06
AROCLOR-1260	3.70E-01	0 00E+00	1 07E-03	1 63E-03	0 00E+00	3 40E-05	1 66E-03	1 80E-01	1 80E+00	9 2E-03	9.2E-04
GAMMA-CHLORDANE	2 20E-03	0 00E+00	5 50E-05	9 69E-06	0 00E+00	1 74E-06	1 14E-05	2 14E+00	1 07E+01	5 3E-06	1 1E-06
Inorganics											
ALUMINUM	1 79E+04	0 00E+00	8 95E+01	7 88E+01	0 00E+00	2 84E+00	8 17E+01	1 10E+02	1 10E+03	7 4E-01	7 4E-02
ARSENIC	1 51E+01	0 00E+00	5 67E-01	6 65E-02	0 00E+00	1 80E-02	8 45E-02	2 24E+00	4 51E+00	3 8E-02	1 9E-02
BARIUM	9 38E+01	0 00E+00	1 46E+01	4 13E-01	0 00E+00	4 64E-01	8 77E-01	NV	NV	NV	NV
BERYLLIUM	1 80E+00	0 00E+00	9 01E-01	7 93E-03	0 00E+00	2 85E-02	3 65E-02	NV	NV	NV	NV
CADMIUM	7 20E+00	0 00E+00	1 83E+00	3.17E-02	0 00E+00	5 79E-02	8 96E-02	1 47E+00	6 35E+00	6 1E-02	1 4E-02
CHROMIUM	1 02E+02	0 00E+00	4 18E+00	4 49E-01	0 00E+00	1 33E-01	5 82E-01	2 66E+00	1 56E+01	2 2E-01	3 7E-02
COBALT	1.27E+01	0 00E+00	9.53E-02	5 59E-02	0 00E+00	3 02E-03	5 90E-02	7 61E+00	1 83E+01	7 7E-03	3 2E-03
COPPER	6.41E+01	0 00E+00	1 00E+01	2 82E-01	0 00E+00	3.18E-01	6.01E-01	4 05E+00	3 49E+01	1 5E-01	1 7E-02
IRON	3 08E+04	0 00E+00	3 08E+02	1 36E+02	0 00E+00	9 76E+00	1 45E+02	1 00E+02	1 00E+03	1.5E+00	1.5E-01
LEAD	1 28E+02	0.00E+00	4 03E+00	5 64E-01	0 00E+00	1 28E-01	6 92E-01	1 63E+00	4 46E+01	4.2E-01	1 5E-02
MANGANESE	3 76E+02	0 00E+00	2.97E+01	1 66E+00	0 00E+00	9 41E-01	2 60E+00	1 79E+02	3 77E+02	1 5E-02	6 9E-03
MERCURY	6 90E-01	0.00E+00	3 45E+00	3 04E-03	0 00E+00	1 09E-01	1 12E-01	6 40E-03	6 40E-02	1.8E+01	1.8E+00
NICKEL	2 69E+01	0 00E+00	1 27E+00	1 18E-01	0 00E+00	4 03E-02	1 59E-01	6 71E+00	1 86E+01	2 4E-02	8 5E-03
SELENIUM	2.40E+00	0.00E+00	1 34E+00	1 06E-02	0 00E+00	4 23E-02	5 29E-02	2 90E-01	8 20E-01	1 8E-01	6 5E-02
SILVER	4 50E+00	0.00E+00	6 30E-02	1 98E-02	0 00E+00	2 00E-03	2 18E-02	2 02E+00	6 05E+01	1 1E-02	3 6E-04
VANADIUM	7 50E+01	0 00E+00	3 64E-01	3 30E-01	0 00E+00	1 15E-02	3 42E-01	3 44E-01	1 70E+00	9 9E-01	2 0E-01
ZINC	1.25E+02	0 00E+00	7 01E+01	5 51E-01	0 00E+00	2 22E+00	2.77E+00	6 61E+01	1 71E+02	4.2E-02	1 6E-02

Cells are shaded if the value is greater than 1 0

Body Weight = (BW)	1.54E-01	kg
Food Ingestion Rate = (If)	4 88E-03	kg/day
Water Ingestion Rate = (Iw)	2 28E-02	L/day
Soil Ingestion Rate = (Is)	6 78E-04	kg/day
Home Range = (HR)	Assume 100% on site	
Contaminated Area = (CA)	Assume equal to home range	

Dose (soil) = (Cs * Is)(H)/BW
Dose (vegetation) = (Cv * If)(H)/BW
Dose (water) = (Cw * Iw)(H)/BW
Cv = Contaminant concentration in vegetation
Cs = Contaminant concentration in soil
Cw = Contaminant concentration in water
Total Dose = Dose (soil) + Dose (vegetation) + Dose (water)
H=HR/CA (Assume = to

Conc = Concentration
LOAEL = Lowest Observed Adverse Effects Concentration
NOAEL = No Observed Adverse Effects Concentration
SW = Surface Water
NV = No value, Value not able to be calculated

BOBWHITE QUAIL - LESS CONSERVATIVE INPUTS
TERRESTRIAL WILDLIFE MODEL ECOLOGICAL EFFECTS QUOTIENT CALCULATION
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Avg Soil Conc. (mg/kg)	Avg SW Conc. (mg/L)	Vegetation Conc. (mg/kg)	Dose (mg/kg/d) from:			Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients	
				Soil	Surface Water	Veget.				NOAEL	LOAEL
Inorganics											
IRON	2 33E+04	0.00E+00	9.91E+01	3.31E+01	0 00E+00	2.31E+00	3 55E+01	1 00E+02	1 00E+03	3.5E-01	3 5E-02
MERCURY	2 47E-01	0.00E+00	1 61E-01	3.51E-04	0 00E+00	3 75E-03	4 10E-03	6 40E-03	6 40E-02	6 4E-01	6.4E-02

Chemicals are shown only if their ecological effects quotients were greater than 1.0 in the conservative food chain model

Body Weight = (BW)	1 75E-01	kg
Food Ingestion Rate = (If)	4.08E-03	kg/day
Water Ingestion Rate = (Iw)	1.93E-02	L/day
Soil Ingestion Rate = (Is)	2.49E-04	kg/day
Home Range = (HR)	1 88E+01	acres
Contaminated Area = (CA)	Assume equal to home range	

Dose (soil) = (Cs * Is)(H)/BW
Dose (vegetation) = (Cv * If)(H)/BW
Dose (water) = (Cw * Iw)(H)/BW
Cv = Contaminant concentration in vegetation
Cs = Contaminant concentration in soil
Cw = Contaminant concentration in water
Total Dose = Dose (soil) + Dose (vegetation) + Dose (water)
H=HR/CA (Assume = to 1)

Conc = Concentration
LOAEL = Lowest Observed Adverse Effects Concentration
NOAEL = No Observed Adverse Effects Concentration
SW = Surface Water

SHORT-TAILED SHREW - CONSERVATIVE INPUTS
TERRESTRIAL WILDLIFE MODEL ECOLOGICAL EFFECTS QUOTIENT CALCULATION
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Max Soil Conc. (mg/kg)	Max SW Conc. (mg/L)	Invertebrate Conc. (mg/kg)	Dose (mg/kg/d) from: Soil	Surface Water	Invert.	Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients NOAEL	LOAEL
Volatile Organics											
2-BUTANONE	3 10E-01	0 00E+00	3 10E-01	9 92E-04	0 00E+00	3 31E-02	3 41E-02	1.77E+03	4 57E+03	1 9E-05	7 5E-06
ACETONE	8 50E-01	0 00E+00	8 50E-01	2 72E-03	0 00E+00	9 07E-02	9 34E-02	1 00E+01	5 00E+01	9 3E-03	1 9E-03
CARBON DISULFIDE	8 00E-03	0 00E+00	8 00E-03	2 56E-05	0 00E+00	8 54E-04	8 79E-04	1 26E+01	2 56E+01	7 0E-05	3 4E-05
METHYLENE CHLORIDE	6 00E-03	0 00E+00	6 00E-03	1 92E-05	0 00E+00	6 40E-04	6 59E-04	5 85E+00	5 00E+01	1 1E-04	1 3E-05
TETRACHLOROETHENE	7 00E-03	0 00E+00	7 00E-03	2 24E-05	0 00E+00	7 47E-04	7 69E-04	1 40E+00	7 00E+00	5 5E-04	1 1E-04
TRICHLOROETHENE	4 00E-03	0 00E+00	4 00E-03	1 28E-05	0 00E+00	4 27E-04	4.40E-04	7 00E-01	7 00E+00	6 3E-04	6 3E-05
Semivolatile Organics											
ACENAPHTHENE	2 70E-01	0 00E+00	4 34E-01	8 64E-04	0 00E+00	4 63E-02	4 71E-02	6 56E+01	3 56E+02	7 2E-04	1 3E-04
ACENAPHTHYLENE	1 20E-01	0.00E+00	1 93E-01	3 84E-04	0 00E+00	2 06E-02	2 09E-02	6 56E+01	3 56E+02	3 2E-04	5 9E-05
ANTHRACENE	7 90E-02	0 00E+00	1 27E-01	2 53E-04	0 00E+00	1 35E-02	1 38E-02	6 56E+01	3 56E+02	2 1E-04	3 9E-05
BENZO(A)ANTHRACENE	4 00E-01	0 00E+00	6 43E-01	1 28E-03	0.00E+00	6 85E-02	6 98E-02	6 15E-01	3 84E+01	1 1E-01	1 8E-03
BENZO(A)PYRENE	3 90E-01	0 00E+00	6 26E-01	1 25E-03	0 00E+00	6 68E-02	6 81E-02	6 15E-01	3 84E+01	1 1E-01	1 8E-03
BENZO(B)FLUORANTHENE	5 50E-01	0 00E+00	8 83E-01	1 76E-03	0 00E+00	9 43E-02	9 60E-02	6 15E-01	3 84E+01	1 6E-01	2 5E-03
BENZO(G,H,I)PERYLENE	2 60E-01	0 00E+00	4 18E-01	8 32E-04	0 00E+00	4 46E-02	4 54E-02	6 15E-01	3 84E+01	7 4E-02	1 2E-03
BENZO(K)FLUORANTHENE	3 90E-01	0 00E+00	6 26E-01	1 25E-03	0 00E+00	6 68E-02	6 81E-02	6 15E-01	3 84E+01	1 1E-01	1 8E-03
BENZOIC ACID	2 20E-01	0 00E+00	2 20E-01	7 04E-04	0 00E+00	2 35E-02	2 42E-02	NV	NV	NV	NV
BIS(2-ETHYLHEXYL)PHTHALATE	1 30E+00	0 00E+00	1.30E+00	4 16E-03	0 00E+00	1 39E-01	1 43E-01	1 83E+01	1 83E+02	7 8E-03	7 8E-04
CHRYSENE	6 00E-01	0 00E+00	9 64E-01	1 92E-03	0 00E+00	1 03E-01	1 05E-01	6 15E-01	3 84E+01	1 7E-01	2 7E-03
DIBENZO(A,H)ANTHRACENE	3 20E-02	0.00E+00	5 14E-02	1.02E-04	0 00E+00	5 48E-03	5 59E-03	6 15E-01	3 84E+01	9 1E-03	1.5E-04
FLUORANTHENE	8 90E-01	0 00E+00	1 43E+00	2 85E-03	0 00E+00	1 53E-01	1 55E-01	6 56E+01	3 56E+02	2 4E-03	4 4E-04
INDENO(1,2,3-CD)PYRENE	2 70E-01	0 00E+00	4.34E-01	8 64E-04	0 00E+00	4 63E-02	4 71E-02	6 15E-01	3 84E+01	7 7E-02	1 2E-03
PHENANTHRENE	3.40E-01	0 00E+00	5 46E-01	1 09E-03	0 00E+00	5 83E-02	5.94E-02	6 56E+01	3 56E+02	9 0E-04	1 7E-04
PYRENE	8.10E-01	0 00E+00	1 30E+00	2 59E-03	0 00E+00	1 39E-01	1 41E-01	6 15E-01	3 84E+01	2 3E-01	3 7E-03
Pesticides/PCBs											
4,4'-DDD	6 90E-02	0.00E+00	4 95E-01	2 21E-04	0 00E+00	5 28E-02	5 30E-02	1 47E-01	5 56E+00	3 6E-01	9 5E-03
4,4'-DDE	1 00E-02	0 00E+00	2 07E-01	3 20E-05	0 00E+00	2 20E-02	2 21E-02	1 47E-01	5 56E+00	1 5E-01	4 0E-03
4,4'-DDT	2 80E-02	0 00E+00	3 75E-01	8 96E-05	0 00E+00	4 00E-02	4 00E-02	1 47E-01	5 56E+00	2 7E-01	7 2E-03
ALPHA-CHLORDANE	3 00E-03	0 00E+00	1 50E-02	9 60E-06	0 00E+00	1 60E-03	1 61E-03	4.58E+00	9 16E+00	3 5E-04	1 8E-04
AROCLOR-1260	3 70E-01	0 00E+00	5 89E+00	1 18E-03	0.00E+00	6 28E-01	6 29E-01	6 80E-02	6 80E-01	9.3E+00	9.3E-01
GAMMA-CHLORDANE	2 20E-03	0 00E+00	1 10E-02	7.04E-06	0 00E+00	1 17E-03	1 18E-03	4 58E+00	9 16E+00	2 6E-04	1 3E-04
Inorganics											
ALUMINUM	1 79E+04	0 00E+00	2 11E+03	5 73E+01	0 00E+00	2 25E+02	2.83E+02	1 93E+00	1 93E+01	1.5E+02	1.5E+01
ARSENIC	1 51E+01	0 00E+00	1 64E+00	4 83E-02	0 00E+00	1 75E-01	2 23E-01	1 04E+00	4 55E+00	2 1E-01	4 9E-02
BARIUM	9 38E+01	0 00E+00	8 54E+00	3 00E-01	0 00E+00	9 11E-01	1 21E+00	5 18E+01	8 27E+01	2 3E-02	1 5E-02
BERYLLIUM	1 80E+00	0 00E+00	8 10E-02	5 76E-03	0 00E+00	8 64E-03	1 44E-02	5 32E-01	6 73E-01	2 7E-02	2 1E-02
CADMIUM	7 20E+00	0 00E+00	3 98E+01	2 30E-02	0 00E+00	4 24E+00	4 27E+00	7 70E-01	6 90E+00	5.5E+00	6 2E-01
CHROMIUM	1 02E+02	0.00E+00	3 12E+01	3 26E-01	0 00E+00	3 33E+00	3.66E+00	2 40E+00	5 82E+01	1.5E+00	6 3E-02
COBALT	1 27E+01	0 00E+00	1 55E+00	4.06E-02	0 00E+00	1 65E-01	2 06E-01	7 33E+00	1 89E+01	2 8E-02	1 1E-02
COPPER	6 41E+01	0 00E+00	3 30E+01	2 05E-01	0 00E+00	3 52E+00	3 73E+00	5 60E+00	8 27E+01	6 7E-01	4 5E-02
IRON	3 08E+04	0.00E+00	2 40E+03	9 86E+01	0 00E+00	2 56E+02	3 55E+02	5 00E+01	5 00E+02	7.1E+00	7 1E-01
LEAD	1 28E+02	0.00E+00	4 03E+01	4 10E-01	0 00E+00	4 30E+00	4 71E+00	4.70E+00	1 86E+02	1.0E+00	2 5E-02
MANGANESE	3 76E+02	0 00E+00	2.54E+01	1.20E+00	0 00E+00	2 71E+00	3 91E+00	5 15E+01	1 46E+02	7 6E-02	2 7E-02
MERCURY	6 90E-01	0 00E+00	9.54E-01	2 21E-03	0.00E+00	1 02E-01	1 04E-01	3 20E-02	1 60E-01	3.3E+00	6 5E-01
NICKEL	2 69E+01	0.00E+00	1 27E+02	8 61E-02	0 00E+00	1 36E+01	1 37E+01	1 70E+00	1 48E+01	8.0E+00	9.2E-01
SELENIUM	2 40E+00	0.00E+00	1 76E+00	7 68E-03	0 00E+00	1 88E-01	1 96E-01	1 43E-01	6 60E-01	1.4E+00	3 0E-01
SILVER	4 50E+00	0 00E+00	9 20E+00	1.44E-02	0 00E+00	9 82E-01	9 96E-01	6.02E+00	1 19E+02	1 7E-01	8 4E-03
VANADIUM	7 50E+01	0 00E+00	3 15E+00	2 40E-01	0 00E+00	3 36E-01	5 76E-01	4 16E+00	9 44E+00	1 4E-01	6 1E-02
ZINC	1 25E+02	0 00E+00	4 17E+02	4 00E-01	0.00E+00	4 45E+01	4 49E+01	7 54E+01	2 98E+02	6 0E-01	1 5E-01

Cells are shaded if the value is greater than 1 0

Body Weight = (BW)	1 50E-02	kg
Food Ingestion Rate = (If)	1.60E-03	kg/day
Water Ingestion Rate.= (Iw)	4 28E-03	L/day
Soil Ingestion Rate = (Is)	4 80E-05	kg/day
Home Range = (HR)	Assume 100% on site	
Contaminated Area = (CA)	Assume equal to home range	

Dose (soil) = (Cs * Is)(H)/BW
Dose (invertebrate) = (Ci * If)(H)/BW
Dose (water) = (Cw * Iw)(H)/BW
Ci = Contaminant concentration in invertebrate
Cs = Contaminant concentration in soil
Cw = Contaminant concentration in water
Total Dose = Dose (soil) + Dose (invertebrate) + Dose (water)
H=HR/CA (Assume = to 1)

Conc = Concentration
LOAEL = Lowest Observed Adverse Effects Concentration
NOAEL = No Observed Adverse Effects Concentration
SW = Surface Water
NV = No value, Value not able to be calculated

SHORT-TAILED SHREW - LESS CONSERVATIVE INPUTS
TERRESTRIAL WILDLIFE MODEL ECOLOGICAL EFFECTS QUOTIENT CALCULATION
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Avg Soil Conc. (mg/kg)	Avg SW Conc. (mg/L)	Invertebrate Conc. (mg/kg)	Dose (mg/kg/d) from: Soil	Surface Water	Invert.	Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients NOAEL	LOAEL
Pesticides/PCBs											
AROCLOR-1260	1 36E-01	0.00E+00	9.09E-01	1.09E-04	0 00E+00	8.08E-02	8.10E-02	6 80E-02	6.80E-01	1.2E+00	1.2E-01
Inorganics											
ALUMINUM	1 40E+04	0 00E+00	6 01E+02	1.12E+01	0 00E+00	5.35E+01	6.47E+01	1 93E+00	1 93E+01	3.4E+01	3.4E+00
CADMIUM	3.76E+00	0.00E+00	2.37E+01	3 01E-03	0 00E+00	2 11E+00	2 11E+00	7 70E-01	6.90E+00	2.7E+00	3 1E-01
CHROMIUM	5.85E+01	0 00E+00	1.79E+01	4 68E-02	0 00E+00	1 59E+00	1.64E+00	2 40E+00	5 82E+01	6.8E-01	2 8E-02
IRON	2 33E+04	0.00E+00	8 39E+02	1.87E+01	0 00E+00	7.47E+01	9 34E+01	5 00E+01	5.00E+02	1.9E+00	1 9E-01
LEAD	4.24E+01	0 00E+00	1.65E+01	3 39E-02	0.00E+00	1 47E+00	1.50E+00	4.70E+00	1 86E+02	3 2E-01	8 1E-03
MERCURY	2.47E-01	0 00E+00	6 75E-01	1.98E-04	0.00E+00	6 01E-02	6.03E-02	3 20E-02	1.60E-01	1.9E+00	3 8E-01
NICKEL	2 13E+01	0.00E+00	2 26E+01	1.71E-02	0 00E+00	2 01E+00	2.03E+00	1 70E+00	1 48E+01	1.2E+00	1 4E-01
SELENIUM	9.20E-01	0 00E+00	8.73E-01	7.37E-04	0.00E+00	7 77E-02	7 84E-02	1.43E-01	6.60E-01	5.5E-01	1 2E-01

Chemicals are shown only if their ecological effects quotients were greater than 1.0 in the conservative food chain model
Cells are shaded if the value is greater than 1.0

Body Weight = (BW)	1.61E-02	kg
Food Ingestion Rate = (If)	1.43E-03	kg/day
Water Ingestion Rate = (Iw)	3.60E-03	L/day
Soil Ingestion Rate = (Is)	1.29E-05	kg/day
Home Range = (HR)	9.70E-01	acres
Contaminated Area = (CA)	Assume equal to home range	

Dose (soil) = (Cs * Is)(H)/BW
Dose (invertebrate) = (Ci * If)(H)/BW
Dose (water) = (Cw * Iw)(H)/BW
Ci = Contaminant concentration in invertebrate
Cs = Contaminant concentration in soil
Cw = Contaminant concentration in water
Total Dose = Dose (soil) + Dose (invertebrate) + Dose (water)
H=HR/CA (Assume = to 1)

Conc = Concentration
LOAEL = Lowest Observed Adverse Effects Concentration
NOAEL = No Observed Adverse Effects Concentration
SW = Surface Water

AMERICAN ROBIN - CONSERVATIVE INPUTS
TERRESTRIAL WILDLIFE MODEL ECOLOGICAL EFFECTS QUOTIENT CALCULATION
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Max Soil Conc. (mg/kg)	Max SW Conc. (mg/L)	Invertebrate Conc. (mg/kg)	Dose (mg/kg/d) from: Soil	Surface Water	Invert.	Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients NOAEL	LOAEL
Volatile Organics											
2-BUTANONE	3 10E-01	0 00E+00	3 10E-01	8 20E-03	0 00E+00	5 00E-02	5 82E-02	NV	NV	NV	NV
ACETONE	8 50E-01	0 00E+00	8 50E-01	2 25E-02	0 00E+00	1 37E-01	1 60E-01	NV	NV	NV	NV
CARBON DISULFIDE	8 00E-03	0 00E+00	8 00E-03	2 12E-04	0 00E+00	1 29E-03	1 50E-03	NV	NV	NV	NV
METHYLENE CHLORIDE	6 00E-03	0.00E+00	6 00E-03	1 59E-04	0 00E+00	9 68E-04	1.13E-03	NV	NV	NV	NV
TETRACHLOROETHENE	7 00E-03	0 00E+00	7 00E-03	1 85E-04	0 00E+00	1 13E-03	1 31E-03	NV	NV	NV	NV
TRICHLOROETHENE	4 00E-03	0.00E+00	4 00E-03	1 06E-04	0 00E+00	6 46E-04	7 51E-04	NV	NV	NV	NV
Semivolatile Organics											
ACENAPHTHENE	2 70E-01	0 00E+00	4 34E-01	7 15E-03	0 00E+00	7 00E-02	7 71E-02	2 00E+00	2 00E+01	3 9E-02	3 9E-03
ACENAPHTHYLENE	1 20E-01	0 00E+00	1 93E-01	3 18E-03	0 00E+00	3 11E-02	3 43E-02	2 00E+00	2 00E+01	1 7E-02	1.7E-03
ANTHRACENE	7 90E-02	0 00E+00	1 27E-01	2 09E-03	0.00E+00	2 05E-02	2 26E-02	2 00E+00	2 00E+01	1 1E-02	1 1E-03
BENZO(A)ANTHRACENE	4 00E-01	0 00E+00	6 43E-01	1 06E-02	0 00E+00	1 04E-01	1 14E-01	2 00E+00	2 00E+01	5 7E-02	5 7E-03
BENZO(A)PYRENE	3 90E-01	0 00E+00	6 26E-01	1 03E-02	0 00E+00	1 01E-01	1 11E-01	2 00E+00	2 00E+01	5 6E-02	5 6E-03
BENZO(B)FLUORANTHENE	5 50E-01	0 00E+00	8 83E-01	1 46E-02	0 00E+00	1 43E-01	1 57E-01	2 00E+00	2 00E+01	7 9E-02	7 9E-03
BENZO(G,H,I)PERYLENE	2 60E-01	0 00E+00	4 18E-01	6.88E-03	0 00E+00	6 74E-02	7 43E-02	2 00E+00	2 00E+01	3 7E-02	3 7E-03
BENZO(K)FLUORANTHENE	3 90E-01	0 00E+00	6 26E-01	1.03E-02	0 00E+00	1 01E-01	1 11E-01	2 00E+00	2 00E+01	5 6E-02	5 6E-03
BENZOIC ACID	2 20E-01	0 00E+00	2 20E-01	5 82E-03	0 00E+00	3 55E-02	4 13E-02	NV	NV	NV	NV
BIS(2-ETHYLHEXYL)PHTHALATE	1 30E+00	0 00E+00	1 30E+00	3 44E-02	0 00E+00	2 10E-01	2 44E-01	NV	NV	NV	NV
CHRYSENE	6 00E-01	0 00E+00	9 64E-01	1 59E-02	0 00E+00	1 56E-01	1 71E-01	2 00E+00	2 00E+01	8 6E-02	8 6E-03
DIBENZO(A,H)ANTHRACENE	3 20E-02	0 00E+00	5 14E-02	8 47E-04	0 00E+00	8 29E-03	9 14E-03	2 00E+00	2 00E+01	4 6E-03	4.6E-04
FLUORANTHENE	8 90E-01	0 00E+00	1 43E+00	2 36E-02	0 00E+00	2 31E-01	2 54E-01	2 00E+00	2 00E+01	1 3E-01	1 3E-02
INDENO(1,2,3-CD)PYRENE	2.70E-01	0 00E+00	4 34E-01	7 15E-03	0 00E+00	7 00E-02	7 71E-02	2 00E+00	2 00E+01	3 9E-02	3 9E-03
PHENANTHRENE	3 40E-01	0 00E+00	5 46E-01	9 00E-03	0 00E+00	8 81E-02	9 71E-02	2 00E+00	2 00E+01	4 9E-02	4 9E-03
PYRENE	8 10E-01	0 00E+00	1 30E+00	2 14E-02	0 00E+00	2 10E-01	2 31E-01	2 00E+00	2 00E+01	1 2E-01	1 2E-02
Pesticides/PCBs											
4,4'-DDD	6 90E-02	0 00E+00	4 95E-01	1 83E-03	0.00E+00	7 99E-02	8 17E-02	2 27E-01	2 70E+00	3 6E-01	3 0E-02
4,4'-DDE	1 00E-02	0 00E+00	2 07E-01	2 65E-04	0.00E+00	3 33E-02	3 36E-02	2 27E-01	2 70E+00	1 5E-01	1 2E-02
4,4'-DDT	2 80E-02	0 00E+00	3 75E-01	7 41E-04	0 00E+00	6 04E-02	6 12E-02	2 27E-01	2 70E+00	2.7E-01	2 3E-02
ALPHA-CHLORDANE	3 00E-03	0 00E+00	1 50E-02	7 94E-05	0 00E+00	2 42E-03	2 50E-03	2 14E+00	1 07E+01	1 2E-03	2 3E-04
AROCLOR-1260	3 70E-01	0 00E+00	5 89E+00	9 79E-03	0 00E+00	9 50E-01	9 60E-01	1 80E-01	1 80E+00	5.3E+00	5 3E-01
GAMMA-CHLORDANE	2 20E-03	0 00E+00	1 10E-02	5 82E-05	0 00E+00	1 78E-03	.1 83E-03	2 14E+00	1 07E+01	8 6E-04	1 7E-04
Inorganics											
ALUMINUM	1.79E+04	0 00E+00	2 11E+03	4 74E+02	0 00E+00	3 41E+02	8 15E+02	1 10E+02	1 10E+03	7.4E+00	7 4E-01
ARSENIC	1 51E+01	0 00E+00	1 64E+00	4.00E-01	0 00E+00	2 65E-01	6 65E-01	2 24E+00	4 51E+00	3 0E-01	1 5E-01
BARIUM	9 38E+01	0 00E+00	8 54E+00	2 48E+00	0 00E+00	1 38E+00	3 86E+00	NV	NV	NV	NV
BERYLLIUM	1 80E+00	0 00E+00	8 10E-02	4 76E-02	0 00E+00	1 31E-02	6 07E-02	NV	NV	NV	NV
CADMIUM	7 20E+00	0.00E+00	3 98E+01	1 91E-01	0 00E+00	6 42E+00	6 61E+00	1.47E+00	6 35E+00	4.5E+00	1.0E+00
CHROMIUM	1 02E+02	0 00E+00	3 12E+01	2.70E+00	0 00E+00	5 04E+00	7 74E+00	2 66E+00	1.56E+01	2.9E+00	5 0E-01
COBALT	1 27E+01	0.00E+00	1 55E+00	3.36E-01	0 00E+00	2 50E-01	5 86E-01	7 61E+00	1 83E+01	7 7E-02	3 2E-02
COPPER	6 41E+01	0 00E+00	3 30E+01	1 70E+00	0 00E+00	5 33E+00	7 02E+00	4 05E+00	3 49E+01	1.7E+00	2 0E-01
IRON	3.08E+04	0 00E+00	2 40E+03	8 15E+02	0 00E+00	3 88E+02	1 20E+03	1 00E+02	1 00E+03	1.2E+01	1.2E+00
LEAD	1 28E+02	0 00E+00	4 03E+01	3 39E+00	0 00E+00	6 51E+00	9 90E+00	1 63E+00	4 46E+01	6.1E+00	2 2E-01
MANGANESE	3.76E+02	0 00E+00	2 54E+01	9 95E+00	0 00E+00	4 10E+00	1 41E+01	1 79E+02	3 77E+02	7 8E-02	3 7E-02
MERCURY	6 90E-01	0 00E+00	9 54E-01	1 83E-02	0 00E+00	1 54E-01	1 72E-01	6 40E-03	6 40E-02	2.7E+01	2.7E+00
NICKEL	2 69E+01	0 00E+00	1 27E+02	7 12E-01	0 00E+00	2 05E+01	2 12E+01	6 71E+00	1 86E+01	3.2E+00	1.1E+00
SELENIUM	2 40E+00	0 00E+00	1 76E+00	6 35E-02	0 00E+00	2 84E-01	3 48E-01	2 90E-01	8 20E-01	1.2E+00	4 2E-01
SILVER	4 50E+00	0 00E+00	9 20E+00	1 19E-01	0 00E+00	1 49E+00	1 60E+00	2.02E+00	6 05E+01	7 9E-01	2 7E-02
VANADIUM	7 50E+01	0 00E+00	3 15E+00	1 98E+00	0 00E+00	5 08E-01	2 49E+00	3 44E-01	1 70E+00	7.2E+00	1.5E+00
ZINC	1 25E+02	0 00E+00	4 17E+02	3 31E+00	0 00E+00	6 73E+01	7 06E+01	6 61E+01	1 71E+02	1.1E+00	4 1E-01

Cells are shaded if the value is greater than 1.0

Body Weight = (BW)	7.73E-02	kg
Food Ingestion Rate = (If)	1 25E-02	kg/day
Water Ingestion Rate = (Iw)	1 21E-02	L/day
Soil Ingestion Rate = (Is)	2 05E-03	kg/day
Home Range = (HR)	Assume 100% on site	
Contaminated Area = (CA)	Assume equal to home range	

Dose (soil) = (Cs * Is)(H)/BW
Dose (invertebrate) = (Ci * If)(H)/BW
Dose (water) = (Cw * Iw)(H)/BW
Ci = Contaminant concentration in invertebrate
Cs = Contaminant concentration in soil
Cw = Contaminant concentration in water
Total Dose = Dose (soil) + Dose (invertebrate) + Dose (water)
H=HR/CA (Assume = to 1

Conc = Concentration
LOAEL = Lowest Observed Adverse Effects Concentration
NOAEL = No Observed Adverse Effects Concentration
SW = Surface Water
NV = No value, Value not able to be calculated

AMERICAN ROBIN - LESS CONSERVATIVE INPUTS
TERRESTRIAL WILDLIFE MODEL ECOLOGICAL EFFECTS QUOTIENT CALCULATION
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Avg Soil Conc. (mg/kg)	Avg SW Conc. (mg/L)	Invertebrate Conc. (mg/kg)	Dose (mg/kg/d) from:			Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients	
				Soil	Surface Water	Invert.				NOAEL	LOAEL
Pesticides/PCBs											
AROCLOR-1260	1.36E-01	0.00E+00	9 09E-01	1.29E-03	0 00E+00	1.34E-01	1.36E-01	1.80E-01	1.80E+00	7.5E-01	7.5E-02
Inorganics											
ALUMINUM	1.40E+04	0.00E+00	6.01E+02	1.32E+02	0.00E+00	8 88E+01	2.21E+02	1 10E+02	1.10E+03	2.0E+00	2 0E-01
CADMIUM	3 76E+00	0.00E+00	2 37E+01	3.55E-02	0.00E+00	3.50E+00	3 54E+00	1 47E+00	6 35E+00	2.4E+00	5 6E-01
CHROMIUM	5.85E+01	0 00E+00	1.79E+01	5.53E-01	0.00E+00	2.64E+00	3 20E+00	2.66E+00	1 56E+01	1.2E+00	2 0E-01
COPPER	3.60E+01	0 00E+00	1.85E+01	3 41E-01	0.00E+00	2 74E+00	3.08E+00	4 05E+00	3.49E+01	7.6E-01	8.8E-02
IRON	2 33E+04	0.00E+00	8.39E+02	2.20E+02	0.00E+00	1 24E+02	3.44E+02	1.00E+02	1 00E+03	3.4E+00	3 4E-01
LEAD	4.24E+01	0.00E+00	1 65E+01	4.00E-01	0 00E+00	2.44E+00	2 84E+00	1 63E+00	4.46E+01	1.7E+00	6 4E-02
MERCURY	2.47E-01	0 00E+00	6 75E-01	2.33E-03	0 00E+00	9 97E-02	1.02E-01	6 40E-03	6 40E-02	1.6E+01	1.6E+00
NICKEL	2.13E+01	0.00E+00	2 26E+01	2.02E-01	0 00E+00	3.34E+00	3 54E+00	6 71E+00	1.86E+01	5 3E-01	1 9E-01
SELENIUM	9.20E-01	0 00E+00	8.73E-01	8 70E-03	0 00E+00	1 29E-01	1 38E-01	2.90E-01	8 20E-01	4 7E-01	1 7E-01
VANADIUM	5.08E+01	0 00E+00	2 13E+00	4.80E-01	0 00E+00	3 15E-01	7.95E-01	3 44E-01	1 70E+00	2.3E+00	4 7E-01
ZINC	7 01E+01	0 00E+00	3.45E+02	6 63E-01	0 00E+00	5 09E+01	5.16E+01	6 61E+01	1 71E+02	7.8E-01	3 0E-01

Chemicals are shown only if their ecological effects quotients were greater than 1.0 in the conservative food chain model.
Cells are shaded if the value is greater than 1.0

Body Weight = (BW)	8.04E-02	kg
Food Ingestion Rate = (If)	1.19E-02	kg/day
Water Ingestion Rate = (Iw)	1.13E-02	L/day
Soil Ingestion Rate = (Is)	7.60E-04	kg/day
Home Range = (HR)	6.10E-01	acres
Contaminated Area = (CA)	Assume equal to home range	

Dose (soil) = (Cs * Is)(H)/BW
Dose (invertebrate) = (Ci * If)(H)/BW
Dose (water) = (Cw * Iw)(H)/BW
Ci = Contaminant concentration in invertebrate
Cs = Contaminant concentration in soil
Cw = Contaminant concentration in water
Total Dose = Dose (soil) + Dose (invertebrate) + Dose (water)
H=HR/CA (Assume = to 1)

Conc = Concentration
LOAEL = Lowest Observed Adverse Effects Concentration
NOAEL = No Observed Adverse Effects Concentration
SW = Surface Water

RACCOON - CONSERVATIVE INPUTS
TERRESTRIAL WILDLIFE MODEL ECOLOGICAL EFFECTS QUOTIENT CALCULATION
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Max Sed Conc. (mg/kg)	Max SW Conc. (mg/L)	Invertebrate Conc. (mg/kg)	Dose (mg/kg/d) from: Sediment	Surface Water	Invert.	Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients NOAEL	LOAEL
Volatile Organics											
1,1,1-TRICHLOROETHANE	1.30E-02	0 00E+00	1 25E-02	7 89E-05	0 00E+00	8.06E-04	8 85E-04	1 00E+03	1 00E+04	8 8E-07	8 8E-08
2-BUTANONE	1 40E+00	0 00E+00	1 34E+00	8.50E-03	0 00E+00	8 68E-02	9 53E-02	1 77E+03	4 57E+03	5 4E-05	2 1E-05
ACETONE	7 20E-01	0 00E+00	6 91E-01	4 37E-03	0 00E+00	4 46E-02	4 90E-02	1 00E+01	5 00E+01	4 9E-03	9 8E-04
CARBON DISULFIDE	1 80E-02	0 00E+00	1 73E-02	1 09E-04	0 00E+00	1.12E-03	1 22E-03	1.26E+01	2 56E+01	9 7E-05	4 8E-05
CHLOROBENZENE	1.40E-02	0.00E+00	1 34E-02	8 50E-05	0.00E+00	8 68E-04	9 53E-04	2 73E+00	5 45E+00	3 5E-04	1 7E-04
METHYLENE CHLORIDE	2 20E-02	0 00E+00	2 11E-02	1 34E-04	0 00E+00	1 36E-03	1 50E-03	5 85E+00	5 00E+01	2 6E-04	3 0E-05
TETRACHLOROETHENE	1.60E-02	0 00E+00	1 54E-02	9 71E-05	0.00E+00	9 92E-04	1 09E-03	1 40E+00	7.00E+00	7.8E-04	1 6E-04
TOLUENE	6.00E-03	0.00E+00	5.76E-03	3 64E-05	0 00E+00	3 72E-04	4 08E-04	2 60E+01	2 60E+02	1 6E-05	1 6E-06
TOTAL XYLENES	3 00E-03	0.00E+00	2 88E-03	1.82E-05	0.00E+00	1 86E-04	2 04E-04	2.06E+00	2 58E+00	9 9E-05	7 9E-05
TRICHLOROETHENE	2.20E-02	0 00E+00	2 11E-02	1.34E-04	0 00E+00	1 36E-03	1 50E-03	7.00E-01	7 00E+00	2 1E-03	2 1E-04
Semivolatile Organics											
1,4-DICHLOROBENZENE	4 20E-02	0 00E+00	4 03E-02	2 55E-04	0 00E+00	2 60E-03	2 86E-03	3 00E+01	3 00E+02	9 5E-05	9 5E-06
2,4-DIMETHYLPHENOL	2 10E-01	0 00E+00	2 02E-01	1 27E-03	0 00E+00	1 30E-02	1 43E-02	5 00E+00	2 50E+01	2 9E-03	5 7E-04
2-METHYLNAPHTHALENE	5 50E-02	0 00E+00	5 28E-02	3 34E-04	0 00E+00	3 41E-03	3 74E-03	6 56E+01	3 56E+02	5 7E-05	1 1E-05
4-METHYLPHENOL	4 30E-02	0 00E+00	4 13E-02	2 61E-04	0 00E+00	2 66E-03	2 93E-03	5 00E+00	1 50E+01	5 9E-04	2 0E-04
ACENAPHTHENE	3 80E-01	0 00E+00	1 06E-01	2 31E-03	0 00E+00	6 83E-03	9 14E-03	6 56E+01	3 56E+02	1 4E-04	2 6E-05
ACENAPHTHYLENE	3 90E-01	0 00E+00	1 09E-01	2 37E-03	0 00E+00	7 01E-03	9 38E-03	6 56E+01	3 56E+02	1 4E-04	2 6E-05
ANTHRACENE	2 40E+00	0 00E+00	6 68E-01	1 46E-02	0 00E+00	4 31E-02	5 77E-02	6 56E+01	3 56E+02	8 8E-04	1 6E-04
BENZO(A)ANTHRACENE	2 70E+01	0 00E+00	7 51E+00	1 64E-01	0 00E+00	4 85E-01	6 49E-01	6 15E-01	3 84E+01	1.1E+00	1 7E-02
BENZO(A)PYRENE	3 50E+01	0 00E+00	9 74E+00	2 12E-01	0 00E+00	6.29E-01	8 41E-01	6 15E-01	3 84E+01	1.4E+00	2 2E-02
BENZO(B)FLUORANTHENE	5 50E+01	0 00E+00	1 53E+01	3 34E-01	0 00E+00	9 88E-01	1 32E+00	6 15E-01	3.84E+01	2.2E+00	3 4E-02
BENZO(G,H,I)PERYLENE	2 30E+01	0 00E+00	6 40E+00	1 40E-01	0 00E+00	4 13E-01	5 53E-01	6 15E-01	3 84E+01	9 0E-01	1 4E-02
BENZO(K)FLUORANTHENE	4 50E+01	0 00E+00	1 25E+01	2 73E-01	0 00E+00	8 09E-01	1 08E+00	6 15E-01	3 84E+01	1.8E+00	2 8E-02
BENZOIC ACID	3 20E+01	0.00E+00	3 07E+01	1 94E-01	0 00E+00	1 98E+00	2 18E+00	NV	NV	NV	NV
BIS(2-ETHYLHEXYL)PHTHALATE	3 50E+00	0 00E+00	3 36E+00	2 12E-02	0.00E+00	2 17E-01	2 38E-01	1 83E+01	1 83E+02	1 3E-02	1 3E-03
BUTYL BENZYL PHTHALATE	3 90E-01	0 00E+00	3 74E-01	2 37E-03	0 00E+00	2 42E-02	2 65E-02	1 59E+01	4 70E+01	1 7E-03	5 6E-04
CARBAZOLE	6 60E-01	0 00E+00	1 84E-01	4 01E-03	0 00E+00	1 19E-02	1 59E-02	6 15E-01	3 84E+01	2 6E-02	4 1E-04
CHRYSENE	4 20E+01	0 00E+00	1 17E+01	2.55E-01	0 00E+00	7 55E-01	1.01E+00	6 15E-01	3 84E+01	1.6E+00	2 6E-02
DIBENZO(A,H)ANTHRACENE	1 40E+00	0 00E+00	3 90E-01	8 50E-03	0 00E+00	2.52E-02	3 37E-02	6 15E-01	3 84E+01	5 5E-02	8.8E-04
DIBENZOFURAN	1 00E+00	0 00E+00	9 60E-01	6.07E-03	0 00E+00	6 20E-02	6 80E-02	6.15E-01	3 84E+01	1 1E-01	1 8E-03
DI-N-BUTYL PHTHALATE	1 80E-01	0 00E+00	1 73E-01	1 09E-03	0 00E+00	1 12E-02	1 22E-02	5 50E+02	1 83E+03	2 2E-05	6 7E-06
FLUORANTHENE	8 00E+01	0 00E+00	2 23E+01	4 86E-01	0 00E+00	1 44E+00	1 92E+00	6 56E+01	3 56E+02	2 9E-02	5 4E-03
FLUORENE	1 00E+00	0 00E+00	2 78E-01	6 07E-03	0.00E+00	1 80E-02	2 40E-02	6 56E+01	3 56E+02	3 7E-04	6 8E-05
INDENO(1,2,3-CD)PYRENE	2 30E+01	0 00E+00	6 40E+00	1 40E-01	0 00E+00	4 13E-01	5 53E-01	6 15E-01	3 84E+01	9 0E-01	1 4E-02
NAPHTHALENE	1 60E-01	0 00E+00	4.45E-02	9 71E-04	0 00E+00	2 88E-03	3 85E-03	6 56E+01	3 56E+02	5 9E-05	1 1E-05
PENTACHLOROPHENOL	2 40E-01	0 00E+00	2 30E-01	1 46E-03	0.00E+00	1 49E-02	1 63E-02	8 42E+00	2 27E+01	1.9E-03	7 2E-04
PHENANTHRENE	3 60E+01	0 00E+00	1 00E+01	2 19E-01	0.00E+00	6 47E-01	8 65E-01	6 56E+01	3 56E+02	1 3E-02	2 4E-03
PYRENE	4 20E+01	0 00E+00	1.17E+01	2 55E-01	0 00E+00	7 55E-01	1 01E+00	6 15E-01	3 84E+01	1.6E+00	2 6E-02

RACCOON - CONSERVATIVE INPUTS
TERRESTRIAL WILDLIFE MODEL ECOLOGICAL EFFECTS QUOTIENT CALCULATION
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Max Sed Conc. (mg/kg)	Max SW Conc. (mg/L)	Invertebrate Conc. (mg/kg)	Dose (mg/kg/d) from: Sediment	Surface Water	Invert.	Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients NOAEL	LOAEL
Pesticides/PCBs											
4,4'-DDD	4 80E+00	0 00E+00	1.29E+00	2 91E-02	0 00E+00	8 33E-02	1 12E-01	1 47E-01	5 56E+00	7 6E-01	2 0E-02
4,4'-DDE	7 20E-01	0 00E+00	5.32E+00	4 37E-03	0 00E+00	3 44E-01	3 48E-01	1 47E-01	5 56E+00	2.4E+00	6 3E-02
4,4'-DDT	2 90E+00	0 00E+00	4 65E+00	1.76E-02	0 00E+00	3 00E-01	3 18E-01	1.47E-01	5 56E+00	2.2E+00	5 7E-02
ALDRIN	3.20E-03	0 00E+00	5 53E-03	1 94E-05	0 00E+00	3.57E-04	3 76E-04	2 00E-01	1 00E+00	1 9E-03	3 8E-04
ALPHA-CHLORDANE	5 20E-02	0 00E+00	2 38E-01	3 16E-04	0 00E+00	1.54E-02	1 57E-02	4 58E+00	9.16E+00	3 4E-03	1 7E-03
AROCLOR-1260	1 50E+00	0 00E+00	9 23E+01	9 11E-03	0 00E+00	5 96E+00	5 97E+00	6 80E-02	6 80E-01	8.8E+01	8.8E+00
BETA-BHC	2 70E-03	0 00E+00	4 66E-03	1 64E-05	0 00E+00	3 01E-04	3 18E-04	4 00E-01	2 00E+00	7 9E-04	1 6E-04
DELTA-BHC	4 20E-03	0 00E+00	7.25E-03	2 55E-05	0 00E+00	4 68E-04	4 94E-04	1 40E-02	1 40E-01	3 5E-02	3 5E-03
DIELDRIN	2 60E-02	0 00E+00	4 49E-02	1 58E-04	0 00E+00	2 90E-03	3 06E-03	1 50E-02	1 27E+00	2.0E-01	2 4E-03
ENDOSULFAN I	1 10E-02	0 00E+00	1 90E-02	6 68E-05	0 00E+00	1 23E-03	1 29E-03	1 50E-01	1 50E+00	8 6E-03	8 6E-04
ENDOSULFAN II	3 10E-02	0.00E+00	5 35E-02	1 88E-04	0 00E+00	3 46E-03	3 65E-03	1 50E-01	1 50E+00	2 4E-02	2 4E-03
ENDOSULFAN SULFATE	1 40E-02	0 00E+00	2.42E-02	8 50E-05	0 00E+00	1 56E-03	1 65E-03	1 50E-01	1 50E+00	1 1E-02	1 1E-03
ENDRIN	1 80E-02	0 00E+00	3 11E-02	1 09E-04	0 00E+00	2 01E-03	2 12E-03	9 20E-02	9 20E-01	2 3E-02	2 3E-03
ENDRIN ALDEHYDE	1.40E-01	0 00E+00	2 42E-01	8 50E-04	0 00E+00	1 56E-02	1 65E-02	9 20E-02	9 20E-01	1 8E-01	1 8E-02
ENDRIN KETONE	2 00E-02	0 00E+00	3 45E-02	1 21E-04	0 00E+00	2 23E-03	2 35E-03	9 20E-02	9 20E-01	2 6E-02	2 6E-03
GAMMA-BHC (LINDANE)	8.20E-03	0 00E+00	1 42E-02	4 98E-05	0 00E+00	9 15E-04	9 64E-04	8 00E+00	8 00E+01	1 2E-04	1 2E-05
GAMMA-CHLORDANE	5 90E-02	0 00E+00	1 26E-01	3 58E-04	0 00E+00	8 12E-03	8 47E-03	4 58E+00	9 16E+00	1 9E-03	9 3E-04
HEPTACHLOR	4 50E-03	0 00E+00	7 77E-03	2 73E-05	0 00E+00	5 02E-04	5 29E-04	1 00E-01	1 00E+00	5 3E-03	5 3E-04
HEPTACHLOR EPOXIDE	4.50E-03	0 00E+00	7 77E-03	2.73E-05	0 00E+00	5 02E-04	5 29E-04	1 00E-01	1 00E+00	5 3E-03	5 3E-04
METHOXYCHLOR	8 30E-02	0 00E+00	1 43E-01	5 04E-04	0 00E+00	9 26E-03	9 76E-03	4 00E+00	8 00E+00	2 4E-03	1 2E-03
Inorganics											
ALUMINUM	2 86E+04	0 00E+00	6 07E+04	1 74E+02	0 00E+00	3 92E+03	4 09E+03	1 93E+00	1 93E+01	2.1E+03	2.1E+02
ANTIMONY	7 80E+00	0 00E+00	1 66E+01	4 73E-02	0 00E+00	1 07E+00	1.12E+00	5 90E-02	2 76E+00	1.9E+01	4 0E-01
ARSENIC	5 25E+01	0 00E+00	3 62E+01	3 19E-01	0 00E+00	2 34E+00	2 66E+00	1 04E+00	4 55E+00	2.6E+00	5 8E-01
BARIUM	3.94E+02	0 00E+00	8 36E+02	2 39E+00	0 00E+00	5 40E+01	5 64E+01	5 18E+01	8 27E+01	1.1E+00	6 8E-01
BERYLLIUM	4 10E+00	0 00E+00	8 70E+00	2 49E-02	0 00E+00	5 62E-01	5 87E-01	5 32E-01	6 73E-01	1.1E+00	8 7E-01
BORON	3 97E+01	0 00E+00	8 43E+01	2 41E-01	0.00E+00	5 44E+00	5 68E+00	2 80E+01	9 36E+01	2 0E-01	6 1E-02
CADMIUM	2.95E+01	0 00E+00	2 36E+02	1 79E-01	0 00E+00	1.52E+01	1 54E+01	7 70E-01	6 90E+00	2.0E+01	2.2E+00
CHROMIUM	9.75E+01	0 00E+00	4 56E+01	5 92E-01	0 00E+00	2 95E+00	3 54E+00	2 40E+00	5 82E+01	1.5E+00	6 1E-02
COBALT	1 44E+01	0 00E+00	3 06E+01	8 74E-02	0 00E+00	1 97E+00	2 06E+00	7 33E+00	1 89E+01	2 8E-01	1 1E-01
COPPER	1 73E+02	0.00E+00	9 08E+02	1 05E+00	0 00E+00	5 87E+01	5 97E+01	5 60E+00	8 27E+01	1.1E+01	7 2E-01
CYANIDE	6.10E+00	0 00E+00	1.29E+01	3 70E-02	0 00E+00	8 36E-01	8 73E-01	6 87E+01	6 87E+02	1.3E-02	1 3E-03
IRON	3 15E+05	0 00E+00	6 69E+05	1 91E+03	0 00E+00	4 32E+04	4 51E+04	5.00E+01	5 00E+02	9.0E+02	9.0E+01
LEAD	2.41E+02	0 00E+00	1.46E+02	1 46E+00	0 00E+00	9 45E+00	1 09E+01	4 70E+00	1 86E+02	2.3E+00	5 9E-02
MANGANESE	2.64E+03	0 00E+00	5 60E+03	1 60E+01	0 00E+00	3 62E+02	3 78E+02	5 15E+01	1.46E+02	7.3E+00	2.6E+00
MERCURY	1.20E+00	0 00E+00	3 44E+00	7 28E-03	0 00E+00	2 22E-01	2 30E-01	3 20E-02	1 60E-01	7.2E+00	1.4E+00
NICKEL	6 15E+01	0 00E+00	1 43E+02	3 73E-01	0 00E+00	9 21E+00	9 59E+00	1 70E+00	1 48E+01	5.6E+00	6 5E-01
SELENIUM	9 80E+00	0 00E+00	2 08E+01	5 95E-02	0 00E+00	1 34E+00	1 40E+00	1 43E-01	6 60E-01	9.8E+00	2.1E+00
SILVER	9 60E-01	0 00E+00	2 04E+00	5 83E-03	0 00E+00	1 32E-01	1 37E-01	6 02E+00	1 19E+02	2 3E-02	1 2E-03
THALLIUM	1 10E+00	0.00E+00	2 33E+00	6 68E-03	0 00E+00	1 51E-01	1 57E-01	7 40E-03	7.40E-02	2.1E+01	2.1E+00
VANADIUM	2 89E+02	0 00E+00	6.13E+02	1 75E+00	0 00E+00	3 96E+01	4 14E+01	4 16E+00	9.44E+00	9.9E+00	4.4E+00
ZINC	7 02E+02	0 00E+00	5 28E+03	4 26E+00	0 00E+00	3 41E+02	3 45E+02	7 54E+01	2 98E+02	4.6E+00	1.2E+00

Cells are shaded if the value is greater than 1 0

Body Weight = (BW)	3 67E+00	kg
Food Ingestion Rate = (If)	2 37E-01	kg/day
Water Ingestion Rate = (Iw)	4 68E-01	L/day
Sediment Ingestion Rate = (Is)	2 23E-02	kg/day
Home Range = (HR)	Assume 100% on site	
Contaminated Area = (CA)	Assume equal to home range	

Dose (sediment) = (Cs * Is)(H)/BW
Dose (invertebrate) = (Ci * If)(H)/BW
Dose (water) = (Cw * Iw)(H)/BW
Ci = Contaminant concentration in invertebrate
Cs = Contaminant concentration in sediment
Cw = Contaminant concentration in water
Total Dose = Dose (sediment) + Dose (invertebrate) + Dose (water)
H=HR/CA (Assume = to 1)

Conc = Concentration
LOAEL = Lowest Observed Adverse Effects Concentration
NOAEL = No Observed Adverse Effects Concentration
Sed = Sediment
SW = Surface Water
NV = No value, Value not able to be calculated

RACCOON - LESS CONSERVATIVE INPUTS
TERRESTRIAL WILDLIFE MODEL ECOLOGICAL EFFECTS QUOTIENT CALCULATION
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Avg Sed Conc. (mg/kg)	Avg SW Conc. (mg/L)	Invertebrate Conc. (mg/kg)	Dose (mg/kg/d) from: Sediment	Surface Water	Invert.	Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients NOAEL	LOAEL
Semivolatile Organics											
BENZO(A)ANTHRACENE	1 11E+00	0 00E+00	3.09E-01	3 41E-03	0 00E+00	1 01E-02	1.35E-02	6.15E-01	3.84E+01	2.2E-02	3.5E-04
BENZO(A)PYRENE	1 28E+00	0.00E+00	3.57E-01	3.93E-03	0.00E+00	1 16E-02	1.56E-02	6.15E-01	3.84E+01	2.5E-02	4.1E-04
BENZO(B)FLUORANTHENE	1 65E+00	0 00E+00	4.58E-01	5.05E-03	0 00E+00	1 50E-02	2.00E-02	6 15E-01	3.84E+01	3.3E-02	5 2E-04
BENZO(K)FLUORANTHENE	1.39E+00	0 00E+00	3 86E-01	4 26E-03	0 00E+00	1 26E-02	1 69E-02	6.15E-01	3 84E+01	2 7E-02	4 4E-04
CHRYSENE	1.46E+00	0 00E+00	4.07E-01	4.48E-03	0.00E+00	1 33E-02	1 78E-02	6.15E-01	3 84E+01	2.9E-02	4 6E-04
PYRENE	1.76E+00	0 00E+00	4.91E-01	5.41E-03	0 00E+00	1.60E-02	2 14E-02	6 15E-01	3.84E+01	3.5E-02	5.6E-04
Pesticides/PCBs											
4,4'-DDE	3.82E-02	0 00E+00	2.83E-01	1.17E-04	0.00E+00	9 23E-03	9 34E-03	1.47E-01	5 56E+00	6 4E-02	1 7E-03
4,4'-DDT	1.30E-01	0 00E+00	2 08E-01	3 99E-04	0.00E+00	6 80E-03	7 20E-03	1.47E-01	5 56E+00	4 9E-02	1.3E-03
AROCLOR-1260	1.95E-01	0 00E+00	6 79E+00	6.00E-04	0.00E+00	2.22E-01	2 22E-01	6 80E-02	6 80E-01	3.3E+00	3 3E-01
Inorganics											
ALUMINUM	1.25E+04	0 00E+00	5.28E+03	3.84E+01	0 00E+00	1 73E+02	2.11E+02	1 93E+00	1 93E+01	1.1E+02	1.1E+01
ANTIMONY	1.46E+00	0 00E+00	6.19E-01	4.50E-03	0 00E+00	2.02E-02	2.47E-02	5.90E-02	2 76E+00	4 2E-01	8 9E-03
ARSENIC	9.98E+00	0 00E+00	1.43E+00	3 06E-02	0.00E+00	4.66E-02	7 72E-02	1.04E+00	4 55E+00	7.4E-02	1 7E-02
BARIUM	8.79E+01	0 00E+00	3 71E+01	2 70E-01	0.00E+00	1 21E+00	1.48E+00	5.18E+01	8 27E+01	2.9E-02	1 8E-02
BERYLLIUM	7.52E-01	0 00E+00	3.18E-01	2.31E-03	0.00E+00	1 04E-02	1 27E-02	5.32E-01	6 73E-01	2 4E-02	1 9E-02
CADMIUM	1.74E+00	0 00E+00	1 05E+00	5 35E-03	0.00E+00	3 42E-02	3 95E-02	7.70E-01	6 90E+00	5.1E-02	5 7E-03
CHROMIUM	4.03E+01	0 00E+00	4.03E+00	1 24E-01	0.00E+00	1.32E-01	2 55E-01	2 40E+00	5 82E+01	1 1E-01	4 4E-03
COPPER	5 15E+01	0.00E+00	8.01E+01	1.58E-01	0.00E+00	2 61E+00	2 77E+00	5.60E+00	8 27E+01	4.9E-01	3.4E-02
IRON	5.26E+04	0 00E+00	2.22E+04	1 62E+02	0 00E+00	7.26E+02	8.87E+02	5 00E+01	5 00E+02	1.8E+01	1.8E+00
LEAD	5 89E+01	0 00E+00	4 18E+00	1.81E-01	0.00E+00	1 37E-01	3.17E-01	4.70E+00	1 86E+02	6.8E-02	1.7E-03
MANGANESE	3.27E+02	0 00E+00	1.38E+02	1.00E+00	0 00E+00	4 51E+00	5.51E+00	5.15E+01	1.46E+02	1 1E-01	3.8E-02
MERCURY	2 72E-01	0 00E+00	3.09E-01	8.34E-04	0 00E+00	1 01E-02	1.09E-02	3 20E-02	1 60E-01	3.4E-01	6 8E-02
NICKEL	1.98E+01	0 00E+00	9 64E+00	6.09E-02	0.00E+00	3 15E-01	3 75E-01	1.70E+00	1 48E+01	2.2E-01	2 5E-02
SELENIUM	1.25E+00	0 00E+00	5 30E-01	3.85E-03	0 00E+00	1 73E-02	2 12E-02	1 43E-01	6.60E-01	1 5E-01	3 2E-02
THALLIUM	3.90E-01	0 00E+00	1.65E-01	1 20E-03	0.00E+00	5 38E-03	6 57E-03	7 40E-03	7 40E-02	8.9E-01	8 9E-02
VANADIUM	5 58E+01	0.00E+00	2.36E+01	1.71E-01	0 00E+00	7 70E-01	9.41E-01	4.16E+00	9 44E+00	2.3E-01	1.0E-01
ZINC	1.67E+02	0 00E+00	3.23E+02	5 12E-01	0 00E+00	1.05E+01	1.10E+01	7 54E+01	2.98E+02	1 5E-01	3 7E-02

Chemicals are shown only if their ecological effects quotients were greater than 1 0 in the conservative food chain model
Cells are shaded if the value is greater than 1.0

Body Weight = (BW)	5.64E+00	kg
Food Ingestion Rate = (If)	1.84E-01	kg/day
Water Ingestion Rate = (Iw)	4 65E-01	L/day
Sediment Ingestion Rate = (Is)	1.73E-02	kg/day
Home Range = (HR)	1.56E+03	acres
Contaminated Area = (CA)	Assume equal to home range	

Dose (sediment) = (Cs * Is)(H)/BW
Dose (invertebrate) = (Ci * If)(H)/BW
Dose (water) = (Cw * Iw)(H)/BW
Ci = Contaminant concentration in invertebrate
Cs = Contaminant concentration in sediment
Cw = Contaminant concentration in water
Total Dose = Dose (sediment) + Dose (invertebrate) + Dose (water)
H=HR/CA (Assume = to 1)

Conc = Concentration
LOAEL = Lowest Observed Adverse Effects Concentration
NOAEL = No Observed Adverse Effects Concentration
Sed = Sediment
SW = Surface Water

MALLARD DUCK - CONSERVATIVE INPUTS
TERRESTRIAL WILDLIFE MODEL ECOLOGICAL EFFECTS QUOTIENT CALCULATION
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Max Sed. Conc. (mg/kg)	Max SW Conc. (mg/L)	Invertebrate Conc. (mg/kg)	Dose (mg/kg/d) from: Sediment	Surface Water	Invert.	Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients NOAEL	LOAEL
Volatile Organics											
1,1,1-TRICHLOROETHANE	1 30E-02	0 00E+00	1 25E-02	3 37E-05	0 00E+00	9 81E-04	1 01E-03	NV	NV	NV	NV
2-BUTANONE	1 40E+00	0 00E+00	1 34E+00	3 63E-03	0 00E+00	1.06E-01	1.09E-01	NV	NV	NV	NV
ACETONE	7.20E-01	0 00E+00	6 91E-01	1 87E-03	0 00E+00	5 43E-02	5 62E-02	NV	NV	NV	NV
CARBON DISULFIDE	1 80E-02	0 00E+00	1.73E-02	4 67E-05	0.00E+00	1 36E-03	1 40E-03	NV	NV	NV	NV
CHLOROBENZENE	1 40E-02	0 00E+00	1 34E-02	3 63E-05	0 00E+00	1 06E-03	1 09E-03	NV	NV	NV	NV
METHYLENE CHLORIDE	2 20E-02	0 00E+00	2.11E-02	5.71E-05	0 00E+00	1 66E-03	1 72E-03	NV	NV	NV	NV
TETRACHLOROETHENE	1 60E-02	0 00E+00	1 54E-02	4 15E-05	0 00E+00	1 21E-03	1 25E-03	NV	NV	NV	NV
TOLUENE	6 00E-03	0 00E+00	5 76E-03	1 56E-05	0 00E+00	4 53E-04	4 68E-04	NV	NV	NV	NV
TOTAL XYLENES	3 00E-03	0 00E+00	2 88E-03	7 78E-06	0 00E+00	2 26E-04	2 34E-04	NV	NV	NV	NV
TRICHLOROETHENE	2 20E-02	0 00E+00	2 11E-02	5 71E-05	0 00E+00	1 66E-03	1 72E-03	NV	NV	NV	NV
Semivolatile Organics											
1,4-DICHLOROBENZENE	4 20E-02	0 00E+00	4 03E-02	1 09E-04	0 00E+00	3 17E-03	3 28E-03	NV	NV	NV	NV
2,4-DIMETHYLPHENOL	2 10E-01	0 00E+00	2 02E-01	5 45E-04	0 00E+00	1 58E-02	1 64E-02	NV	NV	NV	NV
2-METHYLNAPHTHALENE	5 50E-02	0 00E+00	5 28E-02	1 43E-04	0 00E+00	4 15E-03	4 29E-03	2 00E+00	2 00E+01	2 1E-03	2 1E-04
4-METHYLPHENOL	4 30E-02	0 00E+00	4 13E-02	1 12E-04	0 00E+00	3 24E-03	3 36E-03	NV	NV	NV	NV
ACENAPHTHENE	3 80E-01	0 00E+00	1.06E-01	9 86E-04	0 00E+00	8 31E-03	9 30E-03	2 00E+00	2 00E+01	4 6E-03	4 6E-04
ACENAPHTHYLENE	3 90E-01	0 00E+00	1 09E-01	1.01E-03	0 00E+00	8 53E-03	9 54E-03	2 00E+00	2 00E+01	4 8E-03	4 8E-04
ANTHRACENE	2 40E+00	0.00E+00	6 68E-01	6 23E-03	0 00E+00	5 25E-02	5 87E-02	2 00E+00	2 00E+01	2.9E-02	2 9E-03
BENZO(A)ANTHRACENE	2 70E+01	0 00E+00	7 51E+00	7 00E-02	0 00E+00	5.91E-01	6.61E-01	2 00E+00	2 00E+01	3 3E-01	3 3E-02
BENZO(A)PYRENE	3 50E+01	0 00E+00	9 74E+00	9 08E-02	0 00E+00	7 66E-01	8 57E-01	2 00E+00	2 00E+01	4 3E-01	4 3E-02
BENZO(B)FLUORANTHENE	5 50E+01	0 00E+00	1 53E+01	1 43E-01	0 00E+00	1 20E+00	1 35E+00	2 00E+00	2 00E+01	6 7E-01	6 7E-02
BENZO(G,H,I)PERYLENE	2 30E+01	0 00E+00	6 40E+00	5 97E-02	0 00E+00	5.03E-01	5 63E-01	2 00E+00	2 00E+01	2 8E-01	2 8E-02
BENZO(K)FLUORANTHENE	4 50E+01	0 00E+00	1 25E+01	1.17E-01	0 00E+00	9 85E-01	1 10E+00	2 00E+00	2 00E+01	5 5E-01	5 5E-02
BENZOIC ACID	3 20E+01	0 00E+00	3 07E+01	8 30E-02	0 00E+00	2 41E+00	2 50E+00	NV	NV	NV	NV
BIS(2-ETHYLHEXYL)PHTHALATE	3 50E+00	0 00E+00	3 36E+00	9 08E-03	0 00E+00	2 64E-01	2 73E-01	NV	NV	NV	NV
BUTYL BENZYL PHTHALATE	3 90E-01	0 00E+00	3 74E-01	1 01E-03	0 00E+00	2 94E-02	3 04E-02	NV	NV	NV	NV
CARBAZOLE	6.60E-01	0 00E+00	1 84E-01	1 71E-03	0 00E+00	1.44E-02	1 62E-02	2 00E+00	2 00E+01	8.1E-03	8 1E-04
CHRYSENE	4 20E+01	0 00E+00	1 17E+01	1 09E-01	0 00E+00	9 19E-01	1 03E+00	2 00E+00	2 00E+01	5.1E-01	5 1E-02
DIBENZO(A,H)ANTHRACENE	1 40E+00	0 00E+00	3 90E-01	3 63E-03	0 00E+00	3 06E-02	3 43E-02	2 00E+00	2 00E+01	1 7E-02	1 7E-03
DIBENZOFURAN	1 00E+00	0 00E+00	9 60E-01	2 59E-03	0 00E+00	7 54E-02	7 80E-02	2 00E+00	2 00E+01	3 9E-02	3 9E-03
DI-N-BUTYL PHTHALATE	1.80E-01	0 00E+00	1 73E-01	4 67E-04	0 00E+00	1 36E-02	1 40E-02	NV	NV	NV	NV
FLUORANTHENE	8.00E+01	0 00E+00	2 23E+01	2 08E-01	0 00E+00	1.75E+00	1.96E+00	2.00E+00	2 00E+01	9 8E-01	9 8E-02
FLUORENE	1 00E+00	0 00E+00	2 78E-01	2.59E-03	0 00E+00	2 19E-02	2 45E-02	2 00E+00	2 00E+01	1 2E-02	1 2E-03
INDENO(1,2,3-CD)PYRENE	2.30E+01	0.00E+00	6 40E+00	5 97E-02	0 00E+00	5 03E-01	5 63E-01	2 00E+00	2 00E+01	2.8E-01	2 8E-02
NAPHTHALENE	1 60E-01	0 00E+00	4 45E-02	4 15E-04	0 00E+00	3 50E-03	3 92E-03	2 00E+00	2 00E+01	2 0E-03	2 0E-04
PENTACHLOROPHENOL	2.40E-01	0 00E+00	2 30E-01	6 23E-04	0 00E+00	1 81E-02	1 87E-02	6 73E+00	5 20E+01	2 8E-03	3 6E-04
PHENANTHRENE	3 60E+01	0 00E+00	1 00E+01	9 34E-02	0 00E+00	7 88E-01	8.81E-01	2 00E+00	2 00E+01	4.4E-01	4 4E-02
PYRENE	4 20E+01	0 00E+00	1 17E+01	1 09E-01	0 00E+00	9 19E-01	1 03E+00	2 00E+00	2 00E+01	5 1E-01	5 1E-02

MALLARD DUCK - CONSERVATIVE INPUTS
TERRESTRIAL WILDLIFE MODEL ECOLOGICAL EFFECTS QUOTIENT CALCULATION
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Max Sed. Conc. (mg/kg)	Max SW Conc. (mg/L)	Invertebrate Conc. (mg/kg)	Dose (mg/kg/d) from: Sediment	Surface Water	Invert.	Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients NOAEL	LOAEL
Pesticides/PCBs											
4,4'-DDD	4 80E+00	0 00E+00	1 29E+00	1 25E-02	0 00E+00	1 01E-01	1 14E-01	2 27E-01	2 70E+00	5 0E-01	4 2E-02
4,4'-DDE	7 20E-01	0 00E+00	5 32E+00	1 87E-03	0 00E+00	4 18E-01	4 20E-01	2 27E-01	2 70E+00	1.9E+00	1 6E-01
4,4'-DDT	2 90E+00	0 00E+00	4 65E+00	7 52E-03	0.00E+00	3 65E-01	3 73E-01	2 27E-01	2 70E+00	1.6E+00	1 4E-01
ALDRIN	3.20E-03	0.00E+00	5 53E-03	8 30E-06	0 00E+00	4 35E-04	4 43E-04	NV	NV	NV	NV
ALPHA-CHLORDANE	5 20E-02	0 00E+00	2 38E-01	1 35E-04	0 00E+00	1 87E-02	1 88E-02	2 14E+00	1 07E+01	8 8E-03	1 8E-03
AROCLOR-1260	1 50E+00	0 00E+00	9.23E+01	3 89E-03	0 00E+00	7 26E+00	7.26E+00	1 80E-01	1.80E+00	4.0E+01	4.0E+00
BETA-BHC	2 70E-03	0 00E+00	4 66E-03	7 00E-06	0 00E+00	3 67E-04	3 74E-04	5 60E-01	2 25E+00	6 7E-04	1 7E-04
DELTA-BHC	4.20E-03	0 00E+00	7.25E-03	1 09E-05	0 00E+00	5 70E-04	5 81E-04	5 60E-01	2.25E+00	1 0E-03	2 6E-04
DIELDRIN	2 60E-02	0 00E+00	4 49E-02	6 75E-05	0 00E+00	3 53E-03	3 60E-03	7 09E-02	8 00E-01	5 1E-02	4 5E-03
ENDOSULFAN I	1.10E-02	0.00E+00	1 90E-02	2 85E-05	0 00E+00	1 49E-03	1 52E-03	1 00E+01	1 00E+02	1 5E-04	1 5E-05
ENDOSULFAN II	3.10E-02	0 00E+00	5 35E-02	8 04E-05	0 00E+00	4 21E-03	4 29E-03	1 00E+01	1 00E+02	4 3E-04	4 3E-05
ENDOSULFAN SULFATE	1 40E-02	0 00E+00	2 42E-02	3 63E-05	0 00E+00	1 90E-03	1 94E-03	1 00E+01	1 00E+02	1 9E-04	1 9E-05
ENDRIN	1 80E-02	0 00E+00	3.11E-02	4 67E-05	0 00E+00	2 44E-03	2 49E-03	1 04E-02	1 04E-01	2 4E-01	2 4E-02
ENDRIN ALDEHYDE	1 40E-01	0.00E+00	2 42E-01	3 63E-04	0 00E+00	1 90E-02	1 94E-02	1 04E-02	1 04E-01	1.9E+00	1 9E-01
ENDRIN KETONE	2 00E-02	0 00E+00	3 45E-02	5 19E-05	0 00E+00	2 72E-03	2 77E-03	1 04E-02	1 04E-01	2 7E-01	2 7E-02
GAMMA-BHC (LINDANE)	8 20E-03	0 00E+00	1 42E-02	2 13E-05	0 00E+00	1 11E-03	1 13E-03	2 00E+00	2 00E+01	5 7E-04	5 7E-05
GAMMA-CHLORDANE	5.90E-02	0 00E+00	1 26E-01	1 53E-04	0 00E+00	9 88E-03	1 00E-02	2 14E+00	1 07E+01	4 7E-03	9 4E-04
HEPTACHLOR	4 50E-03	0 00E+00	7 77E-03	1 17E-05	0 00E+00	6 11E-04	6 23E-04	NV	NV	NV	NV
HEPTACHLOR EPOXIDE	4 50E-03	0 00E+00	7.77E-03	1 17E-05	0 00E+00	6 11E-04	6 23E-04	NV	NV	NV	NV
METHOXYCHLOR	8 30E-02	0 00E+00	1 43E-01	2 15E-04	0 00E+00	1 13E-02	1 15E-02	NV	NV	NV	NV
Inorganics											
ALUMINUM	2 86E+04	0 00E+00	6 07E+04	7 42E+01	0 00E+00	4 77E+03	4 85E+03	1 10E+02	1 10E+03	4.4E+01	4.4E+00
ANTIMONY	7 80E+00	0 00E+00	1 66E+01	2 02E-02	0 00E+00	1.30E+00	1.32E+00	NV	NV	NV	NV
ARSENIC	5 25E+01	0 00E+00	3 62E+01	1 36E-01	0 00E+00	2 85E+00	2 98E+00	2 24E+00	4 51E+00	1.3E+00	6 6E-01
BARIUM	3 94E+02	0 00E+00	8.36E+02	1.02E+00	0 00E+00	6 57E+01	6 68E+01	NV	NV	NV	NV
BERYLLIUM	4 10E+00	0.00E+00	8 70E+00	1 06E-02	0 00E+00	6 84E-01	6 95E-01	NV	NV	NV	NV
BORON	3 97E+01	0 00E+00	8 43E+01	1 03E-01	0 00E+00	6 62E+00	6 73E+00	2 88E+01	1 00E+02	2 3E-01	6 7E-02
CADMIUM	2.95E+01	0 00E+00	2 36E+02	7.65E-02	0 00E+00	1 85E+01	1 86E+01	1 47E+00	6 35E+00	1.3E+01	2.9E+00
CHROMIUM	9 75E+01	0 00E+00	4 56E+01	2 53E-01	0 00E+00	3 59E+00	3 84E+00	2 66E+00	1 56E+01	1.4E+00	2 5E-01
COBALT	1 44E+01	0 00E+00	3 06E+01	3 74E-02	0 00E+00	2 40E+00	2 44E+00	7 61E+00	1 83E+01	3 2E-01	1.3E-01
COPPER	1 73E+02	0.00E+00	9 08E+02	4 49E-01	0 00E+00	7 14E+01	7.19E+01	4 05E+00	3 49E+01	1.8E+01	2.1E+00
CYANIDE	6 10E+00	0 00E+00	1 29E+01	1 58E-02	0 00E+00	1 02E+00	1 03E+00	NV	NV	NV	NV
IRON	3.15E+05	0.00E+00	6 69E+05	8.17E+02	0 00E+00	5 26E+04	5 34E+04	1 00E+02	1 00E+03	5.3E+02	5.3E+01
LEAD	2.41E+02	0 00E+00	1 46E+02	6 25E-01	0 00E+00	1 15E+01	1 21E+01	1 63E+00	4.46E+01	7.4E+00	2 7E-01
MANGANESE	2 64E+03	0 00E+00	5 60E+03	6 85E+00	0 00E+00	4 41E+02	4 47E+02	1 79E+02	3 77E+02	2.5E+00	1.2E+00
MERCURY	1 20E+00	0.00E+00	3 44E+00	3 11E-03	0 00E+00	2 71E-01	2 74E-01	6 40E-03	6.40E-02	4.3E+01	4.3E+00
NICKEL	6.15E+01	0 00E+00	1.43E+02	1 60E-01	0 00E+00	1 12E+01	1 14E+01	6.71E+00	1 86E+01	1.7E+00	6 1E-01
SELENIUM	9 80E+00	0.00E+00	2 08E+01	2 54E-02	0 00E+00	1 64E+00	1 66E+00	2 90E-01	8 20E-01	5.7E+00	2.0E+00
SILVER	9 60E-01	0 00E+00	2 04E+00	2 49E-03	0 00E+00	1 60E-01	1 63E-01	2 02E+00	6 05E+01	8 1E-02	2 7E-03
THALLIUM	1 10E+00	0 00E+00	2 33E+00	2 85E-03	0 00E+00	1 84E-01	1 86E-01	NV	NV	NV	NV
VANADIUM	2 89E+02	0 00E+00	6 13E+02	7 50E-01	0 00E+00	4 82E+01	4 90E+01	3 44E-01	1 70E+00	1.4E+02	2.9E+01
ZINC	7 02E+02	0 00E+00	5 28E+03	1 82E+00	0 00E+00	4 15E+02	4 17E+02	6 61E+01	1.71E+02	6.3E+00	2.4E+00

Cells are shaded if the value is greater than 1 0

Body Weight = (BW)	1 04E+00	kg
Food Ingestion Rate = (If)	8 20E-02	kg/day
Water Ingestion Rate = (Iw)	6 76E-01	L/day
Sediment Ingestion Rate = (Is)	2.71E-03	kg/day
Home Range = (HR)	Assume 100% on site	
Contaminated Area = (CA)	Assume equal to home range	

Dose (sediment) = (Cs * Is)(H)/BW
Dose (invertebrate) = (Ci * If)(H)/BW
Dose (water) = (Cw * Iw)(H)/BW
Ci = Contaminant concentration in invertebrate
Cs = Contaminant concentration in sediment
Cw = Contaminant concentration in water
Total Dose = Dose (sediment) + Dose (invertebrate) + Dose (water)
H=HR/CA (Assume = to 1)

Conc = Concentration
LOAEL = Lowest Observed Adverse Effects Concentration
NOAEL = No Observed Adverse Effects Concentration
Sed = Sediment
SW = Surface Water
NV = No value, Value not able to be calculated

MALLARD DUCK - LESS CONSERVATIVE INPUTS
TERRESTRIAL WILDLIFE MODEL ECOLOGICAL EFFECTS QUOTIENT CALCULATION
SITE 2B - AREA A WETLAND
NSB-NLON, GROTON, CONNECTICUT

Chemical	Avg Sed. Conc. (mg/kg)	Avg SW Conc. (mg/L)	Invertebrate Conc. (mg/kg)	Dose (mg/kg/d) from: Sediment	Surface Water	Invert.	Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients NOAEL	LOAEL
Pesticides/PCBs											
4,4'-DDE	3.82E-02	0.00E+00	2 83E-01	8.47E-05	0.00E+00	1.90E-02	1 91E-02	2 27E-01	2 70E+00	8.4E-02	7 1E-03
4,4'-DDT	1.30E-01	0.00E+00	2.08E-01	2.88E-04	0 00E+00	1 40E-02	1 43E-02	2 27E-01	2.70E+00	6.3E-02	5 3E-03
AROCLOR-1260	1.95E-01	0.00E+00	6.79E+00	4 33E-04	0 00E+00	4.56E-01	4.56E-01	1.80E-01	1 80E+00	2.5E+00	2 5E-01
ENDRIN ALDEHYDE	1.20E-02	0.00E+00	2.07E-02	2.65E-05	0.00E+00	1 39E-03	1 41E-03	1 04E-02	1.04E-01	1.4E-01	1.4E-02
Inorganics											
ALUMINUM	1 25E+04	0 00E+00	5.28E+03	2 77E+01	0 00E+00	3 55E+02	3.82E+02	1.10E+02	1 10E+03	3.5E+00	3.5E-01
ARSENIC	9 98E+00	0.00E+00	1.43E+00	2.21E-02	0 00E+00	9 58E-02	1 18E-01	2 24E+00	4.51E+00	5 3E-02	2.6E-02
CADMIUM	1.74E+00	0.00E+00	1.05E+00	3 86E-03	0 00E+00	7.02E-02	7 41E-02	1 47E+00	6.35E+00	5 0E-02	1 2E-02
CHROMIUM	4 03E+01	0 00E+00	4 03E+00	8 92E-02	0.00E+00	2.70E-01	3 60E-01	2 66E+00	1 56E+01	1.4E-01	2 3E-02
COPPER	5.15E+01	0 00E+00	8.01E+01	1 14E-01	0 00E+00	5 37E+00	5 49E+00	4.05E+00	3.49E+01	1.4E+00	1.6E-01
IRON	5.26E+04	0.00E+00	2 22E+04	1.17E+02	0.00E+00	1 49E+03	1 61E+03	1.00E+02	1 00E+03	1.6E+01	1.6E+00
LEAD	5.89E+01	0 00E+00	4.18E+00	1 30E-01	0.00E+00	2 81E-01	4 11E-01	1.63E+00	4 46E+01	2 5E-01	9 2E-03
MANGANESE	3.27E+02	0.00E+00	1.38E+02	7 24E-01	0 00E+00	9.26E+00	9.99E+00	1 79E+02	3 77E+02	5.6E-02	2 6E-02
MERCURY	2.72E-01	0 00E+00	3 09E-01	6 02E-04	0 00E+00	2.07E-02	2 13E-02	6 40E-03	6.40E-02	3.3E+00	3 3E-01
NICKEL	1.98E+01	0.00E+00	9.64E+00	4 39E-02	0 00E+00	6 47E-01	6 91E-01	6.71E+00	1.86E+01	1.0E-01	3 7E-02
SELENIUM	1.25E+00	0.00E+00	5.30E-01	2.78E-03	0 00E+00	3.56E-02	3.83E-02	2 90E-01	8.20E-01	1.3E-01	4.7E-02
VANADIUM	5.58E+01	0.00E+00	2.36E+01	1.24E-01	0.00E+00	1 58E+00	1 71E+00	3.44E-01	1 70E+00	5.0E+00	1.0E+00
ZINC	1.67E+02	0.00E+00	3.23E+02	3 69E-01	0.00E+00	2.17E+01	2 20E+01	6.61E+01	1.71E+02	3 3E-01	1 3E-01

Chemicals are shown only if their ecological effects quotients were greater than 1.0 in the conservative food chain model.
Cells are shaded if the value is greater than 1.0

Body Weight = (BW)	1.17E+00	kg
Food Ingestion Rate = (If)	7 83E-02	kg/day
Water Ingestion Rate = (Iw)	6.58E-02	L/day
Sediment Ingestion Rate = (Is)	2.58E-03	kg/day
Home Range = (HR)	1.43E+03	acres
Contaminated Area = (CA)	Assume equal to home range	

Dose (sediment) = (Cs * Is)(H)/BW
Dose (invertebrate) = (Ci * If)(H)/BW
Dose (water) = (Cw * Iw)(H)/BW
Ci = Contaminant concentration in invertebrate
Cs = Contaminant concentration in sediment
Cw = Contaminant concentration in water
Total Dose = Dose (sediment) + Dose (invertebrate) + Dose (water)
H=HR/CA (Assume = to 1)

Conc = Concentration
LOAEL = Lowest Observed Adverse Effects Concentration
NOAEL = No Observed Adverse Effects Concentration
Sed = Sediment
SW = Surface Water