

**PHASE II ENVIRONMENTAL SITE ASSESSMENT
BELFAST BOATYARD
38 WATERVILLE ROAD
BELFAST, MAINE**

Prepared for:

City of Belfast, Maine
131 Church Street
Belfast, Maine
(Using USEPA Brownfields Funding
Under Belfast's Assessment Grant No. BF96151001-0)

Prepared by:

Ransom Consulting, Inc.
400 Commercial Street, Suite 404
Portland, Maine 04101
(207) 772-2891

Project R111.06134.016
August 29, 2012

EXECUTIVE SUMMARY

On behalf of the City of Belfast, the following report presents the findings of a Phase II Environmental Site Assessment (ESA) performed by Ransom Consulting, Inc. (Ransom) for the Belfast Boatyard property located at 38 Waterville Road in the City of Belfast, Waldo County, Maine (the "Site"). The Phase II ESA was performed in conjunction with the United States Environmental Protection Agency (US EPA) and the Maine Department of Environmental Protection (MEDEP) and was conducted using US EPA Brownfield funding under the City of Belfast's municipal Brownfields Site Assessment Program (Grant No. BF96151001-0).

Based on available information, the Site appears to have existed as unimproved land and was reportedly used for timber harvesting, prior to development by Belfast Boatyard in 1988. A saw mill may have also historically existed at the Site; however, prior assessments did not identify any physical or historical evidence of structures in connection with the Site, prior to development by Belfast Boatyard. The Site is currently improved with several buildings, referred to herein, as the Maintenance Shop and boat Storage Structures Nos. 1 through 6 (the "Site buildings").

A Phase I ESA, dated July 6, 2012 was completed by Ransom, which identified *Recognized Environmental Conditions (RECs)* associated with the Site's current use as a boatyard facility utilizing hazardous materials, including various paints, solvents, and engine fluids at the Site. Surficial soil staining, indicative of a release of oil and/or hazardous materials (OHM), was observed on certain portions of the property during our reconnaissance. In addition, a spill of waste oil occurred at the Site during the winter of 2010-2011; an unknown quantity of waste oil was inadvertently released from two 275-gallon aboveground storage tanks (ASTs) located in Storage Structure No. 6. The majority of the impacted soils were reportedly disposed off-site, via the facility dumpster; however, petroleum-impacted surficial soils, indicative of residual contamination, remain in the area of the 275-gallon waste oil ASTs. Furthermore, the spill was not reported or investigated by the MEDEP. Based on these findings, Ransom recommended the completion of a Phase II ESA. Two (2) areas of concern (AOCs) at the Site were identified for additional environmental investigation.

The objective of the Phase II ESA was to collect sufficient data to confirm or dismiss the *RECs* identified during the Phase I ESA and to determine if OHM associated with these *RECs* have potentially impacted environmental conditions at the Site. The scope of work included the collection of surficial soil samples, advancement of soil borings, installation of temporary groundwater monitoring wells, installation of a temporary pore water sample point, installation of a temporary soil vapor sample point, and the collection and chemical analysis of soil, groundwater, pore water, and soil vapor samples throughout the Site. A Hazardous Materials Inventory (HMI) of suspect hazardous building materials including asbestos, lead-based paint, universal wastes, and other potentially hazardous building materials was also conducted concurrently with our Phase II investigation.

Findings from the Phase II investigation identified that surficial soils throughout the Site contain volatile organic compounds (VOCs), volatile petroleum constituents, and target polycyclic aromatic hydrocarbons (PAHs) at concentrations below their respective MEDEP Remedial Action Guidelines (RAGs) and Remediation Guidelines for Petroleum-Contaminated Sites in Maine (Remediation Guidelines) for "Outdoor Commercial Worker" and "Excavation/Construction Worker" exposure scenarios. The presence of these contaminants in surficial soils are likely associated with small releases of OHM during boat maintenance/repair activities in the Maintenance Shop; small OHM releases to the dirt floors of the Storage Structures and/or areas adjacent to these Storage Structures; and/or associated with *de minimis*

petroleum residues that are incidental to the normal operation of motor vehicles at the Site. In addition, polychlorinated biphenyls (PCBs) were not detected above laboratory detection limits in the surficial soil samples submitted for laboratory analysis at the Site.

With the exception of arsenic, copper, and lead, which were detected in several surficial soil samples at concentrations exceeding their corresponding MEDEP RAGs for “Outdoor Commercial Worker” and/or “Excavation Construction Worker”, low-level concentrations of metals detected in surficial soil samples at the Site are likely representative of naturally-occurring background conditions and are not likely associated with OHM releases at the Site. Elevated concentrations of copper and lead, which exceeded their MEDEP RAGs for “Outdoor Commercial Worker” and/or “Excavation/Construction Worker” exposure scenarios, were detected in the surficial soil samples (dirt floors) collected inside Storage Structures No. 3, No. 4, and No. 5 and are likely associated with marine paint removal activities during boat maintenance/repair activities in these Storage Structures.

In addition, an elevated concentration of copper, which exceeded its MEDEP RAGs for “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios, was also detected in a surficial soil sample collected from the ground surface adjacent to the Maintenance Shop. This elevated concentration is likely the result of marine paint removal activities that generate dust, which is often discharged through ventilation fans to the exterior of the Maintenance Shop building and/or associated with marine paint releases to the former floor drains in the building, which discharged via a polyvinyl chlorinated (PVC) pipe to the ground surface outside of the Maintenance Shop building.

Furthermore, an elevated concentration of arsenic that was detected in the surficial soil sample collected from the burn pile, which exceeded its background concentrations and MEDEP RAGs for both “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios. The presence of this elevated arsenic concentration is likely associated with combustion (anthropogenic burning) of arsenic-containing wood at the burn pile portion of the Site.

Ransom did not observe evidence of “petroleum-saturated soils” or evidence of “free petroleum product” contamination in groundwater encountered during the collection of surficial soil samples, soil boring advancements, or gauging of the temporary groundwater monitoring well. An elevated concentration of one extractable petroleum hydrocarbon (EPH) fraction (C₁₉–C₃₆ aliphatics) above its respective MEDEP Remediation Guideline was detected in a soil sample collected from an area of surficial petroleum staining (approximately 65 square feet) located approximately 100 feet south of Storage Structure No. 6, which appeared to be associated with motor oil/automotive lubricant spills from former vehicle storage activities in this area of the Site.

Groundwater at the northeastern portion of the Site contains low-level concentrations of petroleum-related VOCs and volatile petroleum hydrocarbon (VPH) compounds, which do not exceed their respective Maine Center for Disease Control (CDC) Maximum Exposure Guidelines (MEGs) for drinking water. The presence of these VOC and VPH compounds in groundwater is likely associated with OHM releases from boat maintenance/repair activities performed in the Maintenance Shop and/or associated with *de minimis* petroleum residues that are incidental to the normal operation of motor vehicles at the Site. Groundwater was not encountered at remaining portions of the Site.

Pore water results suggest that elevated concentrations of VOCs, petroleum constituents, PAHs, and metals are not accumulating in the surface water body (pond) at the northeastern portion of the Site as a result of storm water runoff from other portions of the Site. Concentrations of arsenic, slightly

exceeding its corresponding MEG, were detected in the pore water sample collected from the pond; however, this is likely representative of microbial activity in an anaerobic environment, where naturally occurring arsenic is chemically reduced and mobilized in the dissolved phase. Therefore, the surface water body is not expected to be contributing contaminants of concern from the Site to the underlying groundwater table, and does not represent an exposure risk to surrounding private water supply wells at this time.

Soil vapor at the northeastern portion of the Site was determined to contain VOCs at concentrations that do not exceed their applicable soil gas target guidelines for residential or commercial use, with the exception of chloroform. The presence of these VOC contaminants in soil vapor are likely associated with OHM releases from boat maintenance/repair activities performed in the Maintenance Shop and/or associated with *de minimis* petroleum residues that are incidental to the normal operation of motor vehicles at the Site. It should be noted that chloroform is a common laboratory contaminant and is also a potential breakdown by-product of bleach and/or other chlorinated aqueous compounds reacting with soil and/or groundwater, thus forming trihalomethanes (e.g., chloroform, bromodichloromethane, dibromochloromethane, and bromoform). Since chloroform was not detected in the groundwater sample, pore water sample, or soil samples collected at the Site, it is inferred that chloroform is not a significant contaminant of concern at the Site.

In addition, potential PCB-containing fluorescent light ballasts and mercury-containing fluorescent light tubes were identified inside the Site buildings. Laboratory analysis and field screening procedures did not identify asbestos-containing material (ACM) or lead-based paint (LBP) in connection with the Site buildings.

Based on the findings and information obtained during this Phase II ESA, Ransom recommends the following with respect to the existing environmental conditions at the Site and the proposed Site redevelopment:

1. The Site should be submitted to the MEDEP Voluntary Response Action Program (VRAP). The MEDEP VRAP is a voluntary review program that offers technical review of environmentally-impacted sites and ultimately state liability protections for interested parties including a “No Action Assurance” letter and a “Certificate of Completion” letter (i.e. no further action required), provided that proper and appropriate environmental cleanup or remedial actions are completed, as approved by the MEDEP;
2. The risk of human exposure to extractable petroleum hydrocarbons (EPH) and metals (specifically arsenic, copper, and lead) identified in surficial soils at concentrations exceeding their respective MEDEP RAGs and/or background concentrations should be mitigated. As such, Ransom recommends the completion of an Analysis of Brownfields Cleanup Alternatives (ABCA) and Conceptual Remedial Action Plan (RAP) or Focused Feasibility Study (FFS) to evaluate and select the most appropriate cleanup or remedial action(s) for the Site. Potential soil mitigation measures may include engineering controls consisting of the placement of a soil cover system or other direct barrier system (e.g., pavement, concrete, building foundations) to prevent direct dermal contact with the identified contaminated surficial soils, excavation and off-Site disposal of OHM-impacted soils, and/or a deed restriction and institutional controls in the form of a Declaration of Environmental Covenant (DEC) in order to potentially restrict groundwater use and excavation of impacted soils at the Site, without proper MEDEP notification/approvals, implementation of a soil management plan, and a health and safety plan; and

3. If the Site is to continue operation as a boat yard, certain engineering controls and institutional controls should be implemented to prevent the potential future release(s) of hazardous materials to the environment. Ransom recommends that the property owner evaluate engineered systems or other management controls to prevent the discharge of paint dust containing elevated concentrations of metals to the ground surface at the Site. Furthermore, Ransom recommends that hazardous wastes generated at the Site, including, but not limited to, paint dust, used solvents, waste engine fluids, used batteries, and partially empty paint cans, be collected and properly disposed of, in accordance with local, State, and/or Federal hazardous waste regulations and guidelines. If applicable, the Site should be registered with the US EPA Resource Conservation Recovery Act (RCRA) program and a US EPA Hazardous Waste Identification (I.D.) Number should be obtained for proper management of hazardous wastes.

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	Purpose.....	1
1.2	Special Terms and Conditions	1
1.3	Limitations and Exceptions of Assessment	2
2.0	BACKGROUND	3
2.1	Site Description, History, and Physical Setting	3
2.2	Recognized Environmental Conditions	4
2.3	Areas of Concern	4
3.0	INVESTIGATION METHODOLOGY	6
3.1	Surficial Soil Sampling	6
3.2	Soil Boring Advancement.....	6
3.3	Qualitative Field Screening.....	7
3.4	Soil Sampling and Analytical Testing	7
3.5	Temporary Groundwater Monitoring Well Installation	7
3.6	Pore Water Sample Point Installation	8
3.7	Groundwater & Pore Water Sampling and Analytical Testing.....	8
3.8	Temporary Soil Vapor Point Installation	8
3.9	Soil Vapor Sampling and Analytical Testing	9
3.10	Background Samples	9
3.11	AOC 1– Maintenance Shop Building & Surrounding Area	9
3.12	AOC 2– Storage Structures No. 1 through No. 6 & Surrounding Areas	10
3.13	Hazardous Building Materials	10
4.0	RESULTS	11
4.1	Geology and Hydrogeology	12
4.2	Background Data	12
4.3	AOC 1– Maintenance Shop Building & Surrounding Area	13
4.4	AOC 2– Storage Structures No. 1 through No. 6 & Surrounding Areas	17
4.5	Hazardous Building Materials	20
5.0	QUALITY ANALYSIS/QUALITY CONTROL.....	21
5.1	Precision.....	21
5.2	Bias	23
5.3	Accuracy	24
5.4	Representativeness.....	24
5.5	Comparability	24
5.6	Completeness	24
6.0	CONCLUSIONS	25
7.0	RECOMMENDATIONS.....	27
8.0	REFERENCES.....	28
9.0	SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S).....	29

TABLES

Table 1	Soil Sample Field Screening Results: Metals
Table 2	Soil Sample Analytical Results
Table 3	Groundwater & Pore Water Sample Analytical Results
Table 4	Soil Vapor Sample Analytical Results
Table 5	Duplicate Sample Analytical Results

FIGURES

Figure 1	Site Location Map
Figure 2	Site Plan

APPENDICES

Appendix A	Boring Logs
Appendix B	Field Data Sheets
Appendix C	Certified Laboratory Analytical Results
Appendix D	Hazardous Building Materials Inventory

1.0 INTRODUCTION

On behalf of the City of Belfast, Ransom Consulting, Inc. (Ransom) is pleased to present this report documenting a Phase II Environmental Site Assessment (ESA) performed at the Belfast Boatyard property located at 38 Waterville Road in the City of Belfast, Waldo County, Maine (the "Site"). This Phase II ESA was performed in conjunction with the United States Environmental Protection Agency (US EPA) and the Maine Department of Environmental Protection (MEDEP) and was completed using US EPA Brownfields funding under the City of Belfast's Brownfields Assessment Program (Grant No. BF96151001-0). Furthermore, this investigation was completed in accordance with Ransom's Site-Specific Quality Assurance Project Plan (SSQAPP, Addendum No. 18), dated July 30, 2012. The SSQAPP was reviewed and approved by the MEDEP and the US EPA, prior to implementation of the field activities.

1.1 PURPOSE

A Phase I ESA, dated July 6, 2012 was completed by Ransom, which identified *Recognized Environmental Conditions (RECs)* associated with the Site's current use as a boatyard facility utilizing hazardous materials, including various paints, solvents, and engine fluids at the Site. In addition, a release of waste oil was identified in connection with two 275-gallon aboveground storage tanks (ASTs) located at the Site, which was not reported/investigated by the MEDEP. According to persons knowledgeable about the Site, the majority of the waste oil-impacted soils were reportedly disposed off-site, via the on-site dumpster; however, residual waste oil-stained surficial soils remain in the area of the 275-gallon ASTs, as noted during our reconnaissance. Two (2) areas of concern (AOCs) throughout the Site were identified for additional environmental investigation. Based on information provided by the City of Belfast government officials, the proposed reuse scenario for the Site is to remain a boatyard with similar commercial boat storage, maintenance, and repair operations.

The purpose of the Phase II ESA was to evaluate each of the identified AOCs for the potential presence and extent of contaminants of concern (COCs), and to assess the potential risk of exposure to site workers, site visitors, and future site occupants. Furthermore, the objective of the Phase II ESA was to collect sufficient data to confirm or dismiss the *RECs* identified during the Phase I ESA and to determine if oil and/or hazardous materials (OHM) associated with these *RECs* have potentially impacted environmental conditions at the Site.

1.2 SPECIAL TERMS AND CONDITIONS

This Phase II ESA was conducted in accordance with our executed Master Services Agreement with the City of Belfast, dated April 27, 2012. Authorization to perform this Phase II ESA was provided by the City of Belfast.

This report was prepared using US EPA Brownfields funding under the City of Belfast's Brownfields Assessment Grant No. BF96151001-0, and therefore, is a public document. However, the services, findings, and conclusions, noted herein, and associated documents provided to the client by Ransom are solely for the benefit of the City of Belfast, their affiliates and subsidiaries and their successors, assigns, and grantees. Other than for public informational purposes, reliance or any use of this report by anyone other than City of Belfast, for whom it was prepared, is prohibited. Furthermore, reliance or use by any such third party without explicit authorization in the report does not make said third party a third party beneficiary to Ransom's contract with City of Belfast. Any such unauthorized reliance on or use of this report, including

any of its information or conclusions, will be at the third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

1.3 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT

The Phase II Investigation was executed in accordance with the scope of work proposed in the SSQAPP. Any additional revisions to the scope of work or methodologies outlined in the SSQAPP were implemented based on conditions encountered in the field and are discussed in Section 2.0. Furthermore, the findings provided by Ransom in this report are based solely on the information reported in this document and the results of limited explorations and confirmatory laboratory testing. Our findings and conclusions must be considered as our professional opinion concerning the significance of the limited data gathered during the course of the environmental assessments. Ransom does not and cannot represent that the Site contains no OHM or other adverse environmental conditions beyond that observed by Ransom during the environmental assessments and field investigations. Should additional information become available in the future, this information can be reviewed by Ransom and the findings, presented herein, may be modified as a result of the review.

2.0 BACKGROUND

2.1 SITE DESCRIPTION, HISTORY, AND PHYSICAL SETTING

The Site is known as the Belfast Boatyard located at 38 Waterville Road (Route 137) in the City of Belfast, Waldo County, Maine. The Site consists of an irregular-shaped parcel of land encompassing 23.92 acres, located along the southwestern side of Waterville Road, which is identified by the City of Belfast Assessor's Office as Lot 2B on Tax Map 6. Refer to the appended Figures 1 and 2, Site Location Map and Site Plan, respectively, for the layout of the Site and adjoining properties.

The Site appears to have existed as unimproved land and was reportedly used for timber harvesting, prior to development by Belfast Boatyard in 1988. A saw mill may have historically existed at the Site; however, prior assessments did not identify any physical or historical evidence of structures in connection with the Site, prior to development by Belfast Boatyard.

The Site is currently improved with several buildings, referred to herein, as the Maintenance Shop and boat Storage Structures Nos. 1 through 6 (the "Site buildings"). The Maintenance Shop is currently heated by a fuel oil-fired furnace. No. 2 fuel oil is stored in a 275-gallon aboveground storage tank (AST) located in the building. The remaining buildings are not heated. Municipal water and sewer services are not provided to the Site and adjoining properties. Non-potable water, obtained from a small pond located on the eastern portion of the Site, is used for boat washing activities and by an on-site bathroom located in Storage Structure No. 1. Wastewater generated in the bathroom inside Storage Structure No. 1 is discharged through an on-site septic system located to the southeast of the building. Electricity is provided to the Site by Central Maine Power Company (CMP).

Boat maintenance/repair activities conducted at the Site involve the use, storage, and disposal of hazardous substances including various paints, solvents, and engine fluids. These items were observed to be stored in a variety of containers located throughout the Site buildings. The majority of the boat maintenance activities reportedly take place in the Maintenance Shop building. Numerous boat batteries and potentially hazardous fluids including bottom paints, varnishes, thinners, acid stain remover, waxes, bleach, oil-based buffing compounds, and acetone were observed to be stored in the Maintenance Shop building. Belfast Boatyard reportedly does not maintain a United States Environmental Protection Agency (USEPA) Hazardous Waste Identification (I.D.) Number for disposal of hazardous wastes generated at the Site. Paint dust generated during boat refinishing activities is collected and disposed of as household waste in the facility dumpster, or directly ventilated to the exterior of the Maintenance Shop. Two floor drains were observed in the concrete floor of the Maintenance Shop. Prior to being sealed with concrete in the mid-1990s, the floor drains reportedly discharged directly to Site soils in the vicinity of the Maintenance Shop.

Numerous containers of unidentified substances were observed to be stored on the dirt floors of boat Storage Structures Nos. 1 through 6. Several engine blocks, engine parts, and associated fluids were also observed to be stored in the interior corners and along the walls within the storage structures. Petroleum-stained surficial soils were observed in connection with some of these items. Several unmarked and apparently discarded drums were observed on exterior portions of the Site. Evidence of vehicle maintenance/disassembly was also observed. Petroleum-stained surficial soils were observed in the areas of vehicle maintenance/disassembly to the east of Storage Structure No. 1 and approximately 100 feet south of Storage Structure No. 6. In addition, a large burn pile (approximately 10,000 square feet) containing wood, metal, and glass debris was observed to the south of Storage Structure No. 6.

According to information provided by the property owner, a spill of waste oil occurred at the Site during the winter of 2010-2011; an unknown quantity of waste oil was inadvertently released from two 275-gallon ASTs located in Storage Structure No. 6. The majority of the impacted soils were reportedly disposed off-site, via the facility dumpster; however, petroleum-impacted surficial soils, indicative of residual contamination, remains in the area of the 275-gallon waste oil ASTs. Furthermore, the spill was not reported or investigated by the MEDEP.

2.2 RECOGNIZED ENVIRONMENTAL CONDITIONS

A Phase I ESA was completed by Ransom on July 6, 2012. Both the MEDEP and US EPA have reviewed and approved the Phase I ESA and agree that the recognized environmental conditions listed in the report were appropriate and inclusive based on the data presented. Based on the information obtained during the Phase I ESA, Ransom identified the following *Recognized Environmental Conditions (RECs)* associated with the Site:

1. Current Site activities involve the use, storage and disposal of hazardous substances including commercial quantities of various paints, solvents, and engine fluids. Small quantities of hazardous wastes generated at the Site are reportedly disposed of as household waste in an on-site dumpster. Belfast Boatyard does not maintain a USEPA Hazardous Waste I.D. for disposal of hazardous wastes;
2. Numerous drums and other containers of hazardous materials and unknown substances were observed to be stored or discarded on both interior and exterior portions of the Site. Several engine blocks and various engine parts were also observed to be stored or discarded on various portions of the Site. Soil staining was evident in connection with many of these items; and
3. A release of waste oil was identified in connection with two 275-gallon ASTs located at the Site. The spill was not reported to, or investigated by, the MEDEP. The majority of the impacted soils were reportedly disposed of in the on-site dumpster; however, stained soils appear to remain in the area of the 275-gallon ASTs.

Ransom recommended that a Phase II environmental investigation be performed to address the identified *RECs*. In addition to those items and findings discussed above, certain ASTM non-scope considerations were reviewed and identified in connection with the Site buildings that represent potential business environmental risk, including suspect asbestos-containing materials, lead-based paint, polychlorinated biphenyls (PCBs), and/or mercury-containing fluorescent lamps. Ransom recommended that a Hazardous Materials Inventory (HMI) also be conducted as part of the Phase II ESA and prior to potential future building renovation and/or demolition activities that may disturb or impact these potentially hazardous building materials, if present.

2.3 AREAS OF CONCERN

Based on the findings of the Phase I ESA and the identified *RECs*, two AOCs were identified at the Site and are summarized below.

AOC 1—Maintenance Shop Building & Surrounding Area

AOC 1 encompasses the eastern portion of the Site and includes the Maintenance Shop building, the dumpster area, the drainage trench, and the water impoundment pond, as well as portions of the Site property downgradient from the Maintenance Shop building. The objective for investigating AOC 1 was to assess whether current boatyard facility operations utilizing hazardous materials, including various paints, solvents, and engine fluids have adversely impacted environmental conditions at the Site, including potential discharges to former floor drains in the Maintenance Shop building and areas surrounding the building. Specific COCs associated with this AOC include volatile petroleum hydrocarbons (VPH), extractable petroleum hydrocarbons (EPH), polycyclic aromatic hydrocarbons (PAHs), chlorinated volatile organic compounds (VOCs) (i.e., solvents), PCBs, and metals (specifically arsenic, cadmium, copper, and lead).

It should be noted that metals typically associated with marine paints include the following: iron, titanium, lead, cadmium, chromium, copper, zinc, and aluminum (“Marine Paint Metals”). Several metals are also associated with waste oils and other engine fluids. Of the metals typically associated with waste oils, engine fluids, and/or marine paints; the metals arsenic, cadmium, copper, and lead have the potential to represent an exposure risk due to their relatively high toxicity characteristics. Other metals associated with waste oils, engine fluids, and/or marine paints were not anticipated to represent an exposure risk, due to their relatively low toxicity characteristics.

AOC 2—Storage Structures No. 1 through No. 6 & Surrounding Areas

AOC 2 encompasses the central and western areas of the developed portion of the Site, which includes Storage Structures No.1 through No.6, as well as an area of observed vehicle disassembly, the septic system and leach field, the burn pile area, areas of discarded/unidentified drums, and the area of residual petroleum-impacted surficial soils associated with the reported waste oil release from two 275-gallon waste oil ASTs located inside Storage Structure No. 6. The objective for investigating AOC 2 was to assess whether the current boatyard facility operations utilizing hazardous materials, including various paints, solvents, and engine fluids have adversely impacted environmental conditions at the Site and whether potential OHM releases have adversely impacted the on-site septic system. Additionally, another objective for investigating AOC 2 was to determine if residual petroleum-impacted soil and/or groundwater are present at the Site associated with the reported waste oil release from the ASTs inside Storage Structure No. 6. Specific COCs associated with this AOC include, volatile and semi-volatile petroleum products, PAHs, chlorinated VOCs (i.e., solvents), PCBs, and metals (specifically arsenic, cadmium, copper, and lead).

Hazardous Building Materials

Based on the age of the Site buildings (circa 1988), it is possible that asbestos-containing materials (ACM), lead-based paint (LBP), PCB-containing light ballasts, and mercury-containing fluorescent lamps may be present in the buildings. Universal wastes, such as mercury-containing switches and fluorescent light bulbs, as well as, potential PCB-containing light ballasts were also observed in the buildings.

Identification of potentially hazardous building materials will be necessary, prior to potential future Site building remodeling and/or demolition activities in order to protect worker safety and to maintain compliance with applicable storage and/or disposal regulatory criteria.

3.0 INVESTIGATION METHODOLOGY

The Phase II Investigation was designed to collect sufficient data to confirm or dismiss the potential presence of OHM and COCs at the Site due to its current use as a boatyard facility utilizing hazardous materials, including various paints, solvents, and engine fluids at the Site. Field activities were conducted by Ransom in conjunction with the MEDEP on August 2, 2012, and are summarized in the following sections. As previously noted, two (2) AOCs were identified throughout the Site, as described in Section 2.3 above and further detailed in the SSQAPP. Specific COCs associated with the AOCs include volatile and semi-volatile petroleum products, PAHs, chlorinated VOCs (i.e., solvents), PCBs, and metals (specifically arsenic, cadmium, copper, and lead).

The scope of work for the Phase II ESA included the collection of surficial soil samples, advancement of soil borings, installation of a temporary groundwater monitoring well, installation of a pore water sample point, installation of a temporary soil vapor sample point, and the collection and chemical analysis of soil, groundwater, pore water, and soil vapor samples. Soil boring, monitoring well, surficial soil, pore water, and soil vapor point locations are shown on Figure 2.

3.1 SURFICIAL SOIL SAMPLING

On August 2, 2012, Ransom collected fifteen surficial soil samples, identified as SS101 through SS115, at the Site. Three surficial soil samples (SS101, SS102, and SS104) were collected utilizing direct-push (i.e., GeoProbe®) drilling techniques and twelve surficial soil samples (SS103 and SS105 through SS115) were collected utilizing hand tools (i.e., hand augers, trowels, shovels and/or pick axes). The surficial soil samples were collected at depths ranging from the ground surface to 2 feet below ground surface (bgs). Surficial soil samples were visually classified in the field by Ransom in general accordance with the Burmister Soil Classification System.

3.2 SOIL BORING ADVANCEMENT

On August 2, 2012, Ransom observed the advancement of six soil borings, identified as B101 through B106 by Environmental Projects Inc. (EPI) of Auburn, Maine. The soil borings were advanced utilizing direct-push (i.e., GeoProbe®) drilling techniques. At each soil boring location, 4-foot macrocore soil samples were collected continuously from surface grade to the termination of each boring. The borings were advanced to depths ranging from 2 to 14.2 feet bgs.

Deviations in the sampling plan, as outlined in the SSQAPP, included the advancement of three surficial soil samples (SS101, SS102, and SS104) and the advancement of three additional soil borings (B104 through B106), utilizing direct-push drilling techniques. The additional soil boring locations were advanced in an effort to intercept the groundwater table; however, groundwater-saturated soils were not observed during the advancement of these borings, which terminated at refusal conditions (presumed bedrock).

Soil samples collected during the advancement of the soil borings were visually classified in the field by Ransom in general accordance with the Burmister Soil Classification System. Surficial soil samples (approximately zero to two feet bgs) were separated from subsurface soil samples (greater than two feet bgs) were collected from each AOC in order to evaluate exposure risks to site workers, site visitors, and future site occupants.

3.3 QUALITATIVE FIELD SCREENING

Soil samples collected during the advancement of the soil borings and surficial soil sampling were screened in the field for the presence of total organic volatile compounds (TVOCs) using a photoionization detector (PID) equipped with a 10.6 eV lamp and calibrated to an isobutylene standard. Soil samples were also screened for metals using an X-ray Fluorescence meter (XRF).

Samples were collected for laboratory analysis from the locations and depths based on observations in the field (visual or olfactory evidence of contamination) and/or proximity to the ground water table. Sample intervals, sample recovery, and organic vapor concentrations (as determined by field screening) are included on the soil boring logs provided as Appendix A. Field screening results for concentrations of metals in soil are included in Table 1.

3.4 SOIL SAMPLING AND ANALYTICAL TESTING

Soil samples were submitted for chemical analysis for a combination of parameters based on the nature of the suspected contaminant source as outlined in the AOCs described in Section 1.6. Soil samples collected from each surficial soil sample were submitted to Analytics Environmental Laboratory, LLC (Analytics) of Portsmouth, New Hampshire, for chemical analysis. Soil samples were collected directly from the sampling equipment and transferred into laboratory-prepared glassware. The samples were preserved in the field in accordance with applicable protocols and delivered on ice under chain-of-custody protocol for laboratory analysis.

Additionally, a duplicate soil sample (SS10X) was collected from surficial soil sample SS112 and submitted for laboratory analysis for quality assurance/quality control (QA/QC) protocols, as outlined in the SSQAPP.

3.5 TEMPORARY GROUNDWATER MONITORING WELL INSTALLATION

On August 2, 2012, soil borings B101, B102, B104, and B105 were completed as temporary groundwater monitoring wells (MW101 through MW104, respectively). Deviations in our sampling plan, as outlined in the SSQAPP, included the installation of temporary groundwater monitoring wells in soil borings B104 (MW103) and B105 (MW104), which were installed as an effort to yield groundwater within AOC 2, since groundwater was not observed during the advancement of soil boring B103. During advancement of the soil boring B101, groundwater-saturated soils were encountered at an approximate depth of 7 feet bgs. Groundwater-saturated soils were not observed during the advancement of soil borings B102, B104, or B105; however, temporary groundwater monitoring wells were installed in these borings in an effort to potentially yield groundwater with time. Each monitoring well was constructed using 1-inch-diameter Schedule 40 PVC well casing and factory-slotted screen, which was installed at the bottom of each boring on presumed bedrock. The temporary monitoring wells were removed from the Site upon the completion of groundwater sampling activities. Well construction details can be found on the boring logs provided as Appendix A.

3.6 PORE WATER SAMPLE POINT INSTALLATION

On August 2, 2012, Ransom observed the installation of one pore water sample point (PW101) utilizing a stainless-steel pore water probe, which was advanced approximately 8 to 12 inches into unconsolidated substrate materials along the western side of the surface water pond at the northeastern portion of the Site.

Deviations in the sampling plan, as outlined in the SSQAPP, included the elimination of one pore water sample point (PW102), which was proposed to be installed near the surface water body at the southwestern portion of the Site. This surface water body had dried up sometime between our Phase I ESA reconnaissance and Phase II ESA field investigation; therefore, a pore water sample from this location was unavailable.

3.7 GROUNDWATER & PORE WATER SAMPLING AND ANALYTICAL TESTING

On August 2, 2012, a groundwater sample was collected from one temporary monitoring well (MW101) and a pore water sample was collected from one pore water sample point (PW101). Groundwater and pore water samples were submitted for chemical analysis for a combination of parameters, based on the nature of the suspected contaminant source, as outlined in the AOCs described in Section 1.6. Deviations in the sampling plan, as outlined in the SSQAPP, included the elimination of groundwater samples from MW102, MW103, and MW104, due to the absence of groundwater present in these wells, upon installation of these monitoring wells.

Prior to sample collection, the temporary monitoring well (MW101) was developed using a peristaltic pump and dedicated tubing. Approximately four well volumes were purged in an effort to remove silt and fines and to restore the natural permeability of the soils surrounding the well screen. During the course of well development, no evidence of light non-aqueous phase liquid (LNAPL) was observed. When purging was complete, the monitoring well (MW101) and pore water sample point (PW101) were sampled in accordance with EPA-established low-flow sampling methods and guidelines, using a peristaltic pump.

Additionally, a duplicate groundwater sample (MWX) was collected from monitoring well MW101 and a duplicate pore water sample (PWDUP) was collected from pore water sample point PW101 and submitted for laboratory analysis for quality assurance/quality control (QA/QC) protocols as outlined in the SSQAPP.

The groundwater and pore water samples were collected directly from the sampling equipment and transferred into laboratory-prepared glassware or plastic containers. The samples were preserved in the field in accordance with applicable protocols and delivered on ice under chain-of-custody protocol to Analytics for laboratory analysis.

3.8 TEMPORARY SOIL VAPOR POINT INSTALLATION

On August 2, 2012, Ransom advanced one soil vapor sample point (SV101) beneath the concrete floor of the Maintenance Shop in order to assess the sub-slab vapor conditions beneath the building. This soil vapor sample point was advanced by drilling a hole through the approximate 4-inch thick concrete slab floor and inserting Teflon® tubing into the soil to an approximate depth of 6 inches beneath the floor of the building. A bentonite seal was placed around the sampling tubing at the floor surface in order to prevent the influx of ambient air during sample collection.

3.9 SOIL VAPOR SAMPLING AND ANALYTICAL TESTING

Prior to sampling, disposable Teflon® tubing was inserted into the soil vapor sample point and the sampling point was purged for approximately 5 minutes using a peristaltic pump at a flow rate of 0.5 liter/minute to ensure at least one well volume of vapor was purged, prior to sampling. After purging, a soil vapor sample was collected in accordance with MEDEP standard operating procedures, using laboratory-prepared SUMMA® passivated stainless steel canister with a 100 milliliters per minute flow control valve. The sample was submitted to Alpha Analytical, Inc. (Alpha) of Mansfield, Massachusetts and analyzed for VOCs by U.S. EPA Method TO-15. A soil gas sampling field data sheet providing additional information regarding the soil vapor sample is included in Appendix B.

Additionally, a duplicate soil vapor sample (SV102) was collected from soil vapor sample point SV101 and submitted for laboratory analysis for quality assurance/quality control (QA/QC) protocols as outlined in the SSQAPP.

3.10 BACKGROUND SAMPLES

In order to compare site-specific results for metals, EPH, and PAHs with background environmental conditions in the vicinity of the Site, three surficial soil samples (zero to two feet bgs) were collected from the undeveloped wooded area at the southwestern portion of the Site, which was presumed to be unaffected by the Site operations. These background soil samples (designated as BK-1, BK-2, and BK-3) were collected with hand tools (i.e., hand augers, trowels, shovels and/or pick axes), concurrent with the site-specific investigation on August 2, 2012. The background soil sample locations are shown on Figure 2.

The background soil samples were visually classified in the field by Ransom in general accordance with the Burmister Soil Classification System and field-screened for the presence of TVOCs using a PID and for the presence of lead using an XRF. The background soil samples were collected directly from the sampling equipment and transferred into laboratory-prepared glassware. The samples were preserved in the field in accordance with applicable protocols and delivered on ice under chain-of-custody protocol to Analytics for laboratory analysis of EPH, PAHs, and metals (specifically arsenic, cadmium, copper, and lead).

3.11 AOC 1– MAINTENANCE SHOP BUILDING & SURROUNDING AREA

AOC 1 encompasses the eastern portion of the Site and includes the Maintenance Shop building, the dumpster area, the drainage trench, and the water impoundment pond, as well as portions of the Site property downgradient from the Maintenance Shop building. The characteristics and history of AOC 1 are described above in Section 2.3. In an effort to evaluate AOC 1 with respect to the identified COCs, four surficial soil samples (SS101 through SS104), one soil boring (B101), one temporary monitoring well (MW101), one temporary soil vapor point (SV101), and one pore water sample point (PW101) were completed in areas beneath and surrounding the Maintenance Shop building.

During our Phase II Investigation, Ransom discovered an approximate 4” diameter PVC pipe extending approximately 20 feet from the Maintenance Shop building’s southwestern corner. Based on available information, it was determined that this PVC pipe was the outfall pipe for the two former floor drains in the Maintenance Shop building, which had been sealed with concrete during the 1990s. Based on these observations, Ransom collected a surficial soil (SS103) from the ground surface at the end of the floor drain discharge pipe.

Based on field screening results and observations, surficial soil samples collected from SS101, SS102, SS103, and SS104; a groundwater sample collected from MW101; and a pore water sample collected from PW101 were submitted for laboratory analysis including VOCs, VPH, EPH, PAHs, PCBs, and metals (specifically arsenic, cadmium, copper, and lead). A soil vapor sample was collected from SV101 and submitted for laboratory analysis of VOCs. A duplicate groundwater sample (MWX) was collected from temporary monitoring well (MW101), a duplicate pore water sample (PWDUP) was collected from pore water sample point (PW101), and a duplicate soil vapor sample (SV102) was collected from soil vapor point (SV101) and submitted for laboratory analysis for quality assurance/quality control (QA/QC) protocols, as outlined in the SSQAPP.

3.12 AOC 2– STORAGE STRUCTURES NO. 1 THROUGH NO. 6 & SURROUNDING AREAS

AOC 2 encompasses the central and western areas of the developed portion of the Site, which includes Storage Structures No.1 through No.6, as well as an area of observed vehicle disassembly, the septic system and leach field, the burn pile area, areas of discarded/unidentified drums, and the area of residual petroleum-impacted surficial soils associated with the reported waste oil release from two 275-gallon waste oil ASTs located inside Storage Structure No. 6. Contaminant sources and exposure pathways associated with AOC 2 are described above in Section 2.3. In an effort to evaluate AOC 2 with respect to the identified COCs, eleven surficial soil samples (SS105 through SS115), five soil borings (B102 through B106), and three temporary monitoring wells (MW102 through MW104) were completed in areas throughout AOC 2.

It should be noted that surficial soil samples SS106 through SS110 were collected from the dirt floors of Storage Structures No. 1 through No. 5, respectively. Surficial soil sample SS111 was collected from the dirt floor of Storage Structure No. 6 and surficial soil sample SS112 was collected from the dirt floor of Storage Structure No. 6, adjacent to the two 275-gallon waste oil ASTs inside the building.

During our Phase II Investigation, an area of surficial petroleum staining (approximately 65 square feet) was observed approximately 100 feet south of Storage Structure No. 6, which appeared to be associated with spills of motor oil/automotive lubricant from former vehicle storage activities in this area of the Site. Based on these observations, Ransom collected one surficial soil sample (SS114) from this area of surficial petroleum staining. Additionally, surficial soil sample SS115 was collected from the burn pile located approximately 100 feet south of Storage Structure No. 6.

Based on field screening results and observations, surficial soil samples collected from SS105 through SS115 were submitted for laboratory analysis including VOCs, VPH, EPH, PAHs, PCBs, and metals (specifically arsenic, cadmium, copper, and lead). As previously discussed, groundwater samples could not be collected from temporary monitoring wells (MW102 through MW104), due to the absence of groundwater in these wells, during and upon their installations.

3.13 HAZARDOUS BUILDING MATERIALS

As previously discussed, suspected ACM, LBP, PCB-containing light ballasts, and mercury-containing fluorescent lamps are present in the Site buildings. Universal wastes, such as mercury-containing switches and fluorescent light bulbs, as well as, potential PCB-containing light ballasts were also observed in the buildings. In an effort to evaluate the potential for these hazardous building materials with respect to the identified COCs, Ransom conducted a Hazardous Materials Inventory (HMI), concurrent with our Phase II ESA investigation. Results of the HMI are summarized in Section 4.0 and are detailed in the full HMI report provided as Appendix D.

4.0 RESULTS

The following subsections document the results of the Phase II ESA activities. Soil sample analytical results are summarized in Table 2. Groundwater and pore water sample analytical results are summarized in Table 3. Soil vapor sample analytical results are summarized in Table 4. Copies of the laboratory chemical analysis data reports are provided as Appendix C.

Analytical results were compared to both background analyte concentrations and risk-based guidelines presented in the SSQAPP. The risk-based guidelines include the following:

- Maine Remedial Action Guidelines (RAGs) for Soil Contaminated with Hazardous Substances;
- Remediation Guidelines for Petroleum Contaminated Sites in Maine;
- Maine Center for Disease Control (CDC) Maximum Exposure Guidelines (MEGs) for Drinking Water;
- MEDEP Bureau of Remediation Vapor Intrusion Evaluation Guidance; and
- USEPA Region 9 Regional Screening Levels (RSLs) for Soil.

Soil

The analytical results of soil samples collected at the Site were compared to the MEDEP Bureau of Remediation and Waste Management's "*Remedial Action Guidelines (RAGs) for Soil Contaminated with Hazardous Substances*", dated January 6, 2010; and MEDEP's "*Remediation Guidelines for Petroleum Contaminated Sites in Maine*," dated November 20, 2009. For comparison purposes, the "DRAFT RAGs for Sites Contaminated with Hazardous Substances," dated January 11, 2012, have also been included in Table 2. Since the Site is proposed to be reused as a boatyard, the "Outdoor Commercial Worker" scenario appears to be the most applicable guidance standard. Additionally, the "Excavation/Construction Worker" scenario also applies in order to evaluate potentially unacceptable risks to excavation/construction workers during any future earthwork work at the Site.

In cases where MEDEP RAGs have not been promulgated, Ransom compared contaminant concentrations to their respective USEPA Region 9 RSLs, dated May 2012. However, the USEPA Region 9 RSLs do not necessarily represent values requiring remedial action within the State of Maine.

Groundwater & Pore Water

Because municipal water is not currently available to the Site or surrounding properties, the Maine Department of Human Services (DHS), Center for Disease Control (CDC), Maximum Exposure Guidelines (MEGs) for Drinking Water and the MEDEP's "*Remediation Guidelines for Petroleum Contaminated Sites in Maine*," would be applicable for evaluating potential impacts to groundwater at the Site. The pore water sample results were compared to the groundwater sample results in order to evaluate potential contaminant contributions from the surface water bodies to the underlying groundwater table, which may present an ingestion risk to drinking water for surrounding properties.

Soil Vapor

The soil vapor samples collected at the Site were compared to guidelines contained in the MEDEP document titled “*Vapor Intrusion Evaluation Guidance*,” dated January 14, 2010 and “*DRAFT RAGs for Sites Contaminated with Hazardous Substances*,” dated January 11, 2012. MEDEP provides concentrations of various soil gas target volatile contaminants, which if exceeded in soil vapor samples, suggest that indoor air impacts are possible and describes additional procedures to evaluate potential vapor intrusion and risks to current and/or future building occupants at the Site and vicinity.

Since the Site is currently utilized for commercial use and is proposed to remain commercial, Ransom calculated applicable Soil Gas Target concentrations for commercial use by multiplying (10x to 50x) the applicable Indoor Air Targets by their respective attenuation factors outlined in the “*DRAFT RAGs for Sites Contaminated with Hazardous Substances*,” dated January 11, 2012, and the “*Vapor Intrusion Evaluation Guidance*” dated January 14, 2010.. The calculated soil gas targets are shown on Table 4.

4.1 GEOLOGY AND HYDROGEOLOGY

In general, soils encountered during the Phase II Investigation were relatively consistent throughout the Site. Surficial soil samples contained fill, which consisted of brown to gray and black, fine to coarse sand with varying amounts of clay, silt, and gravel. Shallow fill soils at the Site appear to be underlain by naturally deposited soils consisting of brown to gray, clay and silt with varying amounts of sand and gravel. Groundwater was encountered at approximate depths ranging from 7 to 9 feet bgs in the soil borings advanced at the eastern portion of the Site (AOC 1). Groundwater was not encountered in any soil borings advanced at the western portion of the Site (AOC 2). Probe refusal (presumed bedrock) was encountered at approximate depths of 6 to 14.2 feet bgs throughout the Site.

Organic vapors were not detected in any of the soil samples collected from surficial soil sample locations or soil borings at concentrations greater than 1 part per million by volume (ppmv), the practical detection limit of the PID. Additionally, no evidence of “petroleum-saturated soils” or evidence of “free petroleum product” contamination was observed in groundwater encountered during the soil boring advancements or gauging of temporary groundwater monitoring wells. Petroleum staining (encompassing an area of approximately 65 square feet), was observed on surficial soils in an area located approximately 100 feet south of Storage Structure No. 6. The soil staining in this area appeared to be associated with spills of motor oil/automotive lubricant from former vehicle storage activities in this area.

4.2 BACKGROUND DATA

The following is a summary of laboratory analytical results of the three background surficial soil samples (BK-1 through BK-3) collected during this investigation. Soil sample analytical results are summarized in Table 2. A copy of the laboratory chemical analysis data report is provided as Appendix C.

Metals

As shown in Table 2, laboratory chemical analysis of the surficial (zero to two feet bgs) background soil samples (BK-1, BK-2, and BK-3) indicate that background concentrations of arsenic in soils at the Site exceed the corresponding MEDEP RAG for “Outdoor Commercial Worker” exposure scenarios; however, only the arsenic concentration detected in BK-2 exceeded the MEDEP RAG for “Excavation/Construction Worker” exposure scenarios. Arsenic was detected at concentrations ranging from 3.4 to 5.6 mg/kg in the background soil samples. Elevated levels of naturally occurring arsenic are

common in Maine soils. For the purposes of this Phase II Investigation, arsenic concentrations in soil samples collected at the Site are considered elevated if they exceed a site-specific background concentration of approximately 5.6 mg/kg. Additionally, copper and lead were also detected in each of the background soil samples; however, the concentrations of these metals were below their corresponding MEDEP RAGs for both “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios. Cadmium was not detected in the background soil samples at concentrations above the respective laboratory detection limits.

Extractable Petroleum Hydrocarbons & Target Polycyclic Aromatic Hydrocarbons

As shown in Table 2, target PAHs were not detected in the background soil sample collected from BK-1 at concentrations above the respective laboratory detection limits; however, the following EPH fractions (C₁₉–C₃₆ aliphatics and C₁₁–C₂₂ aromatics) were detected at concentrations of 14.1 and 14 mg/kg, respectively, in the background soil sample (BK-1). These EPH concentrations did not exceed their corresponding MEDEP RAGs for “Outdoor Commercial Worker” or “Excavation/Construction Worker” exposure scenarios and are presumed to be characteristic of natural decaying organic matter at the Site. For the purposes of this Phase II Investigation, target PAH concentrations in shallow soil samples collected at the Site are considered elevated if they are detected during laboratory analysis and EPH concentrations are considered elevated if they exceed the site-specific background concentrations.

4.3 AOC 1– MAINTENANCE SHOP BUILDING & SURROUNDING AREA

Soil Sample Analytical Results

Volatile Organic Compounds

As shown in Table 2, VOCs were not detected in the surficial soil sample collected from SS101 at concentrations above the respective laboratory detection limits. Two VOCs (ethylbenzene and styrene) were detected in the surficial soil sample collected from SS103 at concentrations of 1.15 and 56.6 mg/kg, respectively, which were below their respective MEDEP RAGs for both “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios. Another VOC (isopropylbenzene) was detected in the surficial soil sample collected from SS103 at concentration of 1.98 mg/kg, which was below its USEPA Region 9 RSL since no MEDEP RAGs are currently established for this compound. The presence of these VOCs is likely associated with former OHM releases to the floor drains in the Maintenance Shop building, which discharged via a PVC pipe to the ground surface outside of the building.

Volatile Petroleum Hydrocarbons

Two VPH fractions (C₉–C₁₂ aliphatics and C₉–C₁₀ aromatics) were detected in the surficial soil samples collected from SS101 and SS103 at concentrations ranging from 7.86 to 19.3 mg/kg; however, these concentrations were below their respective MEDEP Remediation Guidelines for both “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios. C₅–C₈ aliphatics were not detected at concentrations above their respective laboratory detection limits in the surficial soil samples collected from SS101 or SS103. The presence of these EPH fractions in surficial soils are likely associated with *de minimis* petroleum residues that are incidental to the normal operation of motor vehicles and/or former OHM releases to the floor drains in the Maintenance Shop building, which discharged via the PVC pipe to the ground surface outside of the building.

Extractable Petroleum Hydrocarbons

C₉–C₁₈ aliphatics were not detected at concentrations above their respective laboratory detection limits in the surficial soil samples collected from SS101, SS103, and SS104; however, one or more of the following EPH fractions (C₁₉–C₃₆ aliphatics and C₁₁–C₂₂ aromatics) were detected in the surficial soil samples collected from SS101, SS103, and SS104 at concentrations ranging from 12.5 to 102 mg/kg, which exceeded their background concentrations, but did not exceed their MEDEP Remediation Guidelines for “Outdoor Commercial Worker” or “Excavation/Construction Worker” exposure scenarios. The presence of these EPH fractions in surficial soils are likely associated with *de minimis* petroleum residues that are incidental to the normal operation of motor vehicles and/or former OHM releases to the floor drains in the Maintenance Shop building, which discharged via the PVC pipe to the ground surface outside of the building.

Target Polycyclic Aromatic Hydrocarbons

Target PAHs were not detected in the surficial soil samples collected from SS101, SS103, and SS104 at concentrations above their respective laboratory detection limits.

Metals

Arsenic was detected in the surficial soil samples collected from SS101, SS102, and SS103 at concentrations of 12, 10, and 15 mg/kg, respectively, which slightly exceeded its highest background concentration (5.6 mg/kg) and its MEDEP RAGs for both “Outdoor Commercial Worker” (0.42 mg/kg) and “Excavation/Construction Worker” (4.2 mg/kg) exposure scenarios. Since these arsenic concentrations only slightly exceed their background concentrations, it is inferred that they are representative of naturally occurring arsenic in surficial soils at the Site.

Copper was detected in the surficial soil samples collected from SS101, SS102, and SS103 at concentrations of 27, 245, and 4,840 mg/kg, respectively, which exceeded its highest background concentration (21 mg/kg). The concentration of copper detected in SS103 (4,840 mg/kg) also exceeded its MEDEP RAGs for “Outdoor Commercial Worker” (4,800 mg/kg) and “Excavation/Construction Worker” (870 mg/kg) exposure scenarios. These elevated copper concentrations are likely indicative of marine paint removal activities performed within the Maintenance Shop building, which may have been discharged to the ground surface outside of the building via former floor drains in the building connected to a polyvinyl chloride (PVC) discharge pipe and/or marine paint dust that is ventilated to the building exterior via two fans located along the southern side of the Maintenance Shop building.

Additionally, cadmium and lead were also detected in one or more of the surficial soil samples collected from SS101, SS102, and SS103; however, the concentrations of these metals were either below their corresponding background concentrations and/or MEDEP RAGs for both “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios.

Polychlorinated Biphenyls

As shown in Table 2, PCBs were not detected in the surficial soil samples collected from SS101 or SS103 at concentrations above their laboratory detection limits.

Groundwater Sample Analytical Results

As shown in Table 3, EPH fractions, target PAHs, and metals (arsenic, cadmium, copper, and lead) were not detected at concentrations above their laboratory detection limits in the groundwater sample collected from monitoring well MW101. Three VOCs [acetone, 1,2,4-trimethylbenzene, and xylenes (total)] were detected in the groundwater sample collected from MW101 at concentrations ranging from 0.6 to 12 micrograms per liter ($\mu\text{g/l}$); however, these VOC concentrations did not exceed their respective MEGs. No other VOCs were detected at concentrations above their laboratory detection limits in the groundwater sample collected from monitoring well MW101. In addition, all three VPH fractions ($\text{C}_5\text{--C}_8$ aliphatics, $\text{C}_9\text{--C}_{12}$ aliphatics, and $\text{C}_9\text{--C}_{10}$ aromatics) were detected in the groundwater sample collected from MW101 at concentrations ranging from 27 to 33 $\mu\text{g/l}$; however, these VPH concentrations did not exceed their respective MEGs.

Pore Water Sample Analytical Results

As shown in Table 3, VOCs, VPH fractions, EPH fractions, target PAHs, and metals (cadmium, copper, and lead) were not detected at concentrations above their laboratory detection limits in the pore water sample collected from PW101. One metal (arsenic) was detected in the pore water sample collected from PW101 at a concentration of 44 $\mu\text{g/l}$, which exceeded its MEG (10 $\mu\text{g/l}$). The elevated concentration of arsenic detected in the pore water sample is inferred to be a function of microbial metabolism in an anaerobic environment (the pond), which has been shown to mobilize naturally occurring arsenic from a mineral state to the dissolved-phase (United States Geological Society, 2002; Zobrist, 2000).

Soil Vapor Sample Analytical Results

Volatile Organic Compounds

As shown in Table 4, the following VOCs: bromodichloromethane, 1,3-butadiene, chloroethane, chloroform, dibromochloromethane, 1,2-dichloro-1,1,2,2-tetrafluoroethane, ethylbenzene, styrene, tetrachloroethene (PCE), toluene, 1,1,1-trichloroethane, trichlorofluoromethane, 1,2,4-trimethylbenzene, vinyl chloride, and xylenes were detected in the soil vapor sample collected from SV101 at concentrations ranging from 0.473 to 154 micrograms per cubic meter ($\mu\text{g/m}^3$). No other VOCs were detected in the soil vapor sample collected from SV101 at concentrations above their respective laboratory detection limits.

These VOC concentrations do not exceed their applicable soil gas target guidelines for residential or commercial use with the exception of chloroform, which was detected at a concentration of 154 $\mu\text{g/m}^3$. It should be noted that chloroform is a common laboratory contaminant and is also a potential breakdown by-product of bleach and/or other chlorinated aqueous compounds reacting with soil and/or groundwater, thus forming trihalomethanes (e.g., chloroform, bromodichloromethane, dibromochloromethane, and bromoform). Since chloroform was not detected in the groundwater sample, pore water sample, or soil samples collected at the Site, it is inferred that chloroform is not a significant contaminant of concern at the Site.

Discussion of Key AOC 1 Findings

Based on the laboratory analytical results and Ransom's observations during the Phase II ESA program, including XRF and PID field screening activities, VOCs, volatile and semi-volatile petroleum constituents are present in surficial soils in AOC 1 at concentrations below their respective MEDEP RAGs and Remediation Guidelines for "Outdoor Commercial Worker" and "Excavation/Construction Worker" exposure scenarios. The presence of these VOCs, volatile and semi-volatile petroleum constituents in surficial soils are likely associated with OHM releases from boat maintenance/repair activities performed in the Maintenance Shop and/or associated with *de minimis* petroleum residues that are incidental to the normal operation of motor vehicles at the Site.

Low level concentrations of arsenic, cadmium, and lead detected in surficial soil samples at AOC 1 are likely representative of background conditions and not likely associated with OHM releases at the Site; however, the elevated concentration of copper detected in surficial soil sample SS103, which exceeded its MEDEP RAGs for "Outdoor Commercial Worker" and "Excavation/Construction Worker" exposure scenarios, is likely representative of marine paint removal activities, which are ventilated to the exterior of the Maintenance Shop building and/or associated with marine paint discharges to the ground surface outside of the Maintenance Shop building via former floor drains in the building connected to a PVC discharge pipe.

Groundwater at AOC 1 contains low-level concentrations of petroleum-related VOCs and VPH compounds, which do not exceed their respective MEGs for drinking water. The presence of these VOC and VPH compounds in groundwater is likely associated with OHM releases from boat maintenance/repair activities performed in the Maintenance Shop and/or associated with *de minimis* petroleum residues that are incidental to the normal operation of motor vehicles at the Site. Because these concentrations do not exceed the MEGs, they are not anticipated to represent an ingestion risk to surrounding private water supplies.

Surface water at AOC 1 does not appear to be adversely impacted with VOCs, volatile or semi-volatile petroleum constituents, PAHs, or metals at this time. Arsenic detected in the pore water sample collected adjacent to the surface water body (pond) at the northeastern portion of the Site is likely representative of microbial activity in an anaerobic environment, where naturally occurring arsenic is chemically reduced and mobilized in the dissolved phase. Therefore, the surface water body is not expected to be contributing contaminants of concern from the Site to the underlying groundwater table, and does not represent an exposure risk to surrounding private water supply wells at this time.

Soil vapor appears to contain low level concentrations of VOCs at concentrations that do not exceed their applicable soil gas target guidelines for residential or commercial use, with the exception of chloroform. The presence of VOC compounds detected in soil vapor is likely associated with OHM releases from boat maintenance/repair activities performed in the Maintenance Shop and/or associated with *de minimis* petroleum residues that are incidental to the normal operation of motor vehicles at the Site. It should be noted that chloroform is a common laboratory contaminant and is also a potential breakdown by-product of bleach and/or other chlorinated aqueous compounds reacting with soil and/or groundwater, thus forming trihalomethanes (e.g., chloroform, bromodichloromethane, dibromochloromethane, and bromoform). Since chloroform was not detected in the groundwater sample, pore water sample, or soil samples collected at the Site, it is inferred that chloroform is not a significant contaminant of concern at the Site.

4.4 AOC 2– STORAGE STRUCTURES NO. 1 THROUGH NO. 6 & SURROUNDING AREAS

Soil Sample Analytical Results

Volatile Organic Compounds

As shown in Table 2, VOCs were not detected in the surficial soil samples collected from SS105, SS107, SS112, SS114, and SS115 at concentrations above their respective laboratory detection limits. One or more of the following VOCs, acetone, ethylbenzene, isopropylbenzene, p-isopropyltoluene, naphthalene, n-propylbenzene, styrene, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and xylenes, were detected in the surficial soil samples collected from SS106, SS108, SS109, and SS110 at concentrations ranging from 0.059 to 1.68 mg/kg. The concentrations of these VOCs were below their respective MEDEP RAGs for both “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios.

The presence of these low level concentrations of VOCs is likely associated with OHM releases during boat maintenance/repair activities to the dirt floors of the Storage Structures at the Site.

Volatile Petroleum Hydrocarbons

VPH fractions were not detected at concentrations above their respective laboratory detection limits in the surficial soil samples collected from SS105, SS107, and SS115. One or more of the following VPH fractions, C₅–C₈ aliphatics, C₉–C₁₂ aliphatics, and C₉–C₁₀ aromatics, were detected in the surficial soil samples collected from SS106, SS108, SS109, SS110, SS112, and SS114 at concentrations ranging from 0.658 to 102 mg/kg; however, these VPH concentrations were below their respective MEDEP Remediation Guidelines for both “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios.

The presence of these low-level concentrations of VPH fractions detected in surficial soil samples SS106, SS108, SS109, and SS110 is likely associated with OHM releases during boat maintenance/repair activities to the dirt floors of the Storage Structures at the Site. The presence of low-level VPH fractions detected in the surficial soil sample collected from SS112 is likely associated with the former release of waste oil from the two 275-gallon ASTs located inside Storage Structure No. 6 and VPH fractions detected in the surficial soil sample collected from SS114 is likely associated with petroleum releases from former vehicle storage activities near Storage Structure No. 6.

Extractable Petroleum Hydrocarbons

One or more of the following EPH fractions (C₉–C₁₈ aliphatics, C₁₉–C₃₆ aliphatics, and C₁₁–C₂₂ aromatics) were detected in each surficial soil samples collected from AOC 2 (SS105 through SS115) at concentrations ranging from 8.78 to 34,100 mg/kg. These EPH concentrations were below their respective MEDEP Remediation Guidelines for both “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios, except for one EPH fraction (C₁₉–C₃₆ aliphatics), which was detected the surficial soil sample collected from SS114 at a concentration of 34,100 mg/kg, which exceeded its MEDEP Remediation Guideline for both “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios.

Elevated concentrations of EPH fractions detected in the surficial soil sample collected from SS114 is indicative of an apparent oil stain in this area, which was observed to encompass a surface area of approximately 65 square feet. Low-level concentrations of EPH fractions detected in the remaining surficial soil samples are likely associated with OHM releases during boat maintenance/repair activities to the dirt floors of the Storage Structures and/or areas adjacent to these Storage Structures at the Site.

Target Polycyclic Aromatic Hydrocarbons

Target PAHs were not detected in the surficial soil samples collected from SS107, SS111, SS112, SS113, SS114, and SS115 at concentrations above their respective laboratory detection limits. One or more of the following PAHs: anthracene, 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, 2-methylnaphthalene, naphthalene, phenanthrene, and pyrene were detected in the surficial soil samples collected from SS105, SS106, SS108, SS109, and SS110 at concentrations ranging from 0.143 to 2.49 mg/kg; however, these PAH concentrations were below their respective MEDEP RAGs for both “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios.

The presence of these low level concentrations of PAHs detected in surficial soil samples is likely associated with OHM releases during boat maintenance/repair activities to the dirt floors of the Storage Structures and/or areas adjacent to these Storage Structures at the Site.

Metals

Arsenic was not detected in the surficial soil samples collected from SS108, SS109, and SS110 at concentrations above their respective laboratory detection limits. Arsenic was detected in the surficial soil sample collected from SS107 at a concentration of 2.6 mg/kg, which did not exceed the background concentration (5.6 mg/kg). Therefore, it is inferred that the arsenic concentration detected as SS107 is representative of naturally occurring arsenic in surficial soils at the Site.

Arsenic was detected in the surficial soil sample collected from the burn pile (SS115) at a concentration of 72 mg/kg, which greatly exceeded the background concentrations and MEDEP RAGs for both “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios. The presence of this elevated arsenic concentration is likely associated with combustion (fire) of arsenic-containing wood at the burn pile portion of the Site.

Arsenic was detected in the remaining surficial soil samples collected from AOC 2 at concentrations ranging from 8.9 to 15 mg/kg, which slightly exceeded the highest background concentration (5.6 mg/kg) and the MEDEP RAGs for both “Outdoor Commercial Worker” (0.42 mg/kg) and “Excavation/Construction Worker” (4.2 mg/kg) exposure scenarios. Since these arsenic concentrations slightly exceed their background concentrations, it is inferred that are representative of naturally occurring arsenic in surficial soils at the Site.

Copper was detected in all surficial soil samples collected from AOC 2 at concentrations ranging from 12 to 213,000 mg/kg. The concentrations of copper detected in SS108 (25,100 mg/kg), SS109 (106,000 mg/kg), and SS110 (213,000 mg/kg) exceeded the background concentrations and MEDEP RAGs for “Outdoor Commercial Worker” (4,800 mg/kg) and “Excavation/Construction Worker” (870 mg/kg) exposure scenarios. The presence of these

elevated copper concentrations detected in surficial soil samples (dirt floors of the Storage Structures) is likely associated with marine paint removal activities during boat maintenance/repair activities in the Storage Structures at the Site.

Lead was detected in all surficial soil samples collected from AOC 2 at concentrations ranging from 3.3 to 9,970 mg/kg. The concentrations of lead detected in SS108 (1,300 mg/kg), SS109 (9,970 mg/kg), and SS110 (698 mg/kg) exceeded the background concentrations and MEDEP RAGs for “Outdoor Commercial Worker” (560 mg/kg) and/or “Excavation/Construction Worker” (950 mg/kg) exposure scenarios. The presence of these elevated lead concentrations detected in surficial soil samples (dirt floors of the Storage Structures) is likely associated with marine paint removal activities during boat maintenance/repair activities in the Storage Structures at the Site.

Additionally, cadmium was also detected in the surficial soil samples collected from SS105 and SS113 at concentrations of 0.26 and 2.4 mg/kg, respectively; however, the cadmium concentrations were below the MEDEP RAGs for both “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios.

Polychlorinated Biphenyls

As shown in Table 2, PCBs were not detected in the surficial soil samples collected from SS106 or SS112 at concentrations above their laboratory detection limits.

Discussion of Key AOC 2 Findings

Based on the laboratory analytical results and Ransom’s observations during the Phase II ESA program, including XRF and PID field screening activities, VOCs, volatile petroleum constituents, and target PAHs are present in surficial soils in AOC 2 at concentrations below their respective MEDEP RAGs and Remediation Guidelines for “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios. The presence of these VOCs, volatile petroleum constituents, and target PAHs in surficial soils are likely associated with OHM releases during boat maintenance/repair activities to the dirt floors of the Storage Structures, areas adjacent to these Storage Structures, and/or associated with *de minimis* petroleum residues that are incidental to the normal operation of motor vehicles at the Site.

Elevated concentrations of EPH fractions detected in the surficial soil sample collected from SS114 is likely associated with petroleum releases from former vehicle storage activities in this area. Surficial soil staining, encompassing approximately 65 square feet, was observed in this area.

In general, low-level concentrations of cadmium detected in surficial soil samples at AOC 2 are likely representative of background conditions and not likely associated with OHM releases at the Site; however, the elevated concentrations of copper and lead detected in the surficial soil samples (dirt floors) collected inside Storage Structure No. 3 (SS108), Storage Structure No. 4 (SS109), and Storage Structure No. 5 (SS110), which exceeded their MEDEP RAGs for “Outdoor Commercial Worker” and/or “Excavation/Construction Worker” exposure scenarios, is likely associated with marine paint removal activities during boat maintenance/repair activities in these Storage Structures at the Site.

Low-level concentrations of arsenic detected in surficial soil samples collected at AOC 2 are also likely representative of naturally-occurring arsenic in Site soils, with the exception of an elevated concentration of arsenic that was detected in the surficial soil sample collected from the burn pile (SS115), which exceeded its background concentrations and MEDEP RAGs for both “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios. The presence of this elevated arsenic concentration is likely associated with combustion (anthropogenic burning) of arsenic-containing wood at the burn pile portion of the Site.

4.5 HAZARDOUS BUILDING MATERIALS

Ransom conducted a HMI concurrent with our Phase II ESA investigation, which included interior and exterior inspections of the Site buildings. The HMI identified potential PCB-containing fluorescent light ballasts and mercury-containing fluorescent light tubes inside the Site buildings. Laboratory analysis and field screening procedures did not identify ACM or LBP in connection with the Site buildings. Results of the HMI are detailed in the full HMI report provided as Appendix D.

5.0 QUALITY ANALYSIS/QUALITY CONTROL

The contracted laboratory, Analytics Environmental Laboratory (Analytics) of Portsmouth, New Hampshire, provided Level II analytical data, according to USEPA protocols and USEPA laboratory data validation guidance included in Ransom's Generic QAPP for Brownfield sites in Maine. Analytics provided the following information in analytical reports:

- Data results sheets;
- Method blank results;
- Surrogate recoveries and acceptance limits;
- Duplicate results/acceptance limits;
- Spike/duplicate results/acceptance limits;
- Laboratory control sample results;
- Description of analytical methods and results; and
- Other pertinent results/limits as deemed appropriate.

As outlined in the Generic QAPP, at the completion of the field tasks and receipt of the analytical results, a data usability analysis was conducted to document the precision, bias, accuracy, representativeness, comparability, and completeness of the results. The following sections present this analysis. A summary of duplicate sample analytical results is included as Table 5.

5.1 PRECISION

Precision measures the reproducibility of measurements. The precision measurement is established using the relative percent difference (RPD) between the duplicate sample results. Relative percent differences were calculated for soil, groundwater, and soil vapor samples where both sample and duplicate values were greater than five times the Practical Quantitation Limit (PQL) of the analyte. The RPD is calculated as follows:

$$\text{RPD} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Mean of the Two Results}} \times 100$$

One duplicate soil, groundwater, pore water, and soil vapor sample were collected for laboratory analysis. The duplicate soil sample (SS10X) was collected from surficial soil sample SS112 (0 to 2 feet) and was submitted for laboratory analysis of VOCs, VPH, EPH, PAHs, PCBs, and metals (arsenic, cadmium, copper, and lead). The duplicate groundwater sample (MWX) was collected from temporary monitoring well MW101 and was submitted for laboratory analysis of VOCs, VPH, EPH, PAHs, and metals (arsenic, cadmium, copper, and lead). The duplicate pore water sample (PWDUP) was collected from pore water sample point PW101 and was submitted for laboratory analysis of VOCs, VPH, EPH, PAHs, and metals (arsenic, cadmium, copper, and lead). The duplicate soil vapor sample (SV102) was collected from temporary soil vapor point SV101 and was submitted for laboratory analysis of VOCs by TO-15. A summary of duplicate sample analytical results and calculated RPDs is presented in the attached Table 5.

Surficial Soil Sample (SS101)

- VOCs, VPH fractions, Target PAHs, and PCBs were not detected in the SS112 soil sample and/or its duplicate soil sample (SS10X) above their respective laboratory reporting limits; therefore, no RPD was applicable.
- Only one EPH fraction (C₁₉ to C₃₆ aliphatics) was detected in the SS112 soil sample and its duplicate soil sample (SS10X) at concentrations greater than five times their PQL for the compounds. The RPD for this EPH fraction was below its 35 percent guideline; therefore, the precision of this sample result is acceptable.
- Three metals (arsenic, copper, and lead) were detected in the SS112 soil sample and its duplicate soil sample (SS10X) at concentrations greater than five times their PQL for the compounds. The RPDs for two of these metals (arsenic and copper) were below their 35 percent guideline; therefore, the precision of these sample results are acceptable; however, the RPD for lead was above its 35 percent guideline; therefore, the precision of this sample result falls outside the guidance range.

Groundwater Sample (MW101)

- Target PAHs, EPH fractions, and metals were not detected in the MW101 groundwater sample or its duplicate groundwater sample (MWX) above their respective laboratory reporting limits; therefore, no RPD was applicable.
- Only one VOC (acetone) was detected in the MW101 groundwater sample and its duplicate groundwater sample (MWX) at a concentration greater than five times its PQL. The RPD for this VOC was below its 35 percent guideline; therefore, the precision of this sample result is acceptable.
- Only one VPH fraction (C₉ to C₁₀ aromatics) was detected in the MW101 groundwater sample and its duplicate groundwater sample (MWX) at a concentration greater than five times its PQL. The RPD for this VPH fraction was above its 35 percent guideline; therefore, the precision of this sample result falls outside the guidance range.

Pore Water Sample (PW101)

- VOCs, Target PAHs, VPH fractions, and EPH fractions were not detected in the PW101 pore water sample or its duplicate sample (PWDUP) above their respective laboratory reporting limits; therefore, no RPD was applicable.
- Only one metal (arsenic) was detected in the PW101 pore water sample and its duplicate sample (PWDUP) at a concentration greater than five times its PQL. The RPD for arsenic was below its 35 percent guideline; therefore, the precision of this sample result is acceptable.

Soil Vapor Sample (SV101)

- Sixteen VOCs were detected in the SV101 soil vapor sample and its duplicate soil vapor sample (SV102) at concentrations greater than five times their PQL for the compounds. The RPDs for all of these VOCs were below their 35 percent guideline; therefore, the precision of these sample results are acceptable.

5.2 BIAS

Bias is the systematic or persistent distortion of a measurement process that causes errors in one direction. Bias assessments are made using personnel, equipment, and spiking materials or reference materials as independent as possible from those used in the calibration of the measurement system. Bias assessments were based on the analysis of spiked samples so that the effect of the matrix on recovery is incorporated into the assessment. A documented spiking protocol and consistency in following that protocol are important to obtaining meaningful data quality estimates.

Matrix spike and matrix spike duplicate samples (MS/MSD) were used to assess bias as prescribed in the specified methods. Acceptable recovery values were within the recoveries specified by each of the analysis methods. Control samples for assessing bias were analyzed at a rate as specified in the analytical SOPs and specified analytical methods.

The lab provides quality control non-conformance reports that indicate if Laboratory Control Samples/Laboratory Control Sample Duplicates (LCS/LCSD) and/or MS/MSD had low, failing, or high recoveries and if the sample result was affected. Likewise, the lab reports any compounds that had failing RPDs in the LCS/LCSD pair or the MS/MSD pair. This indicates the percent difference between the lab sample and its duplicate or the spike and its' duplicate. Specific comments from the laboratory included the following:

Volatile Organic Compounds

There were no bias issues identified by the laboratory in the soil, groundwater, pore water, or soil vapor samples collected and analyzed for VOCs.

Volatile Petroleum Hydrocarbons

There were no bias issues identified by the laboratory in the soil, groundwater, or pore water samples collected and analyzed for VPH compounds.

Extractable Petroleum Hydrocarbons & Polycyclic Aromatic Hydrocarbons

There were no bias issues identified by the laboratory in the soil, groundwater, or pore water samples collected and analyzed for VPH and PAH compounds.

Metals

There were no bias issues identified by the laboratory in the soil, groundwater, or pore water samples collected and analyzed for Metals.

PCBs by EPA 8082

There were no bias issues identified by the laboratory in the soil samples collected and analyzed for PCBs.

5.3 ACCURACY

Accuracy is a statistical measurement of correctness and includes components of random error (variability due to imprecision) and systemic error. It therefore reflects the total error associated with a measurement. A measurement is accurate when the value reported does not differ from the true value or known concentration of the spike or standard. For volatile and semi-volatile organic compounds, surrogate compound recoveries are also used to assess accuracy and method performance for each sample analyzed. Analysis of performance evaluation samples will also be used to provide additional information for assessing the accuracy of the analytical data being produced. Both accuracy and precision are calculated for each analytical batch, and the associated sample results are interpreted by considering these specific measurements.

The lab provides a non-conformance summary that reports if all of the quality control criteria including initial calibration, calibration verification, surrogate recovery, holding time and method accuracy/precision for analysis were within acceptable limits. According to the laboratory, unless noted in the non-conformance summary, all of the quality control criteria for these analyses were within acceptable limits.

5.4 REPRESENTATIVENESS

Objectives for representativeness are defined for each sampling and analysis task and are a function of the investigative objectives. Representativeness was accomplished during this project through use of standard field, sampling, and analytical procedures. All objectives for sampling and analytical representativeness, as specified in SSQAPP, were met.

5.5 COMPARABILITY

Comparability is the confidence with which one data set can be compared to another data set. The objective for this QA/QC program is to produce data with the greatest possible degree of comparability. Comparability was achieved by using standard methods for sampling and analysis, reporting data in standard units, normalizing results to standard conditions and using standard and comprehensive reporting formats. Complete field documentation was used, including standardized data collection forms to support the assessment of comparability. Historical comparability shall be achieved through consistent use of methods and documentation procedures throughout the project.

5.6 COMPLETENESS

Completeness is calculated by comparing the number of samples successfully analyzed to the number of samples collected. The goal for completeness is 95 percent. The completeness for this project was 100 percent, as there were no samples that could not be analyzed due to holding time violations, samples spilled or broken, or any other reason.

6.0 CONCLUSIONS

Findings from the Phase II investigation identified that surficial soils throughout the Site contain VOCs, volatile petroleum constituents, and target PAHs at concentrations below their respective MEDEP RAGs and Remediation Guidelines for “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios. The presence of these contaminants in surficial soils are likely associated with small releases of OHM during boat maintenance/repair activities in the Maintenance Shop; small OHM releases to the dirt floors of the Storage Structures and/or areas adjacent to these Storage Structures; and/or associated with *de minimis* petroleum residues that are incidental to the normal operation of motor vehicles at the Site. In addition, PCBs were not detected above laboratory detection limits in the surficial soil samples submitted for laboratory analysis at the Site.

With the exception of arsenic, copper, and lead, which were detected in several surficial soil samples at concentrations exceeding their corresponding MEDEP RAGs for “Outdoor Commercial Worker” and/or “Excavation Construction Worker”, low-level concentrations of metals detected in surficial soil samples at the Site are likely representative of naturally-occurring background conditions and are not likely associated with OHM releases at the Site. Elevated concentrations of copper and lead, which exceeded their MEDEP RAGs for “Outdoor Commercial Worker” and/or “Excavation/Construction Worker” exposure scenarios, were detected in the surficial soil samples (dirt floors) collected inside Storage Structures No. 3, No. 4, and No. 5 and are likely associated with marine paint removal activities during boat maintenance/repair activities in these Storage Structures.

An elevated concentration of copper, which exceeded its MEDEP RAGs for “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios, was also detected in a surficial soil sample collected from the ground surface adjacent to the Maintenance Shop. This elevated concentration is likely the result of marine paint removal activities that generate dust, which is often discharged through ventilation fans to the exterior of the Maintenance Shop building and/or associated with marine paint releases to the former floor drains in the building, which discharged via a PVC pipe to the ground surface outside of the Maintenance Shop building.

Furthermore, an elevated concentration of arsenic that was detected in the surficial soil sample collected from the burn pile, which exceeded its background concentrations and MEDEP RAGs for both “Outdoor Commercial Worker” and “Excavation/Construction Worker” exposure scenarios. The presence of this elevated arsenic concentration is likely associated with combustion (anthropogenic burning) of arsenic-containing wood at the burn pile portion of the Site.

Ransom did not observe evidence of “petroleum-saturated soils” or evidence of “free petroleum product” contamination in groundwater encountered during the collection of surficial soil samples, soil boring advancements, or gauging of the temporary groundwater monitoring well. Elevated concentrations of EPH fractions were detected in a soil sample collected from an area of surficial petroleum staining (approximately 65 square feet) located approximately 100 feet south of Storage Structure No. 6, which appeared to be associated with motor oil/automotive lubricant spills from former vehicle storage activities in this area of the Site.

Groundwater at the northeastern portion of the Site contains low-level concentrations of petroleum-related VOCs and VPH compounds, which do not exceed their respective MEGs for drinking water. The presence of these VOC and VPH compounds in groundwater is likely associated with OHM releases from boat maintenance/repair activities performed in the Maintenance Shop and/or associated with *de minimis* petroleum residues that are incidental to the normal operation of motor vehicles at the Site. Groundwater was not encountered at remaining portions of the Site. Pore water results suggest that elevated concentrations of VOCs, petroleum constituents, PAHs, and metals are not accumulating in the surface water body (pond) at the northeastern portion of the Site as a result of storm water runoff from other portions of the Site. Concentrations of arsenic exceeding the MEG were detected in the pore water sample collected from the pond; however, this is likely representative of microbial activity in an anaerobic environment, where naturally occurring arsenic is chemically reduced and mobilized in the dissolved phase. Therefore, the surface water body is not expected to be contributing contaminants of concern from the Site to the underlying groundwater table, and does not represent an exposure risk to surrounding private water supply wells at this time.

Soil vapor at the northeastern portion of the Site was determined to contain VOCs at concentrations that do not exceed their applicable soil gas target guidelines for residential or commercial use, with the exception of chloroform. The presence of these VOC contaminants in soil vapor are likely associated with OHM releases from boat maintenance/repair activities performed in the Maintenance Shop and/or associated with *de minimis* petroleum residues that are incidental to the normal operation of motor vehicles at the Site. It should be noted that chloroform is a common laboratory contaminant and is also a potential breakdown by-product of bleach and/or other chlorinated aqueous compounds reacting with soil and/or groundwater, thus forming trihalomethanes (e.g., chloroform, bromodichloromethane, dibromochloromethane, and bromoform). Since chloroform was not detected in the groundwater sample, pore water sample, or soil samples collected at the Site, it is inferred that chloroform is not a significant contaminant of concern at the Site.

Ransom also conducted a HMI concurrent with our Phase II ESA investigation, which identified potential PCB-containing fluorescent light ballasts and mercury-containing fluorescent light tubes inside the Site buildings. Laboratory analysis and field screening procedures did not identify ACM or LBP in connection with the Site buildings.

7.0 RECOMMENDATIONS

Based on the information obtained during this Phase II Investigation, Ransom recommends the following with respect to the proposed Site redevelopment:

1. The Site should be submitted to the MEDEP Voluntary Response Action Program (VRAP). The MEDEP VRAP is a voluntary review program that offers technical review of environmentally-impacted sites and ultimately state liability protections for interested parties including a “No Action Assurance” letter and a “Certificate of Completion” letter (i.e. no further action required), provided that proper and appropriate environmental cleanup or remedial actions are completed, as approved by the MEDEP;
2. The risk of human exposure to EPH and metals (specifically arsenic, copper, and lead) identified in surficial soils at concentrations exceeding their respective MEDEP RAGs and/or background concentrations should be mitigated. As such, Ransom recommends the completion of an Analysis of Brownfields Cleanup Alternatives (ABCA) and Conceptual Remedial Action Plan (RAP) or Focused Feasibility Study (FFS) to evaluate and select the most appropriate cleanup or remedial action(s) for the Site. Potential soil mitigation measures may include engineering controls consisting of the placement of a soil cover system or other direct barrier system (e.g., pavement, concrete, building foundations) to prevent direct dermal contact with the identified contaminated surficial soils, excavation and off-Site disposal of OHM-impacted soils, and/or a deed restriction and institutional controls in the form of a Declaration of Environmental Covenant (DEC) in order to potentially restrict groundwater use and excavation of impacted soils at the Site, without proper MEDEP notification/approvals, implementation of a soil management plan, and a health and safety plan; and
3. If the Site is to continue operation as a boat yard, certain engineering controls and institutional controls should be implemented to prevent the potential future release(s) of hazardous materials to the environment. Ransom recommends that the property owner evaluate engineered systems or other management controls to prevent the discharge of paint dust containing elevated concentrations of metals to the ground surface at the Site. Furthermore, Ransom recommends that hazardous wastes generated at the Site, including, but not limited to, paint dust, used solvents, waste engine fluids, used batteries, and partially empty paint cans, be collected and properly disposed of, in accordance with local, State, and/or Federal hazardous waste regulations and guidelines. If applicable, the Site should be registered with the US EPA Resource Conservation Recovery Act (RCRA) program and a US EPA Hazardous Waste Identification (I.D.) Number should be obtained for proper management of hazardous wastes.

8.0 REFERENCES

1. MEDEP, Bureau of Remediation; January 13, 2010; Vapor Intrusion Evaluation Guidance.
2. MEDEP; December 1, 2009; Remediation Guidelines for Petroleum Contaminated Sites in Maine.
3. MEDEP; January 6, 2010; Maine Remedial Action Guidelines (RAGs) for Soil Contaminated with Hazardous Substances.
4. MEDEP; January 11, 2012; *Draft* Maine Remedial Action Guidelines (RAGs) for Soil Contaminated with Hazardous Substances.
5. Maine Center for Disease Control (MCDC); September 30, 2011; Maximum Exposure Guidelines (MEGs) for Drinking Water.
6. USEPA Region 9; May 2012; Regional Screening Levels (RSLs).
7. USGS, Ronald S. Oremland, April 2002; "Microbial Redox Cycling of Arsenic Oxyanions in Anoxic Environments".
8. Zobrist, J., P.R. Dowdle, J.A. Davis, and R.S. Oremland, 2000; Mobilization of Arsenite by Dissimilatory Reduction of Adsorbed Arsenate; *Environmental Science and Technology*, v. 34, p.4747-4753.
9. Ransom Consulting Inc.; July 6, 2012; Phase I Environmental Site Assessment, Belfast Boatyard, 38 Waterville Road, Belfast, Maine.
10. Ransom Consulting Inc.; July 30, 2012; Site-Specific Quality Assurance Project Plan Addendum No. 18, Phase II Investigation, Belfast Boatyard, 38 Waterville Road, Belfast, Maine.
11. Ransom Environmental Consultants Inc.; August 27, 2008; State of Maine Brownfields Assessment Projects Generic Quality Assurance Project Plan (QAPP) RFA #08243.

9.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S)

Ransom performed services in a manner consistent with the guidelines set forth in the American Society for Testing and Materials (ASTM) E 1903-97 (Standard Practices for Environmental Site Assessments: Phase II Environmental Site Assessment Process), and in accordance with the scope of work and standard operating procedures outlined in the Generic QAPP and SSQAPP.

The following Ransom personnel possess the sufficient training and experience necessary to conduct a Phase II Environmental Site Assessment, and from the information generated by such activities, have the ability to develop opinions and conclusions regarding recognized environmental conditions in connection with the Site.

Environmental Professionals:

Aaron R. Martin
Associate Project Manager/Primary Author

Eriksen P. Phenix, C.G.
Project Geologist

Peter J. Sherr, P.E.
Senior Project Manager/Belfast Brownfields Program Manager

Nicholas O. Sabatine, P.G.
Vice President/Senior Geologist/Belfast Brownfields QA Officer

TABLE 1: SOIL SAMPLE FIELD SCREENING RESULTS: METALS

Phase II Environmental Site Assessment

38 Waterville Road

Belfast, Maine

Boring ID	Sample	As	Pb
		mg/kg	
B101	S1	ND	ND
B102	S1	ND	ND
	S3	32	16
	S4	ND	ND
B103	S1	ND	24
	S3	16	ND
B104	S1	18	16
	S3	18	ND
B105	S1	15	25
	S3	ND	47
	S5	19	16
	S7	ND	21
B106	S1	18	15
SS101	S1	14	17
SS102	S1	ND	ND
SS103	S1	ND	102
SS104	S1	17	22
SS105	S1	ND	51
SS106	S1	48	553
SS107	S1	ND	24
SS108	S1	ND	618
SS109	S1	287	3,831
SS110	S1	89	780
SS111	S1	20	ND
SS114	S1	15	20
SS115	S1	322	140

NOTES:

mg/kg = milligrams per kilogram

ND= Not Detected

Table 2: Soil Sample Analytical Results
Belfast Boatyard
38 Waterville Road, Belfast, Maine

Sample Location	SS-101	SS-102	SS-103	SS-104	SS-105	SS-106	SS-107	SS-108	SS-109	SS-110	SS-111	SS-112	SS-113	SS-114	SS-115	BK-1	BK-2	BK-3	MEDEP Remedial Action Guidelines (RAGs) for Soil Contaminated with Hazardous Substances (Jan. 6, 2010)				Draft MEDEP Remedial Action Guidelines (RAGs) for Sites Contaminated with Hazardous Substances (Jan 11, 2012)						MEDEP Remediation Guidelines for Petroleum Contaminated Sites in Maine (Dec. 1, 2009)				
	Sample Identification	SS-101	SS-102	SS-103	SS-104	SS-105	SS-106	SS-107	SS-108	SS-109	SS-110	SS-111	SS-112	SS-113	SS-114	SS-115	BK-1	BK-2	BK-3	Residential	Park User	Outdoor Commercial Worker	Excavation/Construction Worker	Residential	Park User	Outdoor Commercial Worker	Excavation/Construction Worker	Background Rural	Background Urban	Tier 2 Residential	Tier 2 Park User	Tier 2 Outdoor Commercial Worker	Tier 2 Excavation/Construction Worker
Date Collected	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	Residential				Draft MEDEP Remedial Action Guidelines (RAGs) for Sites Contaminated with Hazardous Substances (Jan 11, 2012)						MEDEP Remediation Guidelines for Petroleum Contaminated Sites in Maine (Dec. 1, 2009)			
Volatil Organic Compounds (VOC)																																	
milligrams per kilogram (mg/kg)																																	
Acetone	ND	NA	ND	NA	ND	ND	ND	ND	ND	1.68	NA	ND	NA	ND	ND	NA	NA	NA	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	NE	NE	NE	NE			
Ethylbenzene	ND	NA	1.150 J	NA	ND	ND	ND	0.133	0.059 J	ND	NA	ND	NA	ND	ND	NA	NA	NA	130	210	420	2,700	1,300	2,200	4,300	10,000	NE	NE	130	210	420	2,700	
Isopropylbenzene	ND	NA	1.98	NA	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	NA	NA	NA	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE		
p-Isopropyltoluene	ND	NA	ND	NA	ND	ND	ND	0.101 J	ND	0.077 J	NA	ND	NA	ND	ND	NA	NA	NA	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE		
Naphthalene	ND	NA	ND	NA	ND	0.128	ND	1.37	0.613	0.281	NA	ND	NA	ND	ND	NA	NA	NA	200	330	200	32	2500	4200	10,000	10,000	NE	NE	200	330	200	32	
n-Propylbenzene	ND	NA	ND	NA	ND	ND	ND	0.074 J	ND	ND	NA	ND	NA	ND	ND	NA	NA	NA	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE		
Styrene	ND	NA	56.6	NA	ND	ND	ND	0.453	0.117	ND	NA	ND	NA	ND	ND	NA	NA	NA	6,700	10,000	10,000	10,000	10,000	10,000	10,000	10,000	NE	NE	NE	NE	NE		
Toluene	ND	NA	ND	NA	ND	ND	ND	0.108	0.118	ND	NA	ND	NA	ND	ND	NA	NA	NA	2,700	4,500	10,000	10,000	10,000	10,000	10,000	10,000	NE	NE	2,700	4,500	10,000	10,000	
1,2,4-Trimethylbenzene	ND	NA	ND	NA	ND	0.154	ND	0.956	0.163	0.269	NA	ND	NA	ND	ND	NA	NA	NA	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE		
1,3,5-Trimethylbenzene	ND	NA	ND	NA	ND	0.117	ND	0.497	0.109	0.236	NA	ND	NA	ND	ND	NA	NA	NA	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE		
o-Xylene	ND	NA	ND	NA	ND	ND	ND	0.222	0.06 J	0.093 J	NA	ND	NA	ND	ND	NA	NA	NA	6,600 ⁽⁵⁾	10,000 ⁽⁵⁾	10,000 ⁽⁵⁾	7,000 ⁽⁵⁾	10,000	10,000	10,000	10,000	NE	NE	6,600 ⁽⁵⁾	10,000 ⁽⁵⁾	10,000 ⁽⁵⁾	7,000 ⁽⁵⁾	
m,p-Xylene	ND	NA	ND	NA	ND	ND	ND	0.44	0.195	0.089 J	NA	ND	NA	ND	ND	NA	NA	NA	6,600 ⁽⁵⁾	10,000 ⁽⁵⁾	10,000 ⁽⁵⁾	7,000 ⁽⁵⁾	10,000	10,000	10,000	10,000	NE	NE	6,600 ⁽⁵⁾	10,000 ⁽⁵⁾	10,000 ⁽⁵⁾	7,000 ⁽⁵⁾	
All other VOCs	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	NA	NA	NA	Various	Various	Various	Various	Various	Various	Various	Various	NE	NE	Various	Various	Various	Various	
Target Polycyclic Aromatic Hydrocarbons (PAHs)																																	
Anthracene	ND	NA	ND	ND	ND	ND	ND	0.236 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	4,300	7,200	7,800	430	10,000	10,000	10,000	3,800	0	1.63	4,300	7,200	7,800	430	
Benzo(g,h,i) perylene	ND	NA	ND	ND	0.371	ND	ND	0.223 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	750	1,200	5,500	10,000	3,700	6,200	10,000	10,000	1	2.035	750	1,200	5,500	10,000	
Benzo[a]pyrene	ND	NA	ND	ND	0.329	ND	ND	0.236 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	0.026	0.044	0.35	4.3	0.26	0.44	3.5	43	2	4.57	0.026	0.044	0.35	4.3	
Benzo[a]anthracene	ND	NA	ND	ND	0.172 J	ND	ND	0.303	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	0.26	0.44	3.5	43	2.6	4.4	35	430	2	4.15	0.26	0.44	3.5	43	
Benzo[b]fluoranthene	ND	NA	ND	ND	0.504	ND	ND	0.498	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	0.26	0.44	3.5	43	2.6	4.4	35	430	3	5.335	0.26	0.44	3.5	43	
Benzo[k]fluoranthene	ND	NA	ND	ND	0.191 J	ND	ND	0.155 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	2.6	4.4	35	430	26	44	350	4300	2	3.225	2.6	4.4	35	430	
Chrysene	ND	NA	ND	ND	0.331	ND	ND	0.523	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	26	44	350	4,300	260	440	3,500	10,000	4	4.1	26	44	350	4,300	
Fluoranthene	ND	NA	ND	ND	0.260 J	ND	ND	0.566	ND	1.67	ND	ND	ND	ND	ND	ND	NA	NA	1,000	1,700	7,300	10,000	5,000	8,300	10,000	10,000	4	7.635	1,000	1,700	7,300	10,000	
Indeno[1,2,3-cd]pyrene	ND	NA	ND	ND	0.343	ND	ND	0.241 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	0.26	0.44	3.5	43	2.6	4.4	35	430	2	2.6	0.26	0.44	3.5	43	
2-Methylnaphthalene	ND	NA	ND	ND	ND	ND	ND	ND	ND	0.901 J	ND	ND	ND	ND	ND	ND	NA	NA	94	160	480	35	500	830	3600	600	0.414	0.804	94	160	480	35	
Naphthalene	ND	NA	ND	ND	0.143 J	ND	ND	0.443	0.395	ND	ND	ND	ND	ND	ND	ND	NA	NA	200	330	200	32	2500	4,200	10,000	10,000	0.041	0.8368	200	330	200	32	
Phenanthrene	ND	NA	ND	ND	ND	ND	ND	0.249 J	ND	2.49	ND	ND	ND	ND	ND	ND	NA	NA	700	1,200	3,600	470	3700	6,200	10,000	10,000	1.608	4.064	700	1,200	3,600	470	
Pyrene	ND	NA	ND	ND	0.299	ND	ND	0.476	ND	0.969 J	ND	ND	ND	ND	ND	ND	NA	NA	750	1,200	5,500	10,000	3,700	6,200	10,000	10,000	4.016	6.71	750	1,200	5,500	10,000	
All other Target PAHs	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	
Extractable Petroleum Hydrocarbon (EPH) Fractions																																	
C9-C18 Aliphatics	ND	NA	ND	ND	383 J	17.3	ND	48.1	23	ND	ND	ND	ND	ND	ND	ND	NA	NA	NE	NE	NE	NE	2600	4400	10000	7300	NE	NE	2600	4400	10000	7300	
C19-C36 Aliphatics	34.2	NA	102	ND	2340	72	25.3	139	32.6	7120	14.8	9.5 J	30.3	34,100	72.8	14.1 J	NA	NA	NE	NE	NE	NE	10000	10000	10000	10000	NE	NE	10000	10000	10000		
C11-C22 Aromatics	ND	NA	28.7	12.5 J	218	39.6	12.8 J	59.8	16.4	584	8.78 J	ND	9.48 J	1010	18.4	14 J	NA	NA	NE	NE	NE	NE	730	1,200	4,500	4,700	NE	NE	730	1,200	4,500	4,700	
Volatile Petroleum Hydrocarbon (VPH) Fractions																																	
C5-C8 Aliphatics	ND	NA	ND	NA	ND	ND	ND	1.610 J	ND	ND	NA	ND	NA	ND	ND	NA	NA	NA	NE	NE	NE	NE	1400	2300	10000	10000	NE	NE	1400	2300	10000	10000	
C9-C12 Aliphatics	13.8	NA	19.3	NA	ND	10.2	ND	25.2	9.15	102	NA	1.44 J	NA	5.95	ND	NA	NA	NA	NE	NE	NE	NE	2600	4400	10000	9800	NE	NE	2600	4400	10000	9800	
C9-C10 Aromatics	14.6	NA	7.86	NA	ND	9.93	ND	29.4	15.7	72.5	NA	0.658	NA	3.96	ND	NA	NA	NA	NE	NE	NE	NE	740	1200	5100	5500	NE	NE	740	1200	5100	5500	
Metals																																	
Arsenic	12	10	15	NA	8.9	13	2.6	ND	ND	ND	13	11	15	9.5	72	3.6	5.6	3.4	0.14	0.23	0.42	4.2	1.4	2.3	4.2	15	NE	NE	NE	NE	NE		
Cadmium	ND	ND	1.1	NA	0.26 J	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	2.1	3.6	19	3.9	11	18	94	19	NE	NE	NE	NE	NE	NE	
Copper	27	245	4840	NA	1980	3800	12	25100	106000	213000	1520	13	2260	43	639	12	21	2.3	480	790	4,800	870	2400	4000	10000	4300	28	NE	NE	NE	NE	NE	
Lead	12	26	229	NA	38	16	3.3	1300	9970	698	16	9	27	12	295	17	42	8.8	170	280	560	950	340	530	1100	950	NE	NE	340	530	1100	950	
Polychlorinated Biphenyls (PCBs)																																	
All PCBs	ND	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	0.49 ⁽⁵⁾	0.82 ⁽⁵⁾	1.2 ⁽⁵⁾	1.3 ⁽⁵⁾	2.4 ⁽⁵⁾	4.1 ⁽⁵⁾	12 ⁽⁵⁾	6.1 ⁽⁵⁾	NE	NE	NE	NE	NE		

Notes:
MEDEP = Maine Department of Environmental Protection
mg/kg = milligrams per kilogram
ND = Not Detected above laboratory reporting limit
NA = Not Analyzed
NE indicates that a standard or guideline is "not established" for the referenced parameter.
⁽⁵⁾ Standard is for total of all isomers (i.e., total PCBs, not individual Arochlors).
Values in **BOLD** type exceed their respective MEDEP RAG for "Outdoor Commercial Worker" exposure scenario.

**Table 3: Groundwater & Pore Water Sample Analytical Results
Belfast Boatyard
38 Waterville Road, Belfast, Maine**

Sample I.D.	MW-101	PW-101	MCDC Maximum Exposure Guidelines (MEGs)	USEPA Maximum Contaminant Level (MCLs)
Media	Groundwater	Pore Water		
Date Collected	8/2/2012	8/2/2012	Concentrations in micrograms per liter (ug/L)	
Volatile Organic Compounds (VOCs)				
Acetone	12	ND	6,000	NE
Toluene	ND	ND	600	1,000
1,2,4-Trimethylbenzene	1	ND	NE	NE
Xylenes (total)	0.6 J	ND	1,000	10,000
All other VOCs	ND	ND	Various	Various
Target Polycyclic Aromatic Hydrocarbons (PAHs)				
All Target PAHs	ND	ND	Various	Various
Extractable Petroleum Hydrocarbon (EPH) Fractions				
C9-C18 Aliphatics	ND	ND	700	NE
C19-C36 Aliphatics	ND	ND	10,000	NE
C11-C22 Aromatics	ND	ND	200	NE
Volatile Petroleum Hydrocarbon (VPH) Fractions				
C5-C8 Aliphatics	27 J	ND	300	NE
C9-C12 Aliphatics	32 J	ND	700	NE
C9-C10 Aromatics	33	ND	200	NE
Metals				
Arsenic	ND	44	10	10
Cadmium	ND	ND	1	5
Copper	ND	ND	500	1,300
Lead	ND	ND	10	15

Notes:

USEPA = United States Environmental Protection Agency

MECDC = Maine Center for Disease Control and Prevention

ug/L = micrograms per liter

NE indicates that a standard or guideline is "not established" for the referenced parameter.

ND = Not Detected above the laboratory detection limit

J = Estimated Concentration

Table 4: Soil Vapor Results
 Belfast Boatyard
 38 Waterville Road, Belfast, ME

Sample I.D.	SV-101	Draft MEDEP Remedial Action Guidelines for Sites Contaminated with Hazardous Substances (Jan 11, 2012)		MEDEP Vapor Intrusion Evaluation Guidance (Jan 14, 2010)	
		Soil Gas Targets Residential	Soil Gas Targets Commercial	Soil Gas Targets Residential	Soil Gas Targets Commercial
Volatile Organic Compounds		Air (ug/m3)			
Bromodichloromethane	9.24	NE	NE	NE	NE
Chloroethane	0.633	NE	NE	NE	NE
Chloroform	154	11	53	5.5	26.5
Dibromochloromethane	119	NE	NE	NE	NE
1,2-Dichloro-1,1,2,2-tetrafluoroethane	27.3	NE	NE	NE	NE
Ethylbenzene	0.838	97	490	48.5	245
Styrene	6.00	3,100	13,000	3,150	13,000
Tetrachloroethene	0.787	41	210	20.5	105
Toluene	2.88	52,000	220,000	50,000	220,000
1,1,1-Trichloroethane	5.89	52,000	220,000	50,000	220,000
Trichlorofluoromethane	2.46	NE	NE	NE	NE
1,2,4-Trimethylbenzene	0.698	NE	NE	NE	NE
Vinyl Chloride	0.603	55	280	27.5	140
o-Xylene	0.764	1,000	4,400	1,050	4,400
m,p-Xylene	2.66	1,000	4,400	1,050	4,400
1,3-Butadiene	0.473	8.1	41	4.05	20.5
All other VOCs	ND	Various	Various	Various	Various

Notes:

MEDEP = Maine Department of Environmental Protection

ug/m3 = micrograms per cubic meter

NE indicates that a standard or guideline is "not established" for the referenced parameter.

ND = Not Detected above the laboratory detection limit

⁽⁶⁾ Soil Gas Targets = 10 times the Indoor Air Target, as discussed in the January 11, 2012 Draft MEDEP Remedial Action Guidelines

TABLE 5: SUMMARY OF DUPLICATE SAMPLE ANALYTICAL RESULTS

Phase II Environmental Site Assessment
 Belfast Boatyard
 38 Waterville Road, Belfast, Maine

Sample Location	SS112	SS10X	Relative Percent Difference	MW101	MWX	Relative Percent Difference	PW101	PWDUP	Relative Percent Difference	SV101	SV102	Relative Percent Difference
	Sample Depth (ft bgs)	0-2 feet		0-2 feet	2.5-7.5 feet		2.5-7.5 feet	0.5-1 feet		0.5-1 feet	0.5-1 feet	
Sample Date	8/2/2012	8/2/2012		8/2/2012	8/2/2012		8/2/2012	8/2/2012		8/2/2012	8/2/2012	
Volatile Organic Compounds (VOCs)	Concentrations in mg/kg		%	Concentrations in µg/l		%	Concentrations in µg/l		%	Concentrations in µg/m3		%
Acetone	BRL	BRL		12	8.7	31.9	BRL	5.4 J		BRL	BRL	
Bromodichloromethane	BRL	BRL		BRL	BRL		BRL	BRL		9.24	8.31	10.6
1,3-Butadiene	BRL	BRL		BRL	BRL		BRL	BRL		0.473	0.498	-5.1
Chloroethane	BRL	BRL		BRL	BRL		BRL	BRL		0.633	0.765	-18.9
Chloroform	BRL	BRL		BRL	BRL		BRL	BRL		154	157	-1.9
Dibromochloromethane	BRL	BRL		BRL	BRL		BRL	BRL		119	131	-9.6
1,2-Dichloro-1,1,2,2-tetrafluoroethane	NA	NA		NA	NA		NA	NA		27.3	22.2	20.6
Ethylbenzene	BRL	BRL		BRL	BRL		BRL	BRL		0.838	0.847	-1.1
Styrene	BRL	BRL		BRL	BRL		BRL	BRL		6	5.41	10.3
Tetrachloroethene	BRL	BRL		BRL	BRL		BRL	BRL		0.787	0.793	-0.8
Toluene	BRL	BRL		BRL	BRL		BRL	1.2		2.88	3.19	-10.2
1,1,1-Trichloroethane	BRL	BRL		BRL	BRL		BRL	BRL		5.89	6.06	-2.8
Trichlorofluoromethane	BRL	BRL		BRL	BRL		BRL	BRL		2.46	2.46	0.0
1,2,4-Trimethylbenzene	BRL	BRL		1	BRL		BRL	BRL		0.698	0.85	-19.6
Vinyl chloride	BRL	BRL		BRL	BRL		BRL	BRL		0.603	0.475	23.7
o-Xylene	BRL	BRL		BRL	BRL		BRL	BRL		0.764	0.79	-3.3
m,p-Xylene	BRL	BRL		0.6 J	BRL		BRL	BRL		2.66	2.71	-1.9
Polycyclic Aromatic Hydrocarbons (PAHs)	Concentrations in mg/kg		%	Concentrations in µg/l		%	Concentrations in µg/l		%	Concentrations in µg/m3		%
All PAHs	BRL	BRL		BRL	BRL		BRL	BRL		NA	NA	
Volatile Petroleum Hydrocarbon (VPH) Fractions	Concentrations in mg/kg		%	Concentrations in µg/l		%	Concentrations in µg/l		%	Concentrations in µg/m3		%
C ₅ through C ₈ Aliphatics	BRL	BRL		27	BRL		BRL	BRL		NA	NA	
C ₉ through C ₁₂ Aliphatics	1.44	BRL		32	BRL		BRL	BRL		NA	NA	
C ₉ through C ₁₀ Aromatics	0.658	BRL		33	10	107.0	BRL	BRL		NA	NA	
Extractable Petroleum Hydrocarbon (EPH) Fractions	Concentrations in mg/kg		%	Concentrations in µg/l		%	Concentrations in µg/l		%	Concentrations in µg/m3		%
C ₉ through C ₁₈ Aliphatics	BRL	BRL		BRL	BRL		BRL	BRL		NA	NA	
C ₁₉ through C ₃₆ Aliphatics	9.5	11.3	-17.3	BRL	BRL		BRL	BRL		NA	NA	
C ₁₁ through C ₂₂ Aromatics	BRL	BRL		BRL	BRL		BRL	BRL		NA	NA	
Metals	Concentrations in mg/kg		%	Concentrations in µg/l		%	Concentrations in µg/l		%	Concentrations in µg/m3		%
Arsenic	11	11	0.0	BRL	BRL		44	44	0.0	NA	NA	
Cadmium	BRL	BRL		BRL	BRL		BRL	BRL		NA	NA	
Copper	13	10	26.1	BRL	BRL		BRL	BRL		NA	NA	
Lead	9	6	40.0	BRL	BRL		BRL	BRL		NA	NA	
Polychlorinated Biphenyls (PCBs)	Concentrations in mg/kg		%	Concentrations in µg/l		%	Concentrations in µg/l		%	Concentrations in µg/m3		%
All PCBs	BRL	BRL		NA	NA		NA	NA		NA	NA	

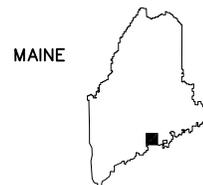


TAKEN FROM U.S.G.S. 7.5x15 MINUTE SERIES TOPOGRAPHIC MAP OF BELFAST, MAINE—1960 (REVISED 1979).

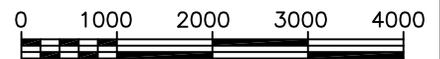
CONTOUR INTERVAL IS 10 FEET

SITE COORDINATES: LATITUDE 44°26'20"
LONGITUDE 69°02'10"

UTM COORDINATES: 49: 20: 481mN
4: 97: 122mE



QUADRANGLE LOCATION



SCALE in FEET
1: 24,000

RANSOM Consulting, Inc.

SITE LOCATION MAP

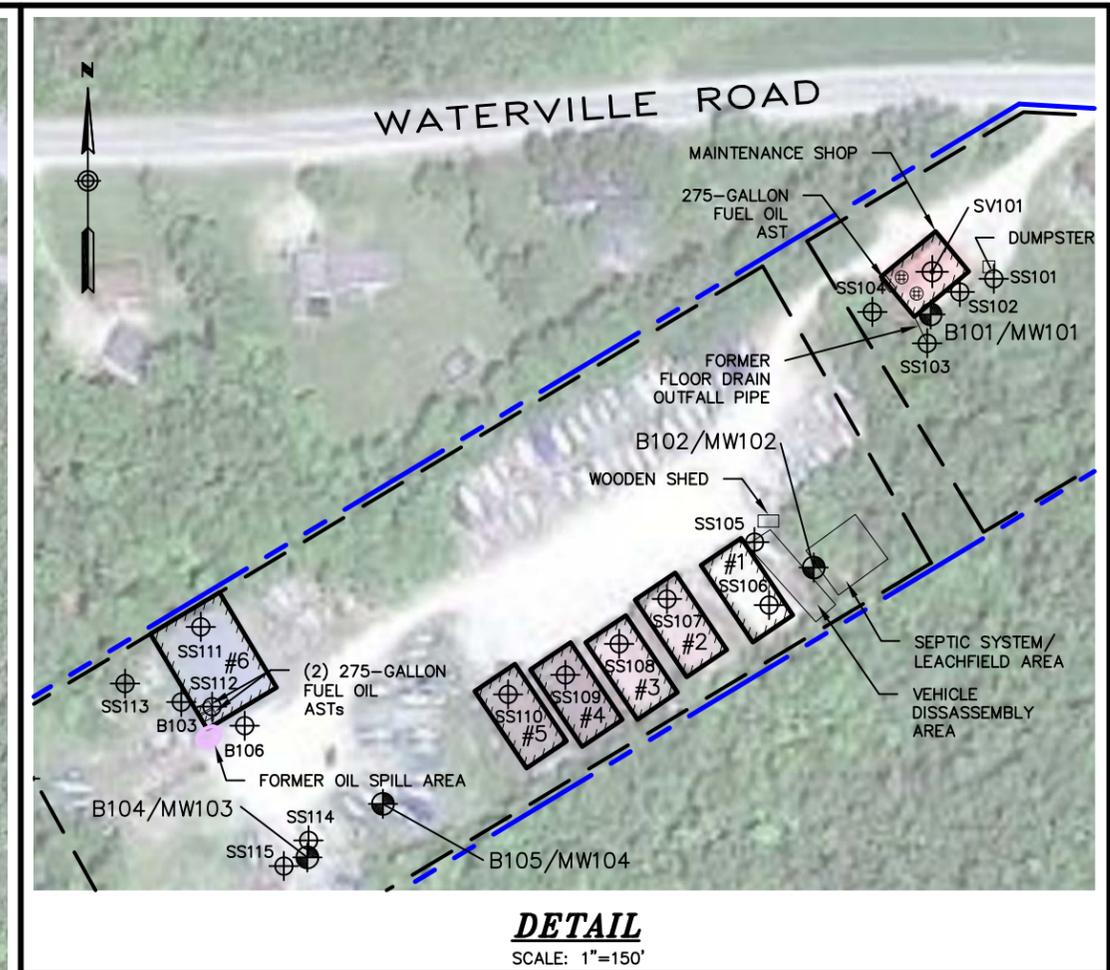
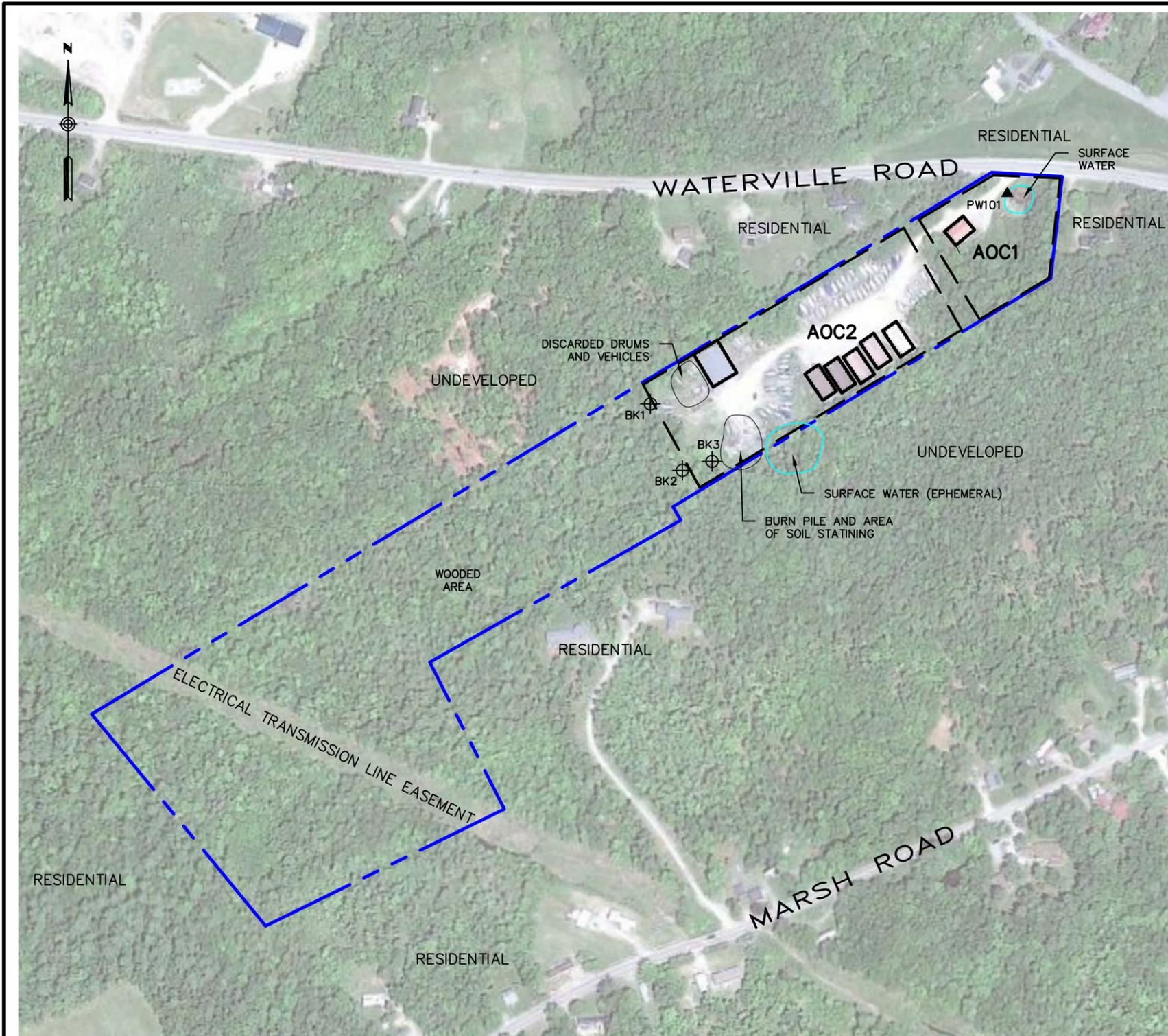
PREPARED FOR:

CITY OF BELFAST
131 CHURCH STREET
BELFAST, MAINE

SITE:

BELFAST BOATYARD
38 WATERVILLE ROAD
BELFAST, MAINE

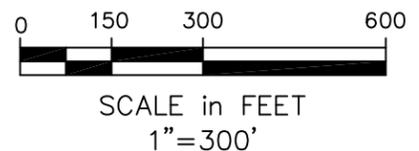
DATE: AUGUST 2012
PROJECT: 111.06134
FIGURE: 1



- LEGEND:**
- B101/MW101 SOIL BORING/MONITORING WELL
 - SS111 SURFICIAL SOIL SAMPLE LOCATION
 - PW101 PORE WATER SAMPLE LOCATION
 - SV101 SOIL VAPOR SAMPLE LOCATION
 - FLOOR DRAIN
 - #5 STORAGE STRUCTURE
 - AOC1** APPROXIMATE LIMIT OF AREAS OF CONCERN
 - APPROXIMATE SITE BOUNDARY (BOUNDARY TAKEN FROM CITY OF BELFAST TAX MAP)

NOTES:

1. SITE PLAN BASED ON OBSERVATIONS MADE BY RANSOM CONSULTING, INC. ON MAY 23, 2012. AERIAL IMAGE PROVIDED BY GOOGLE EARTH.
2. SOME FEATURES ARE APPROXIMATE IN LOCATION AND SCALE.
3. THIS PLAN HAS BEEN PREPARED FOR THE CITY OF BELFAST. ALL OTHER USES ARE NOT AUTHORIZED, UNLESS WRITTEN PERMISSION IS OBTAINED FROM RANSOM CONSULTING, INC.



PREPARED FOR:
CITY OF BELFAST
131 CHURCH STREET
BELFAST, MAINE

SITE:
BELFAST BOATYARD
38 WATERVILLE ROAD
BELFAST, MAINE

SITE PLAN	
DATE:	AUGUST 2012
PROJECT:	111.06134
FIGURE:	2

APPENDIX A

Boring Logs

Phase II Environmental Site Assessment

Belfast Boatyard

38 Waterville Road

Belfast, Maine

BORING LOG:

SS-101

Reviewed By: 	Total Depth: 11.8 Feet	Logged By: EPP
Date Reviewed: 8/16/12	Boring Diameter: 2 Inches	Date Drilled: 8/2/12 to 8/2/12
GW Observed at: 9 Feet	Well Stickup: NA	Driller: EPI

DEPTH	DESCRIPTION (Based on a modified Burmister Soil Classification System)	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	OVM (ppmv)	DEXSIL (ppm)	DEPTH
	S1(0.0'-2.0') - Top 17" - Light gray CLAY, little sand and gravel (fill), moist. Bottom 7" - Dark gray SAND and GRAVEL, little fines, moist, organic.		S1	NM	24/24	0		
	S2(2.0'-4.0') - 10" - Dark gray SILT, little fine sand, wood debris, decaying organics odor, moist.		S2	NM	24/10	0		
5	S3(4.0'-6.0') - 24" - Light brown, low plasticity CLAY, moist, glacio-fluvial.		S3	NM	24/24	0		5
	S4(6.0'-8.0') - 24" - Light brown, low plasticity CLAY, moist, glacio-fluvial.		S4	NM	24/24	0		
10	S5(8.0'-10.0') - Top 20" - Light brown CLAY, little fine to coarse sand, moist, glacio-fluvial. Bottom 4" - Brown SAND and GRAVEL, some fines (till), moist to wet.		S5	NM	24/24	0		10
	S6(10.0'-11.8') - 16" - Brown SAND and GRAVEL, some fines (till) moist to wet.		S6	NM	24/16	0		
	Refusal at 11.8' bgs.							

NOTES:

1) Boring advanced using track-mounted GeoProbe 66DT direct push drill rig. 2) Sample designated with solid fill submitted for laboratory analysis. 3) Groundwater encountered at 9 ft. bgs. 4) NA = Not Applicable; NM = Not Measured.

CLIENT:
City of Belfast

SITE:
Belfast Boatyard
38 Waterville Road
Belfast, ME

BORING LOG:

SS-102

Reviewed By: <i>Car [Signature]</i>	Total Depth: 2 Feet	Logged By: EPP
Date Reviewed: 8/16/12	Boring Diameter: 2 Inches	Date Drilled: 8/2/12 to 8/2/12
GW Observed at: NO Feet	Well Stickup: NA	Driller: EPI

DEPTH	DESCRIPTION (Based on a modified Burmister Soil Classification System)	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	OVM (ppmv)	DEXSIL (ppm)	DEPTH
	S1(0.0'-2.0') - 18" - Brown fine to coarse SAND and GRAVEL (fill), moist.		S1	NM	24/18	0		
	Surficial sample terminated at 2'							
5								5
10								10
15								15

NOTES:
1) Boring advanced using track-mounted GeoProbe 66DT direct push drill rig. 2) Sample designated with solid fill submitted for laboratory analysis. 3) Groundwater not encountered. 4) NA = Not Applicable; NM = Not Measured; NO = Not Observed.

CLIENT:
City of Belfast

SITE:
Belfast Boatyard
38 Waterville Road
Belfast, ME

BORING LOG:

SS-104

Reviewed By: <i>[Signature]</i>	Total Depth: 2 Feet	Logged By: EPP
Date Reviewed: 8/16/12	Boring Diameter: 2 Inches	Date Drilled: 8/2/12 to 8/2/12
GW Observed at: NO Feet	Well Stickup: NA	Driller: EPI

DEPTH	DESCRIPTION (Based on a modified Burmister Soil Classification System)	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	OVM (ppmv)	DEXSIL (ppm)	DEPTH
0	S1(0.0'-2.0') - 16" - Brown SAND and GRAVEL, some fines, moist (till), wood debris.		S1	NM	24/16	0		0
2	Surface sample SS-104 terminated at 2' bgs.							2
5								5
10								10
15								15

NOTES:
1) Boring advanced using track-mounted GeoProbe 66DT direct push drill rig. 2) Sample designated with solid fill submitted for laboratory analysis. 3) Groundwater not encountered. 4) NA = Not Applicable; NM = Not Measured; NO = Not Observed.

CLIENT:
City of Belfast

SITE:
Belfast Boatyard
38 Waterville Road
Belfast, ME

BORING AND MONITORING WELL LOG: B101/MW101

Reviewed by: <i>[Signature]</i>	Total Depth: 7.5 Feet	Logged By: EPP
Date Reviewed: 8/16/12	Boring Diameter: 2 Inches	Date Drilled: 8/2/12 to 8/2/12
GW Observed at: 7.5 Feet	Well Stickup: NM	Driller: EPI

DEPTH	DESCRIPTION (Based on a modified Burnister Soil Classification System)	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	OVM (ppmv)	DEPTH	WELL CONSTRUCTION
	S1(0.0'-2.0') - Top 2" - Topsoil and drain rock. Bottom 3" - Light brown CLAY, some fine to coarse sand (till), moist.		S1	NM	24/5	0		
	S2(2.0'-4.0') - No Recovery		S2	NM	24/0	-		
5	S3(4.0'-6.0') - 24" - Light brown, CLAY, some Sand and Gravel (till), moist.		S3	NM	24/24	0	5	
	S4(6.0'-7.5') - Top 7" - Light brown, CLAY, some Sand and Gravel (till), moist. Bottom 2" - Dark brown GRAVEL/weathered bedrock, wet. Refusal at 7.5' bgs.		S4	NM	24/9	0		
10							10	
15							15	

LEGEND:

- | | | | | | | |
|-------------|-------------|-----------|-----------------|----------|------------|-----------------|
| | | | | | | |
| Filter Sand | Native Fill | Bentonite | Bentonite Grout | Concrete | PVC Screen | Solid PVC Riser |

NOTES:

- Boring advanced using track-mounted GeoProbe 66DT direct push drill rig.
- Temporary well casing removed after sampling and boring backfilled with drill cuttings.
- Groundwater encountered at 7.5 ft. bgs.
- 4) NA = Not Applicable; NM = Not Measured.

CLIENT:
City of Belfast

SITE:
Belfast Boatyard
38 Waterville Road
Belfast, ME

BORING AND MONITORING WELL LOG: B102/MW102

Reviewed by: <i>[Signature]</i>	Total Depth: 7.6 Feet	Logged By: EPP
Date Reviewed: 8/16/12	Boring Diameter: 2 Inches	Date Drilled: 8/2/12 to 8/2/12
GW Observed at: 7.6 Feet	Well Stickup: NM	Driller: EPI

DEPTH	DESCRIPTION (Based on a modified Burmister Soil Classification System)	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	OVM (ppmv)	DEPTH	WELL CONSTRUCTION
	S1(0.0'-2.0') - Top 6" - Brown, well graded fine to coarse SAND (fill). Middle 8" - Light brown low plasticity CLAY, glacio-fluvial. Bottom 10" - Brown, SAND and SILT (till), moist.		S1	NM	24/24	0		
	S2(2.0'-4.0') - No Recovery		S2	NM	24/0	-		
5	S3(4.0'-6.0') - 24" - Light brown, SAND and GRAVEL, little fines (till), moist.		S3	NM	24/24	0	5	
	S4(6.0'-7.6') - 3" - Brown fine SAND, some Gravel (till), moist to wet.		S4	NM	24/3	0		
	Refusal at 7.6' bgs.							
10							10	
15							15	

LEGEND:

						
Filter Sand	Native Fill	Bentonite	Bentonite Grout	Concrete	PVC Screen	Solid PVC Riser

NOTES:

1) Boring advanced using track-mounted GeoProbe 66DT direct push drill rig. 2) Well was observed to be dry after construction. Casing removed and boring backfilled with drill cuttings. 3) NA = Not Applicable; NM = Not Measured.

CLIENT:
City of Belfast

SITE:
Belfast Boatyard
38 Waterville Road
Belfast, ME

BORING LOG:

B103

Reviewed By: <i>[Signature]</i>	Total Depth: 6 Feet	Logged By: EPP
Date Reviewed: 8/16/12	Boring Diameter: 2 Inches	Date Drilled: 8/2/12 to 8/2/12
GW Observed at: NO Feet	Well Stickup: NA	Driller: EPI

DEPTH	DESCRIPTION (Based on a modified Burmister Soil Classification System)	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	OVM (ppmv)	DEXSIL (ppm)	DEPTH
	S1(0.0'-2.0') - 14" - Light brown, well graded SAND, some Gravel (fill), moist.		S1	NM	24/14	0		
	S2(2.0'-4.0') - No Recovery		S2	NM	24/0	-		
5	S3(4.0'-6.0') - Top 10" - Light brown, fine to coarse SAND, some Gravel and Fines (till), moist. Bottom 3" - Gray, weathered bedrock, dry.		S3	NM	24/13	0		5
	Refusal at 6' bgs.							
10								10
15								15

NOTES:
1) Boring advanced using track-mounted GeoProbe 66DT direct push drill rig. 2) Groundwater not encountered. 3) NA = Not Applicable; NM = Not Measured; NO = Not Observed.

CLIENT:
City of Belfast

SITE:
Belfast Boatyard
38 Waterville Road
Belfast, ME

BORING AND MONITORING WELL LOG: B104/MW103

Reviewed by: <i>[Signature]</i>	Total Depth: 8.2 Feet	Logged By: EPP
Date Reviewed: 8/16/12	Boring Diameter: 2 Inches	Date Drilled: 8/2/12 to 8/2/12
GW Observed at: NO Feet	Well Stickup: NM	Driller: EPI

DEPTH	DESCRIPTION (Based on a modified Burmister Soil Classification System)	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	OVM (ppmv)	DEPTH	WELL CONSTRUCTION
	S1(0.0'-2.0') - 19" - Brown/gray, SAND and GRAVEL, little fines (fill), moist.		S1	NM	24/19	0		
	S2(2.0'-4.0') - No Recovery		S2	NM	24/0	-		
5	S3(4.0'-6.0') - 24" - Brown/gray, SAND and GRAVEL, little fines (fill), moist.		S3	NM	24/22	0	5	
	S4(6.0'-8.2') - No Recovery		S4	NM	24/0	-		
	Refusal at 8.2' bgs.							
10							10	
15							15	

LEGEND:

						
Filter Sand	Native Fill	Bentonite	Bentonite Grout	Concrete	PVC Screen	Solid PVC Riser

NOTES:

1) Boring advanced using track-mounted GeoProbe 66DT direct push drill rig. 2) Well was observed to be dry after construction. Casing removed and boring backfilled with drill cuttings. 3) NA = Not Applicable; NM = Not Measured; NO = Not Observed.

CLIENT:
City of Belfast

SITE:
Belfast Boatyard
38 Waterville Road
Belfast, ME

BORING AND MONITORING WELL LOG: B105/MW104

Reviewed by: <i>Am JTB</i>	Total Depth: 14.2 Feet	Logged By: EPP
Date Reviewed: 8/16/12	Boring Diameter: 2 Inches	Date Drilled: 8/2/12 to 8/2/12
GW Observed at: 14.2 Feet	Well Stickup: NM	Driller: EPI

DEPTH	DESCRIPTION (Based on a modified Burmister Soil Classification System)	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	OMV (ppmv)	DEPTH	WELL CONSTRUCTION
	S1(0.0'-2.0') - 10" - Brown, SAND and GRAVEL, some Fines (fill), moist.		S1	NM	24/10	0		
	S2(2.0'-4.0') - No Recovery		S2	NM	24/0	-		
5	S3(4.0'-6.0') - Top 7" - Brown, SAND and GRAVEL, some Fines. Bottom 14" - Light brown CLAY, moist, glacio-fluvial.		S3	NM	24/21	0	5	
	S4(6.0'-8.0') - No Recovery		S4	NM	24/0	-		
10	S5(8.0'-10.0') - 24" - Light brown, SAND and GRAVEL, little fines (till), moist.		S5	NM	24/24	0	10	
	S6(10.0'-12.0') - No Recovery		S6	NM	24/0	-		
	S7(12.0'-14.2') - 24" - Light brown, SAND and GRAVEL, little fines (till), moist to wet.		S7	NM	24/24	0		
15	Refusal at 14.2' bgs.						15	

LEGEND:

						
Filter Sand	Native Fill	Bentonite	Bentonite Grout	Concrete	PVC Screen	Solid PVC Riser

NOTES:

1) Boring advanced using track-mounted GeoProbe 66DT direct push drill rig. 2) Well was observed to be dry after construction. Casing removed and boring backfilled with drill cuttings. 3) NA = Not Applicable; NM = Not Measured.

CLIENT:
City of Belfast

SITE:
Belfast Boatyard
38 Waterville Road
Belfast, ME

BORING LOG:

B106

Reviewed By: <i>[Signature]</i>	Total Depth: 7.8 Feet	Logged By: EPP
Date Reviewed: 8/16/12	Boring Diameter: 2 Inches	Date Drilled: 8/2/12 to 8/2/12
GW Observed at: NO Feet	Well Stickup: NA	Driller: EPI

DEPTH	DESCRIPTION (Based on a modified Burmister Soil Classification System)	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	OVM (ppmv)	DEXSIL (ppm)	DEPTH
	S1(0.0'-2.0') - 24" - Brown, well graded SAND and GRAVEL (fill), moist.	SAMPLE	S1	NM	24/24	0		
	S2(2.0'-4.0') - No Recovery		S2	NM	24/0	-		
5	S3(4.0'-6.0') - 24" - Well graded SAND and GRAVEL, little fines (till), moist.		S3	NM	24/24	0		5
	S4(6.0'-7.8') - 3" - Well graded SAND and GRAVEL, little fines (till), moist.		S4	NM	24/3	0		
	Refusal at 7.8' bgs.							
10								10
15								15

NOTES:
1) Boring advanced using track-mounted GeoProbe 66DT direct push drill rig. 2) Oliophilic dye test conducted on samples S1 and S3 were non-detect for diesel-range petroleum hydrobarbons. 3) Groundwater not encountered. 4) NA = Not Applicable; NM = Not Measured; NO = Not Observed.

CLIENT:
City of Belfast

SITE:
Belfast Boatyard
38 Waterville Road
Belfast, ME

Soil Classification Terms

Grain Size		
<i>Material</i>	<i>Fraction</i>	<i>Sieve Size</i>
Boulders		12" +
Cobbles		3"-12"
Gravel	coarse	¾"-3"
	fine	No. 4 to ¾"
Sand	coarse	No. 10 to No. 4
	medium	No. 40 to No. 10
	fine	No. 200 to No. 40
Fines (Silt & Clay)		Passing No. 200

Coarse and Fine Grained Soils	
<i>Descriptive Adjective</i>	<i>*Percentage Requirement</i>
Trace	1-10%
Little	10-20%
Some	20-35%
And	35-50%

When sampling gravelly soils with a standard split spoon, the true percentage of gravel is often not recovered due to the relatively small sampler diameter.

*Percentage measured by weight.

Identification of soil type is made on the basis of an estimate of particle sizes, and in the case of fine-grained soils, also on basis of plasticity.

Standard Penetration Values (N) v. Relative Density & Consistency

GRANULAR		COHESIVE	
<i>N</i>	<i>Relative Density (%)</i>	<i>N</i>	<i>Consistency</i>
		<2	Very Soft
0-4	Very Loose (0-15)	2-4	Soft
4-10	Loose (15-35)	4-8	Medium
10-30	Firm (35-65)	8-15	Stiff
30-50	Dense (65-85)	15-30	Very Stiff
>50	Very Dense (>85)	>30	Hard

Rock Classification Terms

<i>Weathering Classification</i>		
<i>Grade</i>	<i>Symbol</i>	<i>Diagnostic Features</i>
Fresh	F	No visible sign of decomposition or discoloration. Rings under hammer impact.
Slightly Weathered	WS	Slight discoloration inwards from open fracture, otherwise similar to F.
Moderately Weathered	WM	Discoloration throughout. Weaker mineral such as feldspar decomposed. Strength somewhat less than fresh rock but cores can not be broken by hand or scraped by knife.
Highly Weathered	WH	Most minerals somewhat decomposed. Specimens can be broken by hand with effort or shaved with knife. Core stones present in rock mass. Texture becoming distinct but fabric.
Completely Weathered	WC	Minerals decomposed to soil but fabric and structure preserved (Saprolite). Specimens easily crumbled or penetrated.
Residual Soil	RS	Advanced state of decomposition resulting in Plastic soils. Rock fabric and structure completely destroyed. Large volume change.

<i>Rock Descriptors</i>			
Term		Meaning	
Hardness	Soft	Scratched by fingernail	
	Medium Hard	Scratched easily by penknife	
	Hard	Scratched with difficulty by penknife	
	Very Hard	Cannot be scratched by penknife	
Jointing/ Fractures	Slight	2 to 6 ft. spacing	
	Moderate	8in. to 2 ft.	
	High	2 in. to 8 in.	
	Intense	< 2in.	
Bedding	Laminated	(< 1")	Natural Break in Rock Layers
	Thin Bedded	(1" - 4")	
	Bedded	(4" - 12")	
	Thick Bedded	(12" - 36")	
	Massive	(> 36")	

Unified System Classification of Soils (ASTM D-2487)

Major Divisions		Group Symbols	Typical Names
Coarse-Grained Soils More than 50% retained on No. 200 sieve	Gravels 50% or more of coarse fraction retained on No. 4 sieve	Clean Gravels	GW Well-graded gravels and gravel-sand mixtures, little or no fines.
			GP Poorly graded gravels and gravel-sand mixtures, little or no fines.
		Gravels w/ Fines	GM Silty gravels, gravel-sand-silt mixtures.
			GC Clayey gravels, gravel-sand-clay mixtures.
	Sands More than 50% coarse fraction passes No. 4 sieve	Clean Sands	SW Well-graded sands and gravelly sands little or no fines.
			SP Poorly graded sands and gravelly sands little or no fines.
		Sands w/ Fines	SM Silty gravels, gravel-sand-silt mixtures.
			SC Clayey sands, sand-clay mixtures.
Fine-Grained Soils 50% or more passes No. 200 sieve	Silts and Clays Liquid Limit 50% or less	ML	Inorganic silts, very fine sands, rock flour, silty or clayey sands.
		CL	Inorganic clays of low plasticity, gravelly clays, sandy clays, silty clays.
		OL	Organic silts and organic silty clays of low plasticity.
	Silts and Clays Liquid limit greater than 50%	MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts
		CH	Inorganic clays of high plasticity, fat clays.
		OH	Organic clays of medium to high plasticity.
Highly Organic Soils		Pt	Peat, much and other highly organic soils

APPENDIX B

Field Data Sheets

Phase II Environmental Site Assessment

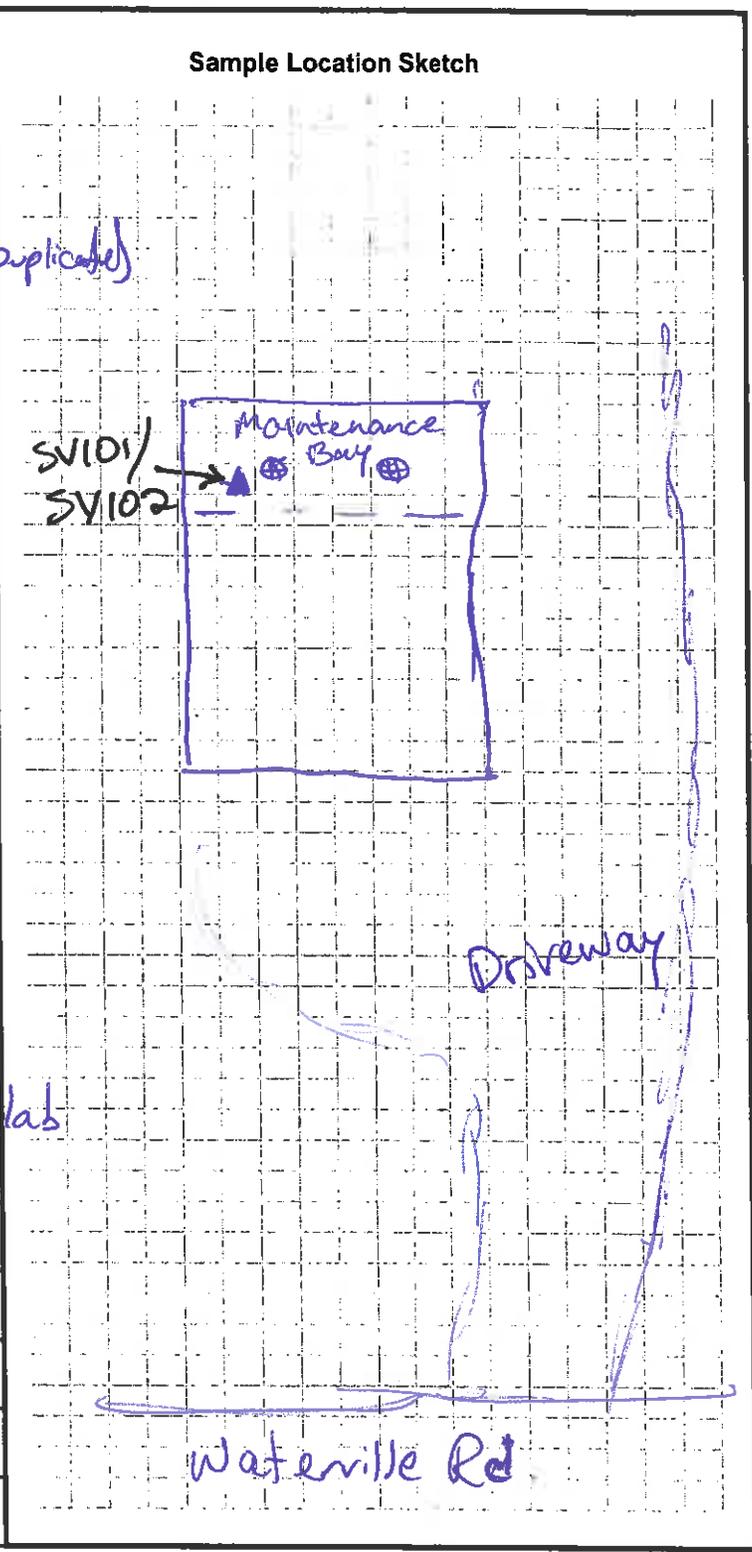
Belfast Boatyard

38 Waterville Road

Belfast, Maine

**Soil Gas Sampling Field Sheet
Maine DEP**

Site Name:	Belfast Boatyard
Location:	38 Waterville Rd
Date:	8/2/12
Sample I.D.:	SV101 / SV102 (duplicate)
Sampling Personnel:	EPP/ARM
Project Manager:	Pete Sherr
Collection Device:	(Suma Cannister) (Tedlar Bag) (Niosh Tube)
PID:	0.0
O ₂ :	17.6 % Vol
CO ₂ :	3.4 % Vol
Flow rate:	79 ml/s/min
Cannister I.D.:	678 / 570
Controller I.D.:	328 / 84
Sample Penetration Location:	(Ashphalt) (Concrete) (Soil)
Soil Type:	(Fill) (Till) (Sand & Gravel) (Glacial Marine)
Sample Depth:	12" below top of slab
Depth to Water:	6' bgs
Suspected COCs:	(Petroleum) (Solvents)
Sampling Start Time:	1610
Initial Vacuum:	-28.85 / -29.11
Sampling End Time:	1623
Final Vacuum:	-0.0 / -0.2



Notes:

APPENDIX C

Certified Laboratory Analytical Results

Phase II Environmental Site Assessment

Belfast Boatyard
38 Waterville Road
Belfast, Maine



ANALYTICAL REPORT

Lab Number:	L1214015
Client:	Ransom Environmental 400 Commercial Street Suite 404 Portland, ME 04101-4660
ATTN:	Peter Sherr
Phone:	(207) 772-2891
Project Name:	BELFAST BOATYARD-WATERVILLE RD
Project Number:	R111.06134.016
Report Date:	08/09/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: BELFAST BOATYARD-WATERVILLE RD
Project Number: R111.06134.016

Lab Number: L1214015
Report Date: 08/09/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1214015-01	SV101	38 WATERVILLE RD.	08/02/12 16:23
L1214015-02	SV102	38 WATERVILLE RD.	08/02/12 16:23

Project Name: BELFAST BOATYARD-WATERVILLE RD
Project Number: R111.06134.016

Lab Number: L1214015
Report Date: 08/09/12

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: BELFAST BOATYARD-WATERVILLE RD
Project Number: R111.06134.016

Lab Number: L1214015
Report Date: 08/09/12

Case Narrative (continued)

Volatile Organics in Air (SIM)

Canisters were released from the laboratory on July 30, 2012.

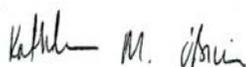
The canister certification results are provided as an addendum.

L1214015-01 and -02 have elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the samples.

L1214015-01 and -02 The presence of Chloromethane could not be determined in these samples due to a non-target compound interfering with the identification and quantification of this compound.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Kathleen O'Brien

Title: Technical Director/Representative

Date: 08/09/12

AIR

Project Name: BELFAST BOATYARD-WATERVILLE RD**Lab Number:** L1214015**Project Number:** R111.06134.016**Report Date:** 08/09/12**SAMPLE RESULTS**

Lab ID: L1214015-01 D
 Client ID: SV101
 Sample Location: 38 WATERVILLE RD.
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 08/07/12 21:35
 Analyst: MB

Date Collected: 08/02/12 16:23
 Date Received: 08/06/12
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	24.1	0.214	--	119	1.06	--		4.288
Chloromethane	ND	2.14	--	ND	4.42	--		4.288
1,2-Dichloro-1,1,2,2-tetrafluoroethane	3.91	0.214	--	27.3	1.50	--		4.288
Vinyl chloride	0.236	0.086	--	0.603	0.219	--		4.288
1,3-Butadiene	0.214	0.086	--	0.473	0.190	--		4.288
Bromomethane	ND	0.086	--	ND	0.333	--		4.288
Chloroethane	0.240	0.086	--	0.633	0.226	--		4.288
Trichlorofluoromethane	0.437	0.214	--	2.46	1.20	--		4.288
1,1-Dichloroethene	ND	0.086	--	ND	0.340	--		4.288
Methylene chloride	ND	4.29	--	ND	14.9	--		4.288
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.214	--	ND	1.64	--		4.288
trans-1,2-Dichloroethene	ND	0.086	--	ND	0.340	--		4.288
1,1-Dichloroethane	ND	0.086	--	ND	0.347	--		4.288
Methyl tert butyl ether	ND	0.086	--	ND	0.309	--		4.288
cis-1,2-Dichloroethene	ND	0.086	--	ND	0.340	--		4.288
Chloroform	31.5	0.086	--	154	0.419	--		4.288
1,2-Dichloroethane	ND	0.086	--	ND	0.347	--		4.288
1,1,1-Trichloroethane	1.08	0.086	--	5.89	0.468	--		4.288
Benzene	ND	0.429	--	ND	1.37	--		4.288
Carbon tetrachloride	ND	0.086	--	ND	0.540	--		4.288
1,2-Dichloropropane	ND	0.086	--	ND	0.396	--		4.288
Bromodichloromethane	1.38	0.086	--	9.24	0.575	--		4.288
Trichloroethene	ND	0.086	--	ND	0.461	--		4.288
cis-1,3-Dichloropropene	ND	0.086	--	ND	0.390	--		4.288



Project Name: BELFAST BOATYARD-WATERVILLE RD**Lab Number:** L1214015**Project Number:** R111.06134.016**Report Date:** 08/09/12**SAMPLE RESULTS**

Lab ID: L1214015-01 D
 Client ID: SV101
 Sample Location: 38 WATERVILLE RD.

Date Collected: 08/02/12 16:23
 Date Received: 08/06/12
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.086	--	ND	0.390	--		4.288
1,1,2-Trichloroethane	ND	0.086	--	ND	0.468	--		4.288
Toluene	0.763	0.214	--	2.88	0.806	--		4.288
Dibromochloromethane	ND	0.086	--	ND	0.731	--		4.288
1,2-Dibromoethane	ND	0.086	--	ND	0.659	--		4.288
Tetrachloroethene	0.116	0.086	--	0.787	0.582	--		4.288
1,1,1,2-Tetrachloroethane	ND	0.086	--	ND	0.589	--		4.288
Chlorobenzene	ND	0.086	--	ND	0.395	--		4.288
Ethylbenzene	0.193	0.086	--	0.838	0.373	--		4.288
p/m-Xylene	0.613	0.172	--	2.66	0.747	--		4.288
Bromoform	ND	0.086	--	ND	0.887	--		4.288
Styrene	1.41	0.086	--	6.00	0.365	--		4.288
1,1,2,2-Tetrachloroethane	ND	0.086	--	ND	0.589	--		4.288
o-Xylene	0.176	0.086	--	0.764	0.373	--		4.288
1,3,5-Trimethylbenzene	ND	0.086	--	ND	0.422	--		4.288
1,2,4-Trimethylbenzene	0.142	0.086	--	0.698	0.422	--		4.288
1,3-Dichlorobenzene	ND	0.086	--	ND	0.516	--		4.288
1,4-Dichlorobenzene	ND	0.086	--	ND	0.516	--		4.288
1,2-Dichlorobenzene	ND	0.086	--	ND	0.516	--		4.288
1,2,4-Trichlorobenzene	ND	0.214	--	ND	1.59	--		4.288
Hexachlorobutadiene	ND	0.214	--	ND	2.28	--		4.288

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	100		60-140
bromochloromethane	113		60-140
chlorobenzene-d5	103		60-140



Project Name: BELFAST BOATYARD-WATERVILLE RD
Project Number: R111.06134.016

Lab Number: L1214015
Report Date: 08/09/12

SAMPLE RESULTS

Lab ID: L1214015-02 D
 Client ID: SV102
 Sample Location: 38 WATERVILLE RD.
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 08/07/12 22:07
 Analyst: MB

Date Collected: 08/02/12 16:23
 Date Received: 08/06/12
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	26.5	0.217	--	131	1.07	--		4.336
Chloromethane	ND	2.17	--	ND	4.48	--		4.336
1,2-Dichloro-1,1,2,2-tetrafluoroethane	3.17	0.217	--	22.2	1.52	--		4.336
Vinyl chloride	0.186	0.087	--	0.475	0.222	--		4.336
1,3-Butadiene	0.225	0.087	--	0.498	0.192	--		4.336
Bromomethane	ND	0.087	--	ND	0.337	--		4.336
Chloroethane	0.290	0.087	--	0.765	0.229	--		4.336
Trichlorofluoromethane	0.438	0.217	--	2.46	1.22	--		4.336
1,1-Dichloroethene	ND	0.087	--	ND	0.344	--		4.336
Methylene chloride	ND	4.34	--	ND	15.1	--		4.336
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.217	--	ND	1.66	--		4.336
trans-1,2-Dichloroethene	ND	0.087	--	ND	0.344	--		4.336
1,1-Dichloroethane	ND	0.087	--	ND	0.351	--		4.336
Methyl tert butyl ether	ND	0.087	--	ND	0.312	--		4.336
cis-1,2-Dichloroethene	ND	0.087	--	ND	0.344	--		4.336
Chloroform	32.2	0.087	--	157	0.423	--		4.336
1,2-Dichloroethane	ND	0.087	--	ND	0.351	--		4.336
1,1,1-Trichloroethane	1.11	0.087	--	6.06	0.473	--		4.336
Benzene	ND	0.434	--	ND	1.39	--		4.336
Carbon tetrachloride	ND	0.087	--	ND	0.545	--		4.336
1,2-Dichloropropane	ND	0.087	--	ND	0.401	--		4.336
Bromodichloromethane	1.24	0.087	--	8.31	0.581	--		4.336
Trichloroethene	ND	0.087	--	ND	0.466	--		4.336
cis-1,3-Dichloropropene	ND	0.087	--	ND	0.394	--		4.336



Project Name: BELFAST BOATYARD-WATERVILLE RD**Lab Number:** L1214015**Project Number:** R111.06134.016**Report Date:** 08/09/12**SAMPLE RESULTS**

Lab ID: L1214015-02 D
 Client ID: SV102
 Sample Location: 38 WATERVILLE RD.

Date Collected: 08/02/12 16:23
 Date Received: 08/06/12
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.087	--	ND	0.394	--		4.336
1,1,2-Trichloroethane	ND	0.087	--	ND	0.473	--		4.336
Toluene	0.846	0.217	--	3.19	0.818	--		4.336
Dibromochloromethane	ND	0.087	--	ND	0.739	--		4.336
1,2-Dibromoethane	ND	0.087	--	ND	0.666	--		4.336
Tetrachloroethene	0.117	0.087	--	0.793	0.588	--		4.336
1,1,1,2-Tetrachloroethane	ND	0.087	--	ND	0.595	--		4.336
Chlorobenzene	ND	0.087	--	ND	0.399	--		4.336
Ethylbenzene	0.195	0.087	--	0.847	0.376	--		4.336
p/m-Xylene	0.624	0.173	--	2.71	0.751	--		4.336
Bromoform	ND	0.087	--	ND	0.896	--		4.336
Styrene	1.27	0.087	--	5.41	0.369	--		4.336
1,1,2,2-Tetrachloroethane	ND	0.087	--	ND	0.595	--		4.336
o-Xylene	0.182	0.087	--	0.790	0.376	--		4.336
1,3,5-Trimethylbenzene	ND	0.087	--	ND	0.426	--		4.336
1,2,4-Trimethylbenzene	0.173	0.087	--	0.850	0.426	--		4.336
1,3-Dichlorobenzene	ND	0.087	--	ND	0.521	--		4.336
1,4-Dichlorobenzene	ND	0.087	--	ND	0.521	--		4.336
1,2-Dichlorobenzene	ND	0.087	--	ND	0.521	--		4.336
1,2,4-Trichlorobenzene	ND	0.217	--	ND	1.61	--		4.336
Hexachlorobutadiene	ND	0.217	--	ND	2.31	--		4.336

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	100		60-140
bromochloromethane	114		60-140
chlorobenzene-d5	104		60-140



Project Name: BELFAST BOATYARD-WATERVILLE RD

Lab Number: L1214015

Project Number: R111.06134.016

Report Date: 08/09/12

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 08/07/12 14:52

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 Batch: WG553382-4								
Dichlorodifluoromethane	ND	0.050	--	ND	0.247	--		1
Chloromethane	ND	0.500	--	ND	1.03	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1



Project Name: BELFAST BOATYARD-WATERVILLE RD

Lab Number: L1214015

Project Number: R111.06134.016

Report Date: 08/09/12

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 08/07/12 14:52

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 Batch: WG553382-4								
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: BELFAST BOATYARD-WATERVILLE RD

Lab Number: L1214015

Project Number: R111.06134.016

Report Date: 08/09/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG553382-3								
Dichlorodifluoromethane	90		-		70-130	-		25
Chloromethane	106		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	105		-		70-130	-		25
Vinyl chloride	107		-		70-130	-		25
1,3-Butadiene	114		-		70-130	-		25
Bromomethane	104		-		70-130	-		25
Chloroethane	106		-		70-130	-		25
Trichlorofluoromethane	107		-		70-130	-		25
1,1-Dichloroethene	108		-		70-130	-		25
Methylene chloride	109		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	109		-		70-130	-		25
trans-1,2-Dichloroethene	99		-		70-130	-		25
1,1-Dichloroethane	108		-		70-130	-		25
Methyl tert butyl ether	109		-		70-130	-		25
cis-1,2-Dichloroethene	115		-		70-130	-		25
Chloroform	105		-		70-130	-		25
1,2-Dichloroethane	109		-		70-130	-		25
1,1,1-Trichloroethane	107		-		70-130	-		25
Benzene	91		-		70-130	-		25
Carbon tetrachloride	113		-		70-130	-		25
1,2-Dichloropropane	103		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: BELFAST BOATYARD-WATERVILLE RD

Lab Number: L1214015

Project Number: R111.06134.016

Report Date: 08/09/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG553382-3								
Bromodichloromethane	107		-		70-130	-		25
Trichloroethene	104		-		70-130	-		25
cis-1,3-Dichloropropene	117		-		70-130	-		25
trans-1,3-Dichloropropene	103		-		70-130	-		25
1,1,2-Trichloroethane	106		-		70-130	-		25
Toluene	104		-		70-130	-		25
Dibromochloromethane	117		-		70-130	-		25
1,2-Dibromoethane	112		-		70-130	-		25
Tetrachloroethene	107		-		70-130	-		25
1,1,1,2-Tetrachloroethane	110		-		70-130	-		25
Chlorobenzene	109		-		70-130	-		25
Ethylbenzene	109		-		70-130	-		25
p/m-Xylene	108		-		70-130	-		25
Bromoform	119		-		70-130	-		25
Styrene	104		-		70-130	-		25
1,1,2,2-Tetrachloroethane	113		-		70-130	-		25
o-Xylene	110		-		70-130	-		25
1,3,5-Trimethylbenzene	111		-		70-130	-		25
1,2,4-Trimethylbenzene	113		-		70-130	-		25
1,3-Dichlorobenzene	113		-		70-130	-		25
1,4-Dichlorobenzene	113		-		70-130	-		25

Lab Control Sample Analysis**Batch Quality Control****Project Name:** BELFAST BOATYARD-WATERVILLE RD**Lab Number:** L1214015**Project Number:** R111.06134.016**Report Date:** 08/09/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG553382-3								
1,2-Dichlorobenzene	114		-		70-130	-		25
1,2,4-Trichlorobenzene	123		-		70-130	-		25
Hexachlorobutadiene	116		-		70-130	-		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: BELFAST BOATYARD-WATERVILLE RD

Project Number: R111.06134.016

Lab Number: L1214015

Report Date: 08/09/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG553382-5 QC Sample: L1214067-02 Client ID: DUP Sample						
Dichlorodifluoromethane	0.458	0.443	ppbV	3		25
Chloromethane	2.56	ND	ppbV	NC		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	32.2	32.3	ppbV	0		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	0.232	0.226	ppbV	3		25
Trichlorofluoromethane	0.453	0.463	ppbV	2		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Chloroform	0.251	0.251	ppbV	0		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	8.98	9.02	ppbV	0		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: BELFAST BOATYARD-WATERVILLE RD

Project Number: R111.06134.016

Lab Number: L1214015

Report Date: 08/09/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG553382-5 QC Sample: L1214067-02 Client ID: DUP Sample					
Carbon tetrachloride	ND	ND	ppbV	NC	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	ND	ND	ppbV	NC	25
Trichloroethene	0.197	0.197	ppbV	0	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	7.12	7.12	ppbV	0	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	0.167	0.271	ppbV	47	Q 25
1,1,1,2-Tetrachloroethane	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	1.46	1.46	ppbV	0	25
p/m-Xylene	2.44	2.45	ppbV	0	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	1.36	1.36	ppbV	0	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	1.14	1.13	ppbV	1	25

Lab Duplicate Analysis

Batch Quality Control

Project Name: BELFAST BOATYARD-WATERVILLE RD

Project Number: R111.06134.016

Lab Number: L1214015

Report Date: 08/09/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG553382-5 QC Sample: L1214067-02 Client ID: DUP Sample					
1,3,5-Trimethylbenzene	0.192	0.197	ppbV	3	25
1,2,4-Trimethylbenzene	0.690	0.690	ppbV	0	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	0.217	0.222	ppbV	2	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25

Project Name: BELFAST BOATYARD-WATERVILLE RD

Serial_No:08091215:14
Lab Number: L1214015

Project Number: R111.06134.016

Report Date: 08/09/12

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1214015-01	SV101	0328	#16 AMB	07/30/12	79931		-	-	-	Pass	79	82	4
L1214015-01	SV101	678	1.0L Can	07/30/12	79931	L1212467-03	Pass	-28.5	0.0	-	-	-	-
L1214015-02	SV102	0084	#16 AMB	07/30/12	79931		-	-	-	Pass	78	75	4
L1214015-02	SV102	567	1.0L Can	07/30/12	79931	L1212467-03	Pass	-29.5	0.0	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1212467
Report Date: 08/09/12

Air Canister Certification Results

Lab ID: L1212467-03
 Client ID: CAN 659 SHELF 20
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 07/17/12 17:29
 Analyst: RY

Date Collected: 07/13/12 13:57
 Date Received: 07/14/12
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.860	--		1
Propane	ND	0.200	--	ND	0.361	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.200	--	ND	0.434	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1212467
Report Date: 08/09/12

Air Canister Certification Results

Lab ID: L1212467-03
 Client ID: CAN 659 SHELF 20
 Sample Location:

Date Collected: 07/13/12 13:57
 Date Received: 07/14/12
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1212467
Report Date: 08/09/12

Air Canister Certification Results

Lab ID: L1212467-03
 Client ID: CAN 659 SHELF 20
 Sample Location:

Date Collected: 07/13/12 13:57
 Date Received: 07/14/12
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.20	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1212467
Report Date: 08/09/12

Air Canister Certification Results

Lab ID: L1212467-03
 Client ID: CAN 659 SHELF 20
 Sample Location:

Date Collected: 07/13/12 13:57
 Date Received: 07/14/12
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	97		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1212467
Report Date: 08/09/12

Air Canister Certification Results

Lab ID: L1212467-03
 Client ID: CAN 659 SHELF 20
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 07/16/12 21:55
 Analyst: MB

Date Collected: 07/13/12 13:57
 Date Received: 07/14/12
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.050	--	ND	0.247	--		1
Chloromethane	ND	0.500	--	ND	1.03	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	ND	2.00	--	ND	4.75	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.08	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1212467
Report Date: 08/09/12

Air Canister Certification Results

Lab ID: L1212467-03
 Client ID: CAN 659 SHELF 20
 Sample Location:

Date Collected: 07/13/12 13:57
 Date Received: 07/14/12
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.500	--	ND	2.46	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.500	--	ND	2.74	--		1
p-Isopropyltoluene	ND	0.500	--	ND	2.74	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.500	--	ND	2.74	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1212467
Report Date: 08/09/12

Air Canister Certification Results

Lab ID: L1212467-03
 Client ID: CAN 659 SHELF 20
 Sample Location:

Date Collected: 07/13/12 13:57
 Date Received: 07/14/12
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	74		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	73		60-140



AIR Petro Can Certification

Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1212467**Project Number:** CANISTER QC BAT**Report Date:** 08/09/12**AIR CAN CERTIFICATION RESULTS**

Lab ID: L1212467-03
Client ID: CAN 659 SHELF 20
Sample Location: Not Specified
Matrix: Air
Analytical Method: 96,APH
Analytical Date: 07/16/12 21:55
Analyst: MB

Date Collected: 07/13/12 13:57
Date Received: 07/14/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	2.0	--	1
Methyl tert butyl ether	ND		ug/m3	2.0	--	1
Benzene	ND		ug/m3	2.0	--	1
Toluene	ND		ug/m3	2.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/m3	12	--	1
Ethylbenzene	ND		ug/m3	2.0	--	1
p/m-Xylene	ND		ug/m3	4.0	--	1
o-Xylene	ND		ug/m3	2.0	--	1
Naphthalene	ND		ug/m3	2.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/m3	14	--	1
C9-C10 Aromatics Total	ND		ug/m3	10	--	1

Project Name: BELFAST BOATYARD-WATERVILLE RD**Lab Number:** L1214015**Project Number:** R111.06134.016**Report Date:** 08/09/12**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal**Cooler**

N/A Present/Intact

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1214015-01A	Canister - 1 Liter	N/A	N/A		Y	Present/Intact	TO15-SIM(30)
L1214015-02A	Canister - 1 Liter	N/A	N/A		Y	Present/Intact	TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name: BELFAST BOATYARD-WATERVILLE RD
Project Number: R111.06134.016

Lab Number: L1214015
Report Date: 08/09/12

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
M	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
NJ	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report



Project Name: BELFAST BOATYARD-WATERVILLE RD
Project Number: R111.06134.016

Lab Number: L1214015
Report Date: 08/09/12

Data Qualifiers

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: BELFAST BOATYARD-WATERVILLE RD
Project Number: R111.06134.016

Lab Number: L1214015
Report Date: 08/09/12

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised August 3, 2012 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0141.

Wastewater/Non-Potable Water (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable). Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

Solid Waste/Soil (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Titanium, Vanadium, Zinc, Total Organic Carbon, Corrosivity, TCLP 1311, SPLP 1312. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Florida Department of Health Certificate/Lab ID: E87814. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, SM2540G.)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7470, 7471, 9045. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

Air & Emissions (EPA TO-15.)

Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 180.1, 245.7, 1631E, 3020A, 6020A, 7470A, 9040, 9050A, SM2320B, 2540D, 2540G, 4500H-B, Organic Parameters: EPA 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 5030B, 8015D, 3570, 8081B, 8082A, 8260B, 8270C, 8270D.)

Solid & Chemical Materials (Inorganic Parameters: EPA 1311, 3050B, 3051A, 3060A, 6020A, 7196A, 7470A, 7471B, 7474, 9040B, 9045C, 9060. Organic Parameters: EPA 3540C, 3570, 3580A, 3630C, 3640A, 3660, 3665A, 5035, 8015D, 8081B, 8082A, 8260B, 8270C, 8270D.)

Biological Tissue (Inorganic Parameters: EPA 6020A. Organic Parameters: EPA 3570, 3510C, 3610B, 3630C, 3640A, 8270C, 8270D.)

Air & Emissions (EPA TO-15.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 180.1, 1631E, 6020A, 7470A, 9040B, 9050A, SM2540D, 2540G, 4500H+B, 2320B, 3020A, . Organic Parameters: EPA 3510C, 3630C, 3640A, 3660B, 8081B, 8082A, 8270C, 8270D, 8015D.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 3050B, 3051A, 6020A, 7471B, 9040B, 9045C. Organic Parameters: SW-846 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8015D, 8082A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: SW-846 1312, 3020A, SM2320B, SM2540D, 2540G, 4500H-B, EPA 180.1, 1631E, SW-846 7470A, 9040C, 6020A, 9050A. Organic Parameters: SW-846 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 1312, 3050B, 3051A, 6020A, 7471B, 7474, 9040B, 9040C, 9045C, 9045D, 9060. Organic Parameters: SW-846 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8081B, 8082A, 8270C, 8270D, 8015D.)

Atmospheric Organic Parameters (EPA 3C, TO-15, TO-10A, TO-13A-SIM.)

Biological Tissue (Inorganic Parameters: SW-846 6020A. Organic Parameters: SW-846 8270C, 8270D, 3510C, 3570, 3610C, 3630C, 3640A)

New York Department of Health Certificate/Lab ID: 11627. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, 6020A, 1631E, 7470A, 9050A, EPA 180.1, 3020A. Organic Parameters: EPA 8270C, 8270D, 8081B, 8082A, 3510C.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 6020A, 7471B, 7474, 9040C, 9045D. Organic Parameters: EPA 8270C, 8270D, 8081B, 8082A, 1311, 3050B, 3580A, 3570, 3051A.)

Air & Emissions (EPA TO-15, TO-10A.)

Pennsylvania Certificate/Lab ID: 68-02089 **NELAP Accredited**

Non-Potable Water (Inorganic Parameters: 1312, 1631E, 180.1, 3020A, 6020A, 7470A, 9040B, 9050A, 2320B, 2540D, 2540G, SM4500H+-B. Organic Parameters: 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D .)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 3051A, 6020A, 7471B, 7474 9040B, 9045C, 9060. Organic Parameters: EPA3050B, 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8270D, 8081B, 8015D, 8082A.)

Rhode Island Department of Health Certificate/Lab ID: LAO00299. **NELAP Accredited via NJ-DEP.**

Refer to NJ-DEP Certificate for Non-Potable Water.

Texas Commission of Environmental Quality Certificate/Lab ID: T104704419-08-TX. **NELAP Accredited.**

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8081, 8082.)

Air (Organic Parameters: EPA TO-15)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID:460194. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters:EPA 3020A, 6020A, 245.7, 9040B. Organic Parameters: EPA 3510C, 3640A, 3660B, 3665A, 8270C, 8270D, 8082A, 8081B, 8015D.)

Solid & Chemical Materials (Inorganic Parameters: EPA 6020A,7470A,7471B,9040B,9045C,3050B,3051, 9060. Organic Parameters: EPA 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 3570, 8270C, 8270D, 8081B, 8082A, 8015D.)

Washington State Department of Ecology Certificate/Lab ID: C954. *Non-Potable Water* (Inorganic Parameters: SM2540D, 180.1, 1631E.)

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 7474, 9045C, 9050A, 9060. Organic Parameters: EPA 8081, 8082, 8015, 8270.)

U.S. Army Corps of Engineers

Department of Defense, L-A-B Certificate/Lab ID: L2217.01.

Non-Potable Water (Inorganic Parameters: EPA 6020A, SM4500H-B. Organic Parameters: 3020A, 3510C, 8270C, 8270D, 8270C-ALK-PAH, 8270D-ALK-PAH, 8082A, 8081B, 8015D-SHC, 8015D.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 3050B, 6020A, 7471A, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580A, 3570, 3540C, 8270C, 8270D, 8270C-ALK-PAH, 8270D-ALK-PAH 8082A, 8081B, 8015D-SHC, 8015D.)

Air & Emissions (EPA TO-15.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **8270C**: Biphenyl. **TO-15**: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 2-Methylnaphthalene, 1-Methylnaphthalene.



AIR ANALYSIS

CHAIN OF CUSTODY

PAGE _____ OF _____

320 Forbes Blvd, Mansfield, MA 02048
 TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: **Ransom Consulting**
 Address: **400 Commercial St.**
Portland ME 04101
 Phone: **(207) 772-2891**
 Fax: **(207) 772-3248**
 Email: **ephenix@ransomenv.com**

Project Information

Project Name: **Belfast Boatyard - Waterville Rd.**
 Project Location: **38 Waterville Rd.**
 Project #: **R111.06134.016**
 Project Manager: **Pete Sherr**
 ALPHA Quote #:

Turn-Around Time

Standard RUSH (only confirmed if pre-approved!)
 Date Due: **8/9/12** Time: **1700**

Date Rec'd in Lab:

Report Information - Data Deliverables

FAX
 ADEX
 Criteria Checker: _____
 (Default based on Regulatory Criteria Indicated)
 Other Formats: _____
 EMAIL (standard pdf report)
 Additional Deliverables: _____
 Report to: (if different than Project Manager)
ephenix@ransomenv.com
peter.sherr@ransomenv.com

ALPHA Job #: **L1214015**

Billing Information

Same as Client info PO #: **4424**
Ransom, 12 Kent Way
Byfield MA

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria
USEPA	Brownfields	

Other Project Specific Requirements/Comments:

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection					Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	ANALYSIS						Sample Comments (i.e. PID)		
		Date	Start Time	End Time	Initial Vacuum	Final Vacuum						TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A		TO-4/TO-10	
L1214015-01	SV101	8/2/12	1610	1623	-28.85	-0.0	SV	EPP	11	678	328				X					
-02	SV102	8/2/12	1610	1623	-29.11	-0.2	SV	EPP	11	576	84				X					

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
 SV = Soil Vapor/Landfill Gas/SVE
 Other = Please Specify

Container Type

CS

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:

Erik Pherris
 USPS

Date/Time

8/6/12 14:00

Received By:

USPS
S. G. Gorman

Date/Time:

8/6/12 14:00

August 9, 2012

195 Commerce Way Suite E
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906
www.analyticslab.com

Mr. Peter Sherr
Ransom Environmental Consultants, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

**RE: Analytical Results Case Narrative
Belfast Boatyard-38 Waterville Rd.
Project No: 111.06134
Analytics #73487**

Dear Mr. Sherr:

Enclosed please find the analytical report for samples collected from the above-mentioned project. The attached Cover Page lists the sample IDs, Lab tracking numbers and collection dates for the samples included in this deliverable.

Samples were analyzed for Volatile Organic Compounds (VOCs) using EPA Method 8260B, Volatile Petroleum Hydrocarbons (VPH) using MADEP VPH Method 2004 Rev 1.1, Extractable Petroleum Hydrocarbons (EPH) using MADEP EPH Method 2004 Rev 1.1, Polychlorinated Biphenyls (PCBs) by EPA Method 8082. and selected Metals using EPA Method 6010B

Unless otherwise noted in the Non-conformance Summary listed below, all of the quality control (QC) criteria including initial calibration, calibration verification, surrogate recovery, holding time and method accuracy/precision for these analyses were within acceptable limits.

This Level II package has been assembled in the following order:

- Case Narrative/Non-Conformance Summary
- Sample Log Sheet - Cover Page
- VOC Form 1 Sample Data Results for Samples
 - Chromatograms
- VOC Blank Summaries & Form 3 MS/MSD and LCS Recoveries
- VPH Form I Data Sheet for Samples
 - Chromatograms
- VPH Blank Summaries & Form 3 MS/MSD (LCS) Recoveries
 - Chromatograms
- EPH Form I Data Sheet for Samples
 - Chromatograms
- EPH Blank Summaries & Form 3 MS/MSD (LCS) Recoveries
- PCB Form I Data Sheet for Samples
 - Chromatograms
- PCB Blank Summaries & Form 3 MS/MSD (LCS) Recoveries
- Metals Form I Data Sheet
- Metals Blank Summaries & Form 3 MS/MSD (LCS) Recoveries
- Chain of Custody (COC) Forms
- Sample Receipt Checklist

QC NON-CONFORMANCE SUMMARY

Sample Receipt:
No discrepancies.

Volatile Organic Compounds (VOCs) by EPA 8260B:

This narrative is specific to target analytes reported on the Form 1 data pages. Non-target (NT) analyte deviations were not addressed. The following analytes were not 'J' flagged in this report; Chloromethane, Methylene chloride, Acetone and Hexachlorobutadiene.

Bromobenzene had recovery of 77% in the initial calibration verification standard (ICV) for the calibration curve analyzed 08/07/12 (V8080712C). All other analytes were in control. Bromobenzene was not detected in any samples for this SDG and results were reported without qualification.

The continuing calibration standard (file#B91480SC) had %D greater than 20% for 1,4-Dioxane. The laboratory control samples (L808072B/L808072B2) were in control for all analytes. Results were reported without qualification.

The continuing calibration standard (file#C83186SC) had %D greater than 20% for Trichlorofluoromethane. The laboratory control samples (LS08082C/LS08082C2) had low recoveries for Chloromethane and Vinyl chloride. These analytes were not detected in any samples associated with this QC and results were reported without qualification.

The continuing calibration standard (file#C83211SC) had %D greater than 20% for 2,2-Dichloropropane. The laboratory control samples (LS08092C/LS08092C2) had low recoveries for Chloromethane and high recovery for Acetone. These analytes were not detected in any samples associated with this QC and results were reported without qualification.

Volatile Petroleum Hydrocarbons (VPH):

No results were reported below the quantitation limit for the C9-C10 Aromatic Hydrocarbon range.

The closing continuing calibration standard (file#K37601SC) had low recovery for n-Butylcyclohexane. The standard was reanalyzed with similar results. All hydrocarbon ranges were in control. Results were reported without qualification.

Extractable Petroleum Hydrocarbons (EPH):

No results for C19-C36 aliphatic range were reported below the quantitation limit for the aqueous samples due to instrument baseline rise.

Samples 73487-5, 73487-8, 73485-10 and 73487-14 were analyzed at a dilution due to concentrations of target analytes that exceeded the calibration range of the instrument.

The closing continuing calibration standard 08/06/12 for the aromatics (file# N21425) had two compounds with %D greater than the acceptance criteria. The standard was reanalyzed with all analytes in control. Results were reported without qualification.

The laboratory control samples (L080612EASE2/L080612EASE2) and MS/MSD on sample 73487-1 had low recoveries for C-36 alkane. All other analyte recoveries were in control. Results were reported without qualification.

PCBs by EPA 8082:

No results were reported below the Quantitation Limit.

Sample 73487-3 had interferences on column#2 that prevented the determination of Decachlorobiphenyl surrogate recovery. Results for surrogates were reported off the column#1 without qualification.

Selected Metals by EPA Method 6010B:

Samples 73487-3, 73487-5, 73487-6, 73487-8 thru 73487-11, 73487-13 and 73487-15 required dilution due to element concentrations that exceeded the linear dynamic range of the instrument.

The MS/MSD analyzed on sample 73487-12 had low recovery for Lead. The laboratory control sample was in control for all elements. Results were reported without qualification.

If you have any questions or I can be of further assistance please do not hesitate to contact me.

Sincerely,
ANALYTICS Environmental Laboratory, LLC



Stephen Knollmeyer
Laboratory Director

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

Report Number: 73487

Revision: Rev. 0

Re: Belfast Boatyard-38 Waterville Rd. (Project No: 111.06134)

Enclosed are the results of the analyses on your sample(s). Samples were received on 03 August 2012 and analyzed for the tests listed. Samples were received in acceptable condition, with the exceptions noted below or on the chain of custody. These results pertain to samples as received by the laboratory and for the analytical tests requested on the chain of custody. The results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. Please see individual reports for specific methodologies and references.

Sample Analysis: The attached pages detail the Client Sample IDs, Lab Sample IDs, and Analyses requested

Sample Receipt Exceptions: Only one preserved vial provided for both VPH and 8260 VOC analyses was received at the laboratory for samples 73487-6, 73487-7, 73487-8 and 73487-

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, Virginia, Maryland, North Carolina, and is accredited by the Department of Defense (DOD) ELAP program. A list of actual certified parameters is available upon request.

If you have any questions on these results, please do not hesitate to contact us.

Authorized signature


Stephen L. Knollmeyer Lab. Director

Date

8/9/2012

This report shall not be reproduced, except in full, without the written consent of Analytics Environmental Laboratory, LLC.

CLIENT: Ransom Consulting, Inc.

REPORT NUMBER: 73487

REV: Rev. 0

PROJECT: Belfast Boatyard-38 Waterville Rd. (Project No: 111.06134)

<u>Lab Number</u>	<u>Sample Date</u>	<u>Station Location</u>	<u>Analysis</u>	<u>Comments</u>
73487-1	08/02/12	SS101	EPA 8082 (PCBs only)	
	08/02/12	SS101	EPA 8260 Volatile Organics	
	08/02/12	SS101	MADEP EPH	
	08/02/12	SS101	Metals	
	08/02/12	SS101	Volatile Petroleum Hydrocarbons	
73487-2	08/02/12	SS102	Metals	
73487-3	08/02/12	SS103	EPA 8082 (PCBs only)	
	08/02/12	SS103	EPA 8260 Volatile Organics	
	08/02/12	SS103	MADEP EPH	
	08/02/12	SS103	Metals	
	08/02/12	SS103	Volatile Petroleum Hydrocarbons	
73487-4	08/02/12	SS104	MADEP EPH	
73487-5	08/02/12	SS105	EPA 8260 Volatile Organics	
	08/02/12	SS105	MADEP EPH	
	08/02/12	SS105	Metals	
	08/02/12	SS105	Volatile Petroleum Hydrocarbons	
73487-6	08/02/12	SS106	EPA 8082 (PCBs only)	
	08/02/12	SS106	EPA 8260 Volatile Organics	
	08/02/12	SS106	MADEP EPH	
	08/02/12	SS106	Metals	
	08/02/12	SS106	Volatile Petroleum Hydrocarbons	
73487-7	08/02/12	SS107	EPA 8260 Volatile Organics	
	08/02/12	SS107	MADEP EPH	
	08/02/12	SS107	Metals	
	08/02/12	SS107	Volatile Petroleum Hydrocarbons	
73487-8	08/02/12	SS108	EPA 8260 Volatile Organics	
	08/02/12	SS108	MADEP EPH	
	08/02/12	SS108	Metals	
	08/02/12	SS108	Volatile Petroleum Hydrocarbons	
73487-9	08/02/12	SS109	EPA 8260 Volatile Organics	
	08/02/12	SS109	MADEP EPH	
	08/02/12	SS109	Metals	
	08/02/12	SS109	Volatile Petroleum Hydrocarbons	
73487-10	08/02/12	SS110	EPA 8260 Volatile Organics	
	08/02/12	SS110	MADEP EPH	
	08/02/12	SS110	Metals	
	08/02/12	SS110	Volatile Petroleum Hydrocarbons	

CLIENT: Ransom Consulting, Inc.

REPORT NUMBER: 73487

REV: Rev. 0

PROJECT: Belfast Boatyard-38 Waterville Rd. (Project No: 111.06134)

<u>Lab Number</u>	<u>Sample Date</u>	<u>Station Location</u>	<u>Analysis</u>	<u>Comments</u>
73487-11	08/02/12	SS111	MADEP EPH	
	08/02/12	SS111	Metals	
73487-12	08/02/12	SS112	EPA 8082 (PCBs only)	
	08/02/12	SS112	EPA 8260 Volatile Organics	
	08/02/12	SS112	MADEP EPH	
	08/02/12	SS112	Metals	
73487-13	08/02/12	SS112	Volatile Petroleum Hydrocarbons	
	08/02/12	SS113	MADEP EPH	
	08/02/12	SS113	Metals	
73487-14	08/02/12	SS114	EPA 8260 Volatile Organics	
	08/02/12	SS114	MADEP EPH	
73487-15	08/02/12	SS114	Metals	
	08/02/12	SS114	Volatile Petroleum Hydrocarbons	
	08/02/12	SS115	EPA 8260 Volatile Organics	
	08/02/12	SS115	MADEP EPH	
73487-16	08/02/12	SS115	Metals	
	08/02/12	SS115	Volatile Petroleum Hydrocarbons	
	08/02/12	SS10X	EPA 8082 (PCBs only)	
	08/02/12	SS10X	EPA 8260 Volatile Organics	
73487-17	08/02/12	SS10X	MADEP EPH	
	08/02/12	SS10X	Metals	
	08/02/12	SS10X	Volatile Petroleum Hydrocarbons	
	08/02/12	BK-1	MADEP EPH	
73487-18	08/02/12	BK-1	Metals	
	08/02/12	BK-2	Metals	
73487-19	08/02/12	BK-3	Metals	
73487-20	08/02/12	Trip Blank	EPA 8260 Volatile Organics	
73487-21	08/02/12	MW101	EPA 8260 Volatile Organics	
	08/02/12	MW101	MADEP EPH	
	08/02/12	MW101	Metals	
	08/02/12	MW101	Volatile Petroleum Hydrocarbons	
73487-22	08/02/12	MWX	EPA 8260 Volatile Organics	
	08/02/12	MWX	MADEP EPH	
	08/02/12	MWX	Metals	
	08/02/12	MWX	Volatile Petroleum Hydrocarbons	
73487-23	08/02/12	PW101	EPA 8260 Volatile Organics	
	08/02/12	PW101	MADEP EPH	

CLIENT: Ransom Consulting, Inc.

REPORT NUMBER: 73487

REV: Rev. 0

PROJECT: Belfast Boatyard-38 Waterville Rd. (Project No: 111.06134)

<u>Lab Number</u>	<u>Sample Date</u>	<u>Station Location</u>	<u>Analysis</u>	<u>Comments</u>
	08/02/12	PW101	Metals	
	08/02/12	PW101	Volatile Petroleum Hydrocarbons	
73487-24	08/02/12	PW DUP	EPA 8260 Volatile Organics	
	08/02/12	PW DUP	MADEP EPH	
	08/02/12	PW DUP	Metals	
	08/02/12	PW DUP	Volatile Petroleum Hydrocarbons	
73487-25	08/02/12	Trip Blank	Electronic Data Deliverable	
	08/02/12	Trip Blank	EPA 8260 Volatile Organics	

Surrogate Compound Limits

Matrix:	Aqueous	Solid	
Units:	% Recovery	% Recovery	Method
Volatile Organic Compounds - Drinking Water			
1,4-Difluorobenzene	70-130		EPA 524.2
Bromofluorobenzene	70-130		
1,2-Dichlorobenzene-d4	70-130		
Volatile Organic Compounds			
1,2-Dichloroethane-d4	70-120	70-120	EPA 624/8260B
Toluene-d8	85-120	85-120	
Bromofluorobenzene	75-120	75-120	
Semi-Volatile Organic Compounds			
2-Fluorophenol	20-110	35-105	EPA 625/8270C
d5-Phenol	15-110	40-100	
d5-nitrobenzene	40-110	35-100	
2-Fluorobiphenyl	50-110	45-105	
2,4,6-Tribromophenol	40-110	40-125	
d14-p-terphenyl	50-130	30-125	
PAH's by SIM			
d5-nitrobenzene	21-110	35-110	EPA 8270C
2-Fluorobiphenyl	36-121	45-105	
d14-p-terphenyl	33-141	30-125	
Pesticides and PCBs			
2,4,5,6-Tetrachloro-m-xylene (TCX)	46-122	40-130	EPA 608/8082
Decachlorobiphenyl (DCB)	40-135	40-130	
Herbicides			
Dichloroacetic acid (DCAA)	30-150	30-150	
Gasoline Range Organics/TPH Gasoline			
Trifluorotoluene TFT (FID)	60-140	60-140	MEDEP 4217/EPA 8015
Bromofluorobenzene (BFB) (FID)	60-140	60-140	
Trifluorotoluene TFT (PID)	60-140	60-140	
Bromofluorobenzene (BFB) (PID)	60-140	60-140	
Diesel Range Organics/TPH Diesel			
m-terphenyl	60-140	60-140	MEDEP 4125/EPA 8015/CT ETPH
Volatile Petroleum Hydrocarbons			
2,5-Dibromotoluene (PID)	70-130	70-130	MADEP VPH May 2004 Rev1.1
2,5-Dibromotoluene (FID)	70-130	70-130	
Extracatable Petroleum Hydrocarbons			
1-chloro-octadecane (aliphatic)	40-140	40-140	MADEP EPH May 2004 Rev1.1
o-Terphenyl (aromatic)	40-140	40-140	
2-Fluorobiphenyl (Fractionation)	40-140	40-140	
2-Bromonaphthalene (fractionation)	40-140	40-140	

VOLATILE
DATA SUMMARIES

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 9, 2012
SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS101

Lab Sample ID: 73487-1
Matrix: Solid
Percent Solid: 86
Dilution Factor: 113
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$	COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$
Benzene	113	U	1,3-Dichloropropane	113	U
Bromobenzene	113	U	cis-1,3-Dichloropropene	113	U
Bromochloromethane	113	U	trans-1,3-Dichloropropene	113	U
Bromodichloromethane	85	U	2,2-Dichloropropane	113	U
Bromoform	85	U	1,1-Dichloropropene	113	U
Bromomethane	113	U	Ethylbenzene	113	U
n-butylbenzene	113	U	Hexachlorobutadiene	113	U
sec-butylbenzene	113	U	Isopropylbenzene	113	U
tert-butylbenzene	113	U	p-isopropyltoluene	113	U
Carbon Tetrachloride	113	U	Methylene Chloride	564	U
Chlorobenzene	113	U	Methyl-tert-butyl ether (MTBE)	85	U
Chloroethane	113	U	Naphthalene	113	U
Chloroform	85	U	n-Propylbenzene	113	U
Chloromethane	113	U	Styrene	113	U
2-Chlorotoluene	113	U	1,1,1,2-Tetrachloroethane	113	U
4-Chlorotoluene	113	U	1,1,2,2-Tetrachloroethane	85	U
Dibromochloromethane	85	U	Tetrachloroethene	113	U
1,2-Dibromo-3-chloropropane	113	U	Toluene	113	U
1,2-Dibromoethane	85	U	1,2,3-Trichlorobenzene	113	U
Dibromomethane	113	U	1,2,4-Trichlorobenzene	113	U
1,2-Dichlorobenzene	113	U	1,1,1-Trichloroethane	113	U
1,3-Dichlorobenzene	113	U	1,1,2-Trichloroethane	85	U
1,4-Dichlorobenzene	113	U	Trichloroethene	113	U
Dichlorodifluoromethane	113	U	Trichlorofluoromethane	113	U
1,1-Dichloroethane	113	U	1,2,3-Trichloropropane	113	U
1,2-Dichloroethane	85	U	1,2,4-Trimethylbenzene	113	U
1,1-Dichloroethene	85	U	1,3,5-Trimethylbenzene	113	U
cis-1,2-Dichloroethene	113	U	Vinyl Chloride	113	U
trans-1,2-Dichloroethene	113	U	o-Xylene	113	U
1,2-Dichloropropane	85	U	m,p-Xylene	113	U
Acetone	1130	U	Diethyl ether	113	U
Carbon Disulfide	113	U	2-Hexanone	1130	U
Tetrahydrofuran	564	U	Methyl isobutyl ketone	1130	U
Methyl ethyl ketone	1130	U	Di-isopropyl ether (DIPE)	113	U
t-Butyl alcohol (TBA)	2250	U	Ethyl t-butyl ether (ETBE)	113	U
t-Amyl methyl ether (TAME)	113	U	1,3,5-Trichlorobenzene	113	U
			1,4-Dioxane	3380	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	84	%	d8-Toluene	87	%
			Bromofluorobenzene	85	%
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS: Results are expressed on a dry weight basis.

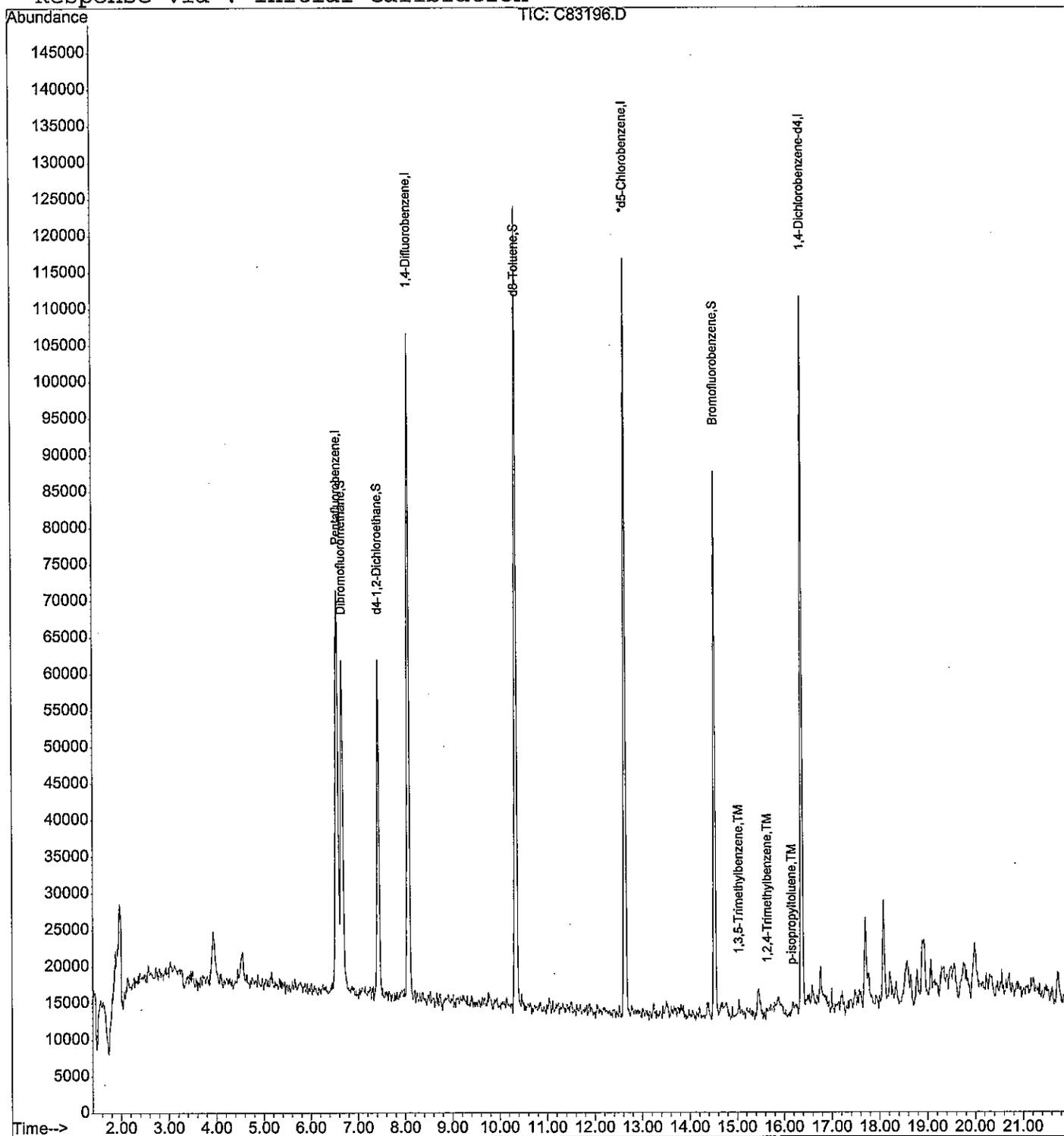
Authorized signature



Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\080812-C\C83196.D Vial: 12
Acq On : 8 Aug 2012 3:28 pm Operator: MT
Sample : 73487-1 Inst : Instr_C
Misc : 50,18.54,SOIL,,18ML F.V. MT Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Aug 9 7:12 2012 Quant Results File: V808072C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V808072C.M (RTE Integrat
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 14:18:16 2012
Response via : Initial Calibration



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 9, 2012
SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS103

Lab Sample ID: 73487-3
Matrix: Solid
Percent Solid: 52
Dilution Factor: 1460
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$	COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$
Benzene	1460	U	1,3-Dichloropropane	1460	U
Bromobenzene	1460	U	cis-1,3-Dichloropropene	1460	U
Bromochloromethane	1460	U	trans-1,3-Dichloropropene	1460	U
Bromodichloromethane	1090	U	2,2-Dichloropropane	1460	U
Bromoform	1090	U	1,1-Dichloropropene	1460	U
Bromomethane	1460	U	Ethylbenzene	1460	1150 J
n-butylbenzene	1460	U	Hexachlorobutadiene	1460	U
sec-butylbenzene	1460	U	Isopropylbenzene	1460	1980
tert-butylbenzene	1460	U	p-isopropyltoluene	1460	U
Carbon Tetrachloride	1460	U	Methylene Chloride	7280	U
Chlorobenzene	1460	U	Methyl-tert-butyl ether (MTBE)	1090	U
Chloroethane	1460	U	Naphthalene	1460	U
Chloroform	1090	U	n-Propylbenzene	1460	U
Chloromethane	1460	U	Styrene	1460	56600
2-Chlorotoluene	1460	U	1,1,1,2-Tetrachloroethane	1460	U
4-Chlorotoluene	1460	U	1,1,2,2-Tetrachloroethane	1090	U
Dibromochloromethane	1090	U	Tetrachloroethene	1460	U
1,2-Dibromo-3-chloropropane	1460	U	Toluene	1460	U
1,2-Dibromoethane	1090	U	1,2,3-Trichlorobenzene	1460	U
Dibromomethane	1460	U	1,2,4-Trichlorobenzene	1460	U
1,2-Dichlorobenzene	1460	U	1,1,1-Trichloroethane	1460	U
1,3-Dichlorobenzene	1460	U	1,1,2-Trichloroethane	1090	U
1,4-Dichlorobenzene	1460	U	Trichloroethene	1460	U
Dichlorodifluoromethane	1460	U	Trichlorofluoromethane	1460	U
1,1-Dichloroethane	1460	U	1,2,3-Trichloropropane	1460	U
1,2-Dichloroethane	1090	U	1,2,4-Trimethylbenzene	1460	U
1,1-Dichloroethene	1090	U	1,3,5-Trimethylbenzene	1460	U
cis-1,2-Dichloroethene	1460	U	Vinyl Chloride	1460	U
trans-1,2-Dichloroethene	1460	U	o-Xylene	1460	U
1,2-Dichloropropane	1090	U	m,p-Xylene	1460	U
Acetone	14600	U	Diethyl ether	1460	U
Carbon Disulfide	1460	U	2-Hexanone	14600	U
Tetrahydrofuran	7280	U	Methyl isobutyl ketone	14600	U
Methyl ethyl ketone	14600	U	Di-isopropyl ether (DIPE)	1460	U
t-Butyl alcohol (TBA)	29100	U	Ethyl t-butyl ether (ETBE)	1460	U
t-Amyl methyl ether (TAME)	1460	U	1,3,5-Trichlorobenzene	1460	U
			1,4-Dioxane	43700	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	64 * %	d8-Toluene	62 * %	Bromofluorobenzene	64 * %
U=Undetected		J=Estimated		E=Exceeds Calibration Range	
				B=Detected in Blank	

METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS: Results are expressed on a dry weight basis.

*Surrogate recovery outside of laboratory acceptance criteria. Sample was reanalyzed to confirm results.

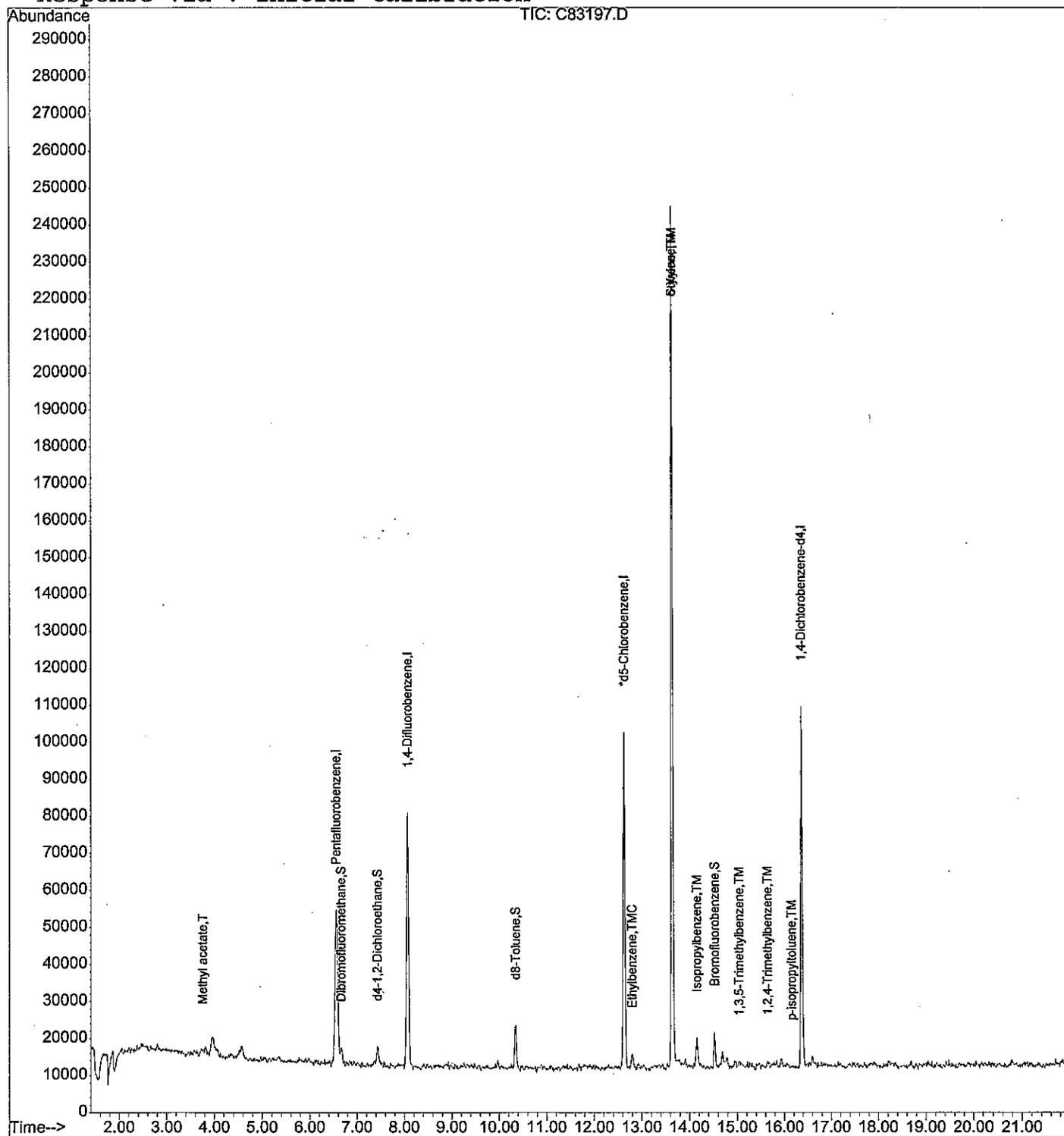
Authorized signature



Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\080812-C\C83197.D Vial: 13
Acq On : 8 Aug 2012 4:09 pm Operator: MT
Sample : 73487-3,,5X Inst : Instr_C
Misc : 10,6.63,SOIL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Aug 9 7:12 2012 Quant Results File: V808072C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V808072C.M (RTE Integrat
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 14:18:16 2012
Response via : Initial Calibration



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 9, 2012
SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS105

Lab Sample ID: 73487-5
Matrix: Solid
Percent Solid: 91
Dilution Factor: 100
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$	COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$
Benzene	100	U	1,3-Dichloropropane	100	U
Bromobenzene	100	U	cis-1,3-Dichloropropene	100	U
Bromochloromethane	100	U	trans-1,3-Dichloropropene	100	U
Bromodichloromethane	75	U	2,2-Dichloropropane	100	U
Bromoform	75	U	1,1-Dichloropropene	100	U
Bromomethane	100	U	Ethylbenzene	100	U
n-butylbenzene	100	U	Hexachlorobutadiene	100	U
sec-butylbenzene	100	U	Isopropylbenzene	100	U
tert-butylbenzene	100	U	p-isopropyltoluene	100	U
Carbon Tetrachloride	100	U	Methylene Chloride	498	U
Chlorobenzene	100	U	Methyl-tert-butyl ether (MTBE)	75	U
Chloroethane	100	U	Naphthalene	100	U
Chloroform	75	U	n-Propylbenzene	100	U
Chloromethane	100	U	Styrene	100	U
2-Chlorotoluene	100	U	1,1,1,2-Tetrachloroethane	100	U
4-Chlorotoluene	100	U	1,1,2,2-Tetrachloroethane	75	U
Dibromochloromethane	75	U	Tetrachloroethene	100	U
1,2-Dibromo-3-chloropropane	100	U	Toluene	100	U
1,2-Dibromoethane	75	U	1,2,3-Trichlorobenzene	100	U
Dibromomethane	100	U	1,2,4-Trichlorobenzene	100	U
1,2-Dichlorobenzene	100	U	1,1,1-Trichloroethane	100	U
1,3-Dichlorobenzene	100	U	1,1,2-Trichloroethane	75	U
1,4-Dichlorobenzene	100	U	Trichloroethene	100	U
Dichlorodifluoromethane	100	U	Trichlorofluoromethane	100	U
1,1-Dichloroethane	100	U	1,2,3-Trichloropropane	100	U
1,2-Dichloroethane	75	U	1,2,4-Trimethylbenzene	100	U
1,1-Dichloroethene	75	U	1,3,5-Trimethylbenzene	100	U
cis-1,2-Dichloroethene	100	U	Vinyl Chloride	100	U
trans-1,2-Dichloroethene	100	U	o-Xylene	100	U
1,2-Dichloropropane	75	U	m,p-Xylene	100	U
Acetone	996	U	Diethyl ether	100	U
Carbon Disulfide	100	U	2-Hexanone	996	U
Tetrahydrofuran	498	U	Methyl isobutyl ketone	996	U
Methyl ethyl ketone	996	U	Di-isopropyl ether (DIPE)	100	U
t-Butyl alcohol (TBA)	1990	U	Ethyl t-butyl ether (ETBE)	100	U
t-Amyl methyl ether (TAME)	100	U	1,3,5-Trichlorobenzene	100	U
			1,4-Dioxane	2990	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	84 %		d8-Toluene	82 %	
			Bromofluorobenzene	79 %	
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS: Results are expressed on a dry weight basis.

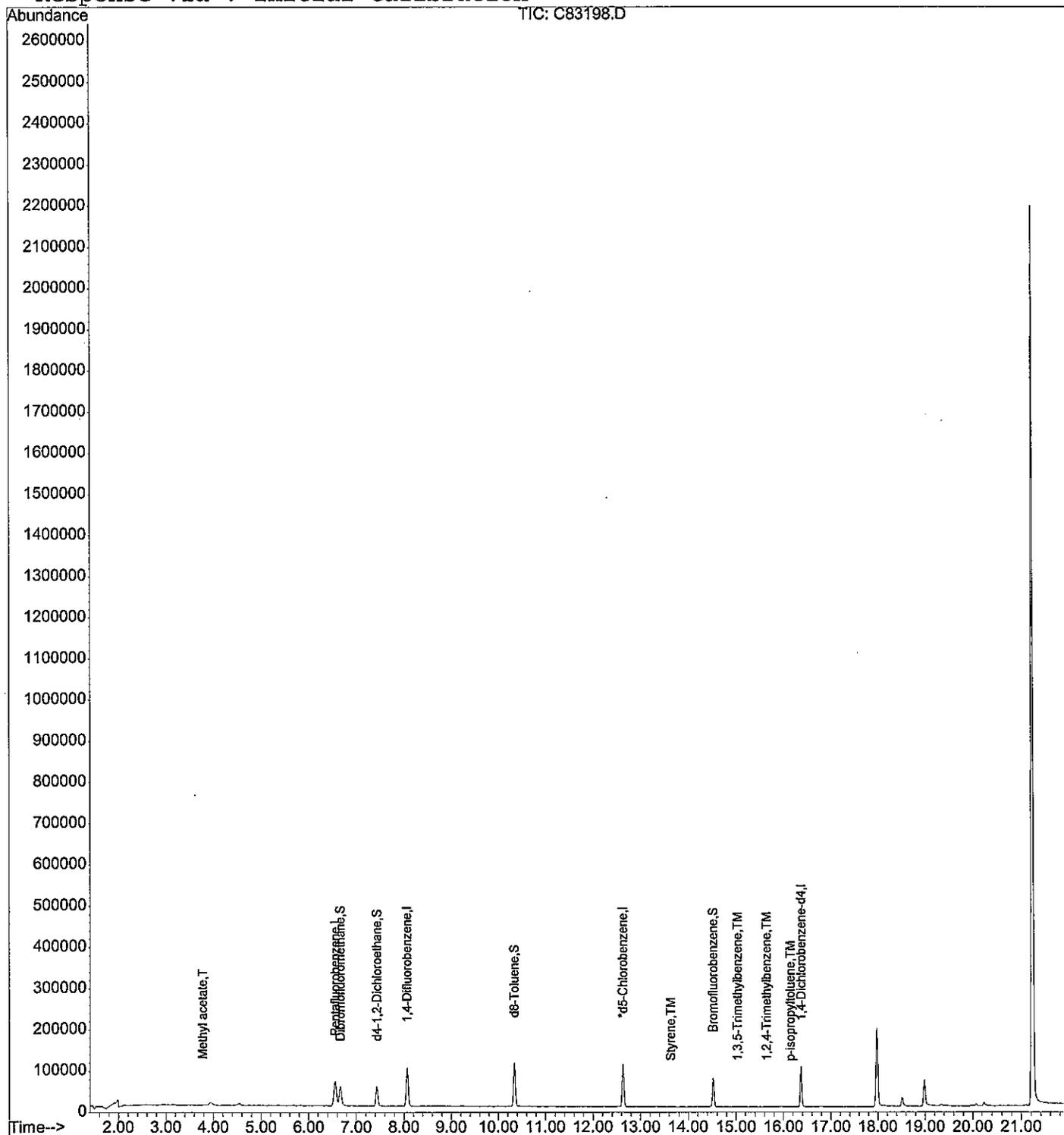
Authorized signature



Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\080812-C\C83198.D Vial: 14
Acq On : 8 Aug 2012 4:35 pm Operator: MT
Sample : 73487-5 Inst : Instr_C
Misc : 50,11.03,SOIL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Aug 9 7:12 2012 Quant Results File: V808072C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V808072C.M (RTE Integrat
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 14:18:16 2012
Response via : Initial Calibration



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 9, 2012
SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS106

Lab Sample ID: 73487-6
Matrix: Solid
Percent Solid: 94
Dilution Factor: 104
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$	COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$
Benzene	104	U	1,3-Dichloropropane	104	U
Bromobenzene	104	U	cis-1,3-Dichloropropene	104	U
Bromochloromethane	104	U	trans-1,3-Dichloropropene	104	U
Bromodichloromethane	78	U	2,2-Dichloropropane	104	U
Bromoform	78	U	1,1-Dichloropropene	104	U
Bromomethane	104	U	Ethylbenzene	104	U
n-butylbenzene	104	U	Hexachlorobutadiene	104	U
sec-butylbenzene	104	U	Isopropylbenzene	104	U
tert-butylbenzene	104	U	p-isopropyltoluene	104	U
Carbon Tetrachloride	104	U	Methylene Chloride	521	U
Chlorobenzene	104	U	Methyl-tert-butyl ether (MTBE)	78	U
Chloroethane	104	U	Naphthalene	104	128
Chloroform	78	U	n-Propylbenzene	104	U
Chloromethane	104	U	Styrene	104	U
2-Chlorotoluene	104	U	1,1,1,2-Tetrachloroethane	104	U
4-Chlorotoluene	104	U	1,1,2,2-Tetrachloroethane	78	U
Dibromochloromethane	78	U	Tetrachloroethene	104	U
1,2-Dibromo-3-chloropropane	104	U	Toluene	104	U
1,2-Dibromoethane	78	U	1,2,3-Trichlorobenzene	104	U
Dibromomethane	104	U	1,2,4-Trichlorobenzene	104	U
1,2-Dichlorobenzene	104	U	1,1,1-Trichloroethane	104	U
1,3-Dichlorobenzene	104	U	1,1,2-Trichloroethane	78	U
1,4-Dichlorobenzene	104	U	Trichloroethene	104	U
Dichlorodifluoromethane	104	U	Trichlorofluoromethane	104	U
1,1-Dichloroethane	104	U	1,2,3-Trichloropropane	104	U
1,2-Dichloroethane	78	U	1,2,4-Trimethylbenzene	104	154
1,1-Dichloroethene	78	U	1,3,5-Trimethylbenzene	104	117
cis-1,2-Dichloroethene	104	U	Vinyl Chloride	104	U
trans-1,2-Dichloroethene	104	U	o-Xylene	104	U
1,2-Dichloropropane	78	U	m,p-Xylene	104	U
Acetone	1040	U	Diethyl ether	104	U
Carbon Disulfide	104	U	2-Hexanone	1040	U
Tetrahydrofuran	521	U	Methyl isobutyl ketone	1040	U
Methyl ethyl ketone	1040	U	Di-isopropyl ether (DIPE)	104	U
t-Butyl alcohol (TBA)	2080	U	Ethyl t-butyl ether (ETBE)	104	U
t-Amyl methyl ether (TAME)	104	U	1,3,5-Trichlorobenzene	104	U
			1,4-Dioxane	3120	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	87 %		d8-Toluene	93 %	
			Bromofluorobenzene	91 %	
U=Undetected		J=Estimated	E=Exceeds Calibration Range		B=Detected in Blank

METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS: Results are expressed on a dry weight basis.

Authorized signature

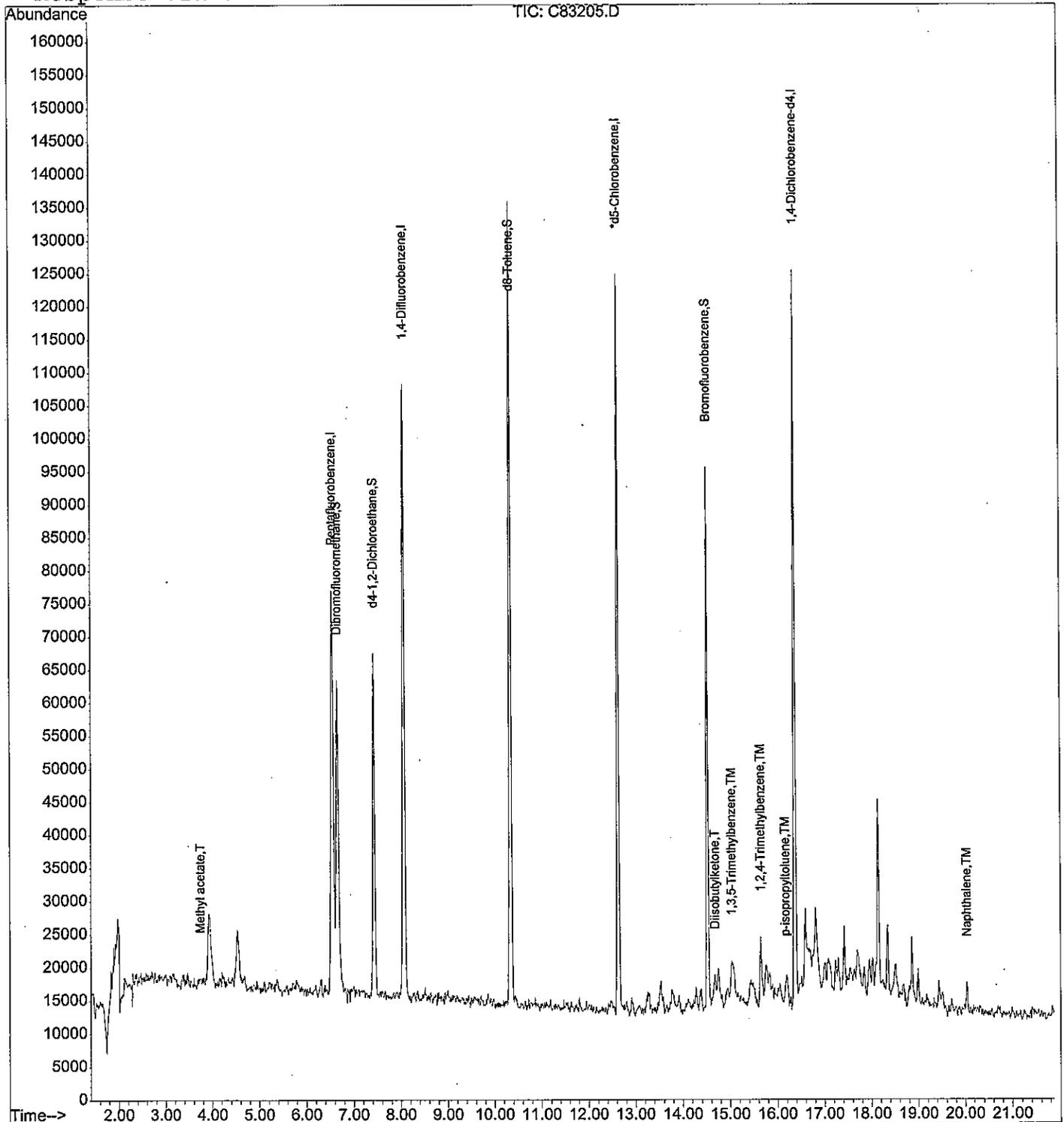
Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\080812-C\C83205.D
Acq On : 8 Aug 2012 8:23 pm
Sample : 73487-6
Misc : 50,12.26,SOIL,,12ML F.V.
MS Integration Params: rteint.p
Quant Time: Aug 9 7:12 2012

Vial: 5
Operator: MT
Inst : Instr_C
Multiplr: 1.00

Quant Results File: V808072C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V808072C.M (RTE Integrat
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 14:18:16 2012
Response via : Initial Calibration



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 9, 2012
SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS107

Lab Sample ID: 73487-7
Matrix: Solid
Percent Solid: 98
Dilution Factor: 98
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$	COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$
Benzene	98	U	1,3-Dichloropropane	98	U
Bromobenzene	98	U	cis-1,3-Dichloropropene	98	U
Bromochloromethane	98	U	trans-1,3-Dichloropropene	98	U
Bromodichloromethane	74	U	2,2-Dichloropropane	98	U
Bromoform	74	U	1,1-Dichloropropene	98	U
Bromomethane	98	U	Ethylbenzene	98	U
n-butylbenzene	98	U	Hexachlorobutadiene	98	U
sec-butylbenzene	98	U	Isopropylbenzene	98	U
tert-butylbenzene	98	U	p-isopropyltoluene	98	U
Carbon Tetrachloride	98	U	Methylene Chloride	491	U
Chlorobenzene	98	U	Methyl-tert-butyl ether (MTBE)	74	U
Chloroethane	98	U	Naphthalene	98	U
Chloroform	74	U	n-Propylbenzene	98	U
Chloromethane	98	U	Styrene	98	U
2-Chlorotoluene	98	U	1,1,1,2-Tetrachloroethane	98	U
4-Chlorotoluene	98	U	1,1,2,2-Tetrachloroethane	74	U
Dibromochloromethane	74	U	Tetrachloroethene	98	U
1,2-Dibromo-3-chloropropane	98	U	Toluene	98	U
1,2-Dibromoethane	74	U	1,2,3-Trichlorobenzene	98	U
Dibromomethane	98	U	1,2,4-Trichlorobenzene	98	U
1,2-Dichlorobenzene	98	U	1,1,1-Trichloroethane	98	U
1,3-Dichlorobenzene	98	U	1,1,2-Trichloroethane	74	U
1,4-Dichlorobenzene	98	U	Trichloroethene	98	U
Dichlorodifluoromethane	98	U	Trichlorofluoromethane	98	U
1,1-Dichloroethane	98	U	1,2,3-Trichloropropane	98	U
1,2-Dichloroethane	74	U	1,2,4-Trimethylbenzene	98	U
1,1-Dichloroethene	74	U	1,3,5-Trimethylbenzene	98	U
cis-1,2-Dichloroethene	98	U	Vinyl Chloride	98	U
trans-1,2-Dichloroethene	98	U	o-Xylene	98	U
1,2-Dichloropropane	74	U	m,p-Xylene	98	U
Acetone	982	U	Diethyl ether	98	U
Carbon Disulfide	98	U	2-Hexanone	982	U
Tetrahydrofuran	491	U	Methyl isobutyl ketone	982	U
Methyl ethyl ketone	982	U	Di-isopropyl ether (DIPE)	98	U
t-Butyl alcohol (TBA)	1960	U	Ethyl t-butyl ether (ETBE)	98	U
t-Amyl methyl ether (TAME)	98	U	1,3,5-Trichlorobenzene	98	U
			1,4-Dioxane	2950	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	85 %		d8-Toluene	91 %	
			Bromofluorobenzene	90 %	
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS: Results are expressed on a dry weight basis.

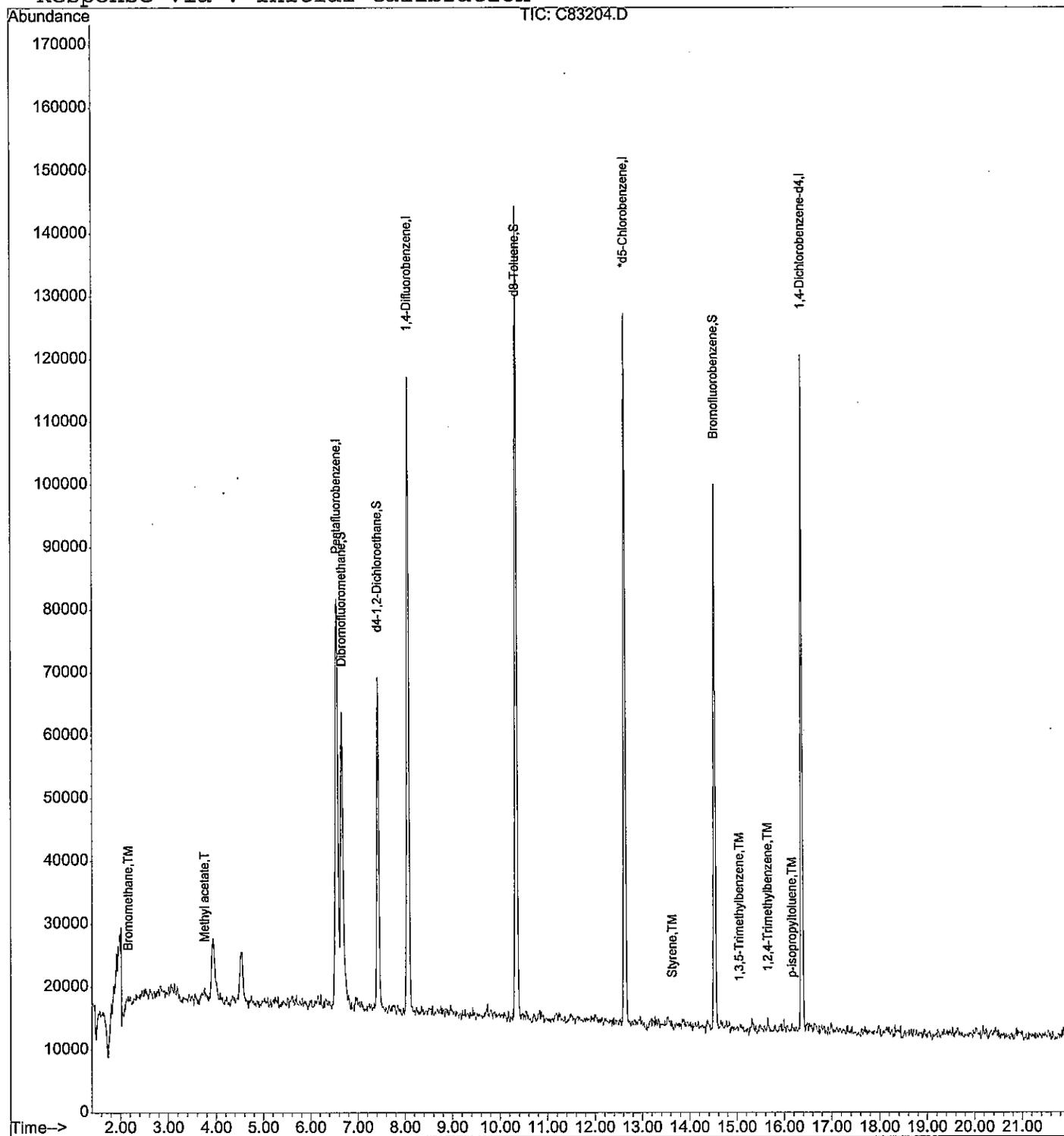
Authorized signature



Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\080812-C\C83204.D Vial: 4
Acq On : 8 Aug 2012 7:45 pm Operator: MT
Sample : 73487-7 Inst : Instr_C
Misc : 50,14.57,SOIL,,14ML F.V. Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Aug 9 7:12 2012 Quant Results File: V808072C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V808072C.M (RTE Integrat
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 14:18:16 2012
Response via : Initial Calibration



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 9, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS108

Lab Sample ID: 73487-8
Matrix: Solid
Percent Solid: 96
Dilution Factor: 108
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/09/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$	COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$
Benzene	108	U	1,3-Dichloropropane	108	U
Bromobenzene	108	U	cis-1,3-Dichloropropene	108	U
Bromochloromethane	108	U	trans-1,3-Dichloropropene	108	U
Bromodichloromethane	81	U	2,2-Dichloropropane	108	U
Bromoform	81	U	1,1-Dichloropropene	108	U
Bromomethane	108	U	Ethylbenzene	108	133
n-butylbenzene	108	U	Hexachlorobutadiene	108	U
sec-butylbenzene	108	U	Isopropylbenzene	108	U
tert-butylbenzene	108	U	p-isopropyltoluene	108	101 J
Carbon Tetrachloride	108	U	Methylene Chloride	540	U
Chlorobenzene	108	U	Methyl-tert-butyl ether (MTBE)	81	U
Chloroethane	108	U	Naphthalene	108	1370
Chloroform	81	U	n-Propylbenzene	108	74 J
Chloromethane	108	U	Styrene	108	453
2-Chlorotoluene	108	U	1,1,1,2-Tetrachloroethane	108	U
4-Chlorotoluene	108	U	1,1,2,2-Tetrachloroethane	81	U
Dibromochloromethane	81	U	Tetrachloroethene	108	U
1,2-Dibromo-3-chloropropane	108	U	Toluene	108	108
1,2-Dibromoethane	81	U	1,2,3-Trichlorobenzene	108	U
Dibromomethane	108	U	1,2,4-Trichlorobenzene	108	U
1,2-Dichlorobenzene	108	U	1,1,1-Trichloroethane	108	U
1,3-Dichlorobenzene	108	U	1,1,2-Trichloroethane	81	U
1,4-Dichlorobenzene	108	U	Trichloroethene	108	U
Dichlorodifluoromethane	108	U	Trichlorofluoromethane	108	U
1,1-Dichloroethane	108	U	1,2,3-Trichloropropane	108	U
1,2-Dichloroethane	81	U	1,2,4-Trimethylbenzene	108	956
1,1-Dichloroethene	81	U	1,3,5-Trimethylbenzene	108	497
cis-1,2-Dichloroethene	108	U	Vinyl Chloride	108	U
trans-1,2-Dichloroethene	108	U	o-Xylene	108	222
1,2-Dichloropropane	81	U	m,p-Xylene	108	440
Acetone	1080	U	Diethyl ether	108	U
Carbon Disulfide	108	U	2-Hexanone	1080	U
Tetrahydrofuran	540	U	Methyl isobutyl ketone	1080	U
Methyl ethyl ketone	1080	U	Di-isopropyl ether (DIPE)	108	U
t-Butyl alcohol (TBA)	2160	U	Ethyl t-butyl ether (ETBE)	108	U
t-Amyl methyl ether (TAME)	108	U	1,3,5-Trichlorobenzene	108	U
			1,4-Dioxane	3240	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	84 %		d8-Toluene	87 %	
			Bromofluorobenzene		90 %
U=Undetected		J=Estimated	E=Exceeds Calibration Range		B=Detected in Blank

METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS: Results are expressed on a dry weight basis.

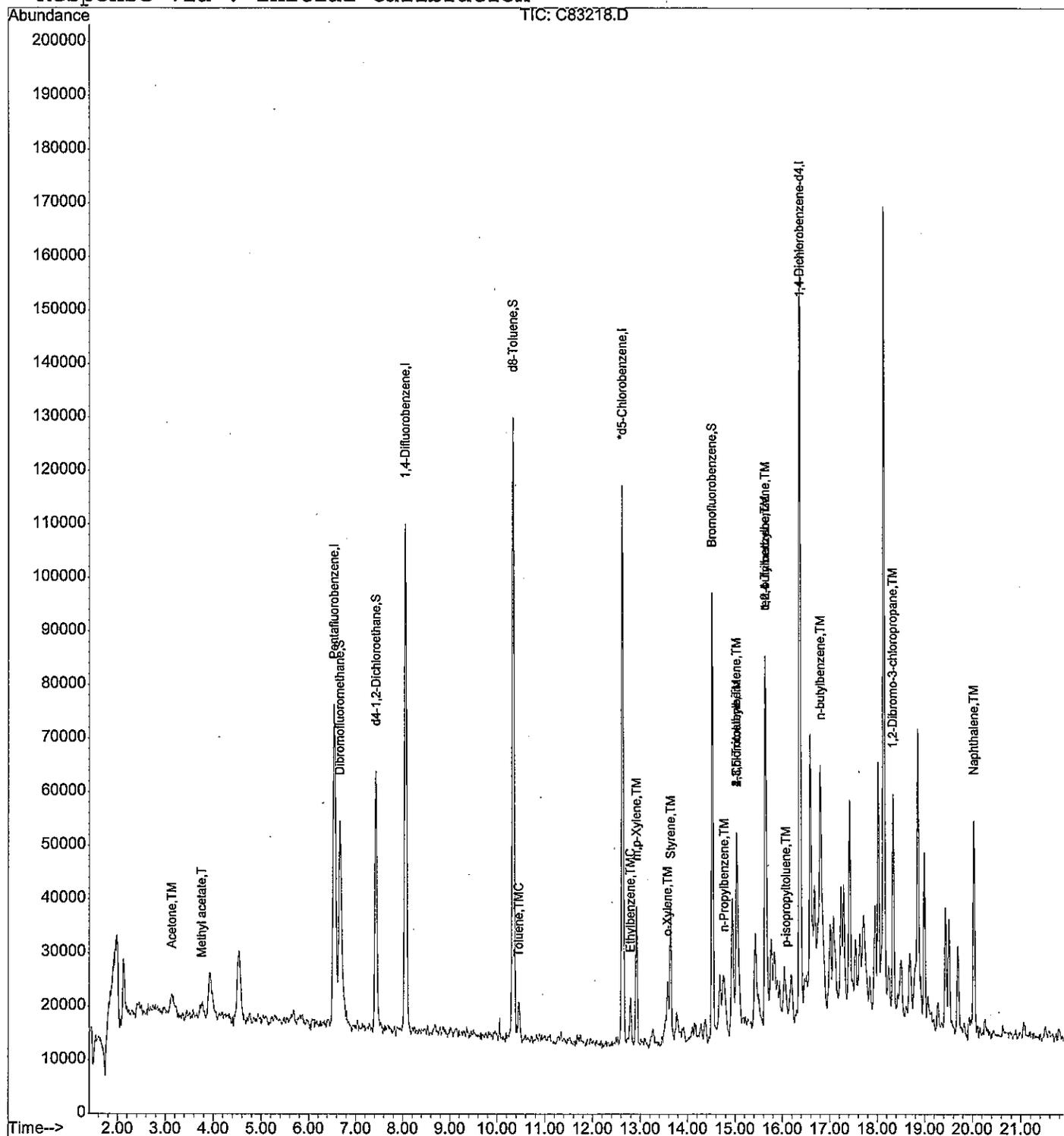
Authorized signature



Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\080912-C\C83218.D Vial: 10
Acq On : 9 Aug 2012 12:32 pm Operator: MT
Sample : 73487-8 Inst : Instr_C
Misc : 50,9.62,SOIL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Aug 9 13:05 2012 Quant Results File: V808072C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V808072C.M (RTE Integrat
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 14:18:16 2012
Response via : Initial Calibration



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 9, 2012
SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS109

Lab Sample ID: 73487-9
Matrix: Solid
Percent Solid: 97
Dilution Factor: 95
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit µg/kg	Result µg/kg	COMPOUND	Quantitation Limit µg/kg	Result µg/kg
Benzene	95	U	1,3-Dichloropropane	95	U
Bromobenzene	95	U	cis-1,3-Dichloropropene	95	U
Bromochloromethane	95	U	trans-1,3-Dichloropropene	95	U
Bromodichloromethane	71	U	2,2-Dichloropropane	95	U
Bromoform	71	U	1,1-Dichloropropene	95	U
Bromomethane	95	U	Ethylbenzene	95	59 J
n-butylbenzene	95	U	Hexachlorobutadiene	95	U
sec-butylbenzene	95	U	Isopropylbenzene	95	U
tert-butylbenzene	95	U	p-isopropyltoluene	95	U
Carbon Tetrachloride	95	U	Methylene Chloride	473	U
Chlorobenzene	95	U	Methyl-tert-butyl ether (MTBE)	71	U
Chloroethane	95	U	Naphthalene	95	613
Chloroform	71	U	n-Propylbenzene	95	U
Chloromethane	95	U	Styrene	95	117
2-Chlorotoluene	95	U	1,1,1,2-Tetrachloroethane	95	U
4-Chlorotoluene	95	U	1,1,2,2-Tetrachloroethane	71	U
Dibromochloromethane	71	U	Tetrachloroethene	95	U
1,2-Dibromo-3-chloropropane	95	U	Toluene	95	118
1,2-Dibromoethane	71	U	1,2,3-Trichlorobenzene	95	U
Dibromomethane	95	U	1,2,4-Trichlorobenzene	95	U
1,2-Dichlorobenzene	95	U	1,1,1-Trichloroethane	95	U
1,3-Dichlorobenzene	95	U	1,1,2-Trichloroethane	71	U
1,4-Dichlorobenzene	95	U	Trichloroethene	95	U
Dichlorodifluoromethane	95	U	Trichlorofluoromethane	95	U
1,1-Dichloroethane	95	U	1,2,3-Trichloropropane	95	U
1,2-Dichloroethane	71	U	1,2,4-Trimethylbenzene	95	163
1,1-Dichloroethene	71	U	1,3,5-Trimethylbenzene	95	109
cis-1,2-Dichloroethene	95	U	Vinyl Chloride	95	U
trans-1,2-Dichloroethene	95	U	o-Xylene	95	60 J
1,2-Dichloropropane	71	U	m,p-Xylene	95	195
Acetone	946	U	Diethyl ether	95	U
Carbon Disulfide	95	U	2-Hexanone	946	U
Tetrahydrofuran	473	U	Methyl isobutyl ketone	946	U
Methyl ethyl ketone	946	U	Di-isopropyl ether (DIPE)	95	U
t-Butyl alcohol (TBA)	1890	U	Ethyl t-butyl ether (ETBE)	95	U
t-Amyl methyl ether (TAME)	95	U	1,3,5-Trichlorobenzene	95	U
			1,4-Dioxane	2840	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	88 %	d8-Toluene	94 %	Bromofluorobenzene	90 %
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS: Results are expressed on a dry weight basis.

Authorized signature

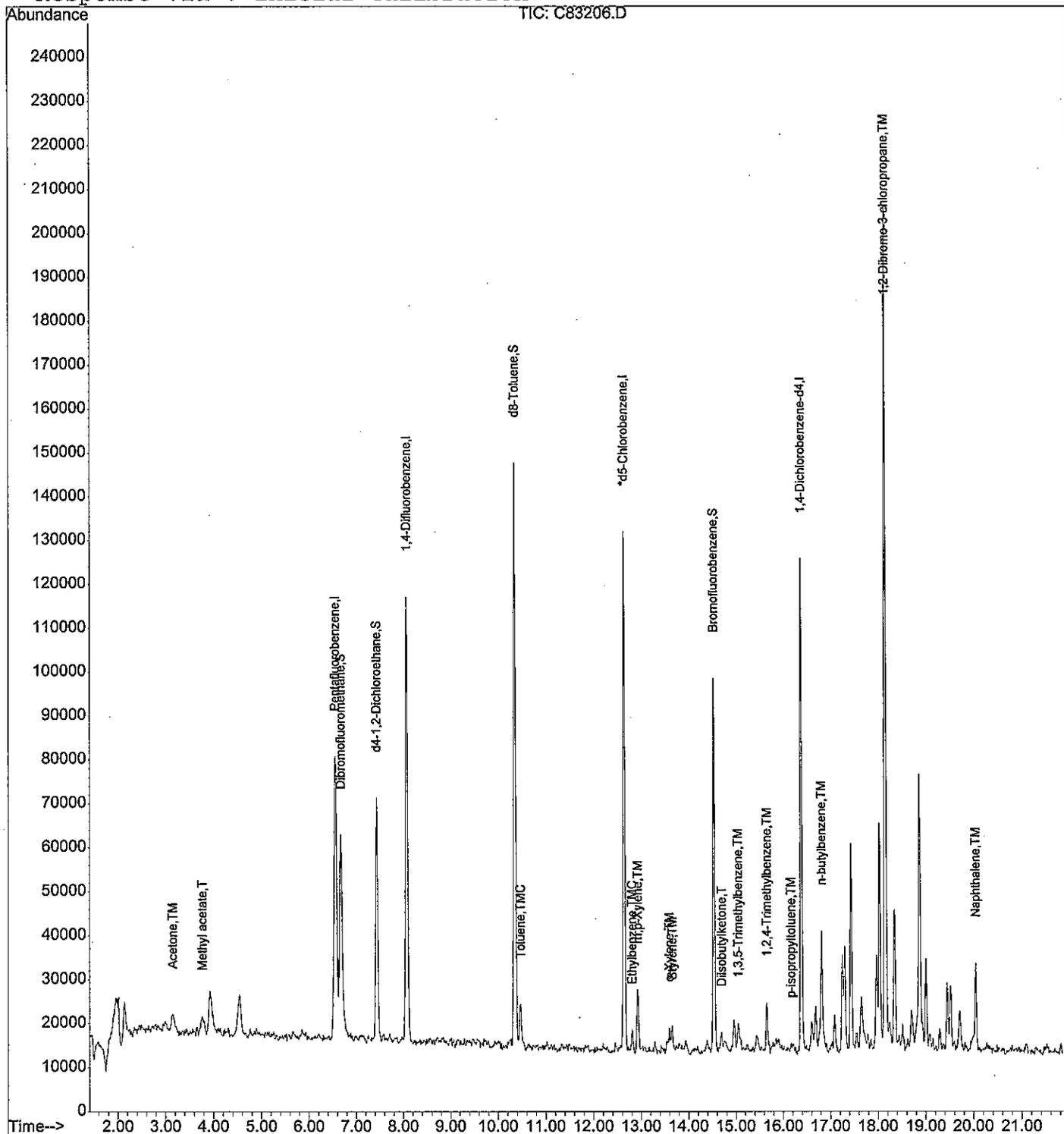
Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\080812-C\C83206.D
Acq On : 8 Aug 2012 8:34 pm
Sample : 73487-9
Misc : 50,10.93,SOIL
MS Integration Params: rteint.p
Quant Time: Aug 9 7:12 2012

Vial: 6
Operator: MT
Inst : Instr_C
Multiplr: 1.00

Quant Results File: V808072C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V808072C.M (RTE Integrat
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 14:18:16 2012
Response via : Initial Calibration



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 9, 2012
SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS110

Lab Sample ID: 73487-10
Matrix: Solid
Percent Solid: 92
Dilution Factor: 108
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/09/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$	COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$
Benzene	108	U	1,3-Dichloropropane	108	U
Bromobenzene	108	U	cis-1,3-Dichloropropene	108	U
Bromochloromethane	108	U	trans-1,3-Dichloropropene	108	U
Bromodichloromethane	81	U	2,2-Dichloropropane	108	U
Bromoform	81	U	1,1-Dichloropropene	108	U
Bromomethane	108	U	Ethylbenzene	108	U
n-butylbenzene	108	U	Hexachlorobutadiene	108	U
sec-butylbenzene	108	U	Isopropylbenzene	108	U
tert-butylbenzene	108	U	p-isopropyltoluene	108	77 J
Carbon Tetrachloride	108	U	Methylene Chloride	538	U
Chlorobenzene	108	U	Methyl-tert-butyl ether (MTBE)	81	U
Chloroethane	108	U	Naphthalene	108	281
Chloroform	81	U	n-Propylbenzene	108	U
Chloromethane	108	U	Styrene	108	U
2-Chlorotoluene	108	U	1,1,1,2-Tetrachloroethane	108	U
4-Chlorotoluene	108	U	1,1,2,2-Tetrachloroethane	81	U
Dibromochloromethane	81	U	Tetrachloroethene	108	U
1,2-Dibromo-3-chloropropane	108	U	Toluene	108	U
1,2-Dibromoethane	81	U	1,2,3-Trichlorobenzene	108	U
Dibromomethane	108	U	1,2,4-Trichlorobenzene	108	U
1,2-Dichlorobenzene	108	U	1,1,1-Trichloroethane	108	U
1,3-Dichlorobenzene	108	U	1,1,2-Trichloroethane	81	U
1,4-Dichlorobenzene	108	U	Trichloroethene	108	U
Dichlorodifluoromethane	108	U	Trichlorofluoromethane	108	U
1,1-Dichloroethane	108	U	1,2,3-Trichloropropane	108	U
1,2-Dichloroethane	81	U	1,2,4-Trimethylbenzene	108	269
1,1-Dichloroethene	81	U	1,3,5-Trimethylbenzene	108	236
cis-1,2-Dichloroethene	108	U	Vinyl Chloride	108	U
trans-1,2-Dichloroethene	108	U	o-Xylene	108	93 J
1,2-Dichloropropane	81	U	m,p-Xylene	108	89 J
Acetone	1080	1680	Diethyl ether	108	U
Carbon Disulfide	108	U	2-Hexanone	1080	U
Tetrahydrofuran	538	U	Methyl isobutyl ketone	1080	U
Methyl ethyl ketone	1080	U	Di-isopropyl ether (DIPE)	108	U
t-Butyl alcohol (TBA)	2150	U	Ethyl t-butyl ether (ETBE)	108	U
t-Amyl methyl ether (TAME)	108	U	1,3,5-Trichlorobenzene	108	U
			1,4-Dioxane	3230	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	81 %		d8-Toluene	84 %	
			Bromofluorobenzene		82 %
U=Undetected		J=Estimated	E=Exceeds Calibration Range		B=Detected in Blank

METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS: Results are expressed on a dry weight basis.

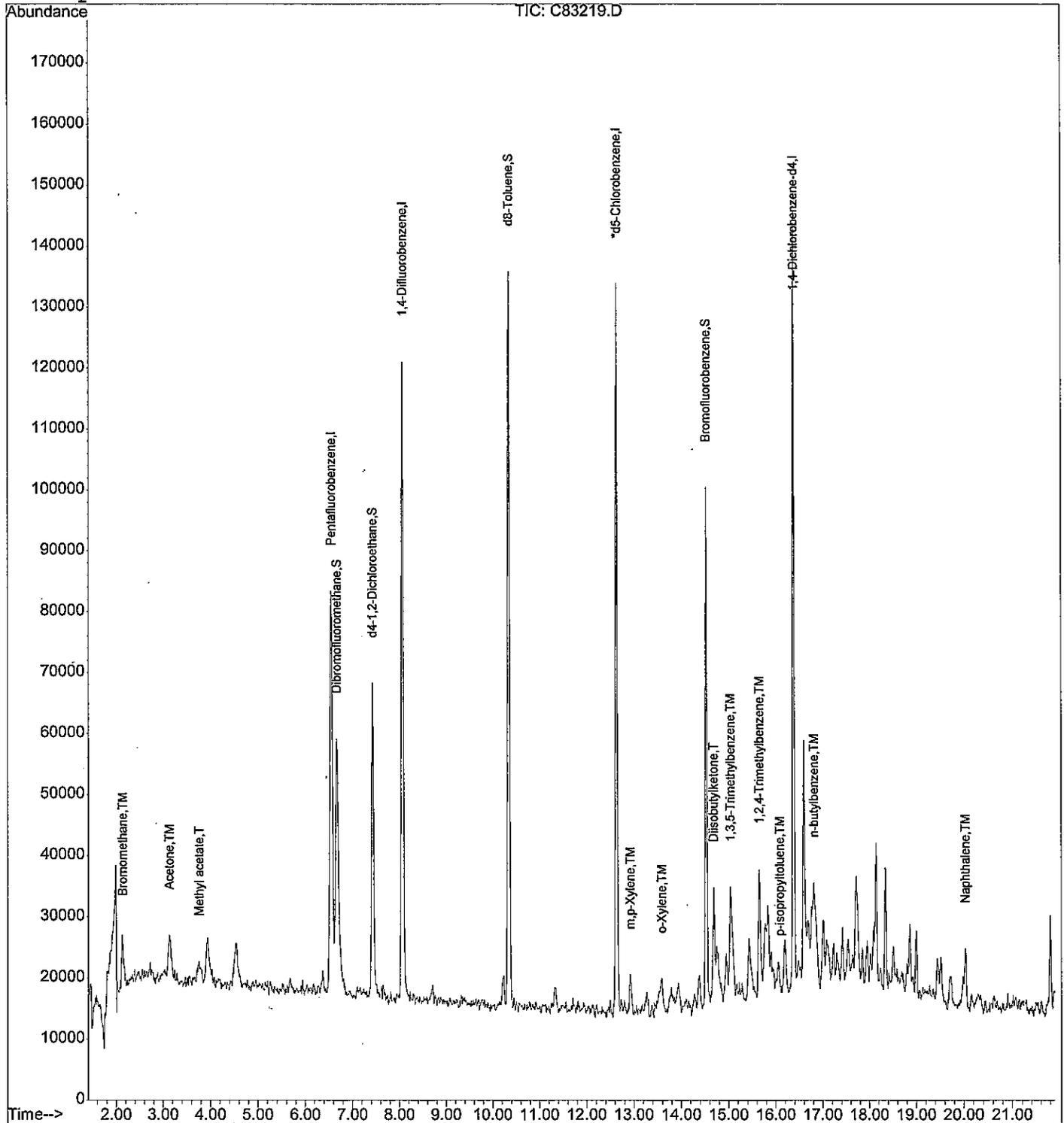
Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\080912-C\C83219.D
Acq On : 9 Aug 2012 1:12 pm
Sample : 73487-10
Misc : 50,14.16,SOIL,,14ML F.V.
MS Integration Params: rteint.p
Quant Time: Aug 9 13:14 2012

Vial: 11
Operator: MT
Inst : Instr_C
Multiplr: 1.00

Quant Results File: V808072C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V808072C.M (RTE Integrat
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 14:18:16 2012
Response via : Initial Calibration



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 9, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS112

Lab Sample ID: 73487-12
Matrix: Solid
Percent Solid: 97
Dilution Factor: 106
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$	COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$
Benzene	106	U	1,3-Dichloropropane	106	U
Bromobenzene	106	U	cis-1,3-Dichloropropene	106	U
Bromochloromethane	106	U	trans-1,3-Dichloropropene	106	U
Bromodichloromethane	79	U	2,2-Dichloropropane	106	U
Bromoform	79	U	1,1-Dichloropropene	106	U
Bromomethane	106	U	Ethylbenzene	106	U
n-butylbenzene	106	U	Hexachlorobutadiene	106	U
sec-butylbenzene	106	U	Isopropylbenzene	106	U
tert-butylbenzene	106	U	p-isopropyltoluene	106	U
Carbon Tetrachloride	106	U	Methylene Chloride	528	U
Chlorobenzene	106	U	Methyl-tert-butyl ether (MTBE)	79	U
Chloroethane	106	U	Naphthalene	106	U
Chloroform	79	U	n-Propylbenzene	106	U
Chloromethane	106	U	Styrene	106	U
2-Chlorotoluene	106	U	1,1,1,2-Tetrachloroethane	106	U
4-Chlorotoluene	106	U	1,1,2,2-Tetrachloroethane	79	U
Dibromochloromethane	79	U	Tetrachloroethene	106	U
1,2-Dibromo-3-chloropropane	106	U	Toluene	106	U
1,2-Dibromoethane	79	U	1,2,3-Trichlorobenzene	106	U
Dibromomethane	106	U	1,2,4-Trichlorobenzene	106	U
1,2-Dichlorobenzene	106	U	1,1,1-Trichloroethane	106	U
1,3-Dichlorobenzene	106	U	1,1,2-Trichloroethane	79	U
1,4-Dichlorobenzene	106	U	Trichloroethene	106	U
Dichlorodifluoromethane	106	U	Trichlorofluoromethane	106	U
1,1-Dichloroethane	106	U	1,2,3-Trichloropropane	106	U
1,2-Dichloroethane	79	U	1,2,4-Trimethylbenzene	106	U
1,1-Dichloroethene	79	U	1,3,5-Trimethylbenzene	106	U
cis-1,2-Dichloroethene	106	U	Vinyl Chloride	106	U
trans-1,2-Dichloroethene	106	U	o-Xylene	106	U
1,2-Dichloropropane	79	U	m,p-Xylene	106	U
Acetone	1060	U	Diethyl ether	106	U
Carbon Disulfide	106	U	2-Hexanone	1060	U
Tetrahydrofuran	528	U	Methyl isobutyl ketone	1060	U
Methyl ethyl ketone	1060	U	Di-isopropyl ether (DIPE)	106	U
t-Butyl alcohol (TBA)	2110	U	Ethyl t-butyl ether (ETBE)	106	U
t-Amyl methyl ether (TAME)	106	U	1,3,5-Trichlorobenzene	106	U
			1,4-Dioxane	3170	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	79 %	d8-Toluene	88 %	Bromofluorobenzene	86 %
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS: Results are expressed on a dry weight basis.

Authorized signature



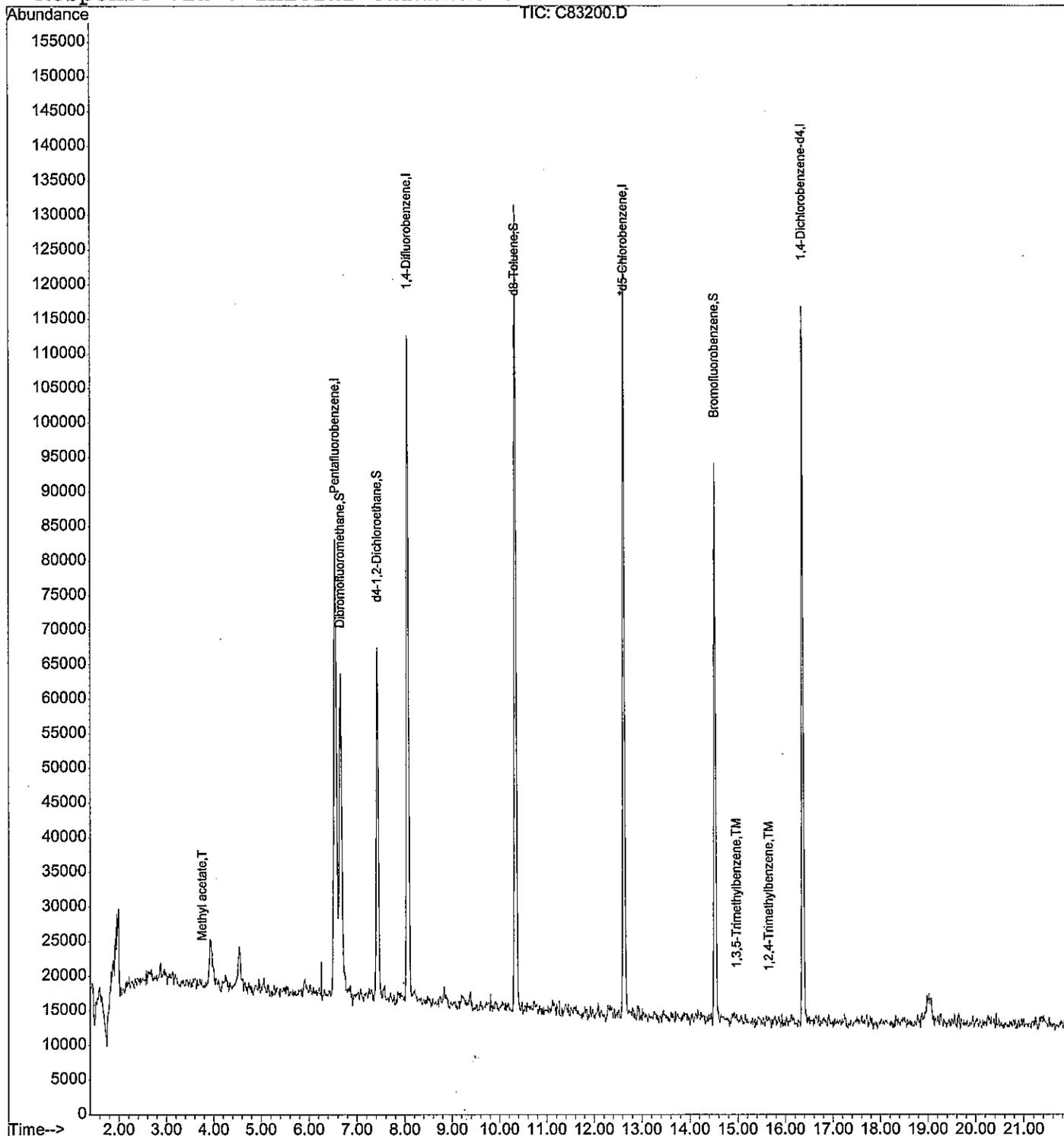
Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\080812-C\C83200.D
Acq On : 8 Aug 2012 5:31 pm
Sample : 73487-12
Misc : 50,9.80,SOIL
MS Integration Params: rteint.p
Quant Time: Aug 9 7:12 2012

Vial: 16
Operator: MT
Inst : Instr_C
Multiplr: 1.00

Quant Results File: V808072C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V808072C.M (RTE Integrat
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 14:18:16 2012
Response via : Initial Calibration



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 9, 2012
SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS114

Lab Sample ID: 73487-14
Matrix: Solid
Percent Solid: 97
Dilution Factor: 99
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$	COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$
Benzene	99	U	1,3-Dichloropropane	99	U
Bromobenzene	99	U	cis-1,3-Dichloropropene	99	U
Bromochloromethane	99	U	trans-1,3-Dichloropropene	99	U
Bromodichloromethane	74	U	2,2-Dichloropropane	99	U
Bromoform	74	U	1,1-Dichloropropene	99	U
Bromomethane	99	U	Ethylbenzene	99	U
n-butylbenzene	99	U	Hexachlorobutadiene	99	U
sec-butylbenzene	99	U	Isopropylbenzene	99	U
tert-butylbenzene	99	U	p-isopropyltoluene	99	U
Carbon Tetrachloride	99	U	Methylene Chloride	496	U
Chlorobenzene	99	U	Methyl-tert-butyl ether (MTBE)	74	U
Chloroethane	99	U	Naphthalene	99	U
Chloroform	74	U	n-Propylbenzene	99	U
Chloromethane	99	U	Styrene	99	U
2-Chlorotoluene	99	U	1,1,1,2-Tetrachloroethane	99	U
4-Chlorotoluene	99	U	1,1,2,2-Tetrachloroethane	74	U
Dibromochloromethane	74	U	Tetrachloroethene	99	U
1,2-Dibromo-3-chloropropane	99	U	Toluene	99	U
1,2-Dibromoethane	74	U	1,2,3-Trichlorobenzene	99	U
Dibromomethane	99	U	1,2,4-Trichlorobenzene	99	U
1,2-Dichlorobenzene	99	U	1,1,1-Trichloroethane	99	U
1,3-Dichlorobenzene	99	U	1,1,2-Trichloroethane	74	U
1,4-Dichlorobenzene	99	U	Trichloroethene	99	U
Dichlorodifluoromethane	99	U	Trichlorofluoromethane	99	U
1,1-Dichloroethane	99	U	1,2,3-Trichloropropane	99	U
1,2-Dichloroethane	74	U	1,2,4-Trimethylbenzene	99	U
1,1-Dichloroethene	74	U	1,3,5-Trimethylbenzene	99	U
cis-1,2-Dichloroethene	99	U	Vinyl Chloride	99	U
trans-1,2-Dichloroethene	99	U	o-Xylene	99	U
1,2-Dichloropropane	74	U	m,p-Xylene	99	U
Acetone	992	U	Diethyl ether	99	U
Carbon Disulfide	99	U	2-Hexanone	992	U
Tetrahydrofuran	496	U	Methyl isobutyl ketone	992	U
Methyl ethyl ketone	992	U	Di-isopropyl ether (DIPE)	99	U
t-Butyl alcohol (TBA)	1980	U	Ethyl t-butyl ether (ETBE)	99	U
t-Amyl methyl ether (TAME)	99	U	1,3,5-Trichlorobenzene	99	U
			1,4-Dioxane	2980	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	85 %		d8-Toluene	88 %	
			Bromofluorobenzene	84 %	
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS: Results are expressed on a dry weight basis.

Authorized signature



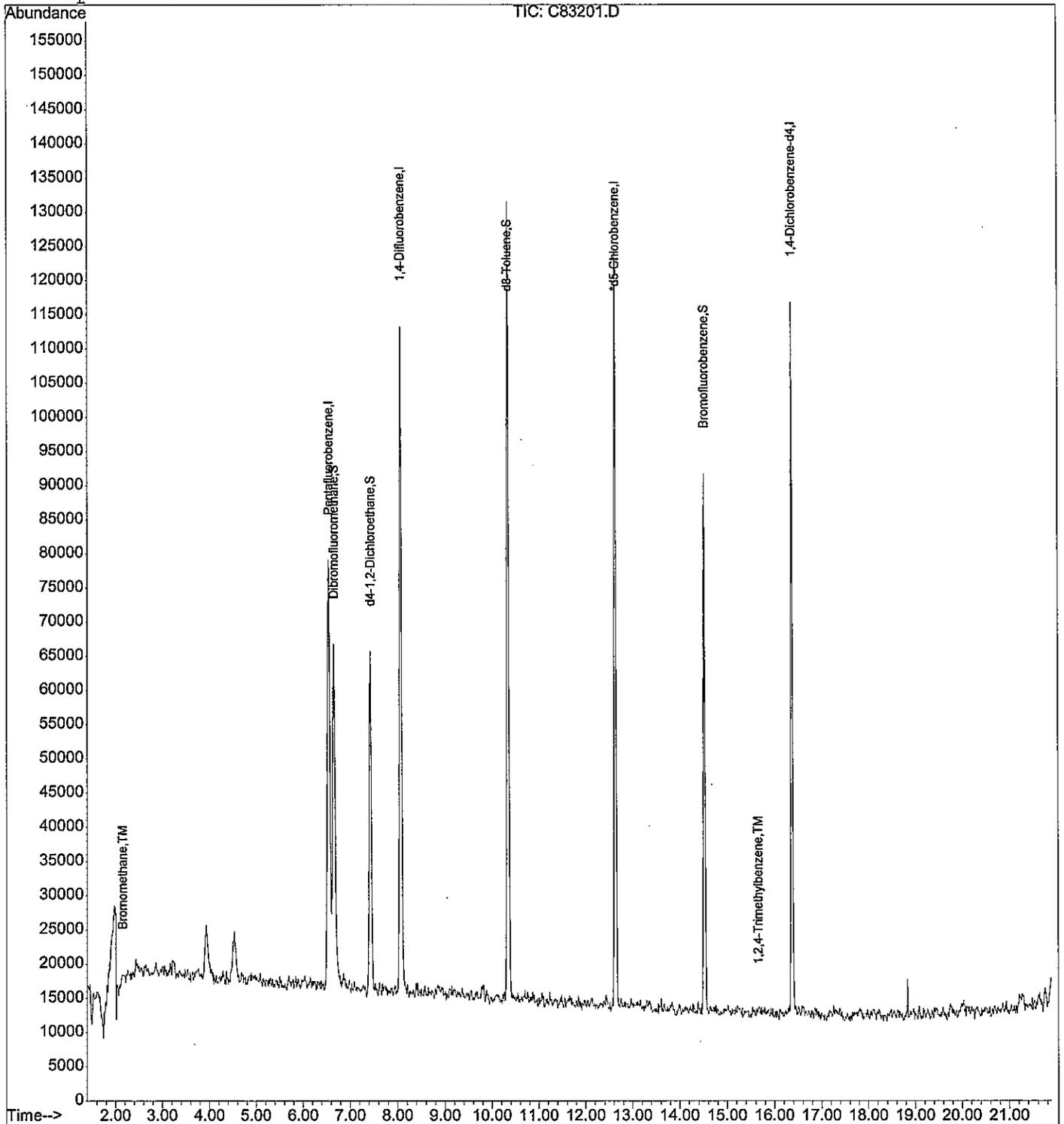
Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\080812-C\C83201.D
Acq On : 8 Aug 2012 6:05 pm
Sample : 73487-14
Misc : 50,10.40,SOIL
MS Integration Params: rteint.p
Quant Time: Aug 9 7:12 2012

Vial: 1
Operator: MT
Inst : Instr_C
Multiplr: 1.00

Quant Results File: V808072C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V808072C.M (RTE Integrat
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 14:18:16 2012
Response via : Initial Calibration



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 9, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS115

Lab Sample ID: 73487-15
Matrix: Solid
Percent Solid: 81
Dilution Factor: 149
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$	COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$
Benzene	149	109 J	1,3-Dichloropropane	149	U
Bromobenzene	149	U	cis-1,3-Dichloropropene	149	U
Bromochloromethane	149	U	trans-1,3-Dichloropropene	149	U
Bromodichloromethane	111	U	2,2-Dichloropropane	149	U
Bromoform	111	U	1,1-Dichloropropene	149	U
Bromomethane	149	U	Ethylbenzene	149	U
n-butylbenzene	149	U	Hexachlorobutadiene	149	U
sec-butylbenzene	149	U	Isopropylbenzene	149	U
tert-butylbenzene	149	U	p-isopropyltoluene	149	U
Carbon Tetrachloride	149	U	Methylene Chloride	743	U
Chlorobenzene	149	U	Methyl-tert-butyl ether (MTBE)	111	U
Chloroethane	149	U	Naphthalene	149	U
Chloroform	111	U	n-Propylbenzene	149	U
Chloromethane	149	U	Styrene	149	U
2-Chlorotoluene	149	U	1,1,1,2-Tetrachloroethane	149	U
4-Chlorotoluene	149	U	1,1,2,2-Tetrachloroethane	111	U
Dibromochloromethane	111	U	Tetrachloroethene	149	U
1,2-Dibromo-3-chloropropane	149	U	Toluene	149	U
1,2-Dibromoethane	111	U	1,2,3-Trichlorobenzene	149	U
Dibromomethane	149	U	1,2,4-Trichlorobenzene	149	U
1,2-Dichlorobenzene	149	U	1,1,1-Trichloroethane	149	U
1,3-Dichlorobenzene	149	U	1,1,2-Trichloroethane	111	U
1,4-Dichlorobenzene	149	U	Trichloroethene	149	U
Dichlorodifluoromethane	149	U	Trichlorofluoromethane	149	U
1,1-Dichloroethane	149	U	1,2,3-Trichloropropane	149	U
1,2-Dichloroethane	111	U	1,2,4-Trimethylbenzene	149	U
1,1-Dichloroethene	111	U	1,3,5-Trimethylbenzene	149	U
cis-1,2-Dichloroethene	149	U	Vinyl Chloride	149	U
trans-1,2-Dichloroethene	149	U	o-Xylene	149	U
1,2-Dichloropropane	111	U	m,p-Xylene	149	U
Acetone	1490	U	Diethyl ether	149	U
Carbon Disulfide	149	U	2-Hexanone	1490	U
Tetrahydrofuran	743	U	Methyl isobutyl ketone	1490	U
Methyl ethyl ketone	1490	U	Di-isopropyl ether (DIPE)	149	U
t-Butyl alcohol (TBA)	2970	U	Ethyl t-butyl ether (ETBE)	149	U
t-Amyl methyl ether (TAME)	149	U	1,3,5-Trichlorobenzene	149	U
			1,4-Dioxane	4460	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	64 * %	d8-Toluene	35 * %	Bromofluorobenzene	20 * %
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS: Results are expressed on a dry weight basis.

*Surrogate recovery outside of laboratory acceptance criteria. Sample was reanalyzed to confirm results.



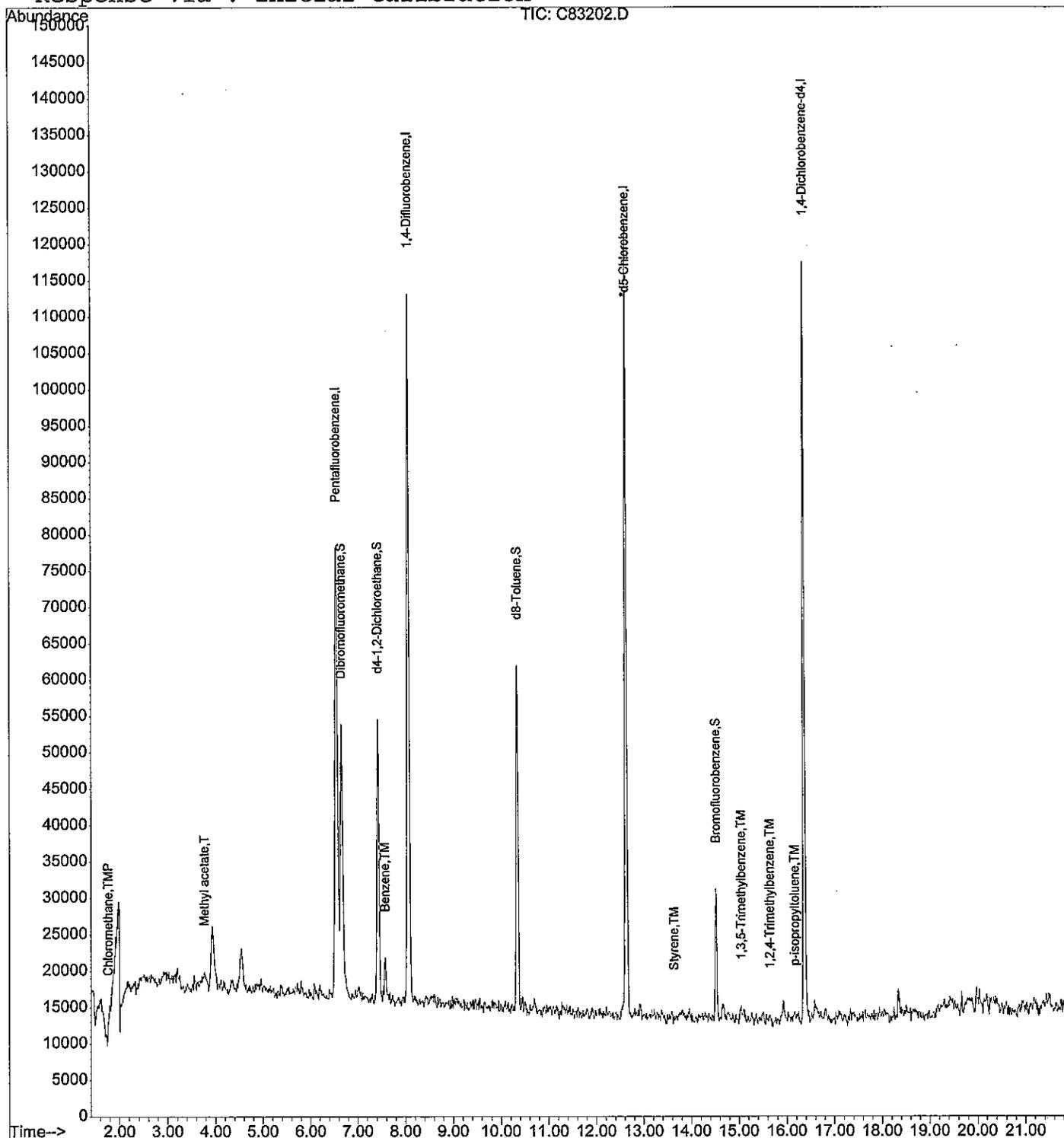
Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\080812-C\C83202.D
Acq On : 8 Aug 2012 6:39 pm
Sample : 73487-15
Misc : 50,8.31,SOIL
MS Integration Params: rteint.p
Quant Time: Aug 9 7:12 2012

Vial: 2
Operator: MT
Inst : Instr_C
Multiplr: 1.00

Quant Results File: V808072C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V808072C.M (RTE Integrat
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 14:18:16 2012
Response via : Initial Calibration



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 9, 2012
SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS10X

Lab Sample ID: 73487-16
Matrix: Solid
Percent Solid: 97
Dilution Factor: 113
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$	COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$
Benzene	113	U	1,3-Dichloropropane	113	U
Bromobenzene	113	U	cis-1,3-Dichloropropene	113	U
Bromochloromethane	113	U	trans-1,3-Dichloropropene	113	U
Bromodichloromethane	84	U	2,2-Dichloropropane	113	U
Bromoform	84	U	1,1-Dichloropropene	113	U
Bromomethane	113	U	Ethylbenzene	113	U
n-butylbenzene	113	U	Hexachlorobutadiene	113	U
sec-butylbenzene	113	U	Isopropylbenzene	113	U
tert-butylbenzene	113	U	p-isopropyltoluene	113	U
Carbon Tetrachloride	113	U	Methylene Chloride	563	U
Chlorobenzene	113	U	Methyl-tert-butyl ether (MTBE)	84	U
Chloroethane	113	U	Naphthalene	113	U
Chloroform	84	U	n-Propylbenzene	113	U
Chloromethane	113	U	Styrene	113	U
2-Chlorotoluene	113	U	1,1,1,2-Tetrachloroethane	113	U
4-Chlorotoluene	113	U	1,1,2,2-Tetrachloroethane	84	U
Dibromochloromethane	84	U	Tetrachloroethene	113	U
1,2-Dibromo-3-chloropropane	113	U	Toluene	113	U
1,2-Dibromoethane	84	U	1,2,3-Trichlorobenzene	113	U
Dibromomethane	113	U	1,2,4-Trichlorobenzene	113	U
1,2-Dichlorobenzene	113	U	1,1,1-Trichloroethane	113	U
1,3-Dichlorobenzene	113	U	1,1,2-Trichloroethane	84	U
1,4-Dichlorobenzene	113	U	Trichloroethene	113	U
Dichlorodifluoromethane	113	U	Trichlorofluoromethane	113	U
1,1-Dichloroethane	113	U	1,2,3-Trichloropropane	113	U
1,2-Dichloroethane	84	U	1,2,4-Trimethylbenzene	113	U
1,1-Dichloroethene	84	U	1,3,5-Trimethylbenzene	113	U
cis-1,2-Dichloroethene	113	U	Vinyl Chloride	113	U
trans-1,2-Dichloroethene	113	U	o-Xylene	113	U
1,2-Dichloropropane	84	U	m,p-Xylene	113	U
Acetone	1130	U	Diethyl ether	113	U
Carbon Disulfide	113	U	2-Hexanone	1130	U
Tetrahydrofuran	563	U	Methyl isobutyl ketone	1130	U
Methyl ethyl ketone	1130	U	Di-isopropyl ether (DIPE)	113	U
t-Butyl alcohol (TBA)	2250	U	Ethyl t-butyl ether (ETBE)	113	U
t-Amyl methyl ether (TAME)	113	U	1,3,5-Trichlorobenzene	113	U
			1,4-Dioxane	3380	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	87 %		d8-Toluene	91 %	
			Bromofluorobenzene	87 %	
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

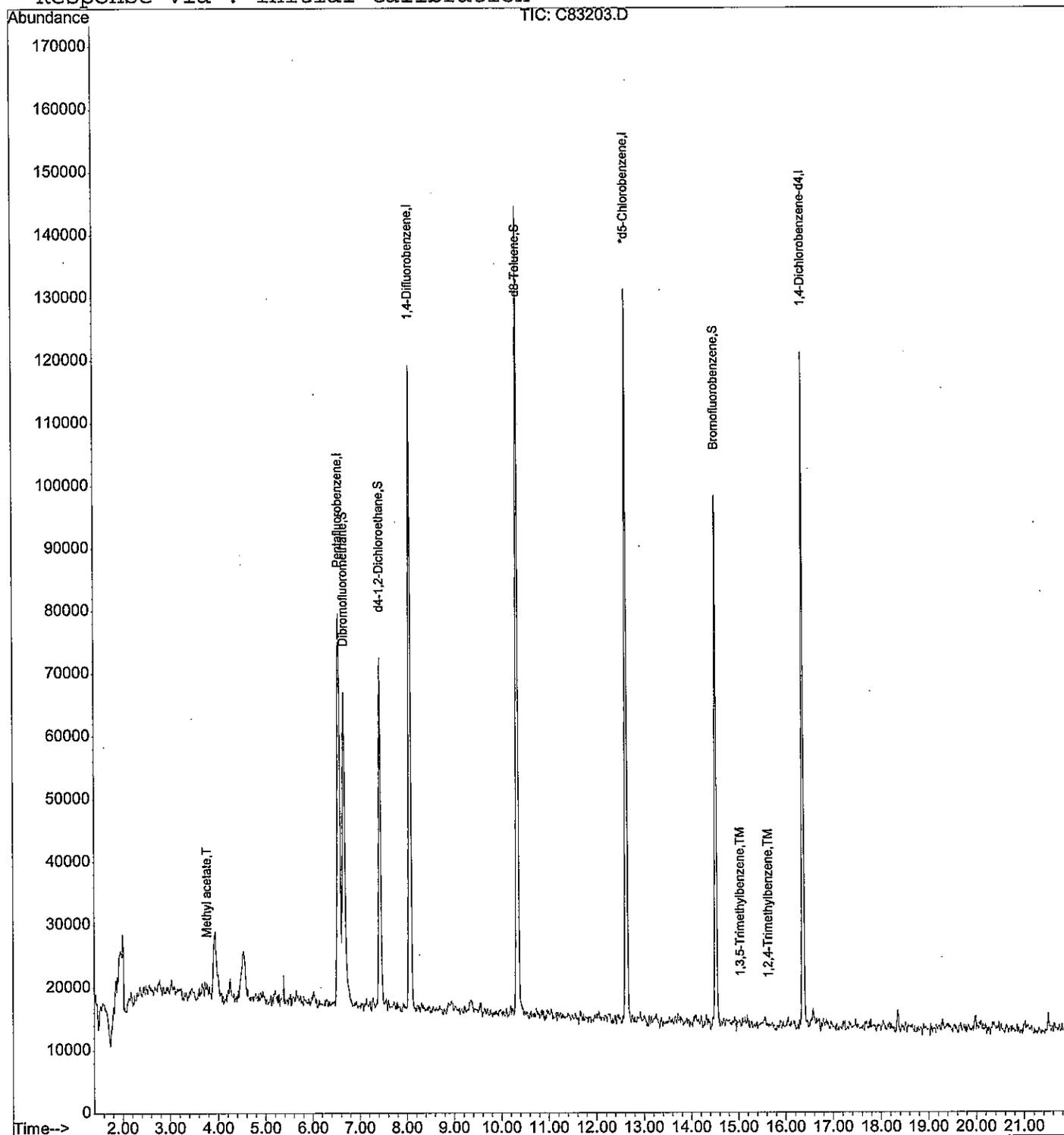
COMMENTS: Results are expressed on a dry weight basis.

Authorized signature

Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\080812-C\C83203.D Vial: 3
Acq On : 8 Aug 2012 7:12 pm Operator: MT
Sample : 73487-16 Inst : Instr_C
Misc : 50,9.13,SOIL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Aug 9 7:12 2012 Quant Results File: V808072C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V808072C.M (RTE Integrat
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 14:18:16 2012
Response via : Initial Calibration



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 9, 2012
SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: Trip Blank

Lab Sample ID: 73487-20
Matrix: Solid
Percent Solid: 100
Dilution Factor: 100
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/09/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$	COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$
Benzene	100	U	1,3-Dichloropropane	100	U
Bromobenzene	100	U	cis-1,3-Dichloropropene	100	U
Bromochloromethane	100	U	trans-1,3-Dichloropropene	100	U
Bromodichloromethane	75	U	2,2-Dichloropropane	100	U
Bromoform	75	U	1,1-Dichloropropene	100	U
Bromomethane	100	U	Ethylbenzene	100	U
n-butylbenzene	100	U	Hexachlorobutadiene	100	U
sec-butylbenzene	100	U	Isopropylbenzene	100	U
tert-butylbenzene	100	U	p-isopropyltoluene	100	U
Carbon Tetrachloride	100	U	Methylene Chloride	500	U
Chlorobenzene	100	U	Methyl-tert-butyl ether (MTBE)	75	U
Chloroethane	100	U	Naphthalene	100	U
Chloroform	75	U	n-Propylbenzene	100	U
Chloromethane	100	U	Styrene	100	U
2-Chlorotoluene	100	U	1,1,1,2-Tetrachloroethane	100	U
4-Chlorotoluene	100	U	1,1,2,2-Tetrachloroethane	75	U
Dibromochloromethane	75	U	Tetrachloroethene	100	U
1,2-Dibromo-3-chloropropane	100	U	Toluene	100	U
1,2-Dibromoethane	75	U	1,2,3-Trichlorobenzene	100	U
Dibromomethane	100	U	1,2,4-Trichlorobenzene	100	U
1,2-Dichlorobenzene	100	U	1,1,1-Trichloroethane	100	U
1,3-Dichlorobenzene	100	U	1,1,2-Trichloroethane	75	U
1,4-Dichlorobenzene	100	U	Trichloroethene	100	U
Dichlorodifluoromethane	100	U	Trichlorofluoromethane	100	U
1,1-Dichloroethane	100	U	1,2,3-Trichloropropane	100	U
1,2-Dichloroethane	75	U	1,2,4-Trimethylbenzene	100	U
1,1-Dichloroethene	75	U	1,3,5-Trimethylbenzene	100	U
cis-1,2-Dichloroethene	100	U	Vinyl Chloride	100	U
trans-1,2-Dichloroethene	100	U	o-Xylene	100	U
1,2-Dichloropropane	75	U	m,p-Xylene	100	U
Acetone	1000	U	Diethyl ether	100	U
Carbon Disulfide	100	U	2-Hexanone	1000	U
Tetrahydrofuran	500	U	Methyl isobutyl ketone	1000	U
Methyl ethyl ketone	1000	U	Di-isopropyl ether (DIPE)	100	U
t-Butyl alcohol (TBA)	2000	U	Ethyl t-butyl ether (ETBE)	100	U
t-Amyl methyl ether (TAME)	100	U	1,3,5-Trichlorobenzene	100	U
			1,4-Dioxane	3000	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	86	%	d8-Toluene	92	%
			Bromofluorobenzene	87	%
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

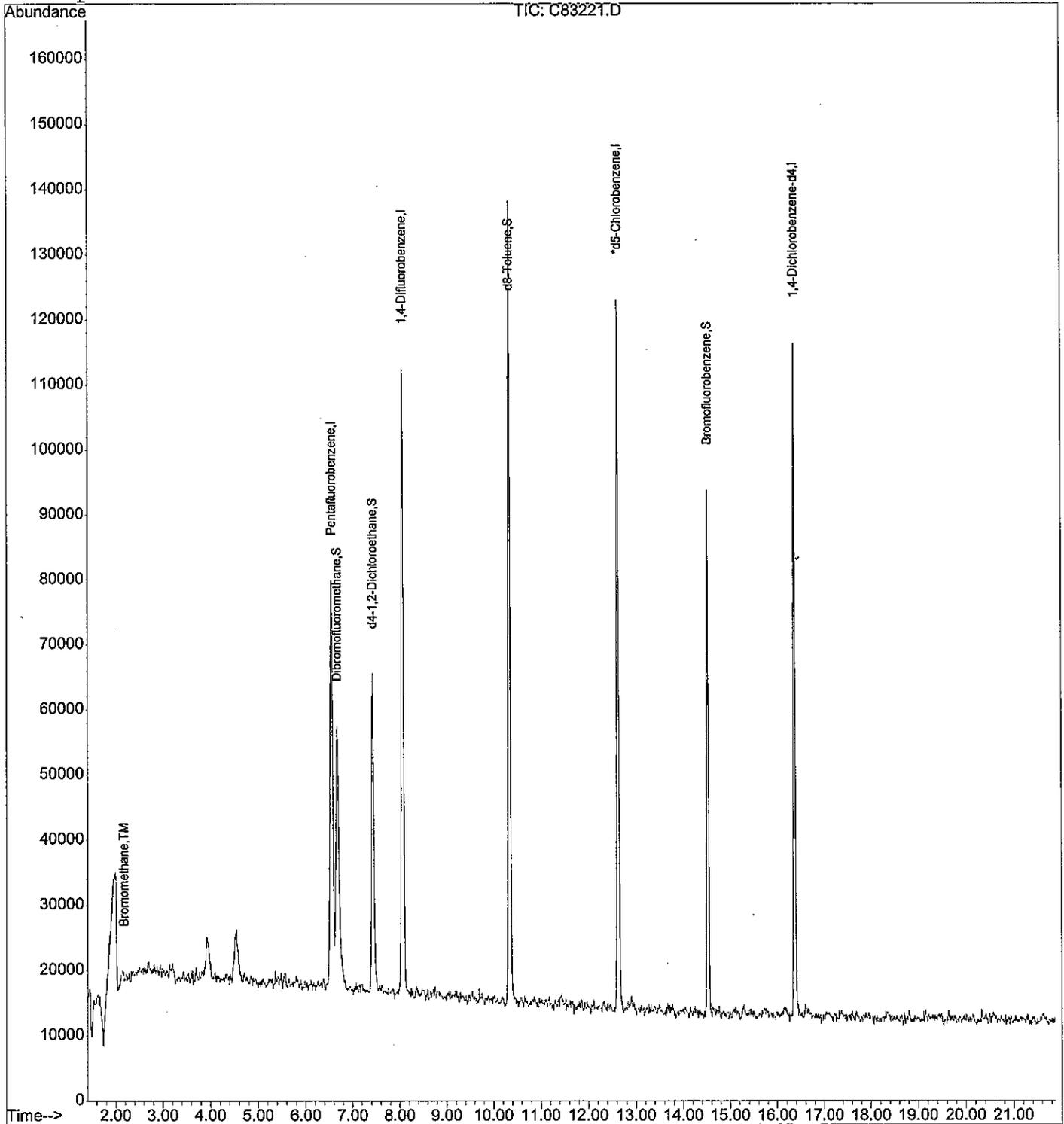
COMMENTS: Results are expressed on a dry weight basis.

Authorized signature

Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\080912-C\C83221.D Vial: 13
Acq On : 9 Aug 2012 2:25 pm Operator: MT
Sample : 73487-20 Inst : Instr_C
Misc : 50,10.00,SOIL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Aug 9 14:25 2012 Quant Results File: V808072C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V808072C.M (RTE Integrat
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 14:18:16 2012
Response via : Initial Calibration



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 8, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: MW101

Lab Sample ID: 73487-21
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/07/12

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	1	U	1,3-Dichloropropane	1	U
Bromobenzene	1	U	cis-1,3-Dichloropropene	1	U
Bromochloromethane	1	U	trans-1,3-Dichloropropene	1	U
Bromodichloromethane	1	U	2,2-Dichloropropane	1	U
Bromoform	1	U	1,1-Dichloropropene	1	U
Bromomethane	2	U	Ethylbenzene	1	U
n-butylbenzene	1	U	Hexachlorobutadiene	1	U
sec-butylbenzene	1	U	Isopropylbenzene	1	U
tert-butylbenzene	1	U	p-isopropyltoluene	1	U
Carbon Tetrachloride	1	U	Methylene Chloride	5	U
Chlorobenzene	1	U	Methyl-tert-butyl ether (MTBE)	1	U
Chloroethane	1	U	Naphthalene	1	U
Chloroform	1	U	n-Propylbenzene	1	U
Chloromethane	1	U	Styrene	1	U
2-Chlorotoluene	1	U	1,1,1,2-Tetrachloroethane	1	U
4-Chlorotoluene	1	U	1,1,2,2-Tetrachloroethane	1	U
Dibromochloromethane	1	U	Tetrachloroethene	1	U
1,2-Dibromo-3-chloropropane	1	U	Toluene	1	U
1,2-Dibromoethane	1	U	1,2,3-Trichlorobenzene	1	U
Dibromomethane	1	U	1,2,4-Trichlorobenzene	1	U
1,2-Dichlorobenzene	1	U	1,1,1-Trichloroethane	1	U
1,3-Dichlorobenzene	1	U	1,1,2-Trichloroethane	1	U
1,4-Dichlorobenzene	1	U	Trichloroethene	1	U
Dichlorodifluoromethane	1	U	Trichlorofluoromethane	1	U
1,1-Dichloroethane	1	U	1,2,3-Trichloropropane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	1	1.0
1,1-Dichloroethene	1	U	1,3,5-Trimethylbenzene	1	U
cis-1,2-Dichloroethene	1	U	Vinyl Chloride	1	U
trans-1,2-Dichloroethene	1	U	o-Xylene	1	U
1,2-Dichloropropane	1	U	m,p-Xylene	1	0.6 J
Acetone	10	12	Diethyl ether	1	U
Carbon Disulfide	1	U	2-Hexanone	10	U
Tetrahydrofuran	2	U	Methyl isobutyl ketone	10	U
Methyl ethyl ketone	10	U	Di-isopropyl ether (DIPE)	1	U
t-Butyl alcohol (TBA)	20	U	Ethyl t-butyl ether (ETBE)	1	U
t-Amyl methyl ether (TAME)	1	U	1,3,5-Trichlorobenzene	1	U
			1,4-Dioxane	30	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	104 %	d8-Toluene	98 %	Bromofluorobenzene	99 %
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS:

Authorized signature

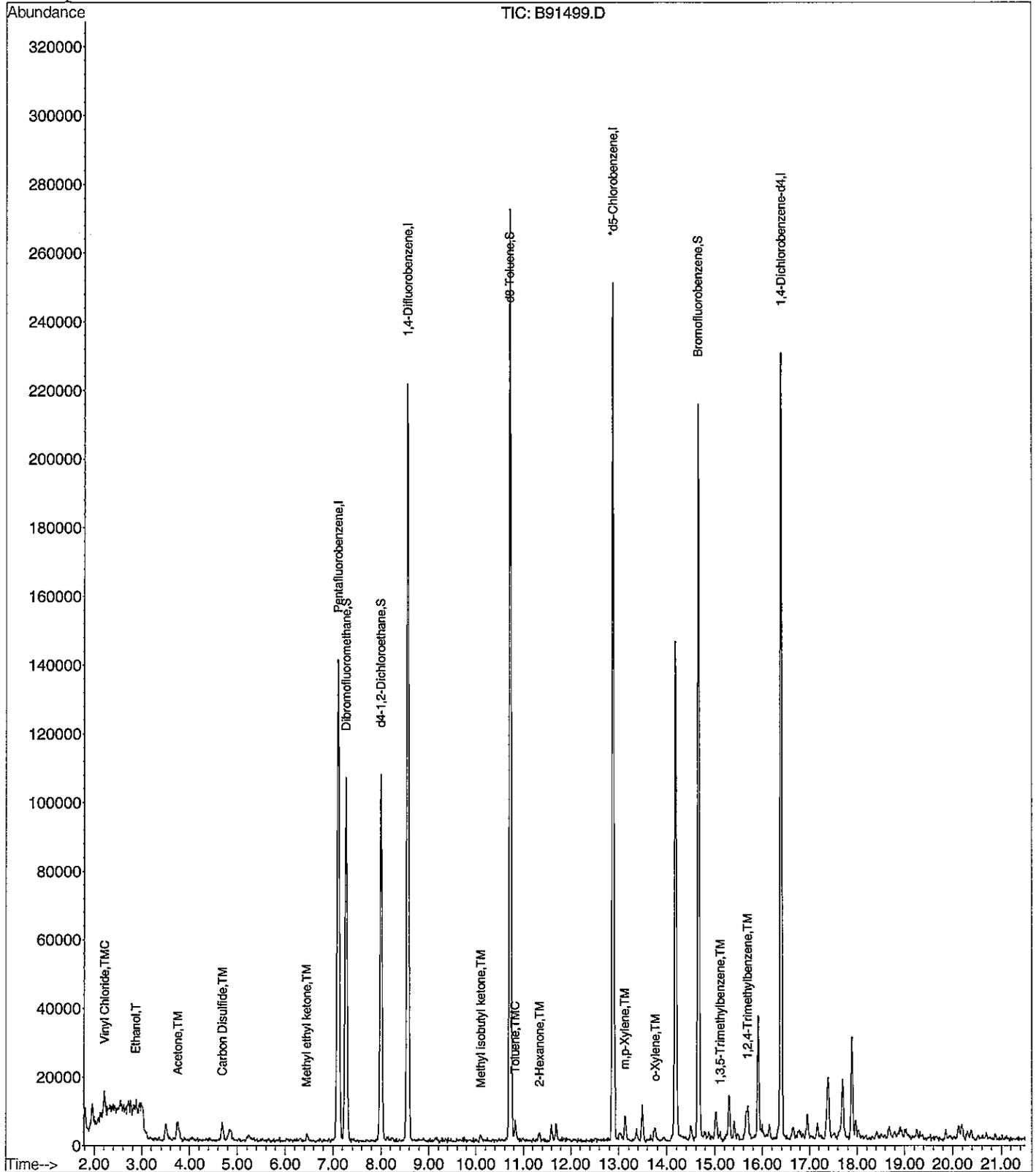


Data File : C:\HPCHEM\1\DATA\080712-B\B91499.D
 Acq On : 7 Aug 2012 8:47 pm
 Sample : 73487-21
 Misc : 5000
 MS Integration Params: rteint.p
 Quant Time: Aug 8 9:25 2012

Vial: 22
 Operator: MT
 Inst : Instrumen
 Multiplr: 1.00

Quant Results File: V808062B.RES

Method : C:\HPCHEM\1\METHODS\V808062B.M (RTE Integrator)
 Title : 8260 Purgable Organics
 Last Update : Wed Aug 08 09:23:43 2012
 Response via : Initial Calibration



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 8, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.

Project Number: 111.06134

Field Sample ID: MWX

Lab Sample ID: 73487-22

Matrix: Aqueous

Percent Solid: N/A

Dilution Factor: 1

Collection Date: 08/02/12

Lab Receipt Date: 08/03/12

Analysis Date: 08/07/12

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	1	U	1,3-Dichloropropane	1	U
Bromobenzene	1	U	cis-1,3-Dichloropropene	1	U
Bromochloromethane	1	U	trans-1,3-Dichloropropene	1	U
Bromodichloromethane	1	U	2,2-Dichloropropane	1	U
Bromoform	1	U	1,1-Dichloropropene	1	U
Bromomethane	2	U	Ethylbenzene	1	U
n-butylbenzene	1	U	Hexachlorobutadiene	1	U
sec-butylbenzene	1	U	Isopropylbenzene	1	U
tert-butylbenzene	1	U	p-isopropyltoluene	1	U
Carbon Tetrachloride	1	U	Methylene Chloride	5	U
Chlorobenzene	1	U	Methyl-tert-butyl ether (MTBE)	1	U
Chloroethane	1	U	Naphthalene	1	U
Chloroform	1	U	n-Propylbenzene	1	U
Chloromethane	1	U	Styrene	1	U
2-Chlorotoluene	1	U	1,1,1,2-Tetrachloroethane	1	U
4-Chlorotoluene	1	U	1,1,2,2-Tetrachloroethane	1	U
Dibromochloromethane	1	U	Tetrachloroethene	1	U
1,2-Dibromo-3-chloropropane	1	U	Toluene	1	U
1,2-Dibromoethane	1	U	1,2,3-Trichlorobenzene	1	U
Dibromomethane	1	U	1,2,4-Trichlorobenzene	1	U
1,2-Dichlorobenzene	1	U	1,1,1-Trichloroethane	1	U
1,3-Dichlorobenzene	1	U	1,1,2-Trichloroethane	1	U
1,4-Dichlorobenzene	1	U	Trichloroethene	1	U
Dichlorodifluoromethane	1	U	Trichlorofluoromethane	1	U
1,1-Dichloroethane	1	U	1,2,3-Trichloropropane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	1	U
1,1-Dichloroethene	1	U	1,3,5-Trimethylbenzene	1	U
cis-1,2-Dichloroethene	1	U	Vinyl Chloride	1	U
trans-1,2-Dichloroethene	1	U	o-Xylene	1	U
1,2-Dichloropropane	1	U	m,p-Xylene	1	U
Acetone	10	8.7 J	Diethyl ether	1	U
Carbon Disulfide	1	U	2-Hexanone	10	U
Tetrahydrofuran	2	U	Methyl isobutyl ketone	10	U
Methyl ethyl ketone	10	U	Di-isopropyl ether (DIPE)	1	U
t-Butyl alcohol (TBA)	20	U	Ethyl t-butyl ether (ETBE)	1	U
t-Amyl methyl ether (TAME)	1	U	1,3,5-Trichlorobenzene	1	U
			1,4-Dioxane	30	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	101 %		d8-Toluene	98 %	
			Bromofluorobenzene	101 %	
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS:

Authorized signature

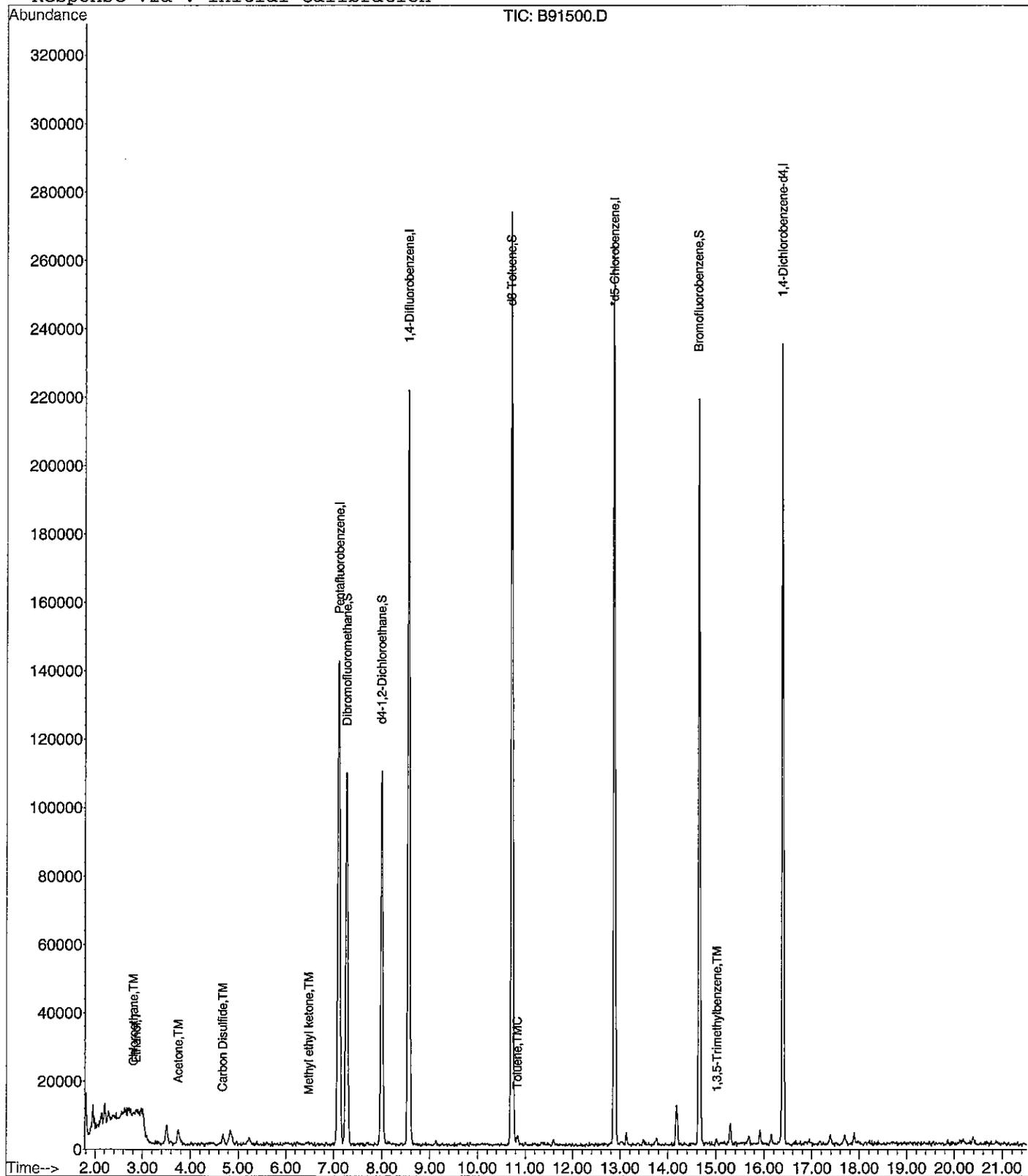


Data File : C:\HPCHEM\1\DATA\080712-B\B91500.D
Acq On : 7 Aug 2012 9:16 pm
Sample : 73487-22
Misc : 5000
MS Integration Params: rteint.p
Quant Time: Aug 8 9:25 2012

Vial: 23
Operator: MT
Inst : Instrumen
Multiplr: 1.00

Quant Results File: V808062B.RES

Method : C:\HPCHEM\1\METHODS\V808062B.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 09:23:43 2012
Response via : Initial Calibration



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 8, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.

Project Number: 111.06134

Field Sample ID: PW101

Lab Sample ID: 73487-23

Matrix: Aqueous

Percent Solid: N/A

Dilution Factor: 1

Collection Date: 08/02/12

Lab Receipt Date: 08/03/12

Analysis Date: 08/07/12

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	1	U	1,3-Dichloropropane	1	U
Bromobenzene	1	U	cis-1,3-Dichloropropene	1	U
Bromochloromethane	1	U	trans-1,3-Dichloropropene	1	U
Bromodichloromethane	1	U	2,2-Dichloropropane	1	U
Bromoform	1	U	1,1-Dichloropropene	1	U
Bromomethane	2	U	Ethylbenzene	1	U
n-butylbenzene	1	U	Hexachlorobutadiene	1	U
sec-butylbenzene	1	U	Isopropylbenzene	1	U
tert-butylbenzene	1	U	p-isopropyltoluene	1	U
Carbon Tetrachloride	1	U	Methylene Chloride	5	U
Chlorobenzene	1	U	Methyl-tert-butyl ether (MTBE)	1	U
Chloroethane	1	U	Naphthalene	1	U
Chloroform	1	U	n-Propylbenzene	1	U
Chloromethane	1	U	Styrene	1	U
2-Chlorotoluene	1	U	1,1,1,2-Tetrachloroethane	1	U
4-Chlorotoluene	1	U	1,1,2,2-Tetrachloroethane	1	U
Dibromochloromethane	1	U	Tetrachloroethene	1	U
1,2-Dibromo-3-chloropropane	1	U	Toluene	1	U
1,2-Dibromoethane	1	U	1,2,3-Trichlorobenzene	1	U
Dibromomethane	1	U	1,2,4-Trichlorobenzene	1	U
1,2-Dichlorobenzene	1	U	1,1,1-Trichloroethane	1	U
1,3-Dichlorobenzene	1	U	1,1,2-Trichloroethane	1	U
1,4-Dichlorobenzene	1	U	Trichloroethene	1	U
Dichlorodifluoromethane	1	U	Trichlorofluoromethane	1	U
1,1-Dichloroethane	1	U	1,2,3-Trichloropropane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	1	U
1,1-Dichloroethene	1	U	1,3,5-Trimethylbenzene	1	U
cis-1,2-Dichloroethene	1	U	Vinyl Chloride	1	U
trans-1,2-Dichloroethene	1	U	o-Xylene	1	U
1,2-Dichloropropane	1	U	m,p-Xylene	1	U
Acetone	10	U	Diethyl ether	1	U
Carbon Disulfide	1	U	2-Hexanone	10	U
Tetrahydrofuran	2	U	Methyl isobutyl ketone	10	U
Methyl ethyl ketone	10	U	Di-isopropyl ether (DIPE)	1	U
t-Butyl alcohol (TBA)	20	U	Ethyl t-butyl ether (ETBE)	1	U
t-Amyl methyl ether (TAME)	1	U	1,3,5-Trichlorobenzene	1	U
			1,4-Dioxane	30	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	103 %	d8-Toluene	101 %	Bromofluorobenzene	101 %
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS:

Authorized signature

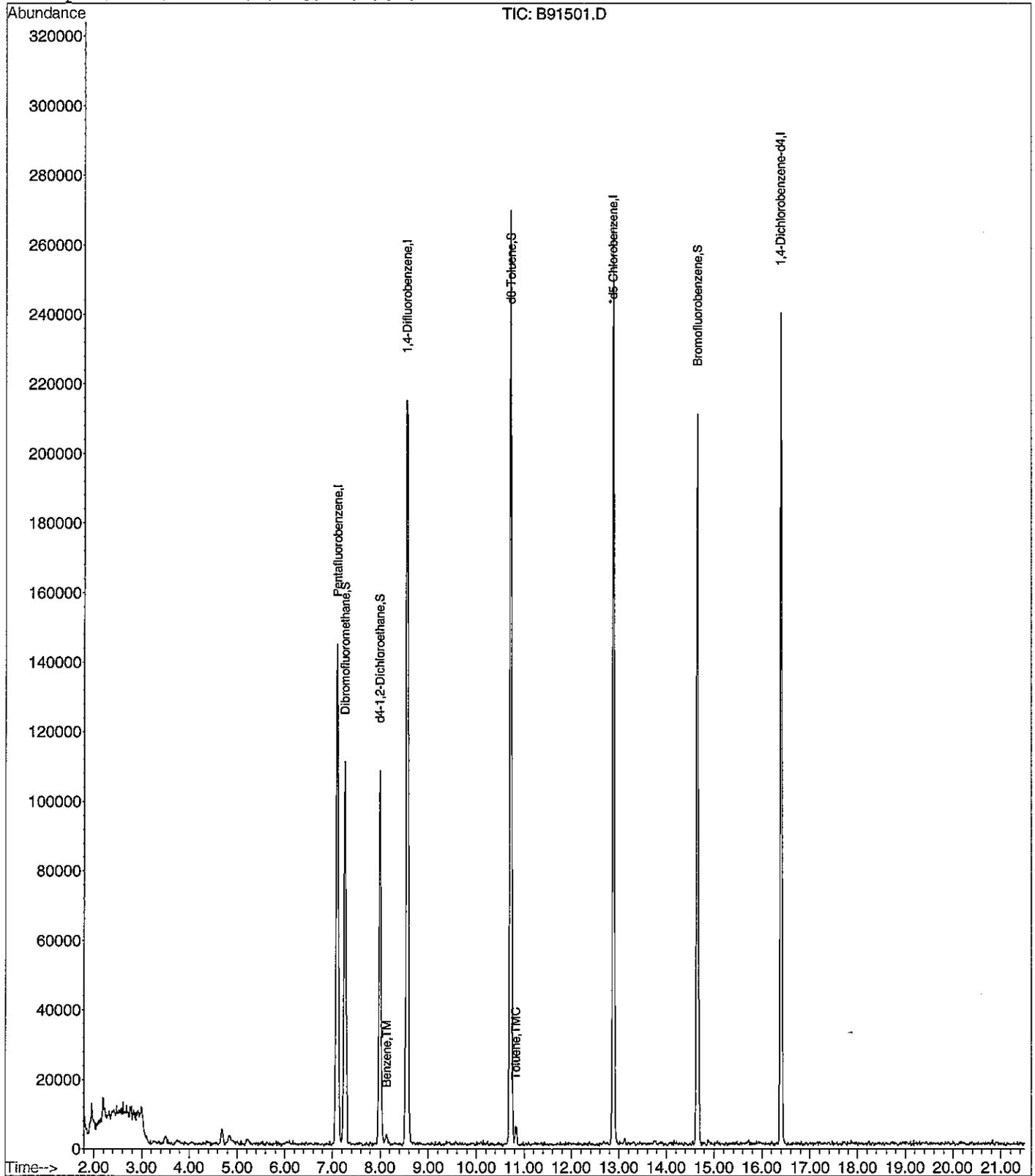


Data File : C:\HPCHEM\1\DATA\080712-B\B91501.D
Acq On : 7 Aug 2012 9:45 pm
Sample : 73487-23
Misc : 5000
MS Integration Params: rteint.p
Quant Time: Aug 8 9:25 2012

Vial: 24
Operator: MT
Inst : Instrumen
Multiplr: 1.00

Quant Results File: V808062B.RES

Method : C:\HPCHEM\1\METHODS\V808062B.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 09:23:43 2012
Response via : Initial Calibration



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 8, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: PW DUP

Lab Sample ID: 73487-24
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/07/12

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	1	U	1,3-Dichloropropane	1	U
Bromobenzene	1	U	cis-1,3-Dichloropropene	1	U
Bromochloromethane	1	U	trans-1,3-Dichloropropene	1	U
Bromodichloromethane	1	U	2,2-Dichloropropane	1	U
Bromoform	1	U	1,1-Dichloropropene	1	U
Bromomethane	2	U	Ethylbenzene	1	U
n-butylbenzene	1	U	Hexachlorobutadiene	1	U
sec-butylbenzene	1	U	Isopropylbenzene	1	U
tert-butylbenzene	1	U	p-isopropyltoluene	1	U
Carbon Tetrachloride	1	U	Methylene Chloride	5	U
Chlorobenzene	1	U	Methyl-tert-butyl ether (MTBE)	1	U
Chloroethane	1	U	Naphthalene	1	U
Chloroform	1	U	n-Propylbenzene	1	U
Chloromethane	1	U	Styrene	1	U
2-Chlorotoluene	1	U	1,1,1,2-Tetrachloroethane	1	U
4-Chlorotoluene	1	U	1,1,2,2-Tetrachloroethane	1	U
Dibromochloromethane	1	U	Tetrachloroethene	1	U
1,2-Dibromo-3-chloropropane	1	U	Toluene	1	1.2
1,2-Dibromoethane	1	U	1,2,3-Trichlorobenzene	1	U
Dibromomethane	1	U	1,2,4-Trichlorobenzene	1	U
1,2-Dichlorobenzene	1	U	1,1,1-Trichloroethane	1	U
1,3-Dichlorobenzene	1	U	1,1,2-Trichloroethane	1	U
1,4-Dichlorobenzene	1	U	Trichloroethene	1	U
Dichlorodifluoromethane	1	U	Trichlorofluoromethane	1	U
1,1-Dichloroethane	1	U	1,2,3-Trichloropropane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	1	U
1,1-Dichloroethene	1	U	1,3,5-Trimethylbenzene	1	U
cis-1,2-Dichloroethene	1	U	Vinyl Chloride	1	U
trans-1,2-Dichloroethene	1	U	o-Xylene	1	U
1,2-Dichloropropane	1	U	m,p-Xylene	1	U
Acetone	10	5.4 J	Diethyl ether	1	U
Carbon Disulfide	1	U	2-Hexanone	10	U
Tetrahydrofuran	2	U	Methyl isobutyl ketone	10	U
Methyl ethyl ketone	10	U	Di-isopropyl ether (DIPE)	1	U
t-Butyl alcohol (TBA)	20	U	Ethyl t-butyl ether (ETBE)	1	U
t-Amyl methyl ether (TAME)	1	U	1,3,5-Trichlorobenzene	1	U
			1,4-Dioxane	30	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	103 %	d8-Toluene	101 %	Bromofluorobenzene	100 %
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS:

Authorized signature 

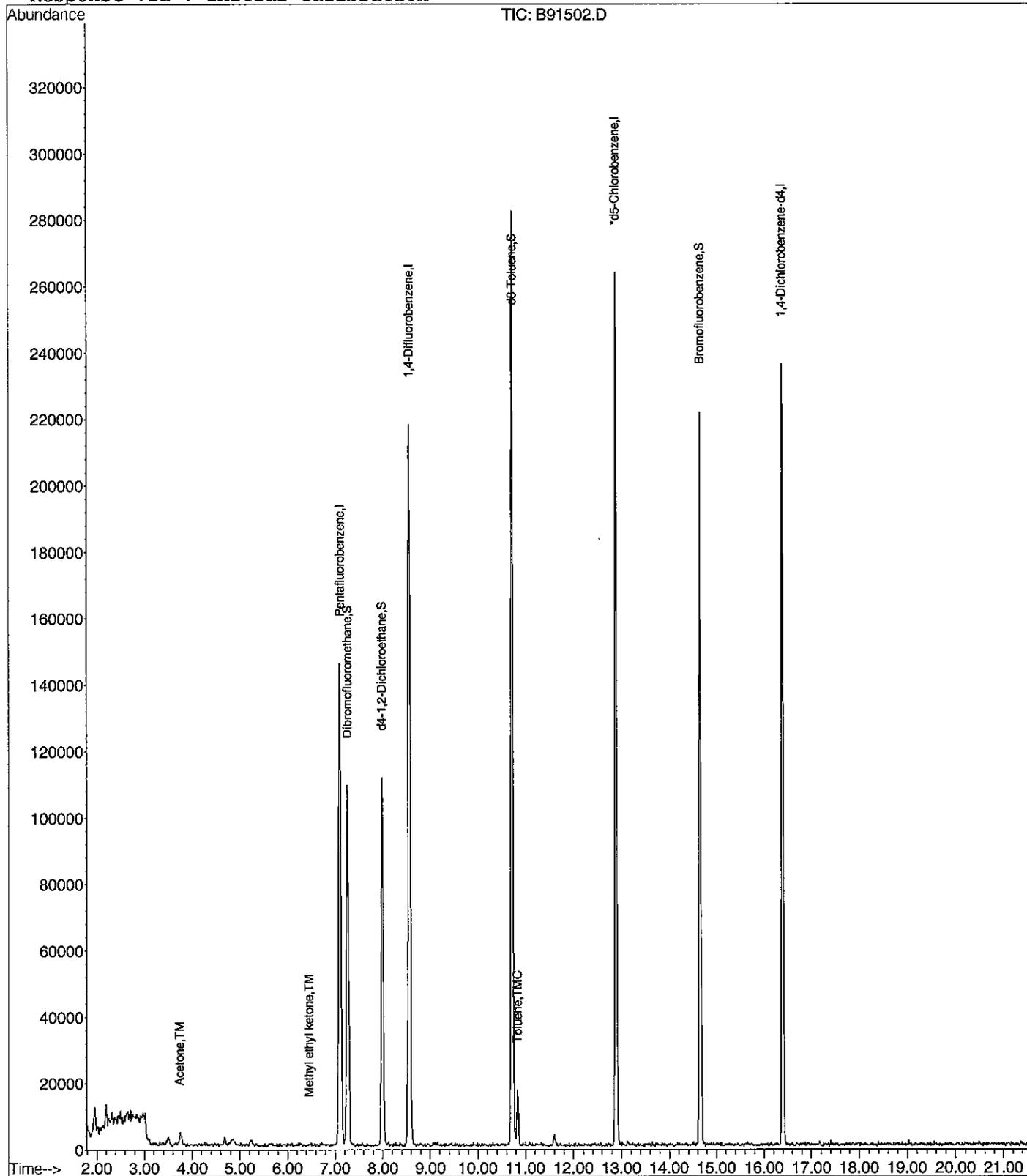
Quantitation Report

Data File : C:\HPCHEM\1\DATA\080712-B\B91502.D
Acq On : 7 Aug 2012 10:14 pm
Sample : 73487-24
Misc : 5000
MS Integration Params: rteint.p
Quant Time: Aug 8 9:25 2012

Vial: 25
Operator: MT
Inst : Instrumen
Multiplr: 1.00

Quant Results File: V808062B.RES

Method : C:\HPCHEM\1\METHODS\V808062B.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 09:23:43 2012
Response via : Initial Calibration



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 8, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.

Project Number: 111.06134

Field Sample ID: Trip Blank

Lab Sample ID: 73487-25

Matrix: Aqueous

Percent Solid: N/A

Dilution Factor: 1

Collection Date: 08/02/12

Lab Receipt Date: 08/03/12

Analysis Date: 08/07/12

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	1	U	1,3-Dichloropropane	1	U
Bromobenzene	1	U	cis-1,3-Dichloropropene	1	U
Bromochloromethane	1	U	trans-1,3-Dichloropropene	1	U
Bromodichloromethane	1	U	2,2-Dichloropropane	1	U
Bromoforn	1	U	1,1-Dichloropropene	1	U
Bromomethane	2	U	Ethylbenzene	1	U
n-butylbenzene	1	U	Hexachlorobutadiene	1	U
sec-butylbenzene	1	U	Isopropylbenzene	1	U
tert-butylbenzene	1	U	p-isopropyltoluene	1	U
Carbon Tetrachloride	1	U	Methylene Chloride	5	U
Chlorobenzene	1	U	Methyl-tert-butyl ether (MTBE)	1	U
Chloroethane	1	U	Naphthalene	1	U
Chloroform	1	U	n-Propylbenzene	1	U
Chloromethane	1	U	Styrene	1	U
2-Chlorotoluene	1	U	1,1,1,2-Tetrachloroethane	1	U
4-Chlorotoluene	1	U	1,1,2,2-Tetrachloroethane	1	U
Dibromochloromethane	1	U	Tetrachloroethene	1	U
1,2-Dibromo-3-chloropropane	1	U	Toluene	1	U
1,2-Dibromoethane	1	U	1,2,3-Trichlorobenzene	1	U
Dibromomethane	1	U	1,2,4-Trichlorobenzene	1	U
1,2-Dichlorobenzene	1	U	1,1,1-Trichloroethane	1	U
1,3-Dichlorobenzene	1	U	1,1,2-Trichloroethane	1	U
1,4-Dichlorobenzene	1	U	Trichloroethene	1	U
Dichlorodifluoromethane	1	U	Trichlorofluoromethane	1	U
1,1-Dichloroethane	1	U	1,2,3-Trichloropropane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	1	U
1,1-Dichloroethene	1	U	1,3,5-Trimethylbenzene	1	U
cis-1,2-Dichloroethene	1	U	Vinyl Chloride	1	U
trans-1,2-Dichloroethene	1	U	o-Xylene	1	U
1,2-Dichloropropane	1	U	m,p-Xylene	1	U
Acetone	10	U	Diethyl ether	1	U
Carbon Disulfide	1	U	2-Hexanone	10	U
Tetrahydrofuran	2	U	Methyl isobutyl ketone	10	U
Methyl ethyl ketone	10	U	Di-isopropyl ether (DIPE)	1	U
t-Butyl alcohol (TBA)	20	U	Ethyl t-butyl ether (ETBE)	1	U
t-Amyl methyl ether (TAME)	1	U	1,3,5-Trichlorobenzene	1	U
			1,4-Dioxane	30	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	104 %	d8-Toluene	101 %	Bromofluorobenzene	101 %
U=Undetected	J=Estimated	E=Exceeds Calibration Range	B=Detected in Blank		

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS:

Authorized signature



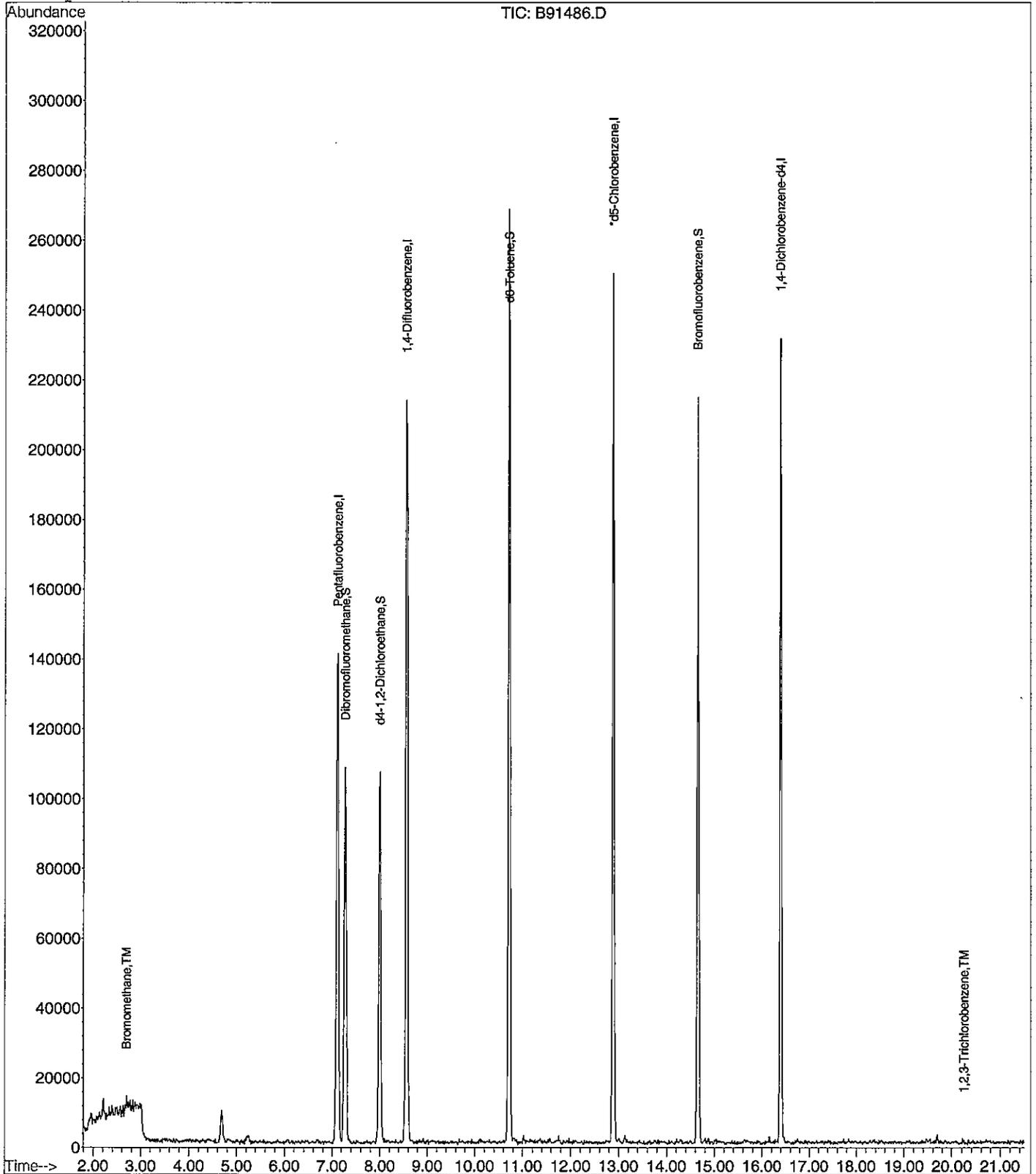
Quantitation Report

Data File : C:\HPCHEM\1\DATA\080712-B\B91486.D
Acq On : 7 Aug 2012 2:36 pm
Sample : 73487-25
Misc : 5000
MS Integration Params: rteint.p
Quant Time: Aug 8 9:24 2012

Vial: 9
Operator: MT
Inst : Instrumen
Multiplr: 1.00

Quant Results File: V808062B.RES

Method : C:\HPCHEM\1\METHODS\V808062B.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 09:23:43 2012
Response via : Initial Calibration



VOLATILE
QC FORMS

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 8, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.

Project Number: 111.06134

Field Sample ID: LAB QC

Lab Sample ID: B808072B

Matrix: Aqueous

Percent Solid: N/A

Dilution Factor: 1

Collection Date: N/A

Lab Receipt Date: N/A

Analysis Date: 08/07/12

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	1	U	1,3-Dichloropropane	1	U
Bromobenzene	1	U	cis-1,3-Dichloropropene	1	U
Bromochloromethane	1	U	trans-1,3-Dichloropropene	1	U
Bromodichloromethane	1	U	2,2-Dichloropropane	1	U
Bromoform	1	U	1,1-Dichloropropene	1	U
Bromomethane	2	U	Ethylbenzene	1	U
n-butylbenzene	1	U	Hexachlorobutadiene	1	U
sec-butylbenzene	1	U	Isopropylbenzene	1	U
tert-butylbenzene	1	U	p-isopropyltoluene	1	U
Carbon Tetrachloride	1	U	Methylene Chloride	5	U
Chlorobenzene	1	U	Methyl-tert-butyl ether (MTBE)	1	U
Chloroethane	1	U	Naphthalene	1	U
Chloroform	1	U	n-Propylbenzene	1	U
Chloromethane	1	U	Styrene	1	U
2-Chlorotoluene	1	U	1,1,1,2-Tetrachloroethane	1	U
4-Chlorotoluene	1	U	1,1,2,2-Tetrachloroethane	1	U
Dibromochloromethane	1	U	Tetrachloroethene	1	U
1,2-Dibromo-3-chloropropane	1	U	Toluene	1	U
1,2-Dibromoethane	1	U	1,2,3-Trichlorobenzene	1	U
Dibromomethane	1	U	1,2,4-Trichlorobenzene	1	U
1,2-Dichlorobenzene	1	U	1,1,1-Trichloroethane	1	U
1,3-Dichlorobenzene	1	U	1,1,2-Trichloroethane	1	U
1,4-Dichlorobenzene	1	U	Trichloroethene	1	U
Dichlorodifluoromethane	1	U	Trichlorofluoromethane	1	U
1,1-Dichloroethane	1	U	1,2,3-Trichloropropane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	1	U
1,1-Dichloroethene	1	U	1,3,5-Trimethylbenzene	1	U
cis-1,2-Dichloroethene	1	U	Vinyl Chloride	1	U
trans-1,2-Dichloroethene	1	U	o-Xylene	1	U
1,2-Dichloropropane	1	U	m,p-Xylene	1	U
Acetone	10	U	Diethyl ether	1	U
Carbon Disulfide	1	U	2-Hexanone	10	U
Tetrahydrofuran	2	U	Methyl isobutyl ketone	10	U
Methyl ethyl ketone	10	U	Di-isopropyl ether (DIPE)	1	U
t-Butyl alcohol (TBA)	20	U	Ethyl t-butyl ether (ETBE)	1	U
t-Amyl methyl ether (TAME)	1	U	1,3,5-Trichlorobenzene	1	U
			1,4-Dioxane	30	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	104 %	d8-Toluene	93 %	Bromofluorobenzene	99 %
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS:

Authorized signature



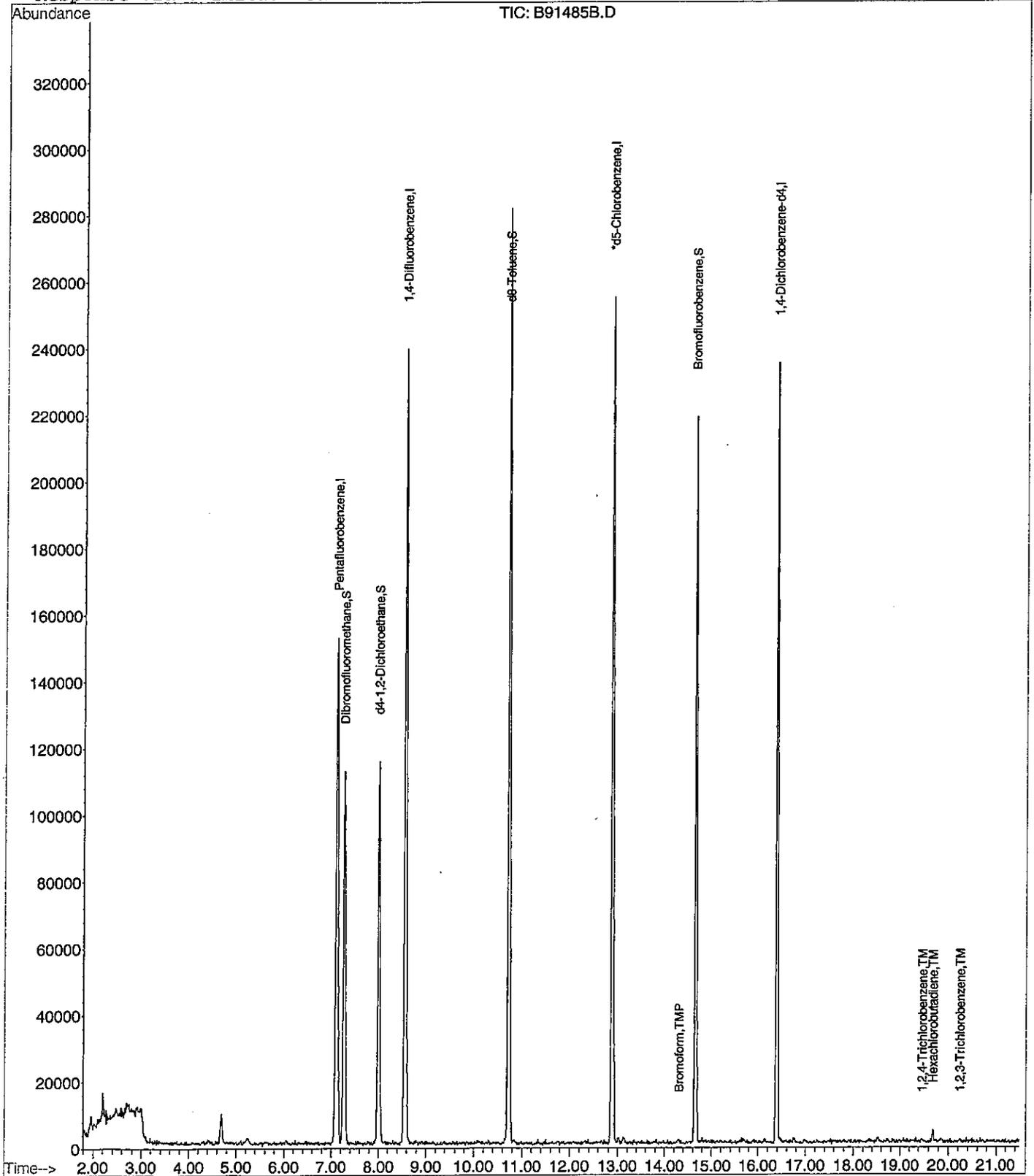
Quantitation Report

Data File : C:\HPCHEM\1\DATA\080712-B\B91485B.D
Acq On : 7 Aug 2012 1:55 pm
Sample : B808072B
Misc : 5000
MS Integration Params: rteint.p
Quant Time: Aug 8 9:23 2012

Vial: 8
Operator: MT
Inst : Instrumen
Multiplr: 1.00

Quant Results File: V808062B.RES

Method : C:\HPCHEM\1\METHODS\V808062B.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 09:23:43 2012
Response via : Initial Calibration



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 9, 2012
SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: LAB QC

Lab Sample ID: MB08082C
Matrix: Solid
Percent Solid: 100
Dilution Factor: 100
Collection Date: N/A
Lab Receipt Date: N/A
Analysis Date: 08/08/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$	COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$
Benzene	100	U	1,3-Dichloropropane	100	U
Bromobenzene	100	U	cis-1,3-Dichloropropene	100	U
Bromochloromethane	100	U	trans-1,3-Dichloropropene	100	U
Bromodichloromethane	75	U	2,2-Dichloropropane	100	U
Bromoform	75	U	1,1-Dichloropropene	100	U
Bromomethane	100	120	Ethylbenzene	100	U
n-butylbenzene	100	U	Hexachlorobutadiene	100	U
sec-butylbenzene	100	U	Isopropylbenzene	100	U
tert-butylbenzene	100	U	p-isopropyltoluene	100	U
Carbon Tetrachloride	100	U	Methylene Chloride	500	U
Chlorobenzene	100	U	Methyl-tert-butyl ether (MTBE)	75	U
Chloroethane	100	U	Naphthalene	100	U
Chloroform	75	U	n-Propylbenzene	100	U
Chloromethane	100	133	Styrene	100	U
2-Chlorotoluene	100	U	1,1,1,2-Tetrachloroethane	100	U
4-Chlorotoluene	100	U	1,1,2,2-Tetrachloroethane	75	U
Dibromochloromethane	75	U	Tetrachloroethene	100	U
1,2-Dibromo-3-chloropropane	100	U	Toluene	100	U
1,2-Dibromoethane	75	U	1,2,3-Trichlorobenzene	100	U
Dibromomethane	100	U	1,2,4-Trichlorobenzene	100	U
1,2-Dichlorobenzene	100	U	1,1,1-Trichloroethane	100	U
1,3-Dichlorobenzene	100	U	1,1,2-Trichloroethane	75	U
1,4-Dichlorobenzene	100	U	Trichloroethene	100	U
Dichlorodifluoromethane	100	U	Trichlorofluoromethane	100	U
1,1-Dichloroethane	100	U	1,2,3-Trichloropropane	100	U
1,2-Dichloroethane	75	U	1,2,4-Trimethylbenzene	100	U
1,1-Dichloroethene	75	U	1,3,5-Trimethylbenzene	100	U
cis-1,2-Dichloroethene	100	U	Vinyl Chloride	100	U
trans-1,2-Dichloroethene	100	U	o-Xylene	100	U
1,2-Dichloropropane	75	U	m,p-Xylene	100	U
Acetone	1000	U	Diethyl ether	100	U
Carbon Disulfide	100	U	2-Hexanone	1000	U
Tetrahydrofuran	500	U	Methyl isobutyl ketone	1000	U
Methyl ethyl ketone	1000	U	Di-isopropyl ether (DIPE)	100	U
t-Butyl alcohol (TBA)	2000	U	Ethyl t-butyl ether (ETBE)	100	U
t-Amyl methyl ether (TAME)	100	U	1,3,5-Trichlorobenzene	100	U
			1,4-Dioxane	3000	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	88 %	d8-Toluene	91 %	Bromofluorobenzene	89 %
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS: Results are expressed on a dry weight basis.

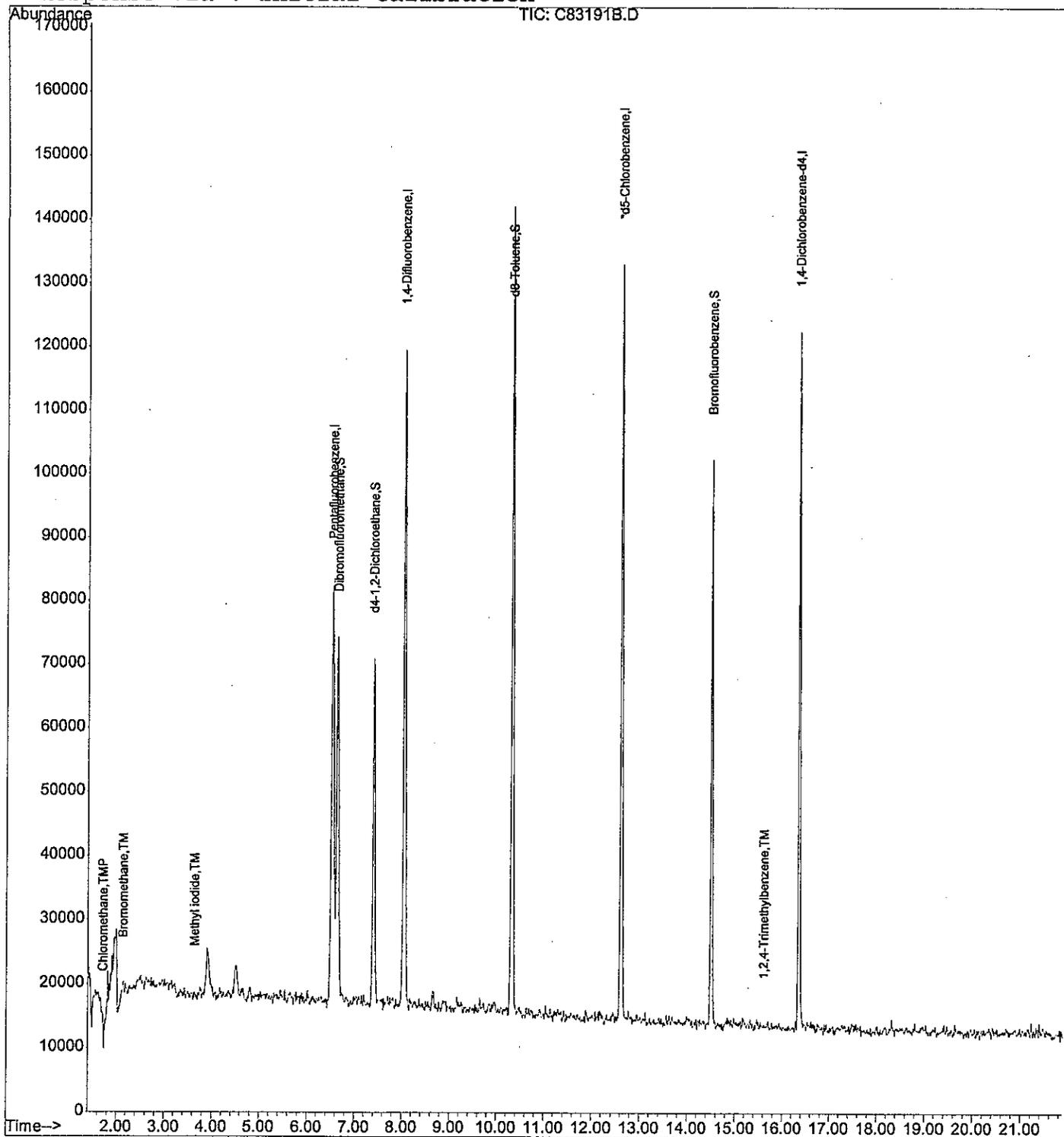
Authorized signature



Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\080812-C\C83191B.D Vial: 6
Acq On : 8 Aug 2012 12:58 pm Operator: MT
Sample : MB08082C,,RR Inst : Instr_C
Misc : 50,10.00,SOIL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Aug 9 7:12 2012 Quant Results File: V808072C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V808072C.M (RTE Integrat
Title : 8260 Purgable Organics
Last Update : Wed Aug 08 14:18:16 2012
Response via : Initial Calibration



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 9, 2012
SAMPLE DATA

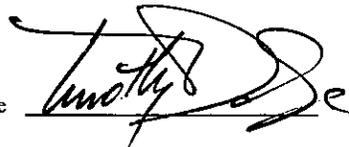
CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: LAB QC

Lab Sample ID: MB08092C
Matrix: Solid
Percent Solid: 100
Dilution Factor: 100
Collection Date: N/A
Lab Receipt Date: N/A
Analysis Date: 08/09/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$	COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$
Benzene	100	U	1,3-Dichloropropane	100	U
Bromobenzene	100	U	cis-1,3-Dichloropropene	100	U
Bromochloromethane	100	U	trans-1,3-Dichloropropene	100	U
Bromodichloromethane	75	U	2,2-Dichloropropane	100	U
Bromoform	75	U	1,1-Dichloropropene	100	U
Bromomethane	100	U	Ethylbenzene	100	U
n-butylbenzene	100	U	Hexachlorobutadiene	100	U
sec-butylbenzene	100	U	Isopropylbenzene	100	U
tert-butylbenzene	100	U	p-isopropyltoluene	100	U
Carbon Tetrachloride	100	U	Methylene Chloride	500	U
Chlorobenzene	100	U	Methyl-tert-butyl ether (MTBE)	75	U
Chloroethane	100	U	Naphthalene	100	U
Chloroform	75	U	n-Propylbenzene	100	U
Chloromethane	100	U	Styrene	100	U
2-Chlorotoluene	100	U	1,1,1,2-Tetrachloroethane	100	U
4-Chlorotoluene	100	U	1,1,2,2-Tetrachloroethane	75	U
Dibromochloromethane	75	U	Tetrachloroethene	100	U
1,2-Dibromo-3-chloropropane	100	U	Toluene	100	U
1,2-Dibromoethane	75	U	1,2,3-Trichlorobenzene	100	U
Dibromomethane	100	U	1,2,4-Trichlorobenzene	100	U
1,2-Dichlorobenzene	100	U	1,1,1-Trichloroethane	100	U
1,3-Dichlorobenzene	100	U	1,1,2-Trichloroethane	75	U
1,4-Dichlorobenzene	100	U	Trichloroethene	100	U
Dichlorodifluoromethane	100	U	Trichlorofluoromethane	100	U
1,1-Dichloroethane	100	U	1,2,3-Trichloropropane	100	U
1,2-Dichloroethane	75	U	1,2,4-Trimethylbenzene	100	U
1,1-Dichloroethene	75	U	1,3,5-Trimethylbenzene	100	U
cis-1,2-Dichloroethene	100	U	Vinyl Chloride	100	U
trans-1,2-Dichloroethene	100	U	o-Xylene	100	U
1,2-Dichloropropane	75	U	m,p-Xylene	100	U
Acetone	1000	U	Diethyl ether	100	U
Carbon Disulfide	100	U	2-Hexanone	1000	U
Tetrahydrofuran	500	U	Methyl isobutyl ketone	1000	U
Methyl ethyl ketone	1000	U	Di-isopropyl ether (DIPE)	100	U
t-Butyl alcohol (TBA)	2000	U	Ethyl t-butyl ether (ETBE)	100	U
t-Amyl methyl ether (TAME)	100	U	1,3,5-Trichlorobenzene	100	U
			1,4-Dioxane	3000	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	95 %	d8-Toluene	101 %	Bromofluorobenzene	99 %
U=Undetected		J=Estimated		E=Exceeds Calibration Range	
				B=Detected in Blank	

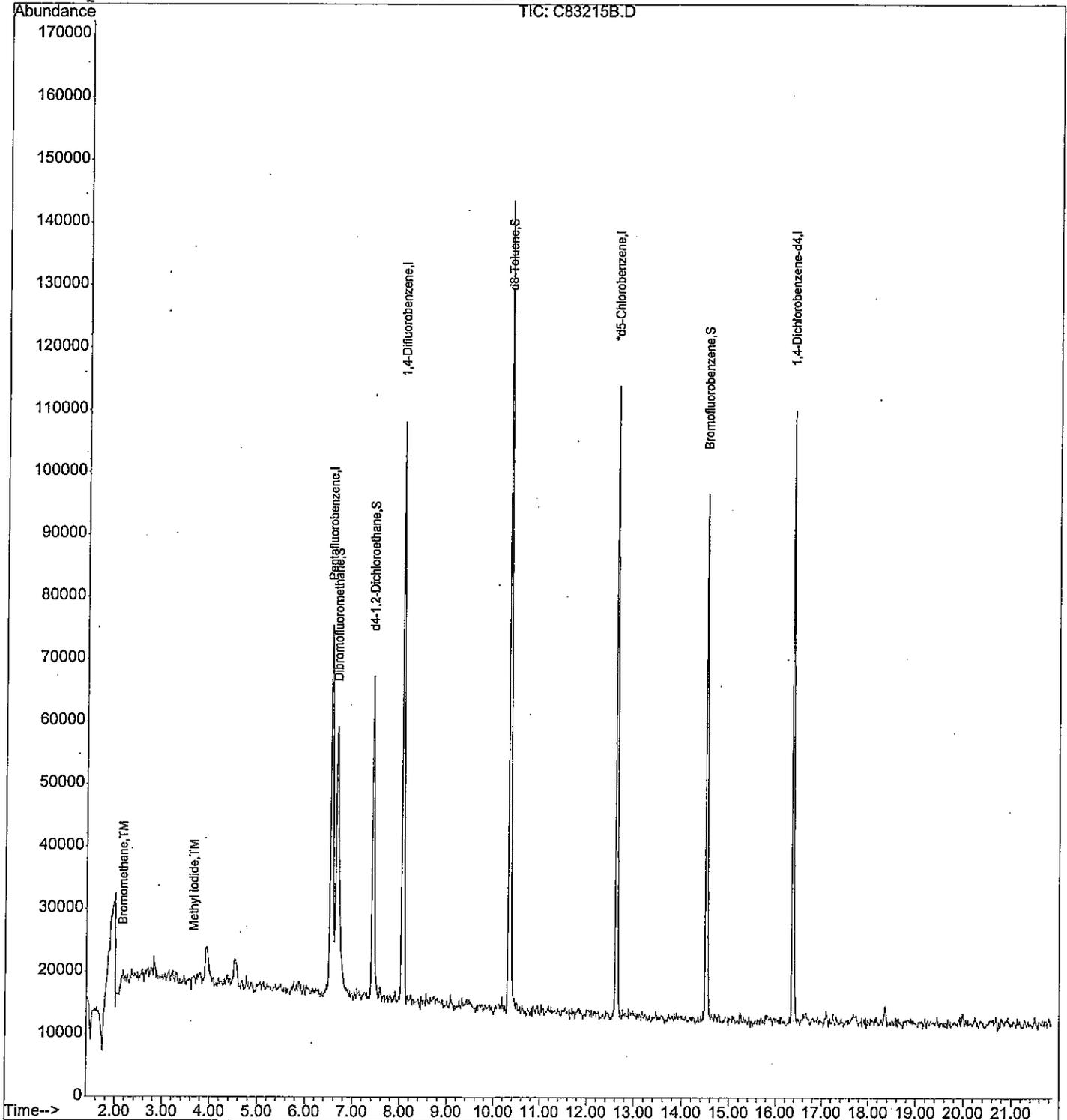
METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS: Results are expressed on a dry weight basis.

Authorized signature 

Data File : C:\HPCHEM\1\DATA\DATA\080912-C\C83215B.D Vial: 6
 Acq On : 9 Aug 2012 10:45 am Operator: MT
 Sample : MB08092C Inst : Instr_C
 Misc : 50,10.00,SOIL Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Aug 9 11:08 2012 Quant Results File: V808072C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V808072C.M (RTE Integrat
 Title : 8260 Purgable Organics
 Last Update : Wed Aug 08 14:18:16 2012
 Response via : Initial Calibration



VOLATILE ORGANIC AQUEOUS
LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
PERCENT RECOVERY

Instrument ID: B
GC Column: RTX-502.2
Column ID: 0.25 mm
Heated purge (Y/N): N

SDG: 73487
Non-spiked sample: B808072B
Spike: L808072B
Spike duplicate: L808072B2

COMPOUND	SPIKE ADDED	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
Dichlorodifluoromethane	20	40	155	15	0.0	23	113		21	107		6	
Chloromethane	20	40	125	15	0.0	22	109		21	105		4	
Vinyl Chloride	20	70	130	15	0.0	21	105		21	107		3	
Bromomethane	20	40	145	15	0.0	22	112		24	119		6	
Chloroethane	20	70	130	15	0.0	22	109		21	103		6	
t-Butyl alcohol (TBA)	100	70	130	15	0.0	99	99		96	96		3	
Trichlorofluoromethane	20	70	130	15	0.0	20	102		20	98		4	
Diethyl ether	20	70	130	15	0.0	20	98		20	98		0	
1,1,2-Trichlorotrifluoroethane	20	70	130	15	0.0	20	98		19	94		4	
Acetone	100	40	140	15	0.0	92	92		91	91		1	
1,1-Dichloroethene	20	75	125	15	0.0	21	103		20	98		5	
Methyl iodide	20	70	130	15	0.0	21	106		22	109		3	
Di-isopropyl ether (DIPE)	20	70	130	15	0.0	21	103		19	97		6	
Methylene Chloride	20	70	130	15	0.0	22	108		21	107		1	
Carbon Disulfide	20	70	130	15	0.0	21	103		20	98		5	
Acrylonitrile	20	70	130	15	0.0	22	112		21	104		7	
Methyl-tert-butyl ether (MTBE)	40	70	130	15	0.0	41	103		39	96		6	
trans-1,2-Dichloroethene	20	75	125	15	0.0	21	105		20	98		6	
1,1-Dichloroethane	20	70	130	15	0.0	21	104		20	100		4	
Vinyl acetate	20	70	130	15	0.0	23	113		23	113		0	
Methyl ethyl ketone	100	40	150	15	0.0	100	100		95	95		4	
Ethyl t-butyl ether (ETBE)	20	70	130	15	0.0	21	105		20	102		3	
2,2-Dichloropropane	20	70	130	15	0.0	20	101		19	93		9	
cis-1,2-Dichloroethene	20	75	125	15	0.0	21	104		20	100		4	
t-Amyl methyl ether (TAME)	20	70	130	15	0.0	21	105		20	101		4	
Chloroform	20	70	130	15	0.0	21	104		20	101		3	
Bromochloromethane	20	70	130	15	0.0	22	109		21	106		3	
Tetrahydrofuran	20	70	130	15	0.0	19	97		18	88		9	
1,1,1-Trichloroethane	20	75	125	15	0.0	20	102		19	96		7	
1,1-Dichloropropene	20	75	130	15	0.0	20	98		18	91		7	
Carbon Tetrachloride	20	75	125	15	0.0	21	106		20	99		7	
1,2-Dichloroethane	20	70	130	15	0.0	20	100		19	97		4	
Benzene	20	80	120	15	0.0	20	99		19	96		3	
Trichloroethene	20	75	125	15	0.0	21	103		19	97		5	
1,2-Dichloropropane	20	75	125	15	0.0	18	92		18	91		1	
Methylmethacrylate	20	70	130	15	0.0	19	94		18	90		5	
Bromodichloromethane	20	75	120	15	0.0	20	98		20	99		1	
Dibromomethane	20	75	125	15	0.0	19	93		19	95		1	
1,4-Dioxane	500	40	160	15	0.0	537	107		540	108		1	
2-Hexanone	100	55	130	15	0.0	100	100		96	96		4	
Methyl isobutyl ketone	100	60	135	15	0.0	98	98		96	96		2	
cis-1,3-Dichloropropene	20	70	130	15	0.0	20	101		20	100		2	
Toluene	20	75	120	15	0.0	19	97		19	96		1	
trans-1,3-Dichloropropene	20	70	130	15	0.0	21	106		21	104		2	
1,1,2-Trichloroethane	20	75	125	15	0.0	20	98		19	96		2	
1,3-Dichloropropane	20	75	125	15	0.0	20	100		19	97		3	
Tetrachloroethene	20	75	125	15	0.0	21	104		21	103		1	
Dibromochloromethane	20	70	130	15	0.0	20	102		21	103		1	
1,2-Dibromoethane	20	80	120	15	0.0	20	102		20	98		4	
Chlorobenzene	20	80	120	15	0.0	21	103		20	100		3	
1,1,1,2-Tetrachloroethane	20	80	130	15	0.0	20	102		20	102		0	

VOLATILE ORGANIC AQUEOUS
LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
PERCENT RECOVERY

Instrument ID: B
GC Column: RTX-502.2
Column ID: 0.25 mm
Heated purge (Y/N): N

SDG: 73487
Non-spiked sample: B808072B
Spike: L808072B
Spike duplicate: L808072B2

COMPOUND	SPIKE ADDED	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
Ethylbenzene	20	75	125	15	0.0	20	98		20	98		0	
m,p-Xylene	40	75	125	15	0.0	40	101		41	103		3	
o-Xylene	20	80	120	15	0.0	20	99		21	103		3	
Styrene	20	70	130	15	0.0	20	101		20	102		1	
Bromoform	20	70	130	15	0.0	22	108		21	107		1	
Isopropylbenzene	20	75	125	15	0.0	21	104		21	105		1	
1,1,2,2-Tetrachloroethane	20	70	130	15	0.0	20	100		19	97		3	
1,2,3-Trichloropropane	20	75	125	15	0.0	19	97		20	99		2	
n-Propylbenzene	20	70	130	15	0.0	21	103		21	103		0	
Bromobenzene	20	75	125	15	0.0	19	96		20	99		4	
1,3,5-Trimethylbenzene	20	75	130	15	0.0	21	103		21	107		4	
2-Chlorotoluene	20	75	125	15	0.0	21	106		22	111		4	
4-Chlorotoluene	20	75	130	15	0.0	19	95		20	98		2	
tert-butylbenzene	20	70	130	15	0.0	21	107		21	107		0	
1,2,4-Trimethylbenzene	20	75	130	15	0.0	19	95		20	98		3	
sec-butylbenzene	20	70	125	15	0.0	21	104		21	103		1	
p-isopropyltoluene	20	75	130	15	0.0	21	106		22	112		5	
1,3-Dichlorobenzene	20	75	125	15	0.0	20	101		20	100		1	
1,4-Dichlorobenzene	20	75	125	15	0.0	21	103		21	103		0	
n-butylbenzene	20	70	130	15	0.0	20	102		20	99		3	
1,2-Dichlorobenzene	20	70	120	15	0.0	19	97		19	96		1	
1,2-Dibromo-3-chloropropane	20	70	130	15	0.0	19	97		19	96		1	
1,2,4-Trichlorobenzene	20	70	130	15	0.0	20	100		19	96		4	
Hexachlorobutadiene	20	70	130	15	0.0	21	105		20	101		4	
Naphthalene	20	70	130	15	0.0	19	97		19	94		3	
1,2,3-Trichlorobenzene	20	70	130	15	0.0	20	99		20	99		0	
1,3,5-Trichlorobenzene	20	70	130	15	0.0	20	98		19	97		1	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery

Comments: _____

VOLATILE ORGANIC SOIL
LABORATORY CONTROL/LABORATORY CONTROL DUPLICATE
PERCENT RECOVERY

Instrument ID: C
GC Column: RTX-502.2
Column ID: 0.25 mm
Heated purge (Y/N): N

SDG: 73487
Non-spiked sample: MB08082C,,RR
Spike: LS08082C
Spike duplicate: LS08082C2

COMPOUND	LCS SPIKE ADDED (ug/kg)	LCSD SPIKE ADDED (ug/kg)	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/kg)	SPIKE RESULT (ug/kg)	SPIKE % REC	SPIKE #	SPIKE DUP RESULT (ug/kg)	SPIKE DUP % REC	SPIKE DUP #	RPD #
Dichlorodifluoromethane	2000	2000	49	82	25	0	1612	81		1436	72		12
Chloromethane	2000	2000	75	125	25	0	1395	70	*	1291	65	*	8
Vinyl Chloride	2000	2000	75	125	25	0	1651	83		1356	68	*	20
Bromomethane	2000	2000	75	125	25	0	1886	94		1808	90		4
Chloroethane	2000	2000	75	125	25	0	1895	95		1593	80		17
t-Butyl alcohol (TBA)	10000	10000	60	140	25	0	8812	88		9725	97		10
Trichlorofluoromethane	2000	2000	75	125	25	0	2171	109		2045	102		6
Diethyl ether	2000	2000	75	125	25	0	2077	104		1818	91		13
1,1,2-Trichlorotrifluoroethane	2000	2000	75	125	25	0	2058	103		1893	95		8
Acetone	5000	5000	75	125	25	0	7086	142	*	5762	115		21
1,1-Dichloroethene	2000	2000	75	125	25	0	2215	111		2095	105		6
Di-isopropyl ether (DIPE)	2000	2000	75	125	25	0	1985	99		1779	89		11
Methylene Chloride	2000	2000	75	125	25	0	2255	113		2060	103		9
Carbon Disulfide	2000	2000	75	125	25	0	2425	121		2206	110		9
Acrylonitrile	2000	2000	75	125	25	0	2129	106		1993	100		7
Methyl-tert-butyl ether (MTBE)	2000	2000	75	125	25	0	2010	101		1834	92		9
trans-1,2-Dichloroethene	2000	2000	75	125	25	0	2155	108		1950	98		10
1,1-Dichloroethane	2000	2000	75	125	25	0	2201	110		1972	99		11
Methyl ethyl ketone	5000	5000	60	140	25	0	6436	129		5576	112		14
Ethyl t-butyl ether (ETBE)	2000	2000	75	125	25	0	2079	104		1816	91		14
2,2-Dichloropropane	2000	2000	75	125	25	0	2200	110		1675	84		27 *
cis-1,2-Dichloroethene	2000	2000	75	125	25	0	2200	110		1996	100		10
t-Amyl methyl ether (TAME)	2000	2000	75	125	25	0	2112	106		1828	91		14
Chloroform	2000	2000	75	125	25	0	2157	108		1960	98		10
Bromochloromethane	2000	2000	75	125	25	0	2020	101		1944	97		4
Tetrahydrofuran	2000	2000	60	140	25	0	2021	101		1944	97		4
1,1,1-Trichloroethane	2000	2000	75	125	25	0	2147	107		1930	96		11
1,1-Dichloropropene	2000	2000	75	125	25	0	2160	108		1848	92		16
Carbon Tetrachloride	2000	2000	75	125	25	0	2123	106		1930	96		10
1,2-Dichloroethane	2000	2000	75	125	25	0	1976	99		1825	91		8
Benzene	2000	2000	75	125	25	0	2146	107		1806	90		17
Trichloroethene	2000	2000	75	125	25	0	2075	104		2031	102		2
1,2-Dichloropropane	2000	2000	75	125	25	0	2019	101		1924	96		5
Methylmethacrylate	2000	2000	75	125	25	0	2029	101		2053	103		1
Bromodichloromethane	2000	2000	75	125	25	0	2029	101		1991	100		2
Dibromomethane	2000	2000	75	125	25	0	2027	101		2059	103		2
1,4-Dioxane	25000	25000	60	140	25	0	21777	87		26580	106		20
2-Hexanone	5000	5000	75	125	25	0	4478	90		5232	105		16
Methyl isobutyl ketone	5000	5000	75	125	25	0	4769	95		4867	97		2
cis-1,3-Dichloropropene	2000	2000	75	125	25	0	2064	103		1988	99		4
Toluene	2000	2000	75	125	25	0	2080	104		2056	103		1
trans-1,3-Dichloropropene	2000	2000	75	125	25	0	2005	100		1950	98		3
1,1,2-Trichloroethane	2000	2000	75	125	25	0	1973	99		1979	99		0
1,3-Dichloropropane	2000	2000	75	125	25	0	1867	93		1972	99		5
Tetrachloroethene	2000	2000	75	125	25	0	1943	97		1996	100		3
Dibromochloromethane	2000	2000	75	125	25	0	1889	94		1978	99		5
1,2-Dibromoethane	2000	2000	75	125	25	0	1914	96		1991	100		4
Chlorobenzene	2000	2000	75	125	25	0	2179	109		2044	102		6
1,1,1,2-Tetrachloroethane	2000	2000	75	125	25	0	2154	108		2014	101		7
Ethylbenzene	2000	2000	75	125	25	0	2110	105		2008	100		5

VOLATILE ORGANIC SOIL
LABORATORY CONTROL/LABORATORY CONTROL DUPLICATE
PERCENT RECOVERY

Instrument ID: C
GC Column: RTX-502.2
Column ID: 0.25 mm
Heated purge (Y/N): N

SDG: 73487
Non-spiked sample: MB08082C,,RR
Spike: LS08082C
Spike duplicate: LS08082C2

COMPOUND	LCS SPIKE	LCS D SPIKE	LOWER	UPPER	RPD	NON-SPIKE	SPIKE	SPIKE	SPIKE DUP	SPIKE DUP		
	ADDED (ug/kg)	ADDED (ug/kg)	LIMIT	LIMIT	LIMIT	RESULT (ug/kg)	RESULT (ug/kg)	% REC	#	RESULT (ug/kg)	% REC	#
m,p-Xylene	4000	4000	75	125	25	0	4511	113		4255	106	6
o-Xylene	2000	2000	75	125	25	0	2202	110		2026	101	8
Styrene	2000	2000	75	125	25	0	1995	100		1885	94	6
Bromoform	2000	2000	75	125	25	0	2095	105		2077	104	1
Isopropylbenzene	2000	2000	75	125	25	0	2229	111		2113	106	5
1,1,2,2-Tetrachloroethane	2000	2000	75	125	25	0	2000	100		1910	95	5
1,2,3-Trichloropropane	2000	2000	75	125	25	0	1836	92		1824	91	1
trans-1,4-Dichloro-2-butene	2000	2000	75	125	25	0	1959	98		1949	97	1
n-Propylbenzene	2000	2000	75	125	25	0	1865	93		1714	86	8
Bromobenzene	2000	2000	75	125	25	0	1571	79		1502	75	4
1,3,5-Trimethylbenzene	2000	2000	75	125	25	0	1667	83		1614	81	3
2-Chlorotoluene	2000	2000	75	125	25	0	1998	100		1906	95	5
4-Chlorotoluene	2000	2000	75	125	25	0	1957	98		1812	91	8
tert-butylbenzene	2000	2000	75	125	25	0	1937	97		1831	92	6
1,2,4-Trimethylbenzene	2000	2000	75	125	25	0	1669	83		1601	80	4
sec-butylbenzene	2000	2000	75	125	25	0	1817	91		1684	84	8
p-isopropyltoluene	2000	2000	75	125	25	0	1792	90		1631	82	9
1,3-Dichlorobenzene	2000	2000	75	125	25	0	2125	106		1969	98	8
1,4-Dichlorobenzene	2000	2000	75	125	25	0	2171	109		2111	106	3
n-butylbenzene	2000	2000	75	125	25	0	2239	112		2143	107	4
1,2-Dichlorobenzene	2000	2000	75	125	25	0	2171	109		2120	106	2
1,2-Dibromo-3-chloropropane	2000	2000	75	125	25	0	1941	97		2179	109	12
1,2,4-Trichlorobenzene	2000	2000	75	125	25	0	1984	99		1968	98	1
Hexachlorobutadiene	2000	2000	75	125	25	0	2054	103		2096	105	2
Naphthalene	2000	2000	75	125	25	0	1938	97		2120	106	9
1,2,3-Trichlorobenzene	2000	2000	75	125	25	0	2056	103		2142	107	4

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

VOLATILE ORGANIC SOIL
LABORATORY CONTROL/LABORATORY CONTROL DUPLICATE
PERCENT RECOVERY

Instrument ID: C
GC Column: RTX-502.2
Column ID: 0.25 mm
Heated purge (Y/N): N

SDG: 73487
Non-spiked sample: BLK
Spike: LS08092C
Spike duplicate: LS08092C2

COMPOUND	LCS SPIKE ADDED (ug/kg)	LCSD SPIKE ADDED (ug/kg)	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/kg)	SPIKE RESULT (ug/kg)	SPIKE % REC	SPIKE #	SPIKE DUP RESULT (ug/kg)	SPIKE DUP % REC	SPIKE DUP #	RPD #
Dichlorodifluoromethane	2000	2000	49	82	25	0	1432	72		1547	77		8
Chloromethane	2000	2000	75	125	25	0	1173	59	*	1328	66	*	12
Vinyl Chloride	2000	2000	75	125	25	0	1632	82		1695	85		4
Bromomethane	2000	2000	75	125	25	0	2003	100		2106	105		5
Chloroethane	2000	2000	75	125	25	0	1733	87		1903	95		9
t-Butyl alcohol (TBA)	10000	10000	60	140	25	0	7873	79		8447	84		7
Trichlorofluoromethane	2000	2000	75	125	25	0	2057	103		2261	113		9
Diethyl ether	2000	2000	75	125	25	0	1853	93		1982	99		7
1,1,2-Trichlorotrifluoroethane	2000	2000	75	125	25	0	2033	102		2243	112		10
Acetone	5000	5000	75	125	25	0	6132	123		6537	131	*	6
1,1-Dichloroethene	2000	2000	75	125	25	0	2078	104		2257	113		8
Methyl iodide	2000	2000	75	125	25	0	1236	62	*	1265	63	*	2
Di-isopropyl ether (DIPE)	2000	2000	75	125	25	0	1856	93		1995	100		7
Methylene Chloride	2000	2000	75	125	25	0	1943	97		2124	106		9
Carbon Disulfide	2000	2000	75	125	25	0	2192	110		2356	118		7
Acrylonitrile	2000	2000	75	125	25	0	1810	90		2049	102		12
Methyl-tert-butyl ether (MTBE)	2000	2000	75	125	25	0	1728	86		1949	97		12
trans-1,2-Dichloroethene	2000	2000	75	125	25	0	1942	97		2062	103		6
1,1-Dichloroethane	2000	2000	75	125	25	0	1918	96		2052	103		7
Methyl ethyl ketone	5000	5000	60	140	25	0	5279	106		5617	112		6
Ethyl t-butyl ether (ETBE)	2000	2000	75	125	25	0	1822	91		1981	99		8
2,2-Dichloropropane	2000	2000	75	125	25	0	1733	87		1734	87		0
cis-1,2-Dichloroethene	2000	2000	75	125	25	0	1992	100		2155	108		8
t-Amyl methyl ether (TAME)	2000	2000	75	125	25	0	1815	91		1946	97		7
Chloroform	2000	2000	75	125	25	0	1951	98		2100	105		7
Bromochloromethane	2000	2000	75	125	25	0	1922	96		2088	104		8
Tetrahydrofuran	2000	2000	60	140	25	0	1710	85		1925	96		12
1,1,1-Trichloroethane	2000	2000	75	125	25	0	1983	99		2126	106		7
1,1-Dichloropropene	2000	2000	75	125	25	0	1901	95		2064	103		8
Carbon Tetrachloride	2000	2000	75	125	25	0	2064	103		2241	112		8
1,2-Dichloroethane	2000	2000	75	125	25	0	1744	87		1940	97		11
Benzene	2000	2000	75	125	25	0	1886	94		2094	105		10
Trichloroethene	2000	2000	75	125	25	0	2059	103		2258	113		9
1,2-Dichloropropane	2000	2000	75	125	25	0	1912	96		2072	104		8
Methylmethacrylate	2000	2000	75	125	25	0	1821	91		1939	97		6
Bromodichloromethane	2000	2000	75	125	25	0	1952	98		2136	107		9
Dibromomethane	2000	2000	75	125	25	0	1880	94		2008	100		7
1,4-Dioxane	25000	25000	60	140	25	0	20015	80		21663	87		8
2-Hexanone	5000	5000	75	125	25	0	3995	80		4677	94		16
Methyl isobutyl ketone	5000	5000	75	125	25	0	4241	85		4521	90		6
cis-1,3-Dichloropropene	2000	2000	75	125	25	0	1906	95		2082	104		9
Toluene	2000	2000	75	125	25	0	1969	98		2128	106		8
trans-1,3-Dichloropropene	2000	2000	75	125	25	0	1812	91		1989	99		9
1,1,2-Trichloroethane	2000	2000	75	125	25	0	1872	94		2059	103		10
1,3-Dichloropropane	2000	2000	75	125	25	0	1830	92		2006	100		9
Tetrachloroethene	2000	2000	75	125	25	0	2006	100		2206	110		10
Dibromochloromethane	2000	2000	75	125	25	0	1929	96		2085	104		8
1,2-Dibromoethane	2000	2000	75	125	25	0	1870	93		2062	103		10
Chlorobenzene	2000	2000	75	125	25	0	2145	107		2358	118		9
1,1,1,2-Tetrachloroethane	2000	2000	75	125	25	0	2146	107		2411	121		12

VOLATILE ORGANIC SOIL
LABORATORY CONTROL/LABORATORY CONTROL DUPLICATE
PERCENT RECOVERY

Instrument ID: C
GC Column: RTX-502.2
Column ID: 0.25 mm
Heated purge (Y/N): N

SDG: 73487
Non-spiked sample: BLK
Spike: LS08092C
Spike duplicate: LS08092C2

COMPOUND	LCS SPIKE	LCS D SPIKE	LOWER	UPPER	RPD	NON-SPIKE	SPIKE	SPIKE	SPIKE DUP	SPIKE DUP		
	ADDED (ug/kg)	ADDED (ug/kg)	LIMIT	LIMIT	LIMIT	RESULT (ug/kg)	RESULT (ug/kg)	% REC	#	RESULT (ug/kg)	% REC	#
Ethylbenzene	2000	2000	75	125	25	0	2079	104		2257	113	8
m,p-Xylene	4000	4000	75	125	25	0	4289	107		4856	121	12
o-Xylene	2000	2000	75	125	25	0	2140	107		2375	119	10
Styrene	2000	2000	75	125	25	0	1936	97		2131	107	10
Bromoform	2000	2000	75	125	25	0	2136	107		2455	123	14
Isopropylbenzene	2000	2000	75	125	25	0	2231	112		2448	122	9
1,1,2,2-Tetrachloroethane	2000	2000	75	125	25	0	1923	96		2120	106	10
1,2,3-Trichloropropane	2000	2000	75	125	25	0	1786	89		1944	97	8
trans-1,4-Dichloro-2-butene	2000	2000	75	125	25	0	2000	100		2094	105	5
n-Propylbenzene	2000	2000	75	125	25	0	1740	87		1930	96	10
Bromobenzene	2000	2000	75	125	25	0	1595	80		1762	88	10
1,3,5-Trimethylbenzene	2000	2000	75	125	25	0	1587	79		1815	91	13
2-Chlorotoluene	2000	2000	75	125	25	0	1916	96		2154	108	12
4-Chlorotoluene	2000	2000	75	125	25	0	1853	93		2096	105	12
tert-butylbenzene	2000	2000	75	125	25	0	1956	98		2207	110	12
1,2,4-Trimethylbenzene	2000	2000	75	125	25	0	1566	78		1776	89	13
sec-butylbenzene	2000	2000	75	125	25	0	1835	92		2078	104	12
p-isopropyltoluene	2000	2000	75	125	25	0	1784	89		1975	99	10
1,3-Dichlorobenzene	2000	2000	75	125	25	0	2140	107		2494	125	15
1,4-Dichlorobenzene	2000	2000	75	125	25	0	2108	105		2309	115	9
n-butylbenzene	2000	2000	75	125	25	0	2075	104		2267	113	9
1,2-Dichlorobenzene	2000	2000	75	125	25	0	2117	106		2334	117	10
1,2-Dibromo-3-chloropropane	2000	2000	75	125	25	0	1773	89		1914	96	8
1,2,4-Trichlorobenzene	2000	2000	75	125	25	0	1936	97		2091	105	8
Hexachlorobutadiene	2000	2000	75	125	25	0	2012	101		2160	108	7
Naphthalene	2000	2000	75	125	25	0	1758	88		1765	88	0
1,2,3-Trichlorobenzene	2000	2000	75	125	25	0	2029	101		2208	110	8

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

VPH
DATA SUMMARIES

Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 8, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS101

Lab Sample ID: 73487-1
Matrix: Solid
Percent Solid: 86
Dilution Factor: 64
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/07/12

VPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	3200	µg/kg	U
Unadjusted C9-C12 Aliphatics	N/A	3200	µg/kg	28400
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	3200	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	3200	µg/kg	13800
C9-C10 Aromatic Hydrocarbons ¹	N/A	640	µg/kg	14600
Surrogate % Recovery (Trifluorotoluene) PID				108
Surrogate % Recovery (Trifluorotoluene) FID				109
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. Of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

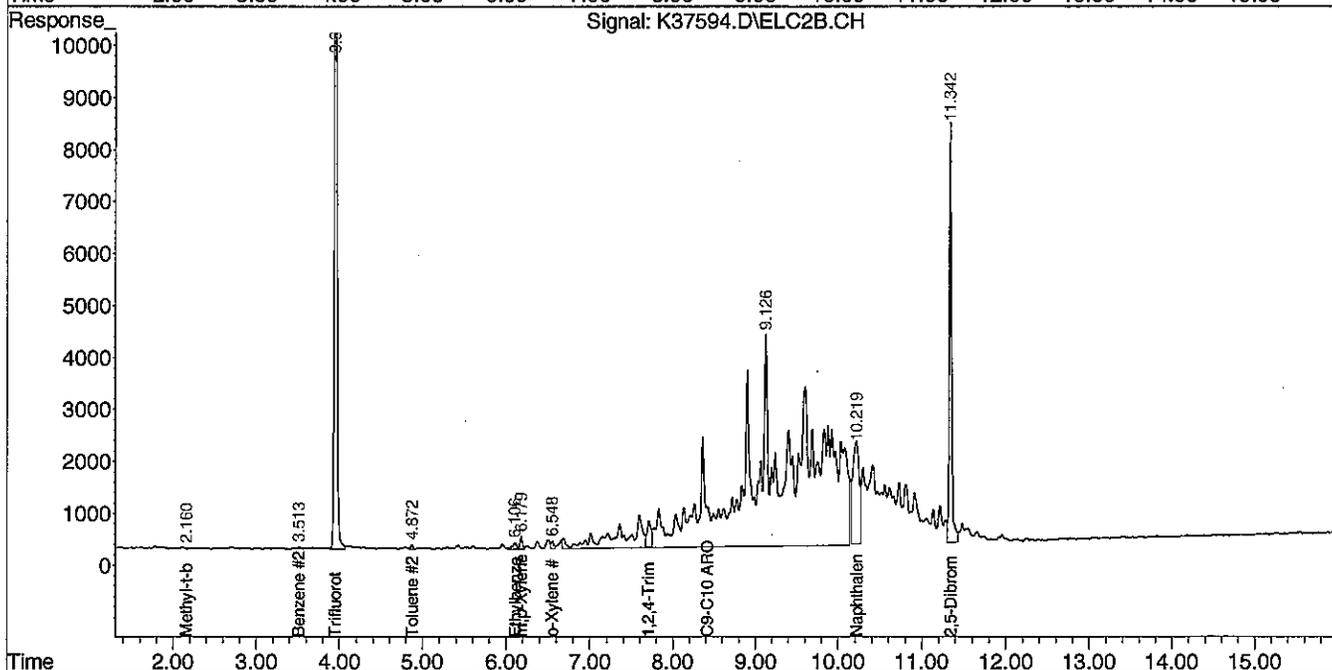
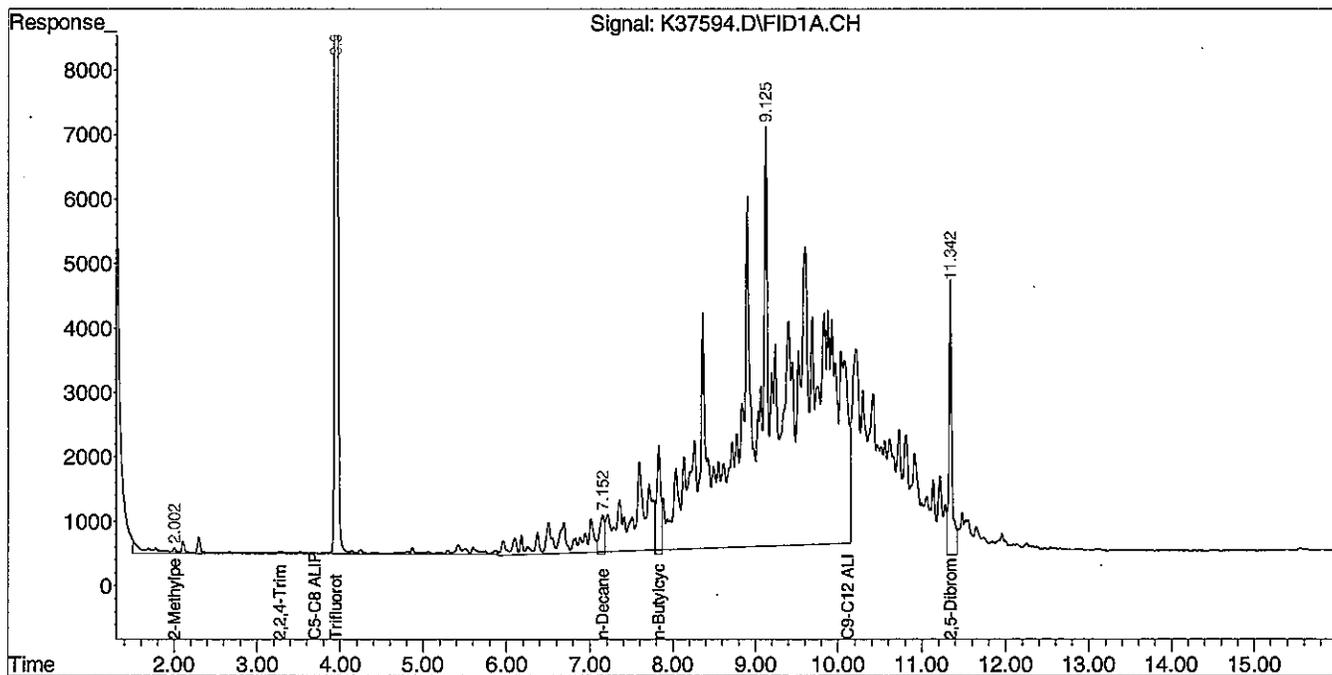
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080612-K\
 Data File : K37594.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 07 Aug 2012 10:55 pm
 Operator : AR/JK
 Sample : 73487-1
 Misc : 100,16.62,SOIL,,16 ML FV
 ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 10:48:47 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 8, 2012

SAMPLE DATA

Lab Sample ID: 73487-3
Matrix: Solid
Percent Solid: 52
Dilution Factor: 167
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS103

VPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics	N/A	8350	µg/kg	U
Unadjusted C9-C12 Aliphatics	N/A	8350	µg/kg	89700
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	8350	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	8350	µg/kg	19300
C9-C10 Aromatic Hydrocarbons	N/A	1670	µg/kg	7860
Surrogate % Recovery (Trifluorotoluene) PID				95
Surrogate % Recovery (Trifluorotoluene) FID				95
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. Of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

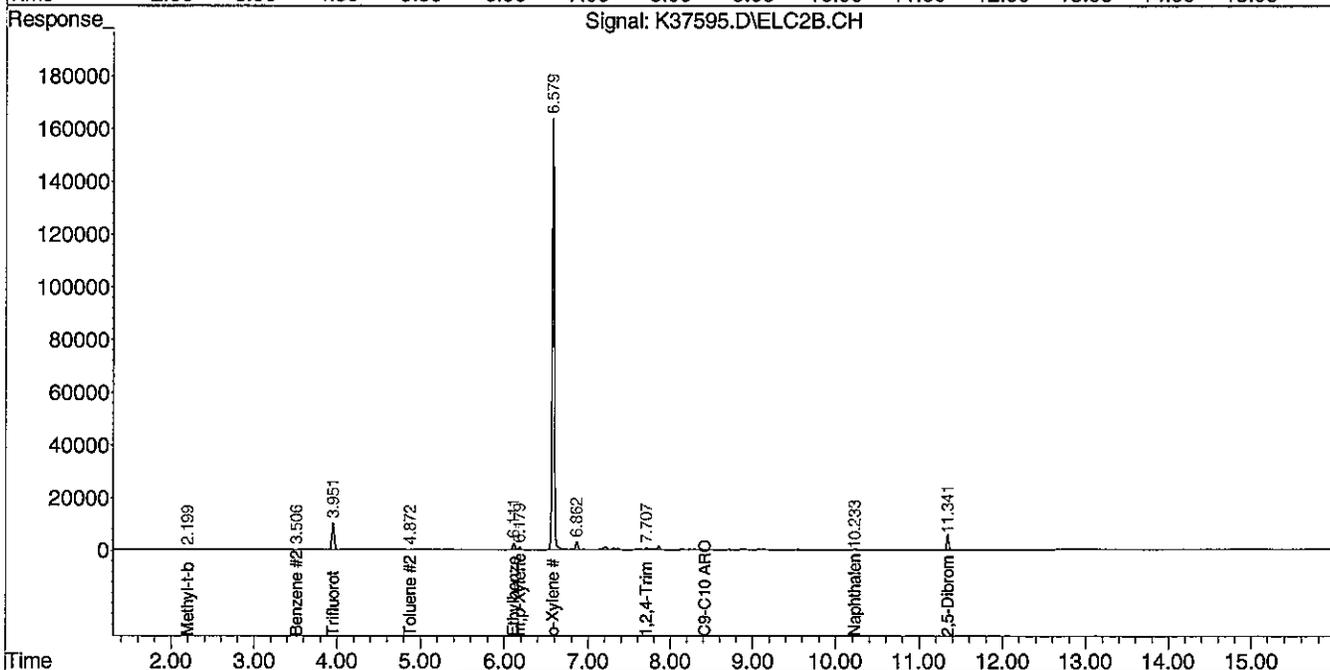
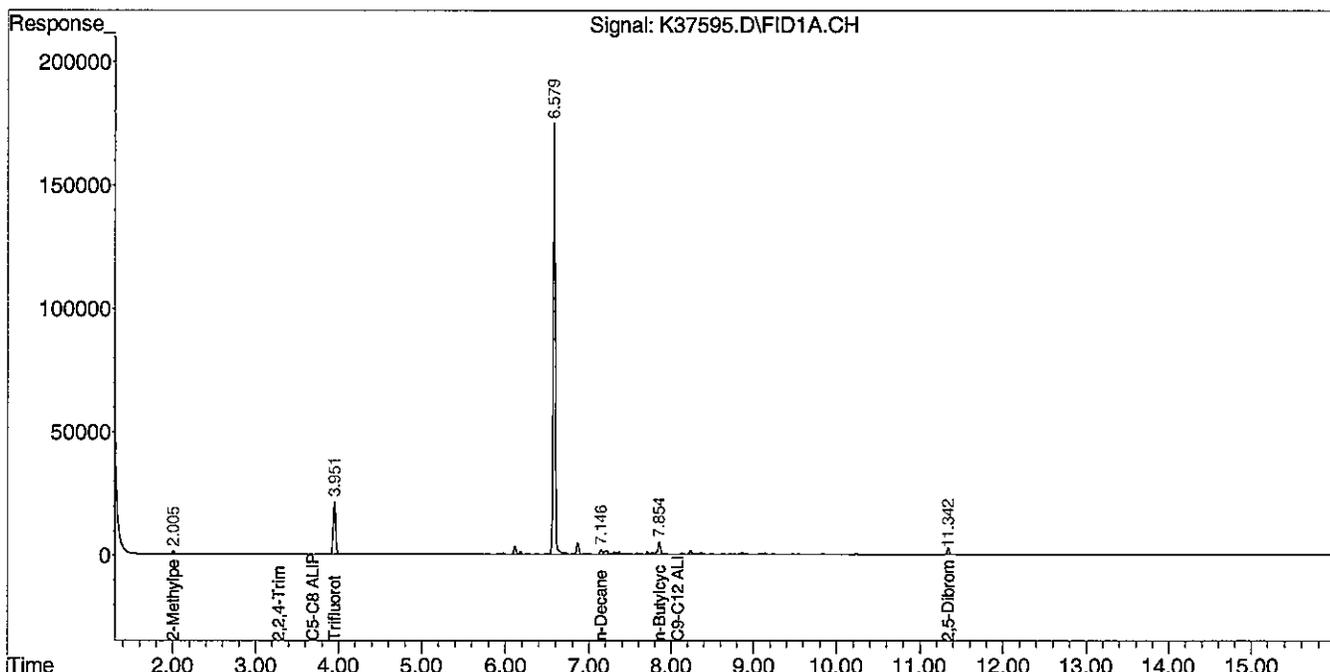
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080612-K\
 Data File : K37595.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 07 Aug 2012 11:22 pm
 Operator : AR/JK
 Sample : 73487-3
 Misc : 100,8.02,SOIL
 ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 09:04:39 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 8, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS105

Lab Sample ID: 73487-5
Matrix: Solid
Percent Solid: 91
Dilution Factor: 55
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/07/12

VPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	2750	µg/kg	U
Unadjusted C9-C12 Aliphatics	N/A	2750	µg/kg	U
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	2750	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	2750	µg/kg	U
C9-C10 Aromatic Hydrocarbons ¹	N/A	550	µg/kg	U
Surrogate % Recovery (Trifluorotoluene) PID				105
Surrogate % Recovery (Trifluorotoluene) FID				104
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

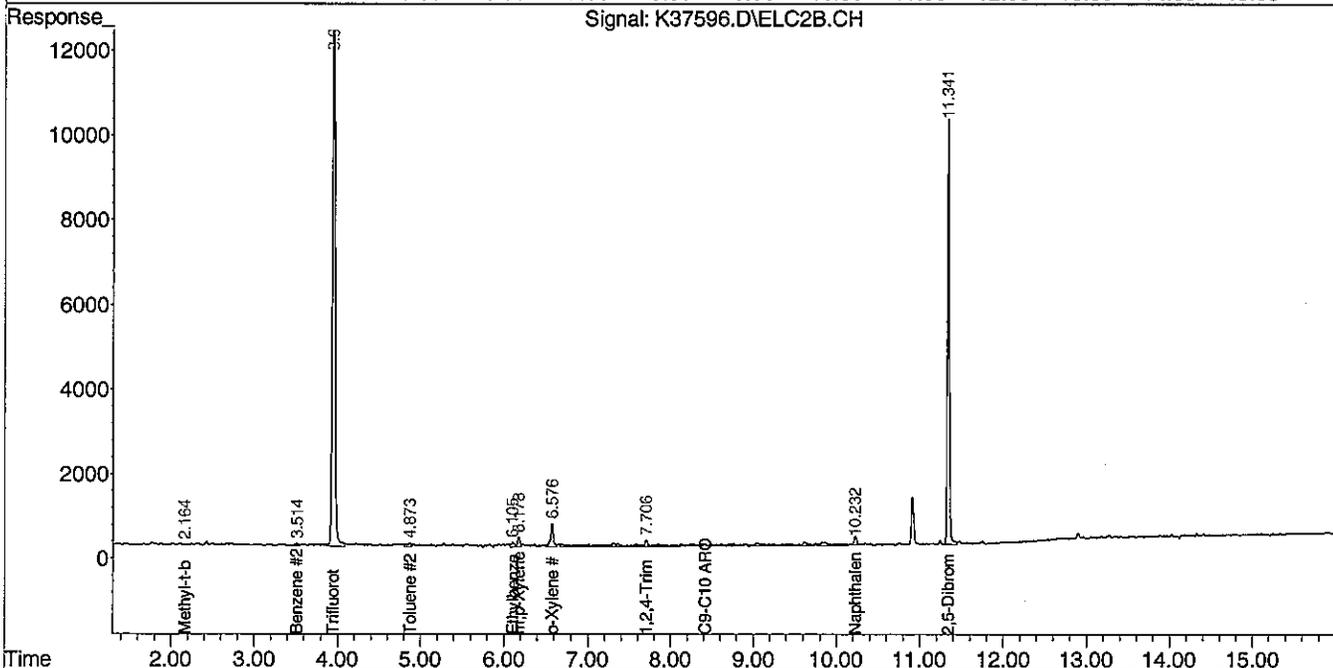
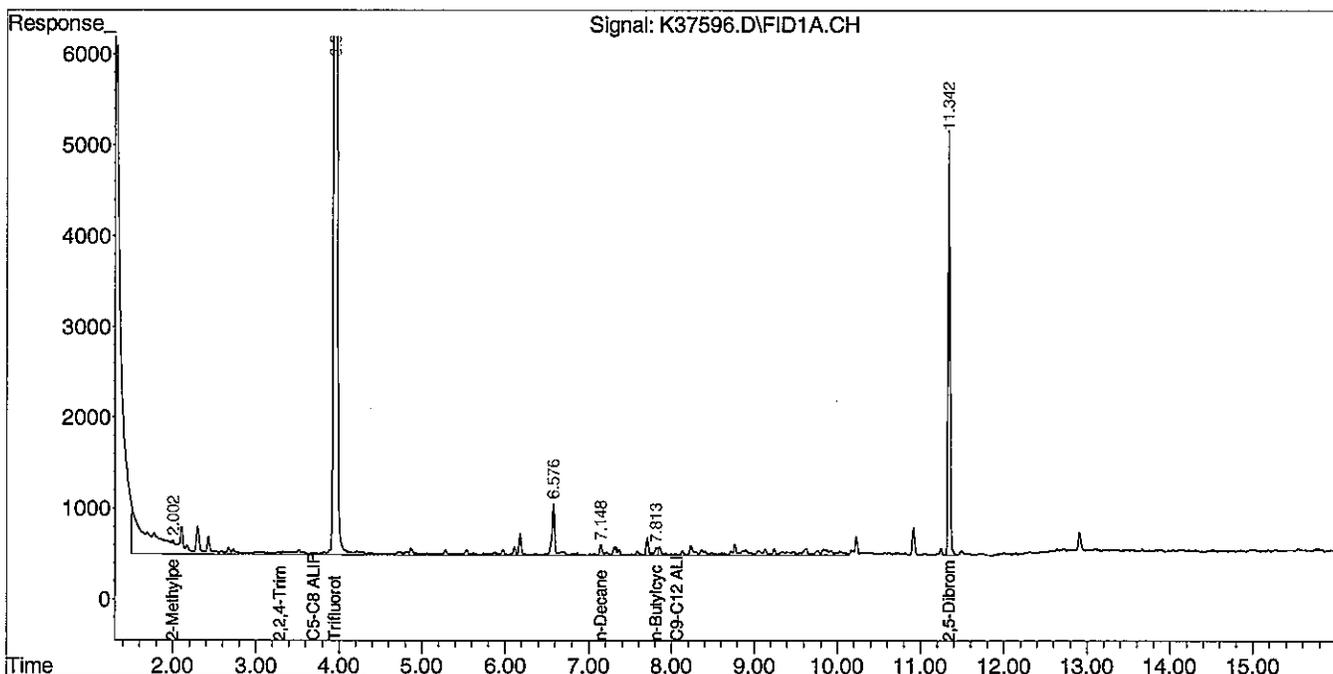
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080612-K\
 Data File : K37596.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 07 Aug 2012 11:48 pm
 Operator : AR/JK
 Sample : 73487-5
 Misc : 100,10.86,SOIL
 ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 10:50:26 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 8, 2012

SAMPLE DATA

Lab Sample ID: 73487-6
Matrix: Solid
Percent Solid: 94
Dilution Factor: 55
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS106

VPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	2750	µg/kg	U
Unadjusted C9-C12 Aliphatics ^{1,2}	N/A	2750	µg/kg	20200
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	2750	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	2750	µg/kg	10200
C9-C10 Aromatic Hydrocarbons ¹	N/A	550	µg/kg	9930
Surrogate % Recovery (Trifluorotoluene) PID				119
Surrogate % Recovery (Trifluorotoluene) FID				118
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

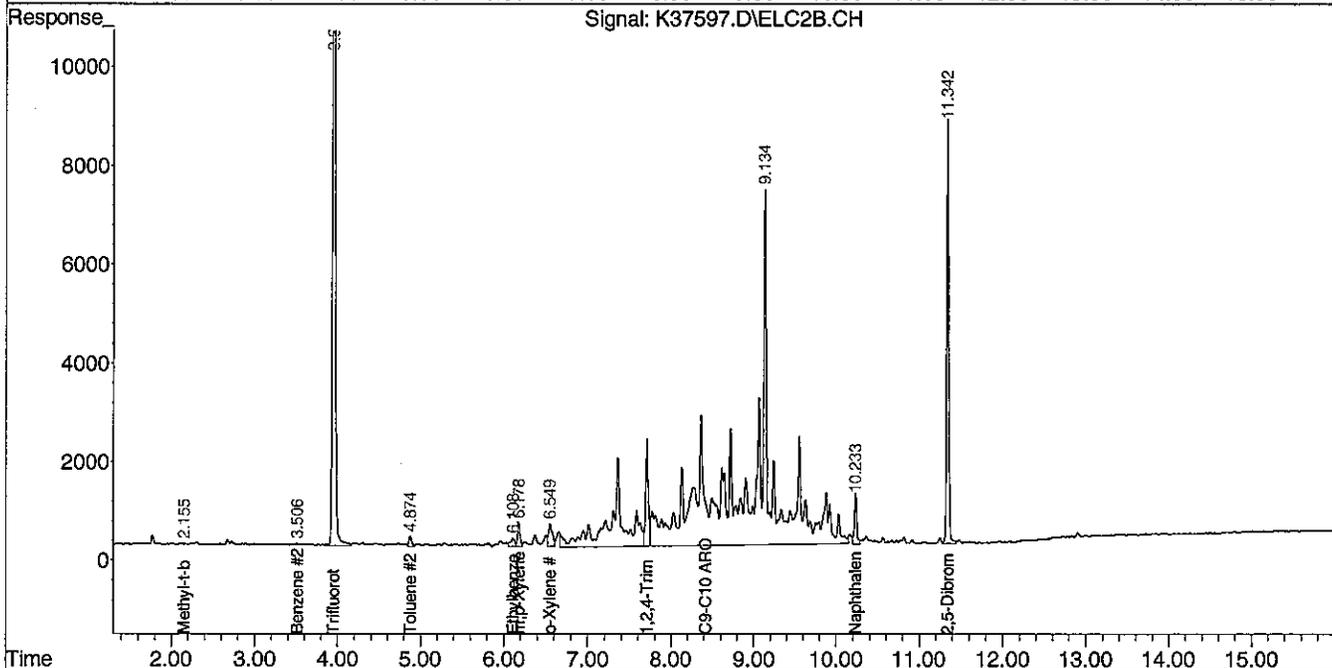
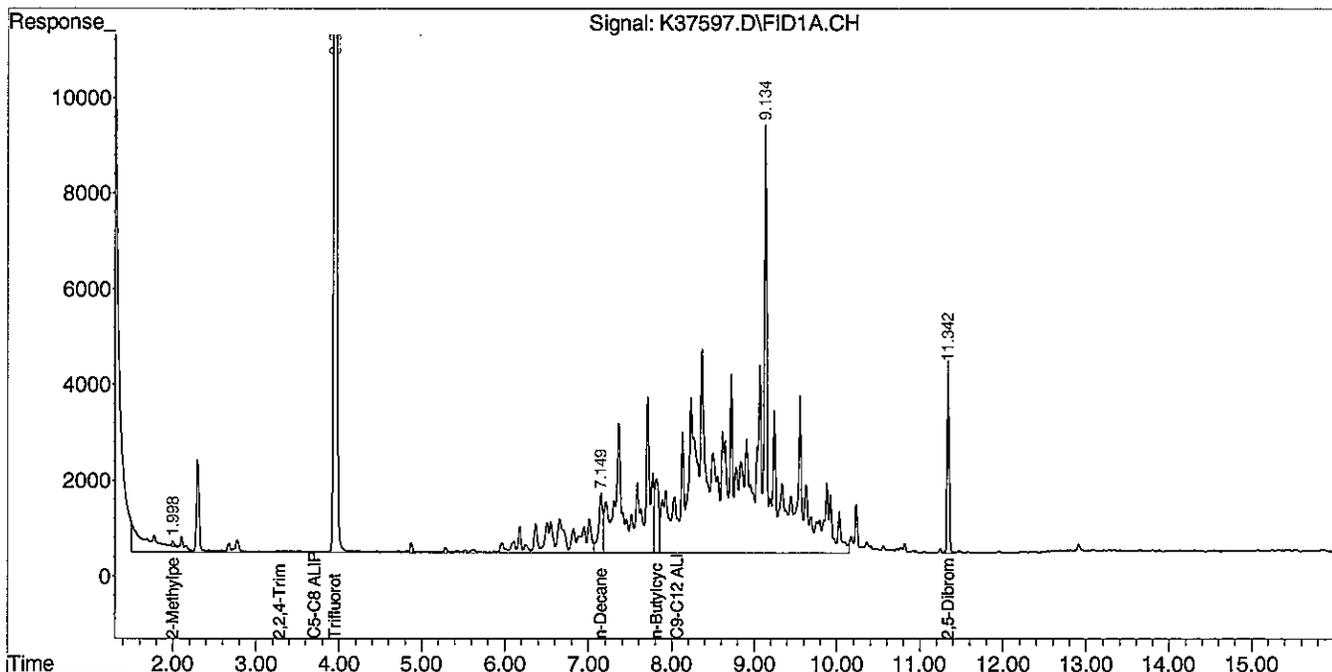
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080612-K\
 Data File : K37597.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 08 Aug 2012 12:15 am
 Operator : AR/JK
 Sample : 73487-6
 Misc : 100,12.26,SOIL,,12 ML FV
 ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 09:04:41 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 8, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS107

Lab Sample ID: 73487-7
Matrix: Solid
Percent Solid: 98
Dilution Factor: 50
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

VPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	2500	µg/kg	U
Unadjusted C9-C12 Aliphatics ¹	N/A	2500	µg/kg	U
C5-C8 Aliphatic Hydrocarbons ^{1,2}	N/A	2500	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	2500	µg/kg	U
C9-C10 Aromatic Hydrocarbons	N/A	500	µg/kg	U
Surrogate % Recovery (Trifluorotoluene) PID				113
Surrogate % Recovery (Trifluorotoluene) FID				113
Surrogate Acceptance Range				70-130%

¹ Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
² C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³ C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

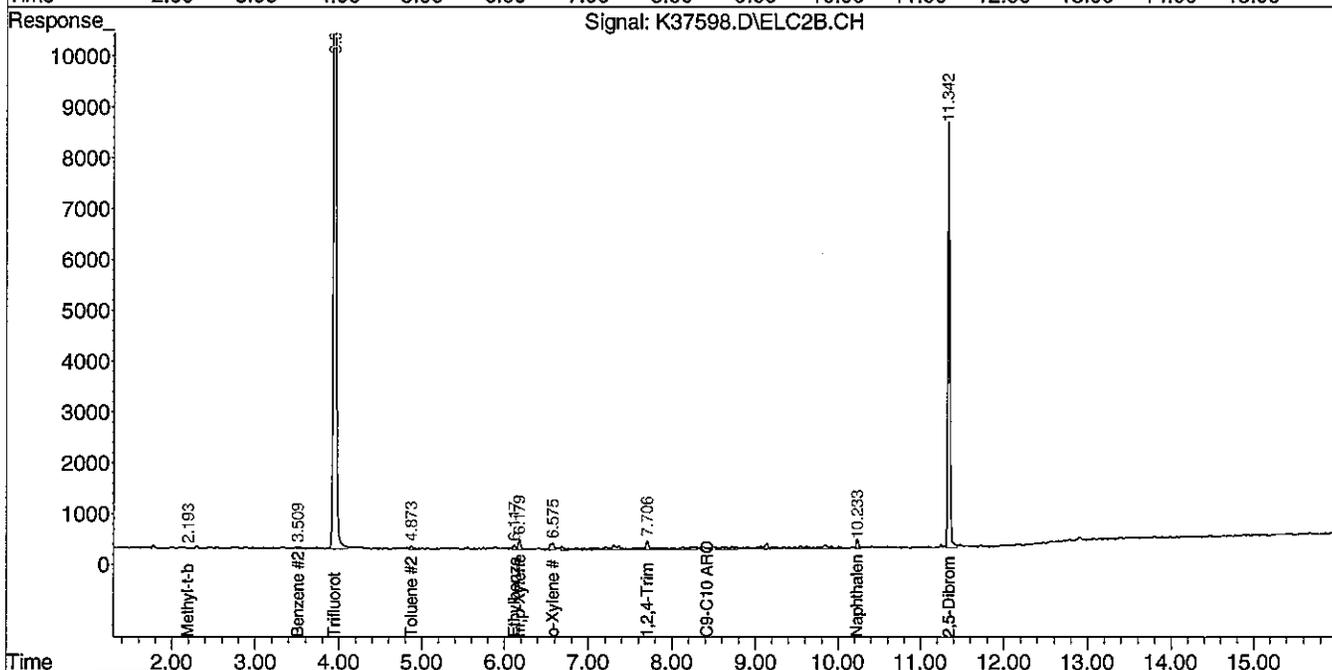
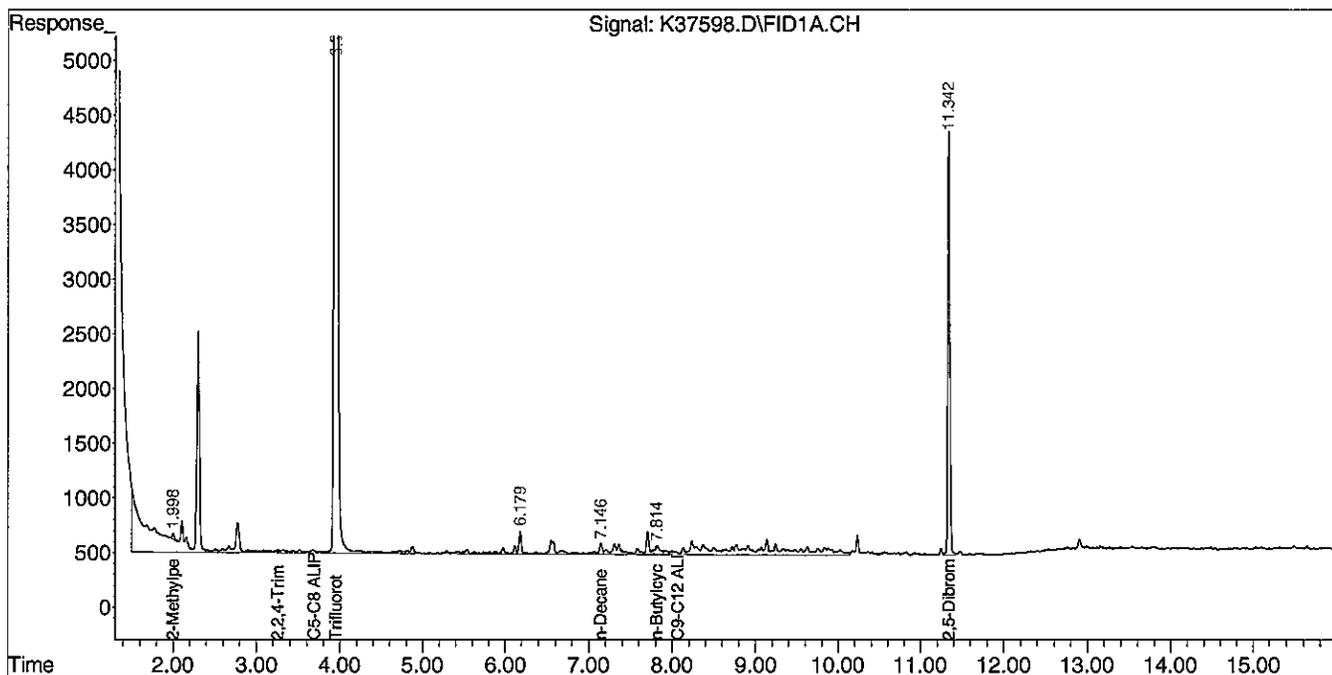
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080612-K\
 Data File : K37598.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 08 Aug 2012 12:42 am
 Operator : AR/JK
 Sample : 73487-7
 Misc : 100,14.57,SOIL,,14 ML FV
 ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 09:04:42 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 8, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS108

Lab Sample ID: 73487-8
Matrix: Solid
Percent Solid: 96
Dilution Factor: 280
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

VPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	14000	µg/kg	U
Unadjusted C9-C12 Aliphatics ¹	N/A	14000	µg/kg	56800
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	14000	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	14000	µg/kg	25200
C9-C10 Aromatic Hydrocarbons	N/A	2800	µg/kg	29400
Surrogate % Recovery (Trifluorotoluene) PID				115
Surrogate % Recovery (Trifluorotoluene) FID				114
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. Of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

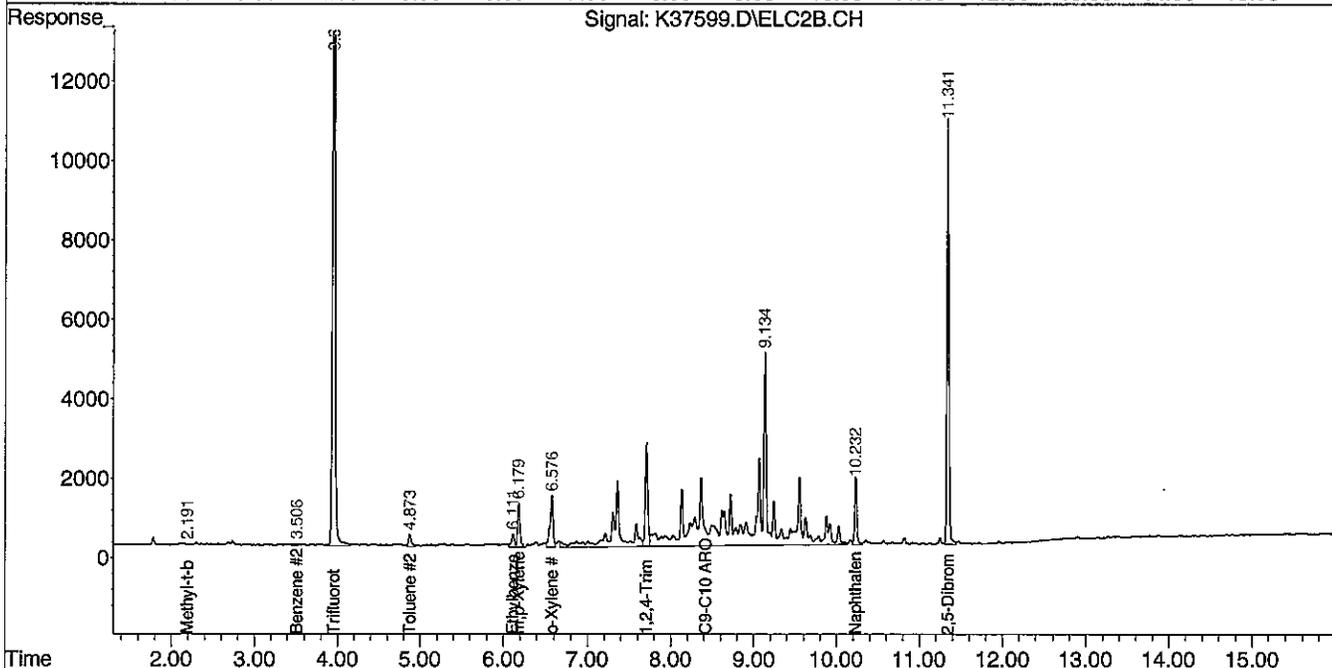
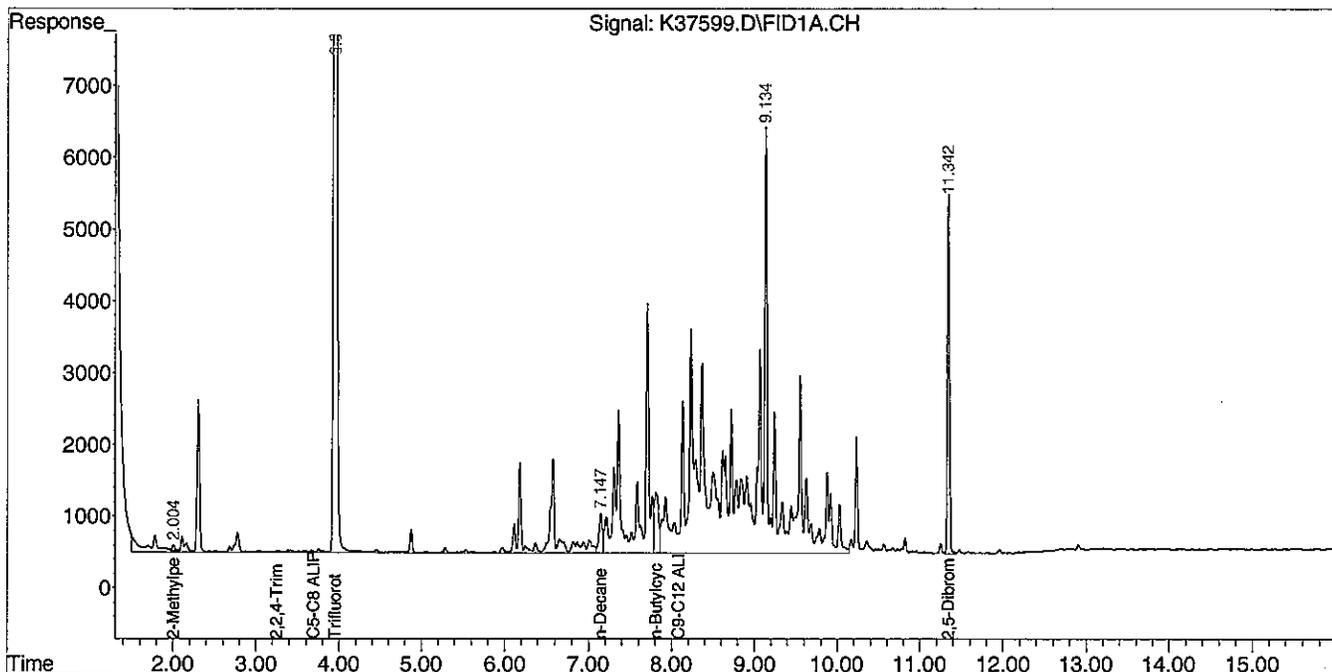
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080612-K\
 Data File : K37599.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 08 Aug 2012 1:08 am
 Operator : AR/JK
 Sample : 73487-8,,5X
 Misc : 20,9.62,SOIL
 ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 09:04:43 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 8, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS109

Lab Sample ID: 73487-9
Matrix: Solid
Percent Solid: 97
Dilution Factor: 49
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	2450	µg/kg	1770 J
Unadjusted C9-C12 Aliphatics ¹	N/A	2450	µg/kg	25500
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	2450	µg/kg	1610 J
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	2450	µg/kg	9150
C9-C10 Aromatic Hydrocarbons ¹	N/A	490	µg/kg	15700
Surrogate % Recovery (Trifluorotoluene) PID				129
Surrogate % Recovery (Trifluorotoluene) FID				126
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

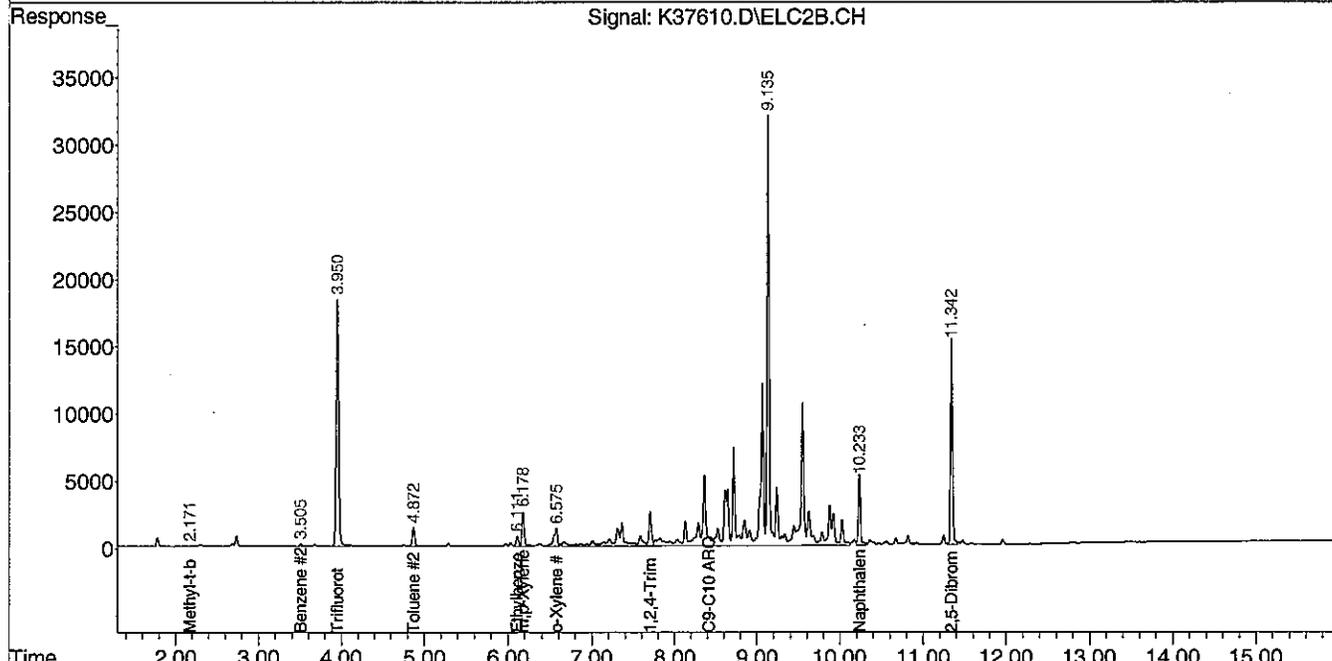
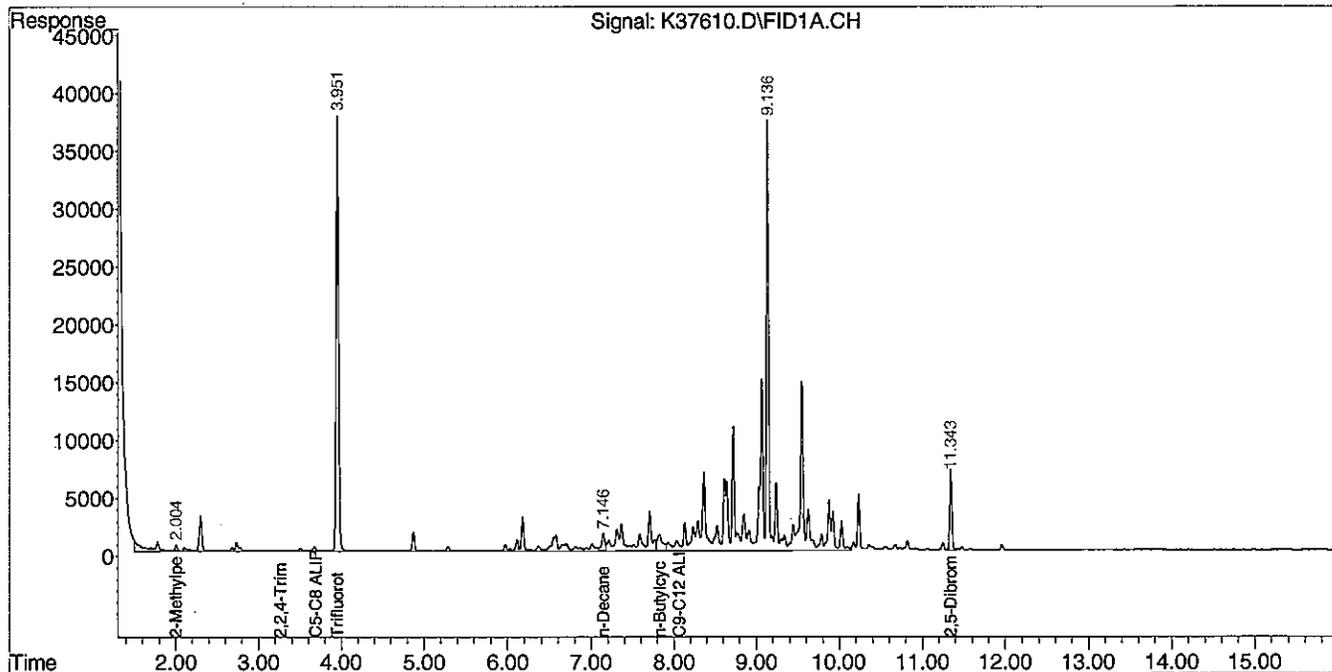
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080812-K\
 Data File : K37610.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 08 Aug 2012 12:04 pm
 Operator : JK
 Sample : 73487-9
 Misc : 100,10.93,SOIL
 ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 14:38:24 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 8, 2012

SAMPLE DATA

Lab Sample ID: 73487-10
Matrix: Solid
Percent Solid: 92
Dilution Factor: 293
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS110

VPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	14700	µg/kg	U
Unadjusted C9-C12 Aliphatics	N/A	14700	µg/kg	174000
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	14700	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	14700	µg/kg	102000
C9-C10 Aromatic Hydrocarbons ¹	N/A	2930	µg/kg	72500
Surrogate % Recovery (Trifluorotoluene) PID				143*
Surrogate % Recovery (Trifluorotoluene) FID				141*
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

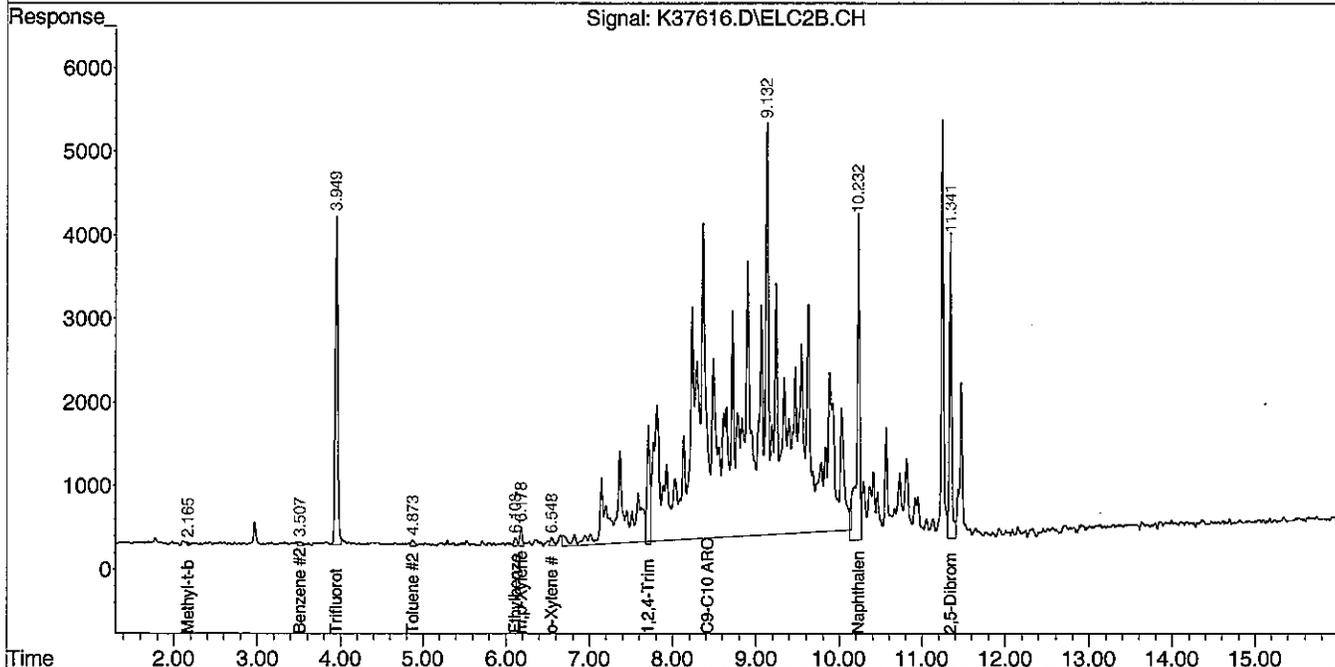
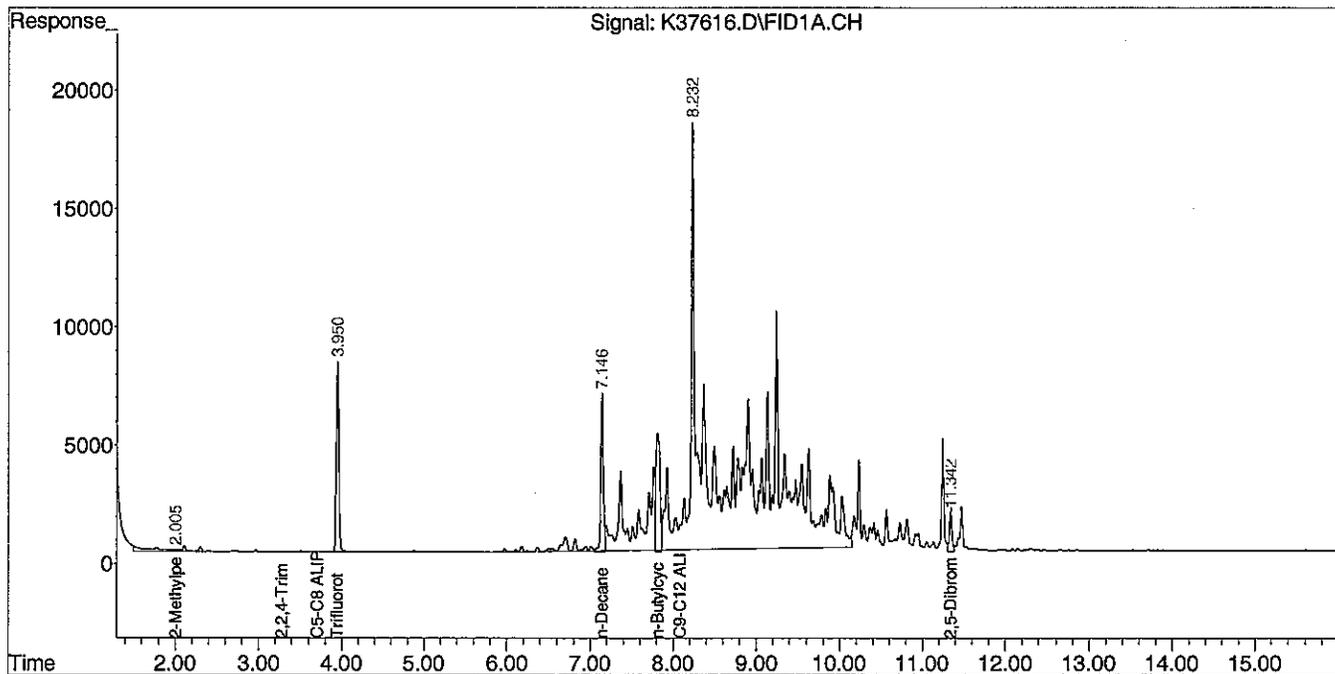
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.
 * Surrogate recovery outside of laboratory acceptance criteria. Sample was analyzed previously with similar results.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080812-K\
 Data File : K37616.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 08 Aug 2012 2:46 pm
 Operator : JK
 Sample : 73487-10,,5X
 Misc : 20,16.03,SOIL,,16 ML FV
 ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 15:15:22 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 8, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS112

Lab Sample ID: 73487-12
Matrix: Solid
Percent Solid: 97
Dilution Factor: 51
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	2550	µg/kg	U
Unadjusted C9-C12 Aliphatics ¹	N/A	2550	µg/kg	2100 J
C5-C8 Aliphatic Hydrocarbons ^{1,2}	N/A	2550	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	2550	µg/kg	1440 J
C9-C10 Aromatic Hydrocarbons ¹	N/A	510	µg/kg	658
Surrogate % Recovery (Trifluorotoluene) PID				109
Surrogate % Recovery (Trifluorotoluene) FID				108
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. Of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

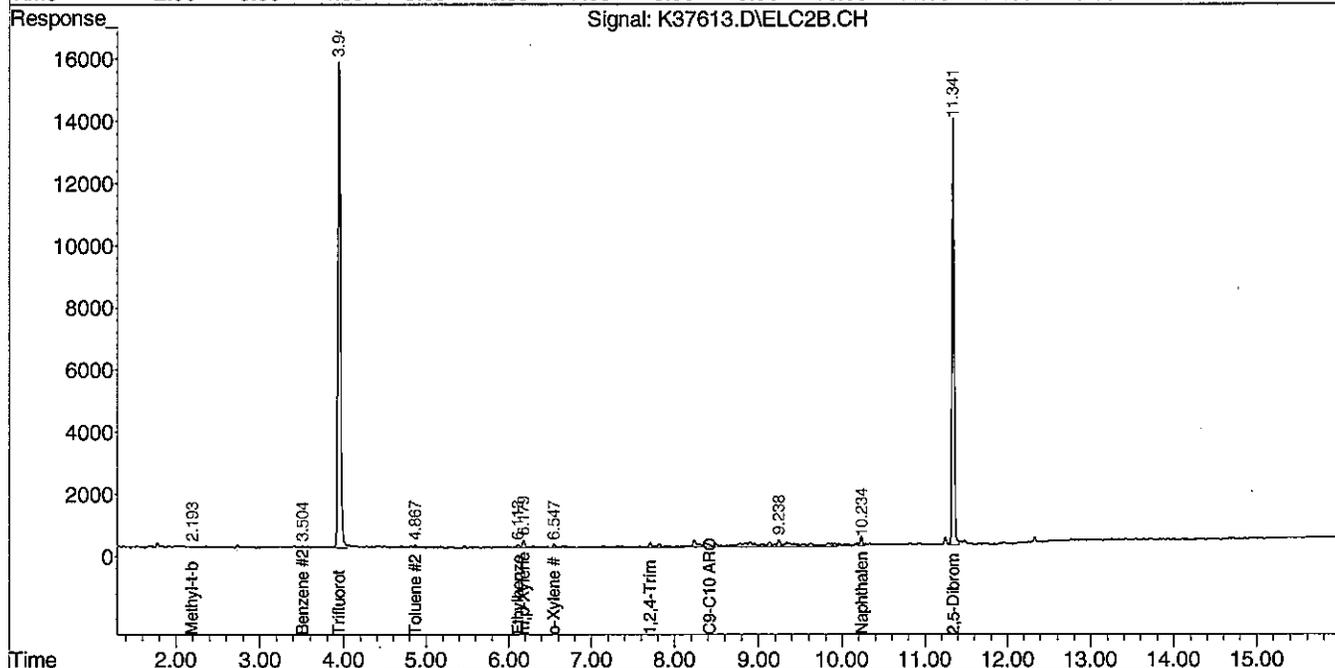
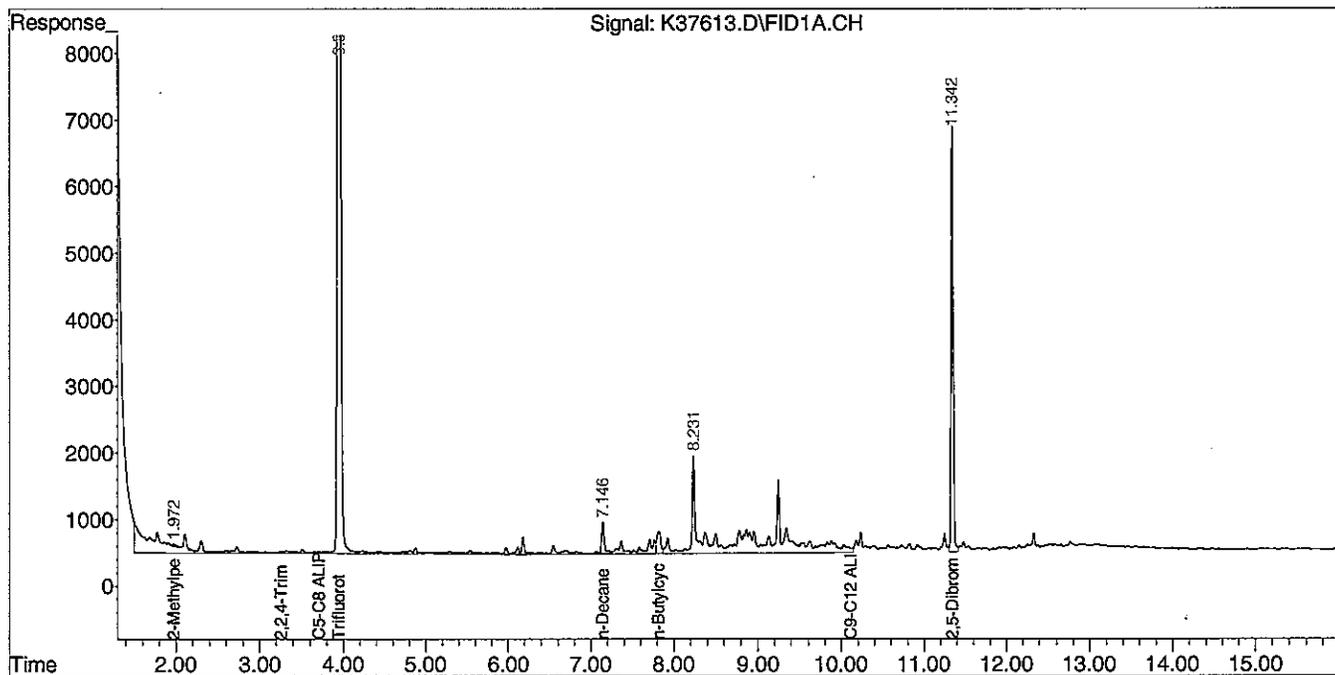
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080812-K\
 Data File : K37613.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 08 Aug 2012 1:25 pm
 Operator : JK
 Sample : 73487-12
 Misc : 100,14.60,SOIL,,14 ML FV
 ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 14:40:41 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 8, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS114

Lab Sample ID: 73487-14
Matrix: Solid
Percent Solid: 97
Dilution Factor: 52
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	2600	µg/kg	U
Unadjusted C9-C12 Aliphatics ¹	N/A	2600	µg/kg	9910
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	2600	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	2600	µg/kg	5950
C9-C10 Aromatic Hydrocarbons ¹	N/A	520	µg/kg	3960
Surrogate % Recovery (Trifluorotoluene) PID				118
Surrogate % Recovery (Trifluorotoluene) FID				114
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

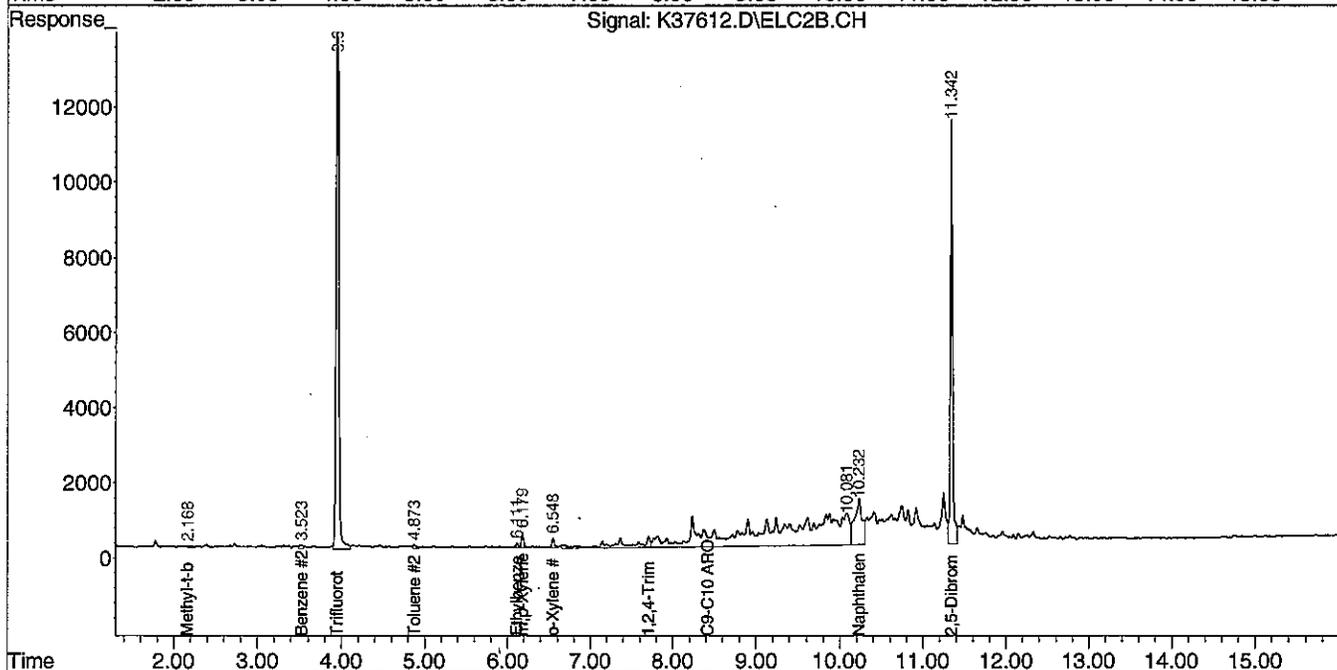
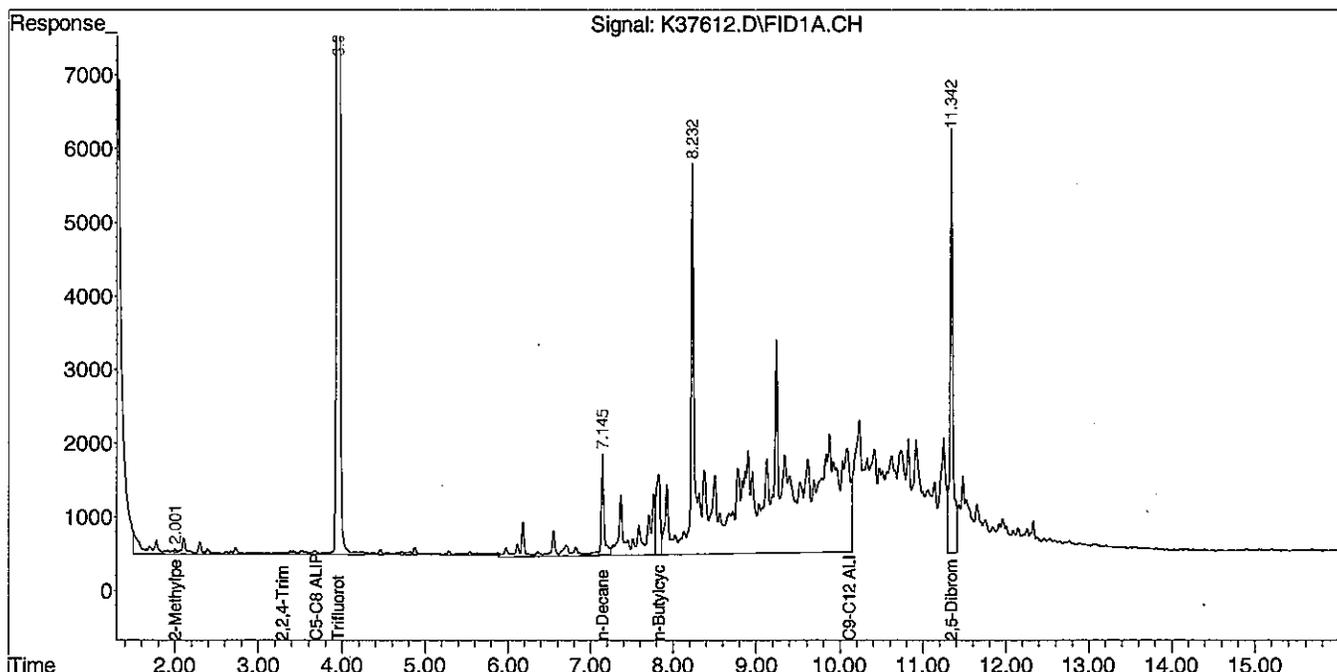
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080812-K\
 Data File : K37612.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 08 Aug 2012 12:58 pm
 Operator : JK
 Sample : 73487-14
 Misc : 100,16.52,SOIL,,16 ML FV
 ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 14:39:43 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 8, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS115

Lab Sample ID: 73487-15
Matrix: Solid
Percent Solid: 81
Dilution Factor: 79
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

VPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	3950	µg/kg	U
Unadjusted C9-C12 Aliphatics ¹	N/A	3950	µg/kg	U
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	3950	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	3950	µg/kg	U
C9-C10 Aromatic Hydrocarbons ¹	N/A	790	µg/kg	U
Surrogate % Recovery (Trifluorotoluene) PID				84
Surrogate % Recovery (Trifluorotoluene) FID				82
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. Of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

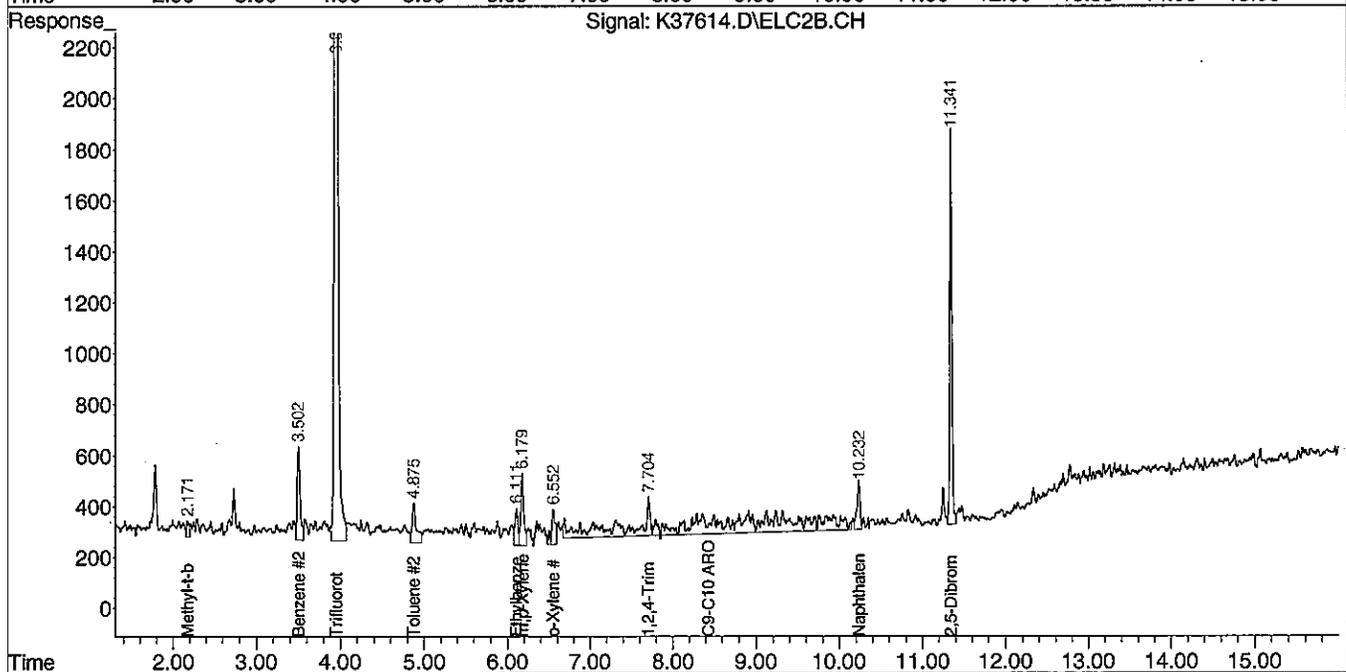
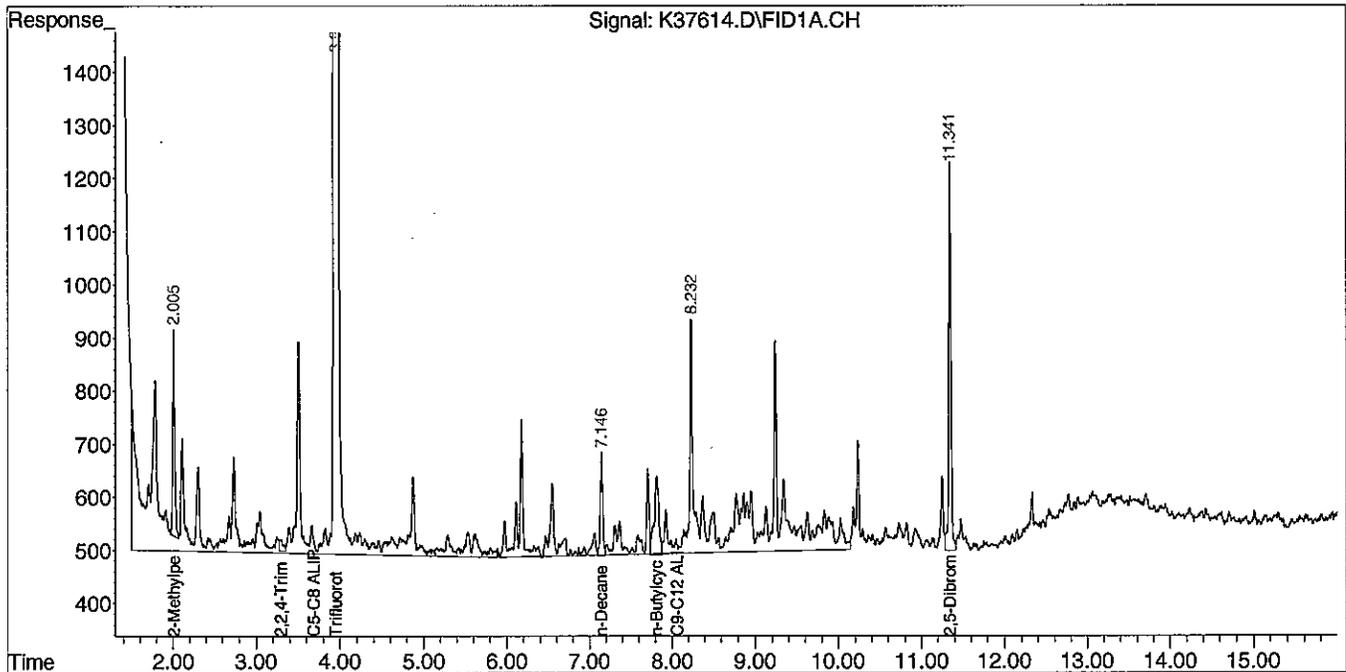
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080812-K\
 Data File : K37614.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 08 Aug 2012 1:52 pm
 Operator : JK
 Sample : 73487-15
 Misc : 100,9.23,SOIL
 ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 14:41:49 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 8, 2012

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS10X

SAMPLE DATA

Lab Sample ID: 73487-16
Matrix: Solid
Percent Solid: 97
Dilution Factor: 45
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/08/12

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics	N/A	2250	µg/kg	U
Unadjusted C9-C12 Aliphatics	N/A	2250	µg/kg	U
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	2250	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	2250	µg/kg	U
C9-C10 Aromatic Hydrocarbons	N/A	450	µg/kg	U
Surrogate % Recovery (Trifluorotoluene) PID				164*
Surrogate % Recovery (Trifluorotoluene) FID				163*
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

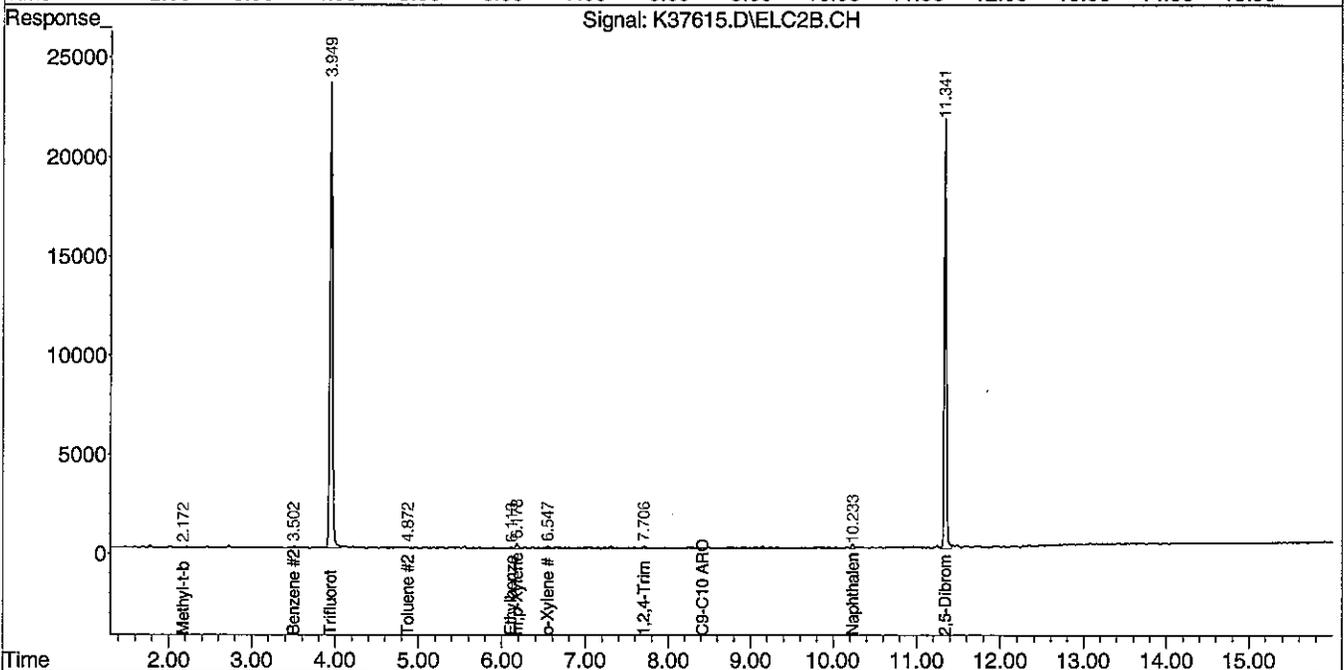
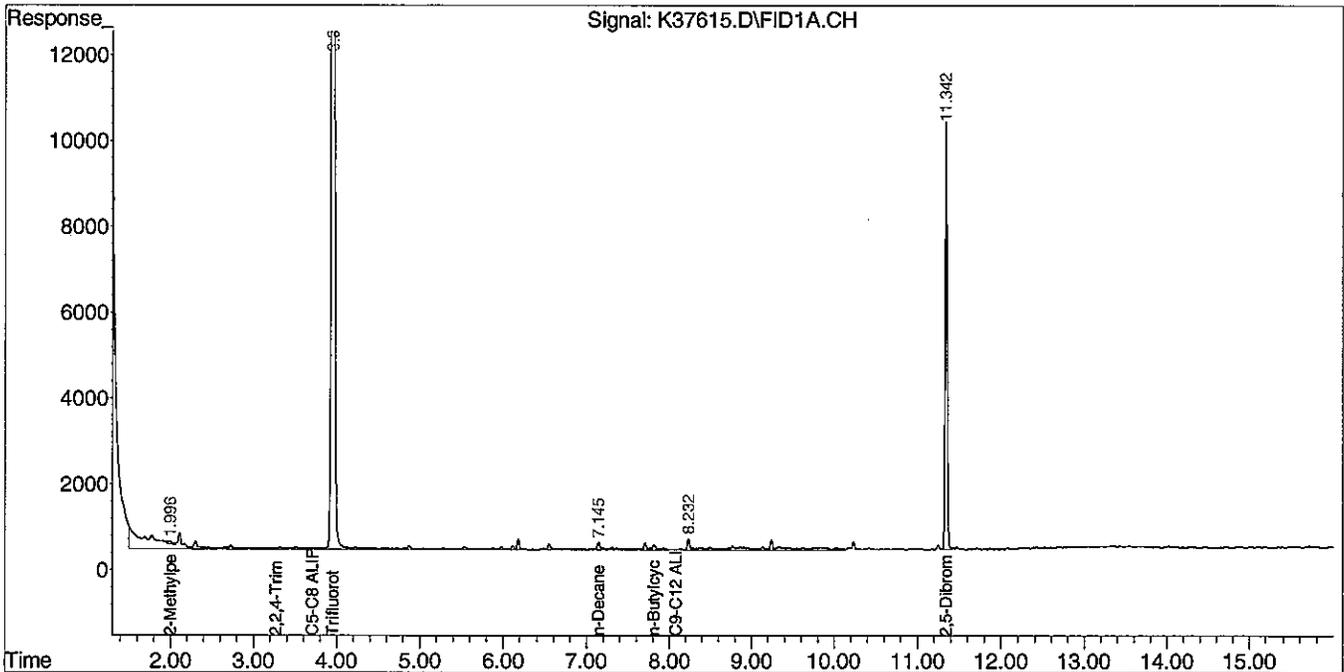
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.
 * Surrogate recovery outside of laboratory acceptance criteria. Sample was analyzed previously with similar results.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080812-K\
 Data File : K37615.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 08 Aug 2012 2:19 pm
 Operator : JK
 Sample : 73487-16
 Misc : 100,11.81,SOIL
 ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 14:42:38 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 8, 2012

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: MW101

SAMPLE DATA

Lab Sample ID: 73487-21
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/07/12

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	50	µg/L	27 J
Unadjusted C9-C12 Aliphatics ¹	N/A	50	µg/L	66
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	50	µg/L	27 J
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	50	µg/L	32 J
C9-C10 Aromatic Hydrocarbons ¹	N/A	10	µg/L	33
Surrogate % Recovery (Trifluorotoluene) PID				116
Surrogate % Recovery (Trifluorotoluene) FID				113
Surrogate Acceptance Range				70-130%
¹ Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range ² C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range ³ C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. of C9-C10 Aromatic Hydrocarbons. *Recovery is outside the laboratory acceptance criteria. RL = Report Limit U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank				

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

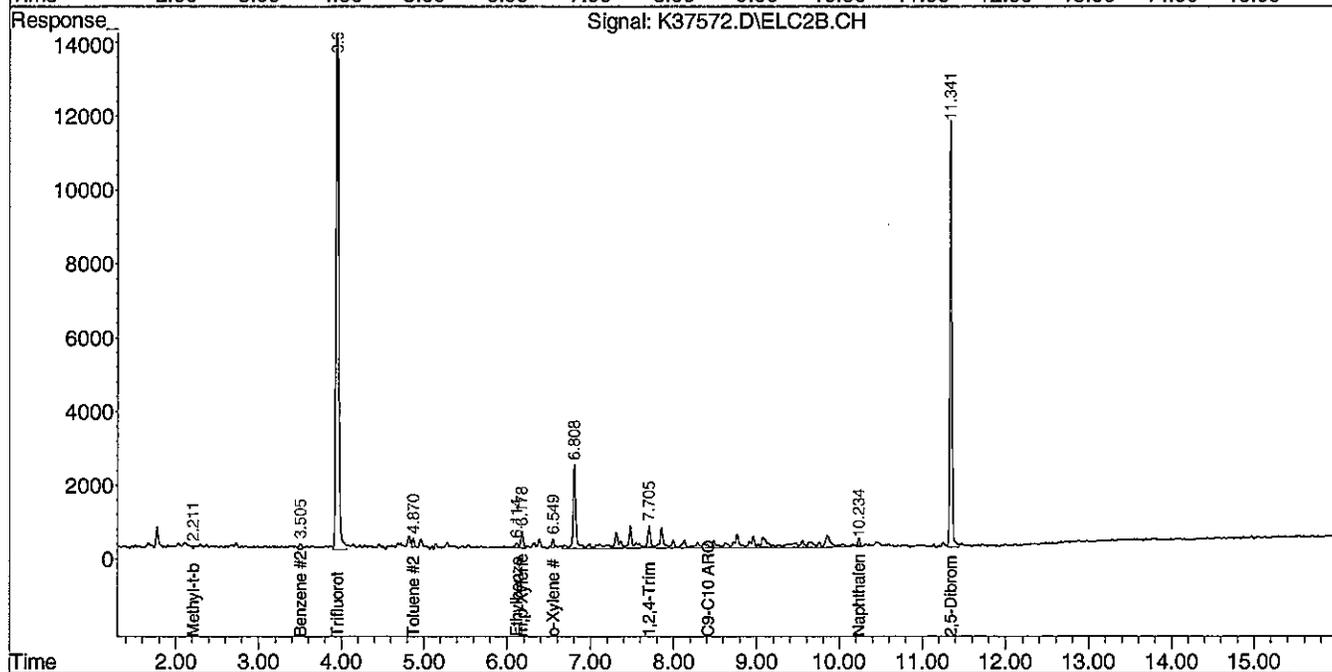
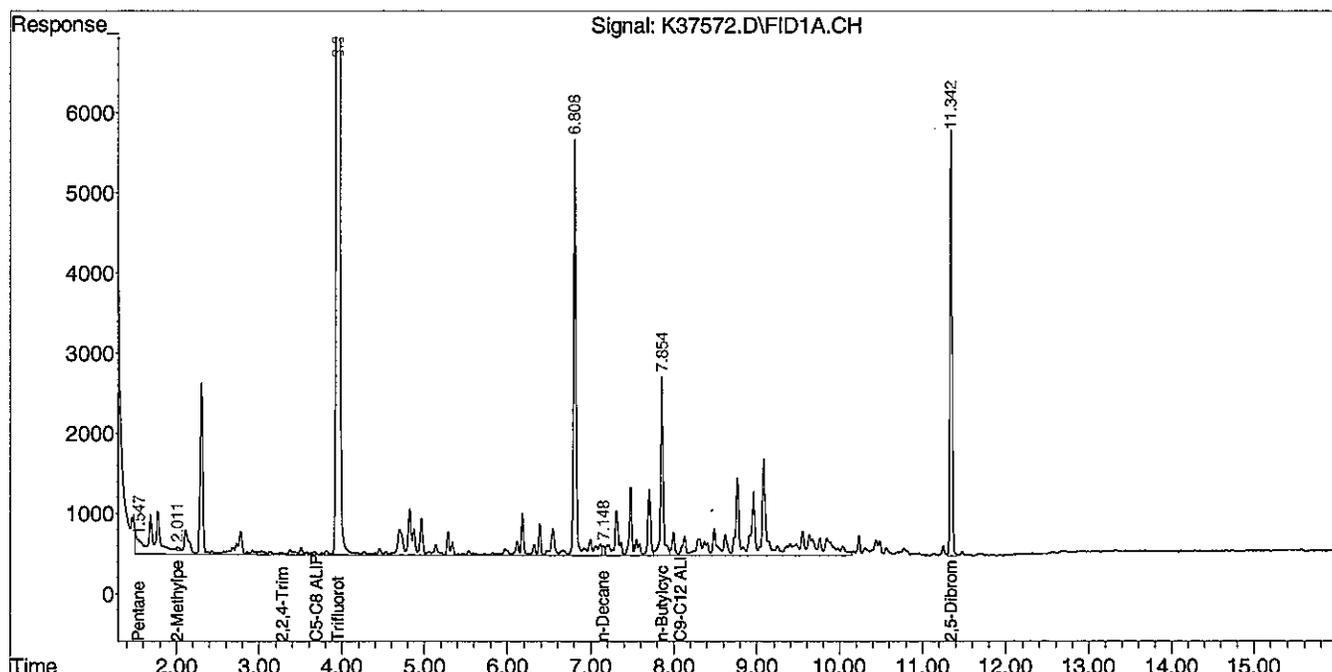
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080612-K\
 Data File : K37572.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 07 Aug 2012 12:15 pm
 Operator : AR
 Sample : 73487-21
 Misc : 5000
 ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 07 15:43:42 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 8, 2012

SAMPLE DATA

Lab Sample ID: 73487-22
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: MWX

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	50	µg/L	U
Unadjusted C9-C12 Aliphatics ¹	N/A	50	µg/L	U
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	50	µg/L	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	50	µg/L	U
C9-C10 Aromatic Hydrocarbons ¹	N/A	10	µg/L	10
Surrogate % Recovery (Trifluorotoluene) PID				115
Surrogate % Recovery (Trifluorotoluene) FID				113
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

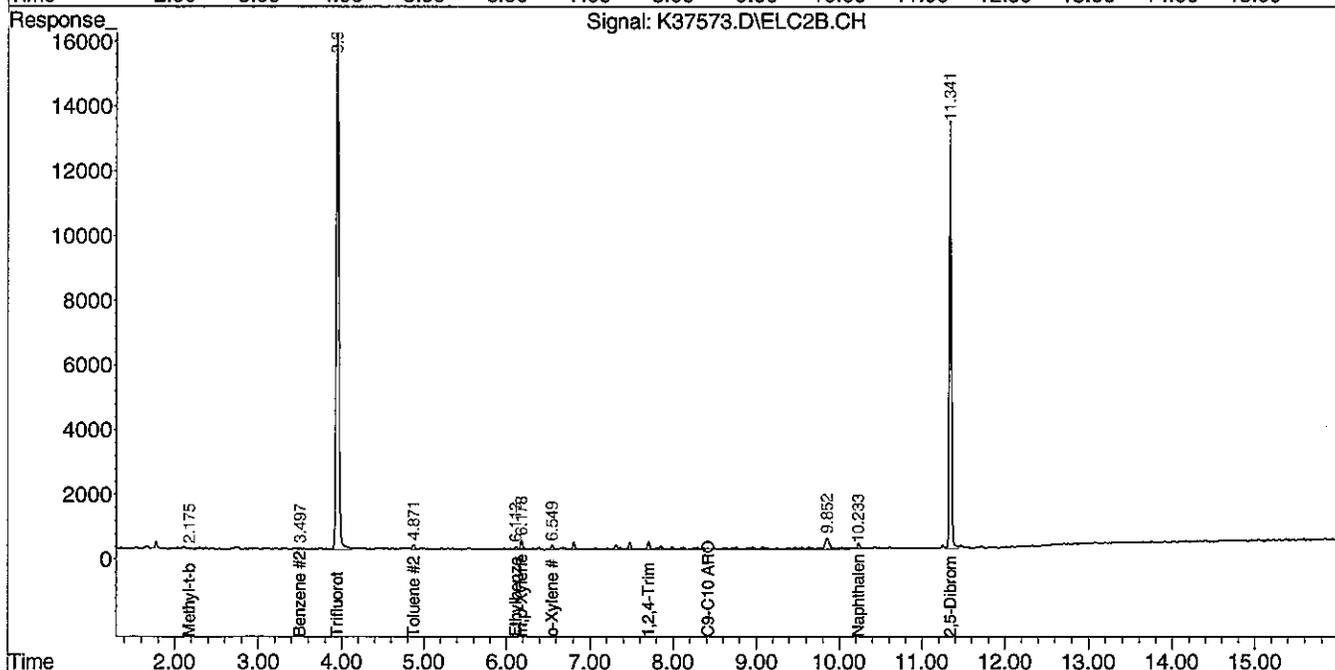
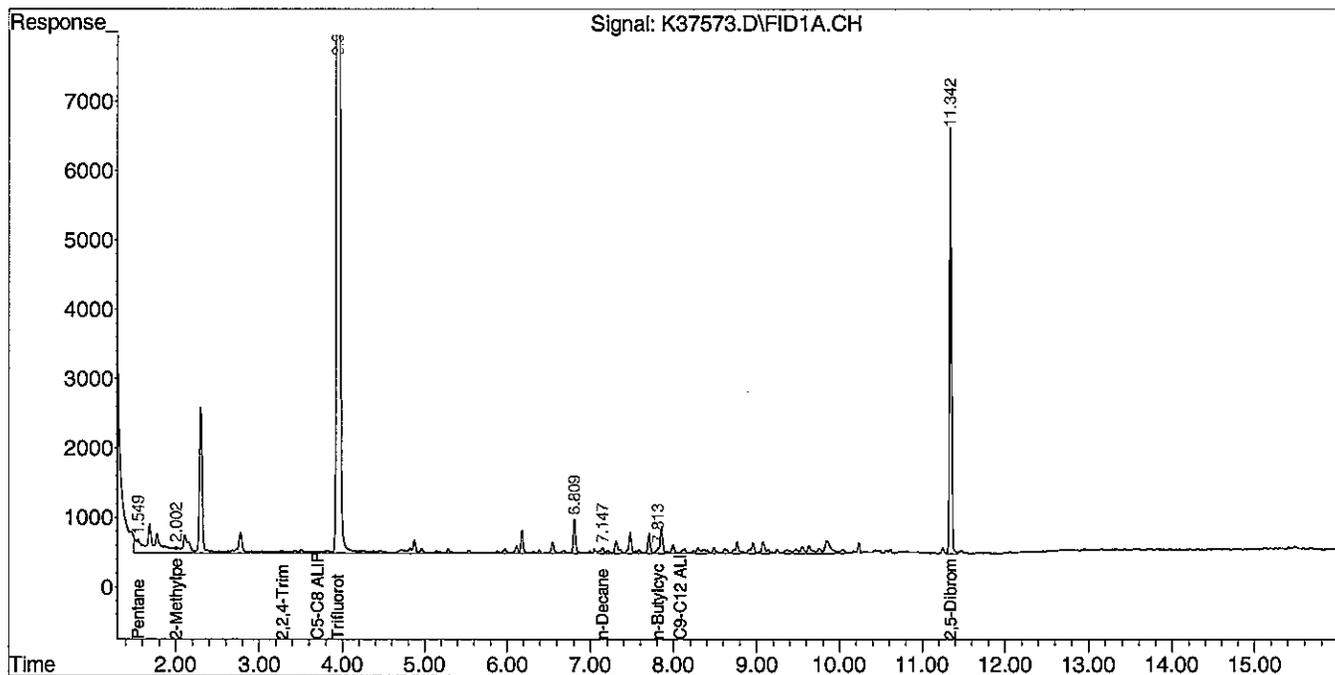
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080612-K\
 Data File : K37573.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 07 Aug 2012 12:42 pm
 Operator : AR
 Sample : 73487-22
 Misc : 5000
 ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 07 15:45:13 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 8, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: PW101

Lab Sample ID: 73487-23
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/07/12

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	50	µg/L	U
Unadjusted C9-C12 Aliphatics ¹	N/A	50	µg/L	U
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	50	µg/L	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	50	µg/L	U
C9-C10 Aromatic Hydrocarbons ¹	N/A	10	µg/L	U
Surrogate % Recovery (Trifluorotoluene) PID				110
Surrogate % Recovery (Trifluorotoluene) FID				111
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

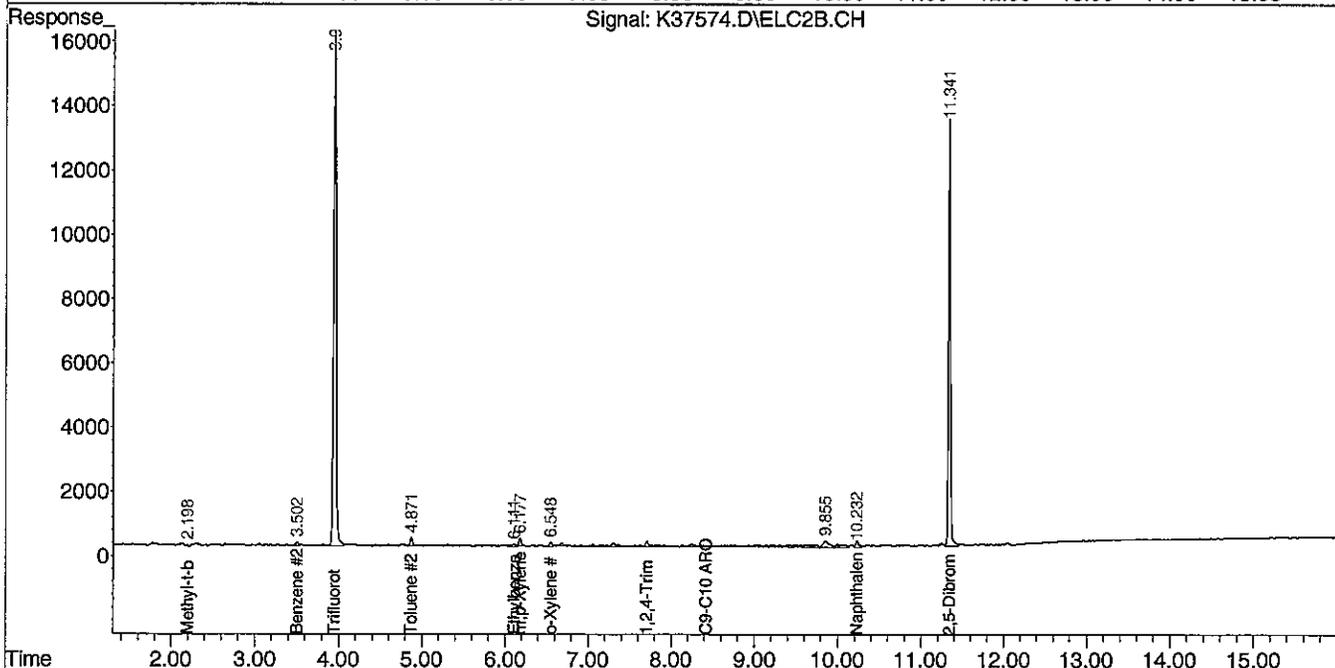
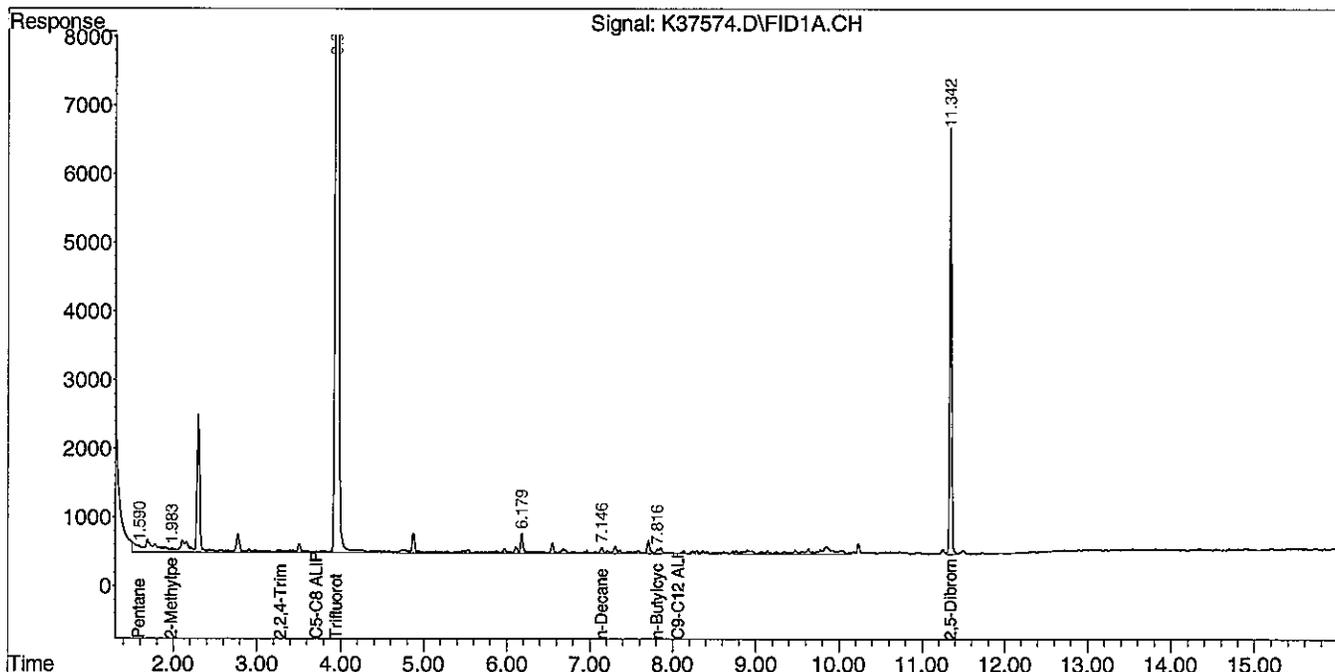
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080612-K\
 Data File : K37574.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 07 Aug 2012 1:09 pm
 Operator : AR
 Sample : 73487-23
 Misc : 5000
 ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 07 15:46:48 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 8, 2012

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: PW DUP

SAMPLE DATA

Lab Sample ID: 73487-24
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Analysis Date: 08/07/12

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics	N/A	50	µg/L	U
Unadjusted C9-C12 Aliphatics	N/A	50	µg/L	U
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	50	µg/L	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	50	µg/L	U
C9-C10 Aromatic Hydrocarbons ¹	N/A	10	µg/L	U
Surrogate % Recovery (Trifluorotoluene) PID				113
Surrogate % Recovery (Trifluorotoluene) FID				113
Surrogate Acceptance Range				70-130%

¹ Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
² C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³ C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

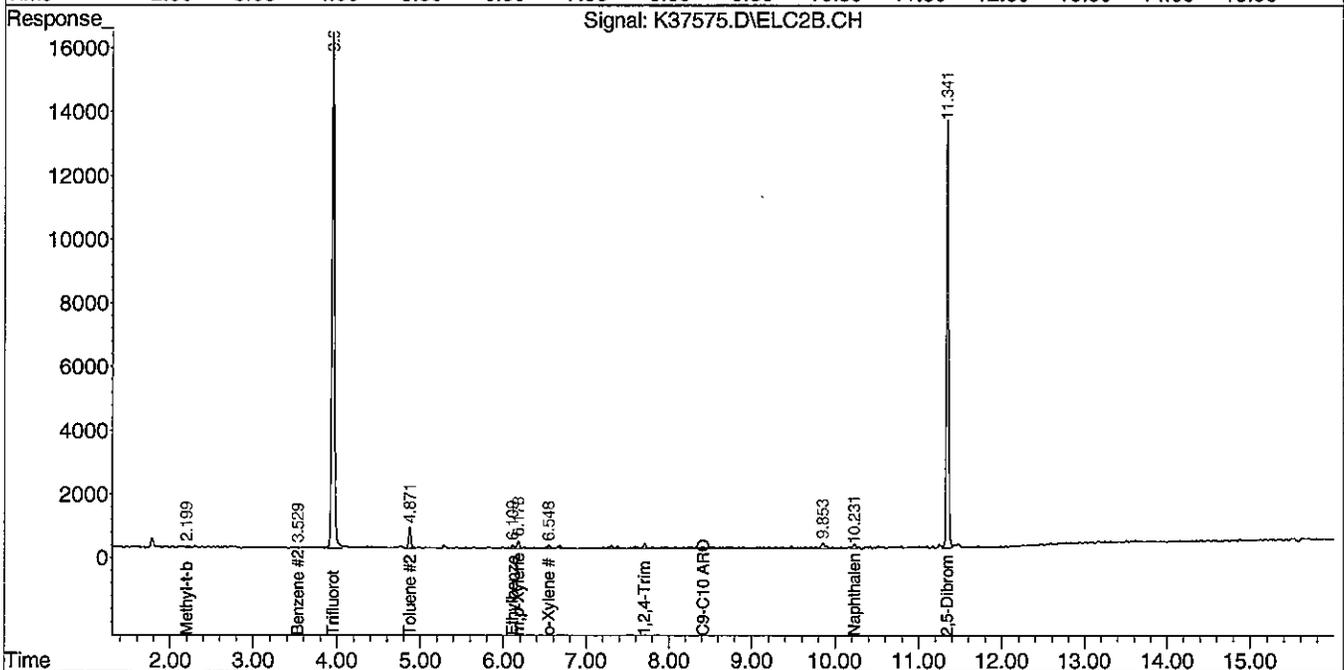
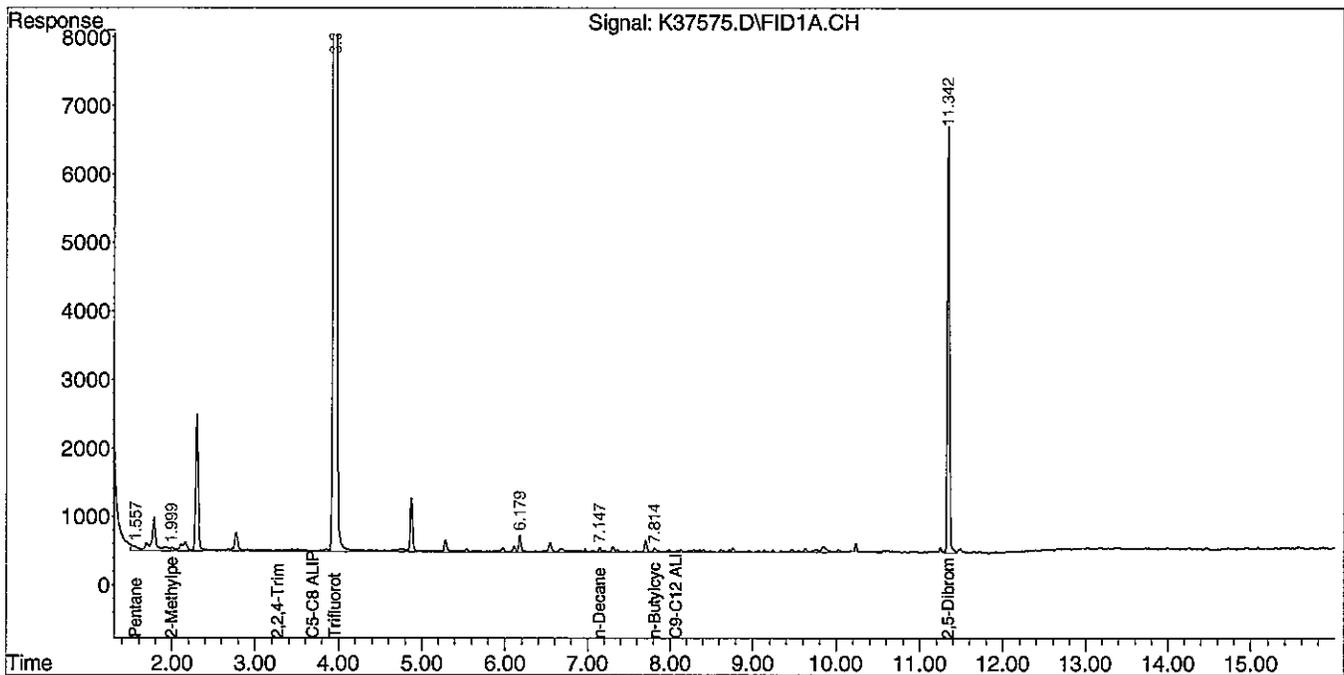
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080612-K\
 Data File : K37575.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 07 Aug 2012 1:36 pm
 Operator : AR
 Sample : 73487-24
 Misc : 5000
 ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 07 15:47:33 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



VPH
QC FORMS

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 8, 2012

SAMPLE DATA

Lab Sample ID: BV080612K4
Matrix: Aqueous
Percent Solid: NA
Dilution Factor: 1
Collection Date:
Lab Receipt Date:
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: LabQC

VPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	50	µg/L	U
Unadjusted C9-C12 Aliphatics ¹	N/A	50	µg/L	U
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	50	µg/L	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	50	µg/L	U
C9-C10 Aromatic Hydrocarbons ¹	N/A	10	µg/L	U
Surrogate % Recovery (Trifluorotoluene) PID				115
Surrogate % Recovery (Trifluorotoluene) FID				114
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

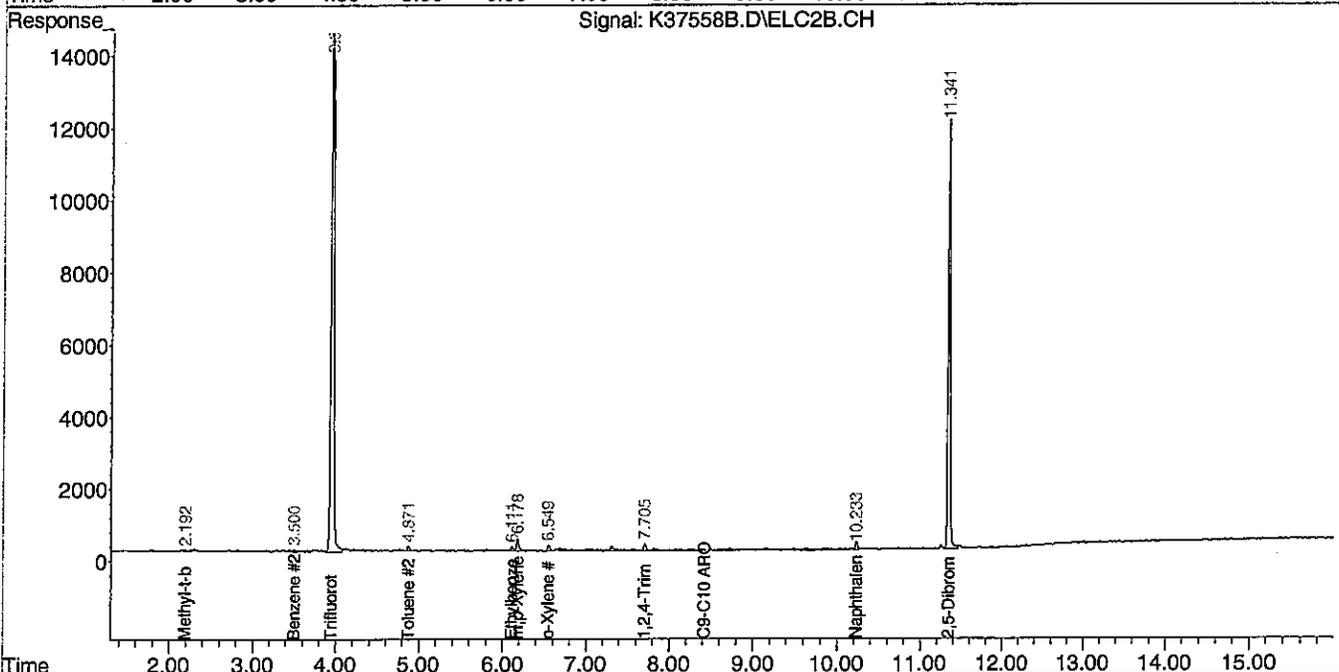
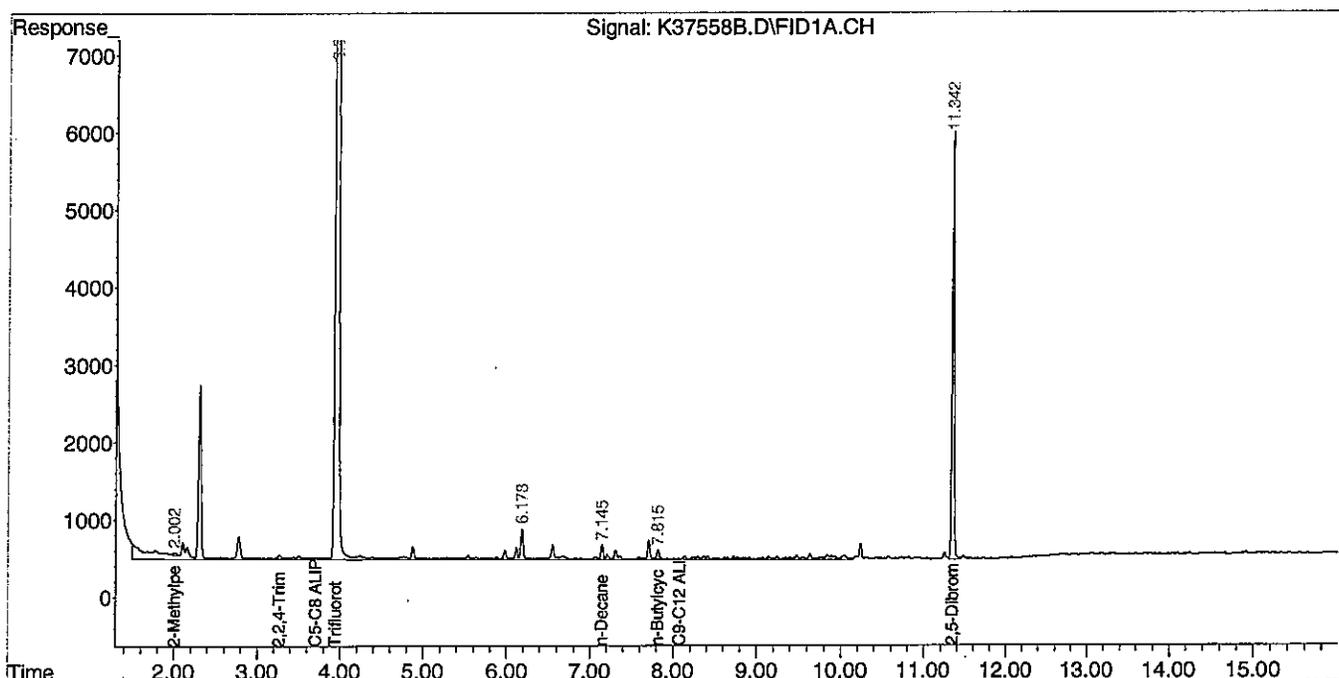
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080612-K\
 Data File : K37558B.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 07 Aug 2012 5:44 am
 Operator : AR
 Sample : BV080612K4
 Misc : 5000
 ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 07 06:04:47 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 8, 2012

SAMPLE DATA

Lab Sample ID: MBV080712K
 Matrix: Soil
 Percent Solid: 0
 Dilution Factor: 50
 Collection Date:
 Lab Receipt Date:
 Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
 Project Number: 111.06134
 Client Sample ID: LabQC

VPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics	N/A	2500	µg/kg	U
Unadjusted C9-C12 Aliphatics	N/A	2500	µg/kg	U
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	2500	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	2500	µg/kg	U
C9-C10 Aromatic Hydrocarbons ¹	N/A	500	µg/kg	U
Surrogate % Recovery (Trifluorotoluene) PID				90
Surrogate % Recovery (Trifluorotoluene) FID				90
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

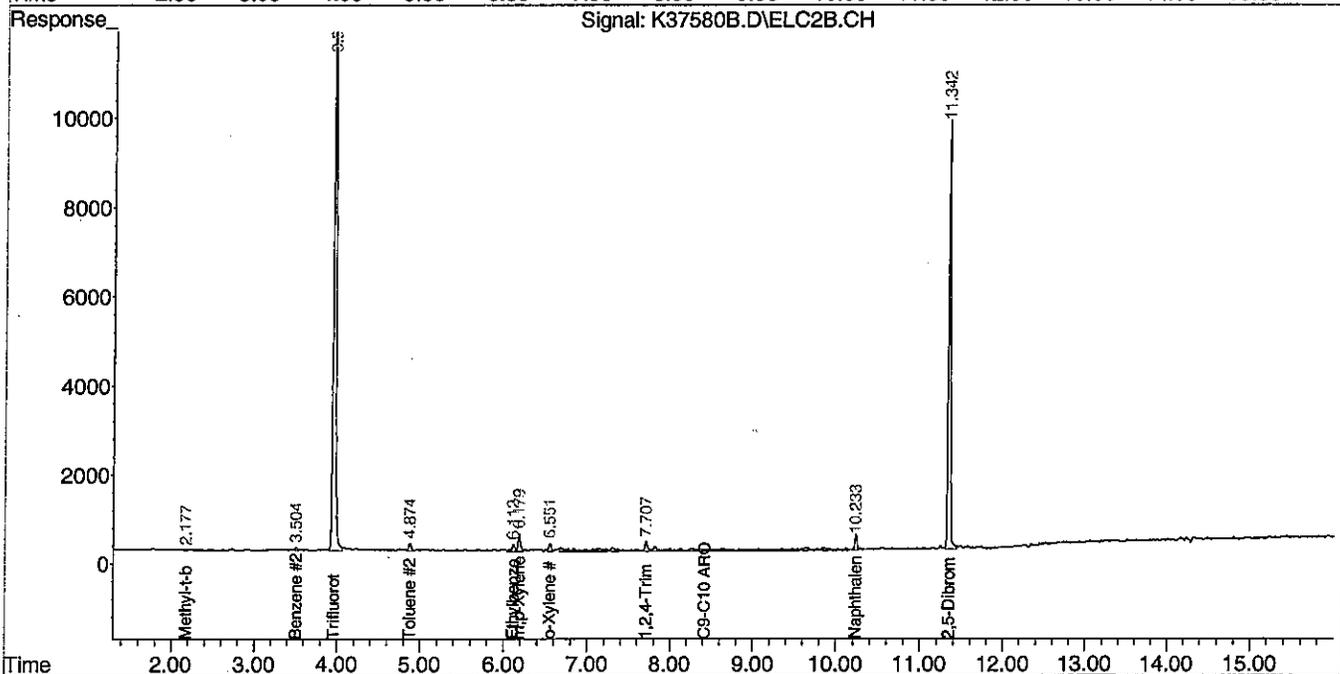
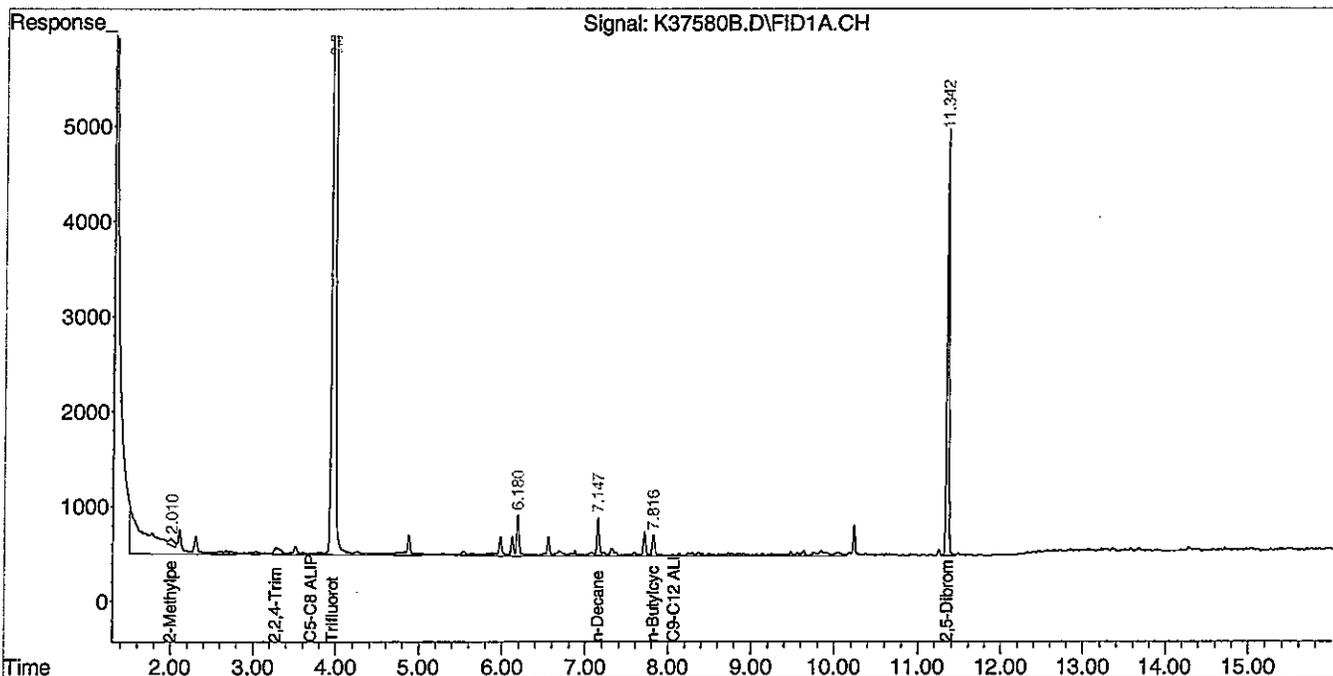
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080612-K\
 Data File : K37580B.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 07 Aug 2012 4:20 pm
 Operator : AR/JK
 Sample : MBV080712K
 Misc : 100,10.00,SOIL
 ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 07 16:37:04 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 8, 2012

SAMPLE DATA

Lab Sample ID: MBV080812K
Matrix: Soil
Percent Solid: 0
Dilution Factor: 50
Collection Date:
Lab Receipt Date:
Analysis Date: 08/08/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: LabQC

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	2500	µg/kg	U
Unadjusted C9-C12 Aliphatics	N/A	2500	µg/kg	U
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	2500	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	2500	µg/kg	U
C9-C10 Aromatic Hydrocarbons ¹	N/A	500	µg/kg	U
Surrogate % Recovery (Trifluorotoluene) PID				89
Surrogate % Recovery (Trifluorotoluene) FID				87
Surrogate Acceptance Range				70-130%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
²C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
³C9-C12 Aliphatic Hydrocarbons exclude conc. of Target Analytes eluting in that range AND conc. of C9-C10 Aromatic Hydrocarbons.
 *Recovery is outside the laboratory acceptance criteria. RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: MADEP Volatile Petroleum Hydrocarbons (VPH), ORS Division of Environmental Analysis, Revision 1.1 May 2004.

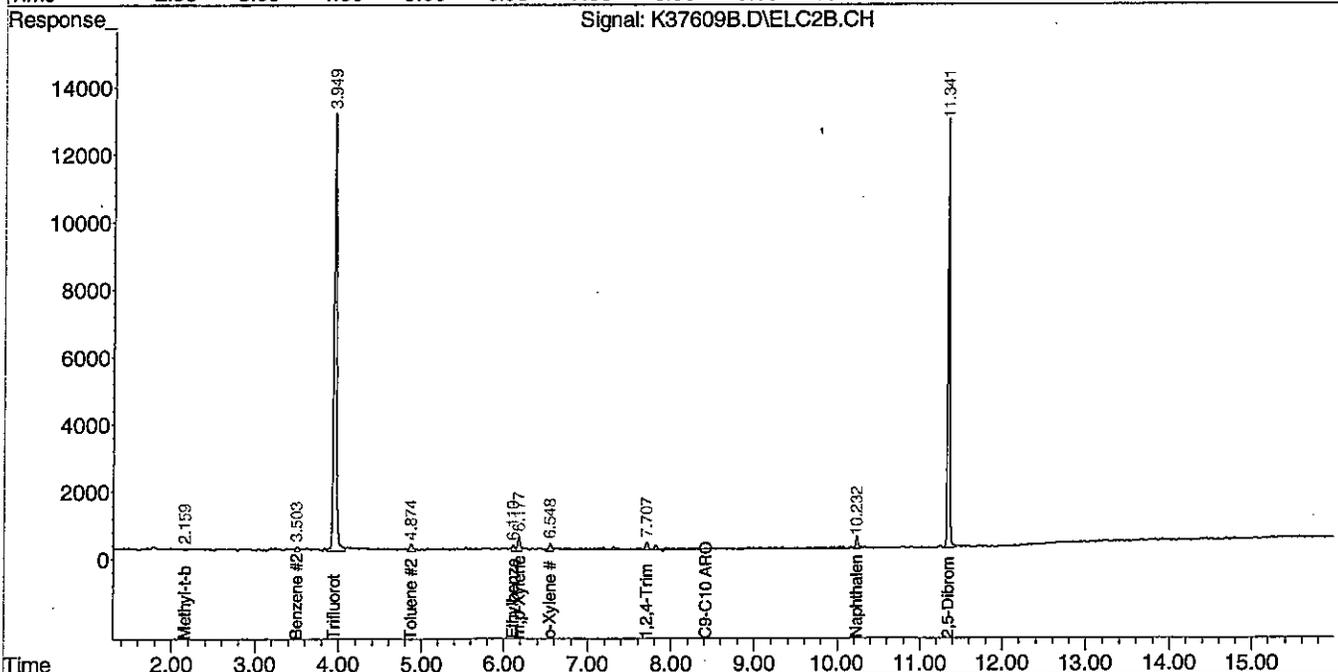
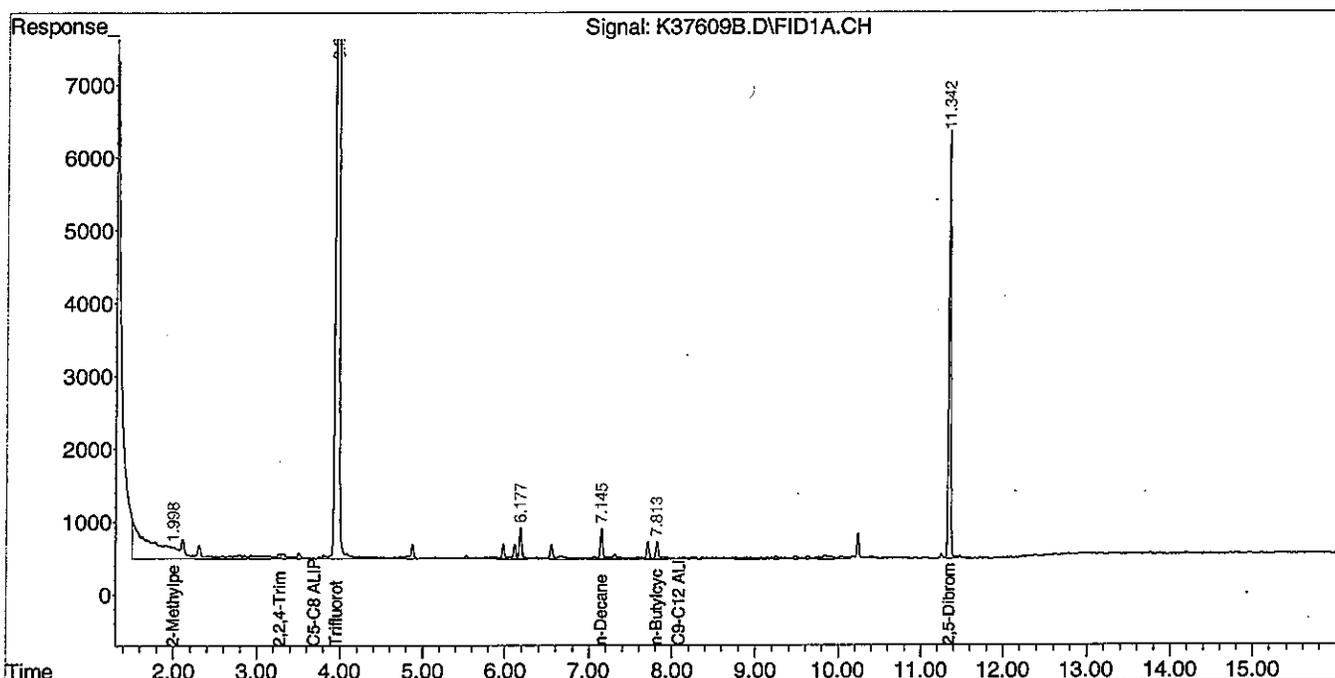
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\080812-K\
 Data File : K37609B.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 08 Aug 2012 11:10 am
 Operator : JK
 Sample : MBV080812K
 Misc : 100,10.00,SOIL
 ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 11:40:49 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT040612.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Mon Apr 09 09:06:00 2012
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



VOLATILE PETROLEUM HYDROCARBONS
LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
PERCENT RECOVERY

Instrument ID: K
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG:
Non-spiked sample: BV080612K4
Spike: LV080612K3
Spike duplicate: LV080612K4

COMPOUND	SPIKE	LOWER	UPPER	RPD	NON-SPIKE	SPIKE	SPIKE	SPIKE DUP		SPIKE DUP		RPD	
	ADDED	LIMIT	LIMIT	LIMIT	RESULT (ug/L)	RESULT (ug/L)	% REC	#	RESULT (ug/L)	% REC	#	RPD	#
Pentane	100	70	130	25	0.0	107	107		103	103		4	
2-Methylpentane	100	70	130	25	0.0	105	105		100	100		5	
2,2,4-Trimethylpentane	100	70	130	25	0.0	108	108		101	101		8	
n-Decane	100	70	130	25	0.0	105	105		106	106		1	
n-Butylcyclohexane	100	70	130	25	0.0	89	89		87	87		2	
Methyl-t-butylether #2	100	70	130	25	0.0	103	103		98	98		5	
Benzene #2	100	70	130	25	0.0	107	107		100	100		7	
Toluene #2	100	70	130	25	0.0	106	106		100	100		6	
Ethylbenzene #2	100	70	130	25	0.0	104	104		97	97		7	
m,p-Xylene #2	200	70	130	25	0.0	213	106		199	99		7	
o-Xylene #2	100	70	130	25	0.0	106	106		98	98		7	
1,2,4-Trimethylbenzene #2	100	70	130	25	0.0	105	105		97	97		8	
Naphthalene #2	100	70	130	25	0.0	103	103		103	103		0	
C5-C8 Aliphatics	300	70	130	25	0.0	321	107		304	101		5	
C9-C12 Aliphatics	200	70	130	25	0.0	194	97		193	97		0	
C9-C10 Aromatics #2	100	70	130	25	0.0	105	105		97	97		8	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery

Comments: _____

VOLATILE PETROLEUM HYDROCARBONS SOIL
LABORATORY CONTROL/LABORATORY CONTROL DUPLICATE
PERCENT RECOVERY

Instrument ID: K
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG:
Non-spiked sample: MBV080712K
Spike: LSV080712K
Spike duplicate: LSV080712K2

COMPOUND	LCS SPIKE ADDED (ug/kg)	LCSD SPIKE ADDED (ug/kg)	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/kg)	SPIKE RESULT (ug/kg)	SPIKE % REC	#	SPIKE DUP RESULT (ug/kg)	SPIKE DUP % REC	#	RPD	#
Pentane	5000	5000	70	130	25	0	4335	87		4228	85		2	
2-Methylpentane	5000	5000	70	130	25	0	4638	93		4447	89		4	
2,2,4-Trimethylpentane	5000	5000	70	130	25	0	5222	104		4928	99		6	
n-Decane	5000	5000	70	130	25	0	6203	124		5760	115		7	
n-Butylcyclohexane	5000	5000	70	130	25	0	5007	100		4599	92		8	
Methyl-t-butylether #2	5000	5000	70	130	25	0	6379	128		6140	123		4	
Benzene #2	5000	5000	70	130	25	0	6334	127		6045	121		5	
Toluene #2	5000	5000	70	130	25	0	6378	128		6037	121		6	
Ethylbenzene #2	5000	5000	70	130	25	0	6221	124		5944	119		5	
m,p-Xylene #2	10000	10000	70	130	25	0	12827	128		12119	121		6	
o-Xylene #2	5000	5000	70	130	25	0	6414	128		6116	122		5	
1,2,4-Trimethylbenzene #2	5000	5000	70	130	25	0	6228	125		5912	118		5	
Naphthalene #2	5000	5000	70	130	25	0	5935	119		5818	116		2	
C5-C8 Aliphatics	15000	15000	70	130	25	0	14195	95		13603	91		4	
C9-C12 Aliphatics	10000	10000	70	130	25	0	11209	112		10359	104		8	
C9-C10 Aromatics #2	5000	5000	70	130	25	0	6228	125		5912	118		5	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

VOLATILE PETROLEUM HYDROCARBONS SOIL
LABORATORY CONTROL/LABORATORY CONTROL DUPLICATE
PERCENT RECOVERY

Instrument ID: K
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG:
Non-spiked sample: MBV080812K
Spike: LSV080812K
Spike duplicate: LSV080812K2

COMPOUND	LCS SPIKE ADDED (ug/kg)	LCS D SPIKE ADDED (ug/kg)	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/kg)	SPIKE RESULT (ug/kg)	SPIKE % REC	#	SPIKE DUP RESULT (ug/kg)	SPIKE DUP % REC	#	RPD	#
Pentane	5000	5000	70	130	25	0	4159	83		4547	91		9	
2-Methylpentane	5000	5000	70	130	25	0	4521	90		4775	96		5	
2,2,4-Trimethylpentane	5000	5000	70	130	25	0	4953	99		4895	98		1	
n-Decane	5000	5000	70	130	25	0	6066	121		6092	122		0	
n-Butylcyclohexane	5000	5000	70	130	25	0	5138	103		4986	100		3	
Methyl-t-butylether #2	5000	5000	70	130	25	0	6188	124		5743	115		7	
Benzene #2	5000	5000	70	130	25	0	6141	123		5698	114		7	
Toluene #2	5000	5000	70	130	25	0	6120	122		5703	114		7	
Ethylbenzene #2	5000	5000	70	130	25	0	5975	120		5583	112		7	
m,p-Xylene #2	10000	10000	70	130	25	0	12250	122		11396	114		7	
o-Xylene #2	5000	5000	70	130	25	0	6165	123		5725	115		7	
1,2,4-Trimethylbenzene #2	5000	5000	70	130	25	0	5958	119		5588	112		6	
Naphthalene #2	5000	5000	70	130	25	0	5951	119		5930	119		0	
C5-C8 Aliphatics	15000	15000	70	130	25	0	13633	91		14218	95		4	
C9-C12 Aliphatics	10000	10000	70	130	25	0	11204	112		11079	111		1	
C9-C10 Aromatics #2	5000	5000	70	130	25	0	5958	119		5588	112		6	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

EPH
DATA SUMMARIES

August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-1
Matrix: Solid
Percent Solid: 86
Dilution Factor: 1.1
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS101

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	15000	µg/kg	
Diesel PAH Analytes	Naphthalene	300	µg/kg U
	2-Methylnaphthalene	300	µg/kg U
	Phenanthrene	300	µg/kg U
	Acenaphthene	300	µg/kg U
Other Target PAH Analytes	Acenaphthylene	300	µg/kg U
	Fluorene	300	µg/kg U
	Anthracene	300	µg/kg U
	Fluoranthene	300	µg/kg U
	Pyrene	300	µg/kg U
	Benzo[a]anthracene	300	µg/kg U
	Chrysene	300	µg/kg U
	Benzo[b]fluoranthene	300	µg/kg U
	Benzo[k]fluoranthene	300	µg/kg U
	Benzo[a]pyrene	300	µg/kg U
	Indeno[1,2,3-cd]pyrene	300	µg/kg U
	Dibenzo[a,h]anthracene	300	µg/kg U
Benzo[g,h,i]perylene	300	µg/kg U	
C9-C18 Aliphatic Hydrocarbons ¹	15000	µg/kg	U
C19-C36 Aliphatic Hydrocarbons ¹	15000	µg/kg	34200
C11-C22 Aromatic Hydrocarbons ^{1,2}	15000	µg/kg	U
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			59
Aromatic Surrogate % Recovery (O-Terphenyl)			63
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			87
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			84
Fractionation Surrogate Acceptance Range	--	--	40-140%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
²C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.
 RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

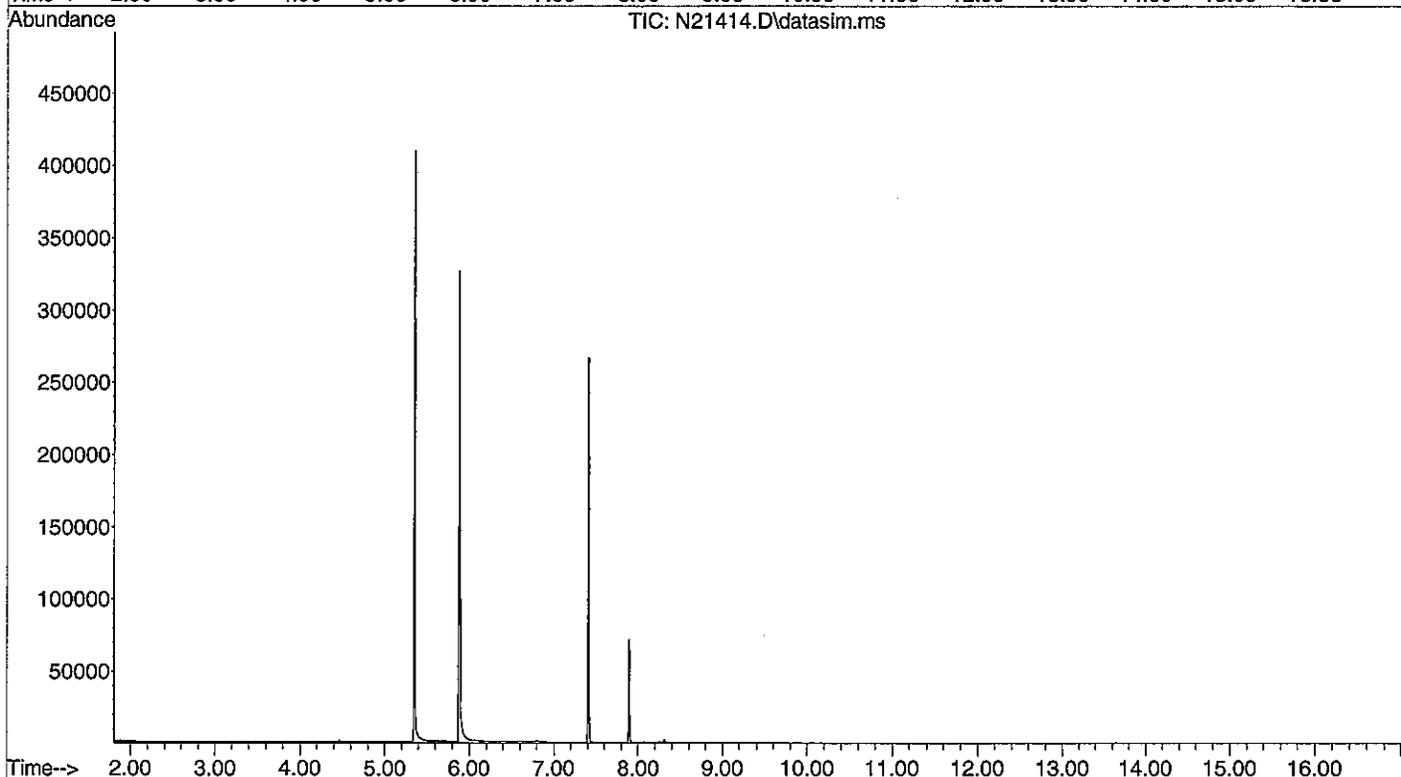
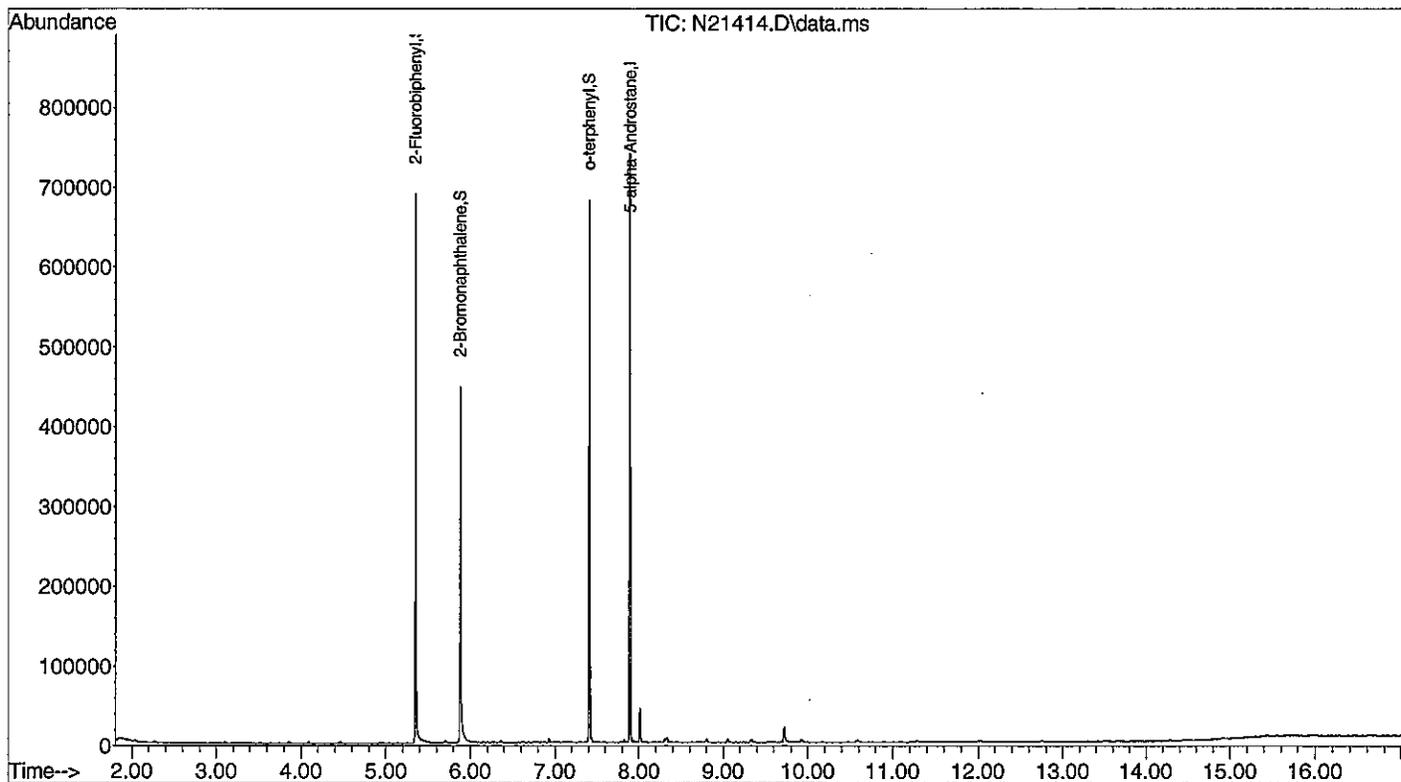
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a dry weight basis.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080612-N\
 Data File : N21414.D
 Acq On : 7 Aug 2012 6:34 am
 Operator : AR
 Sample : 73487-1
 Misc : SOIL, ARO
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 07 10:35:48 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:13 2012
 Response via : Initial Calibration



August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-3
Matrix: Solid
Percent Solid: 52
Dilution Factor: 1.9
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS103

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	25500	µg/kg	28700
Diesel PAH Analytes	Naphthalene	511	µg/kg
	2-Methylnaphthalene	511	µg/kg
	Phenanthrene	511	µg/kg
	Acenaphthene	511	µg/kg
Other Target PAH Analytes	Acenaphthylene	511	µg/kg
	Fluorene	511	µg/kg
	Anthracene	511	µg/kg
	Fluoranthene	511	µg/kg
	Pyrene	511	µg/kg
	Benzo[a]anthracene	511	µg/kg
	Chrysene	511	µg/kg
	Benzo[b]fluoranthene	511	µg/kg
	Benzo[k]fluoranthene	511	µg/kg
	Benzo[a]pyrene	511	µg/kg
	Indeno[1,2,3-cd]pyrene	511	µg/kg
	Dibenzo[a,h]anthracene	511	µg/kg
Benzo[g,h,i]perylene	511	µg/kg	
C9-C18 Aliphatic Hydrocarbons ¹	25500	µg/kg	U
C19-C36 Aliphatic Hydrocarbons ¹	25500	µg/kg	102000
C11-C22 Aromatic Hydrocarbons ^{1,2}	25500	µg/kg	28700
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			63
Aromatic Surrogate % Recovery (O-Terphenyl)			62
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			83
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			76
Fractionation Surrogate Acceptance Range	--	--	40-140%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
²C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.
RL = Report Limit
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

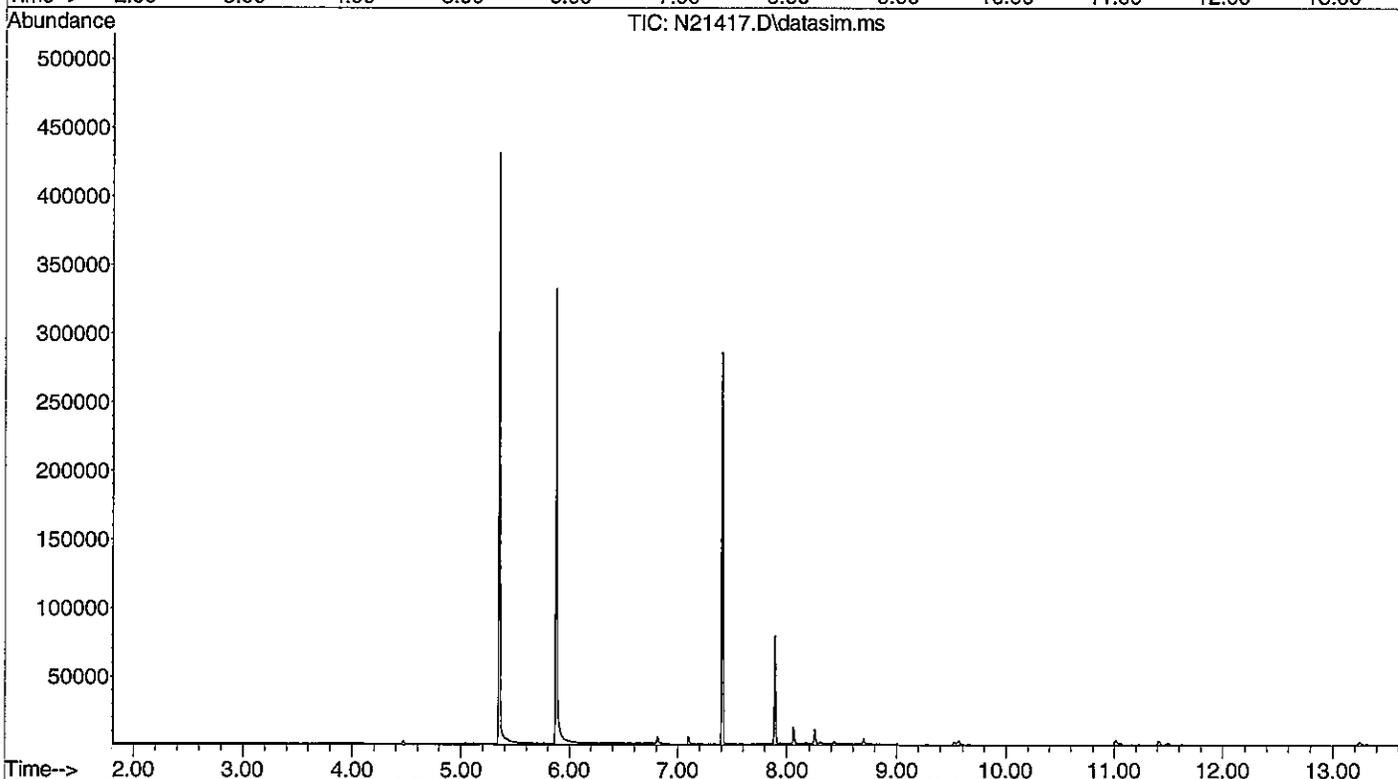
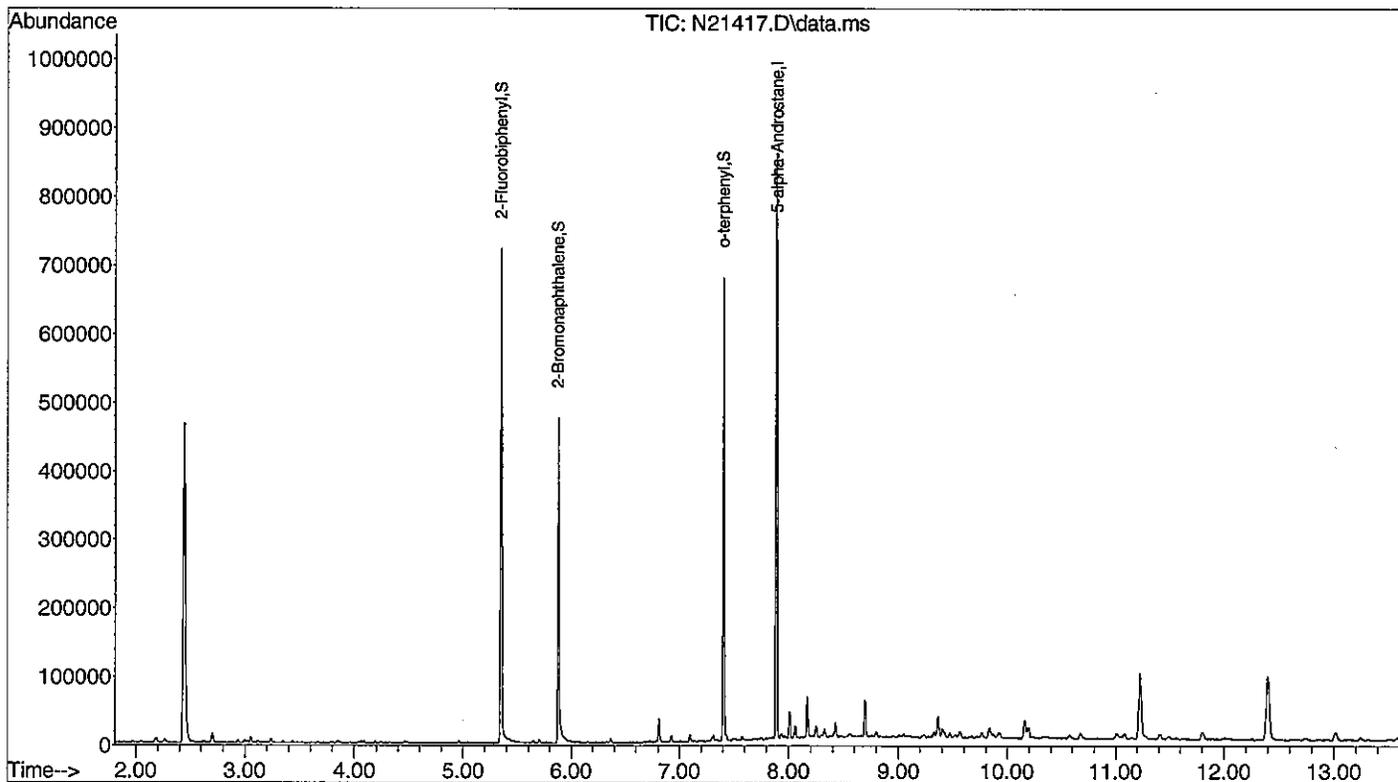
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a dry weight basis.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080612-N\
 Data File : N21417.D
 Acq On : 7 Aug 2012 7:37 am
 Operator : AR
 Sample : 73487-3
 Misc : SOIL, ARO
 ALS Vial : 32 Sample Multiplier: 1

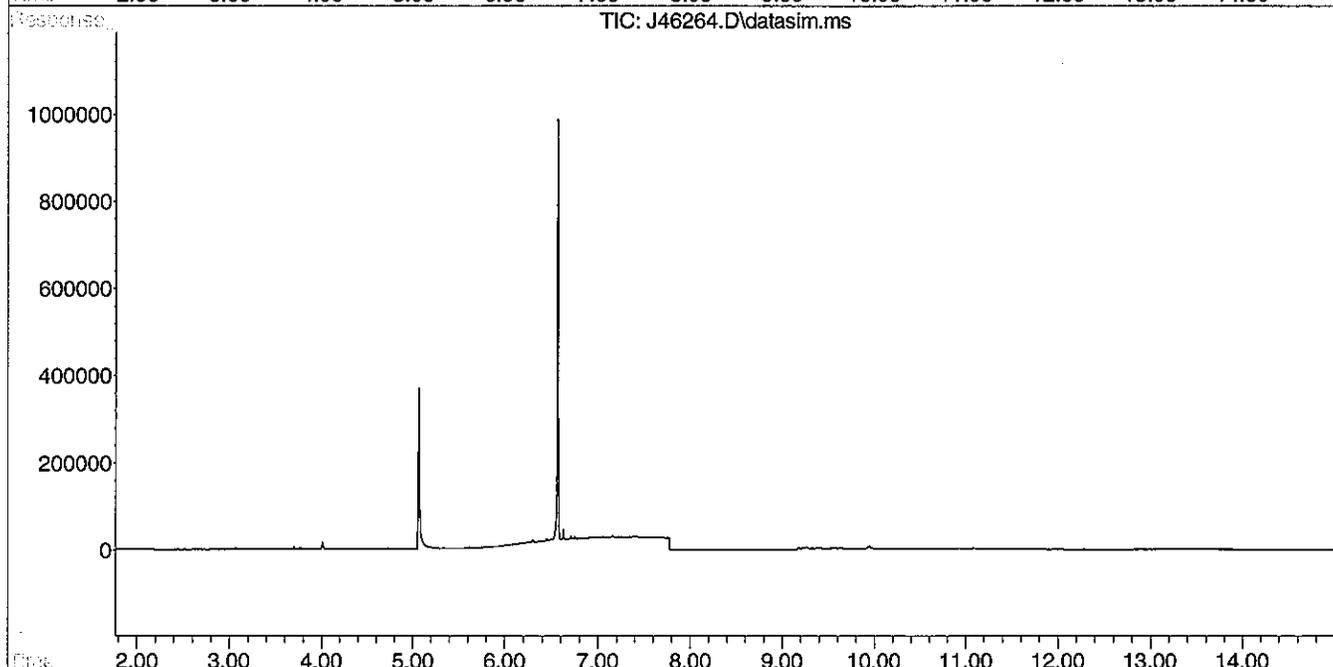
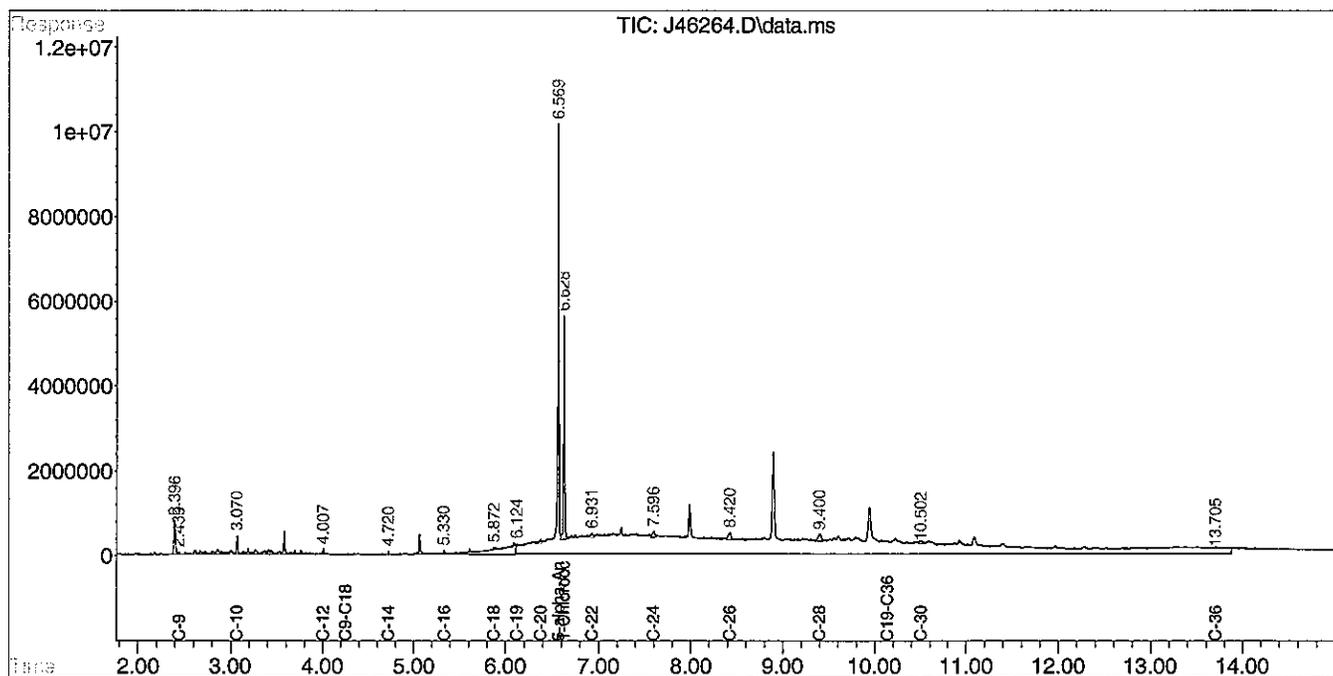
Quant Time: Aug 07 10:35:54 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:13 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080612-J\
 Data File : J46264.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 6:27 am
 Operator : AR
 Sample : 73487-3
 Misc : SOIL,ALI
 ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 07 11:42:45 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-4
Matrix: Solid
Percent Solid: 85
Dilution Factor: 1.1
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS104

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	15200	µg/kg	12500 J
Diesel PAH Analytes	Naphthalene	305	µg/kg U
	2-Methylnaphthalene	305	µg/kg U
	Phenanthrene	305	µg/kg U
	Acenaphthene	305	µg/kg U
Other Target PAH Analytes	Acenaphthylene	305	µg/kg U
	Fluorene	305	µg/kg U
	Anthracene	305	µg/kg U
	Fluoranthene	305	µg/kg U
	Pyrene	305	µg/kg U
	Benzo[a]anthracene	305	µg/kg U
	Chrysene	305	µg/kg U
	Benzo[b]fluoranthene	305	µg/kg U
	Benzo[k]fluoranthene	305	µg/kg U
	Benzo[a]pyrene	305	µg/kg U
	Indeno[1,2,3-cd]pyrene	305	µg/kg U
	Dibenzo[a,h]anthracene	305	µg/kg U
Benzo[g,h,i]perylene	305	µg/kg U	
C9-C18 Aliphatic Hydrocarbons ¹	15200	µg/kg	U
C19-C36 Aliphatic Hydrocarbons ¹	15200	µg/kg	U
C11-C22 Aromatic Hydrocarbons ^{1,2}	15200	µg/kg	12500 J
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			69
Aromatic Surrogate % Recovery (O-Terphenyl)			76
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			88
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			82
Fractionation Surrogate Acceptance Range	--	--	40-140%
¹ Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.			
² C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.			
RL = Report Limit			
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank			

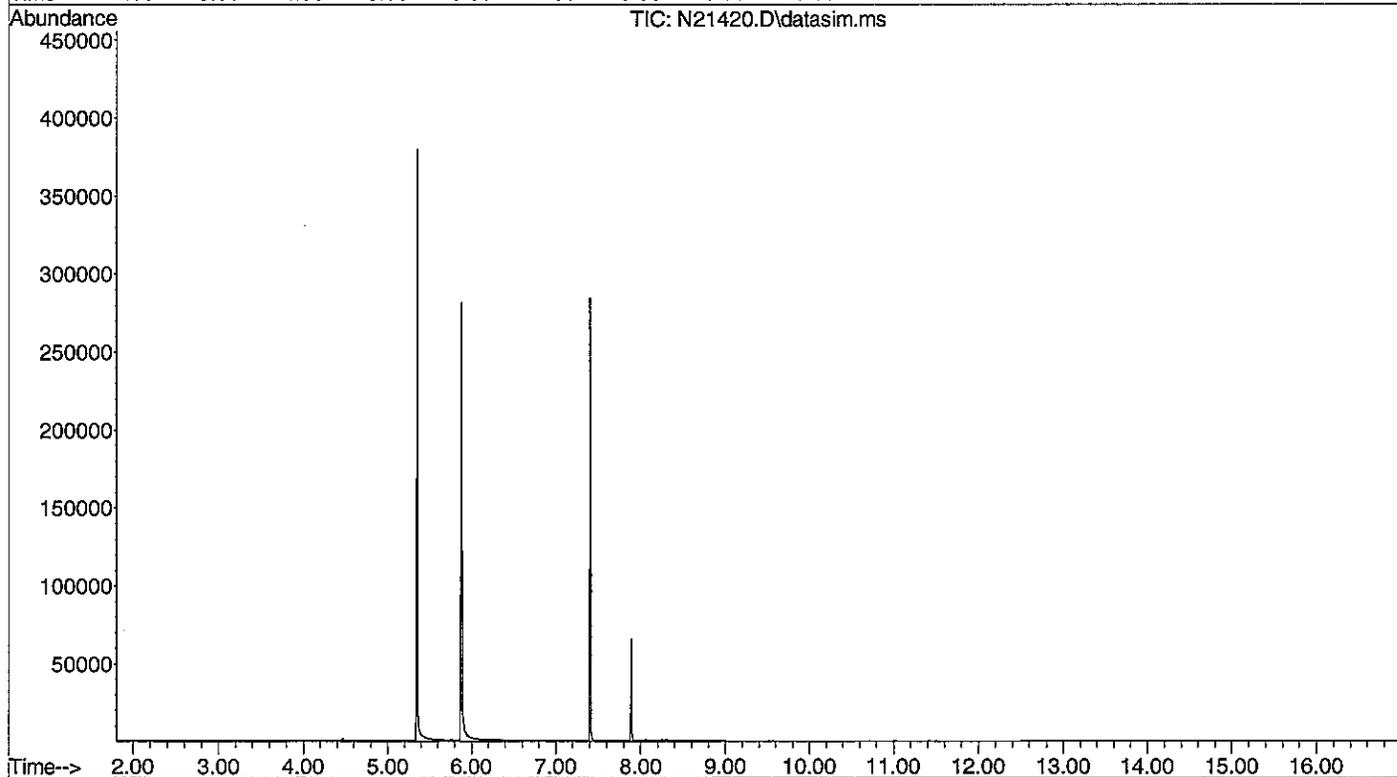
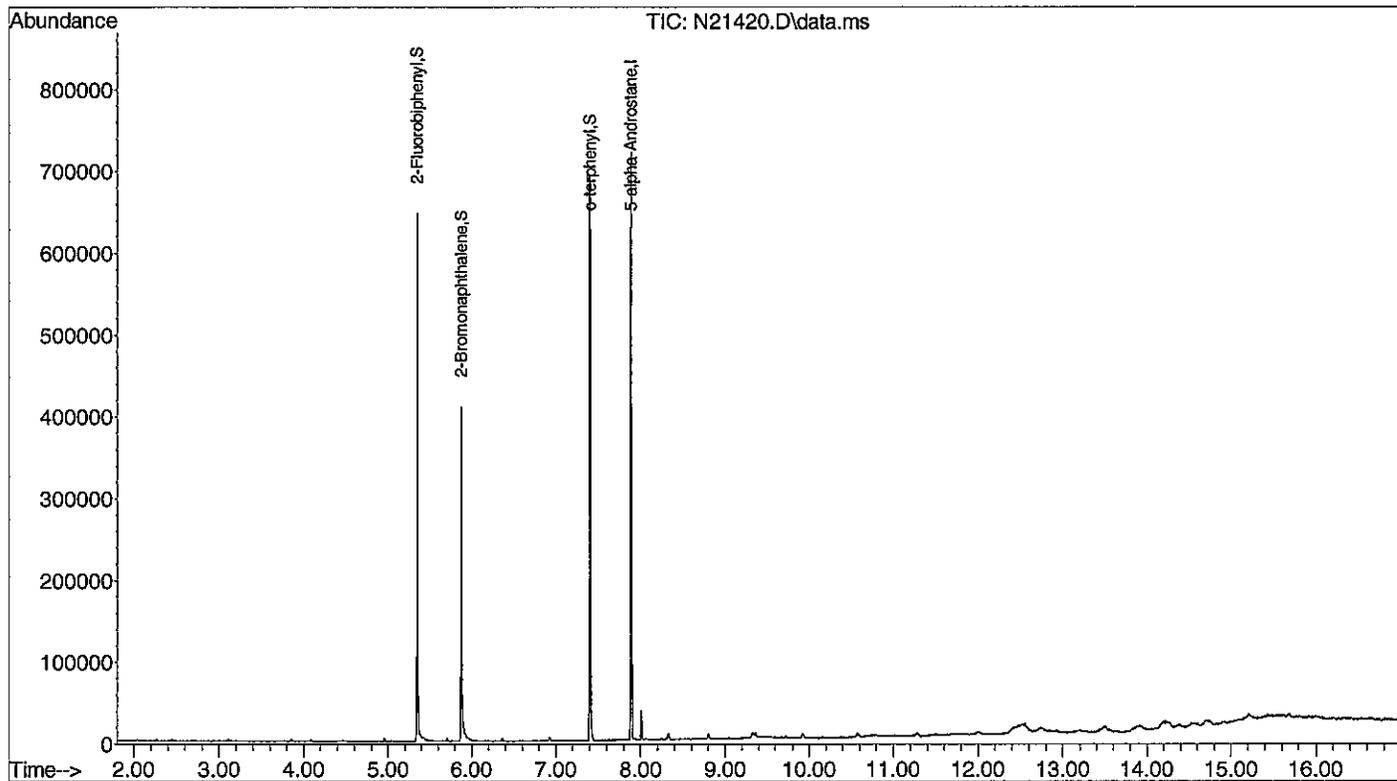
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a dry weight basis.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080612-N\
Data File : N21420.D
Acq On : 7 Aug 2012 9:32 am
Operator : AR
Sample : 73487-4
Misc : SOIL, ARO
ALS Vial : 33 Sample Multiplier: 1

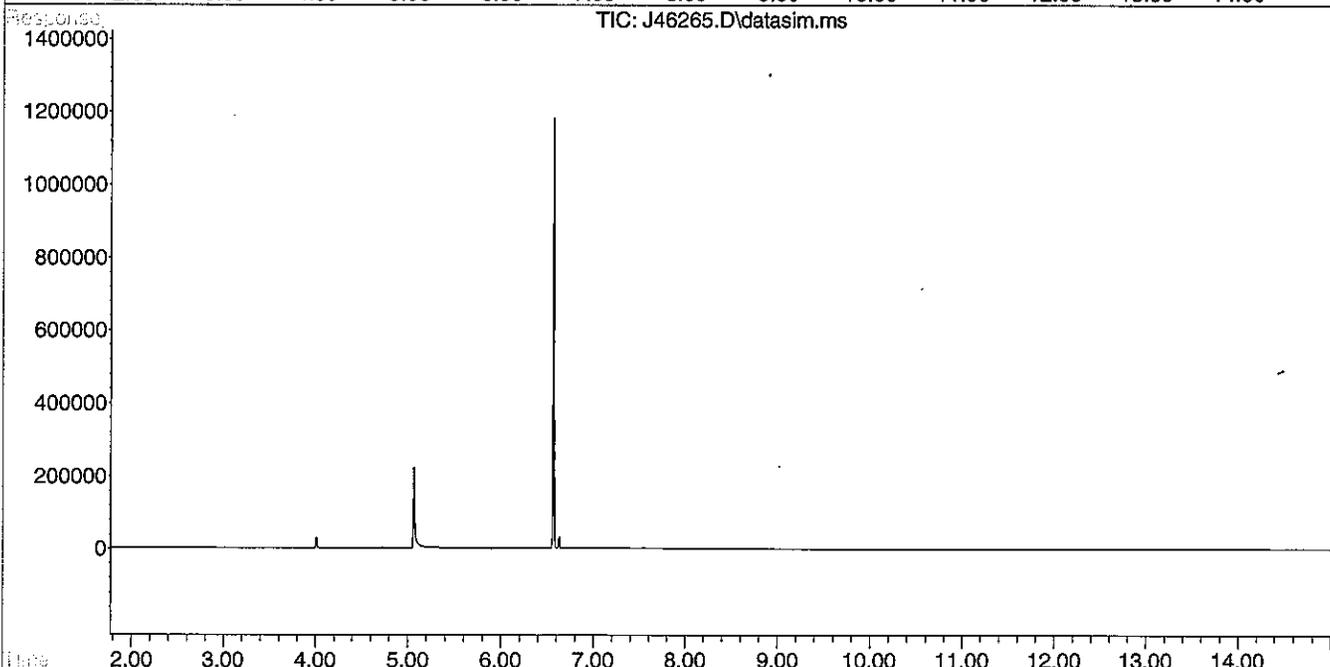
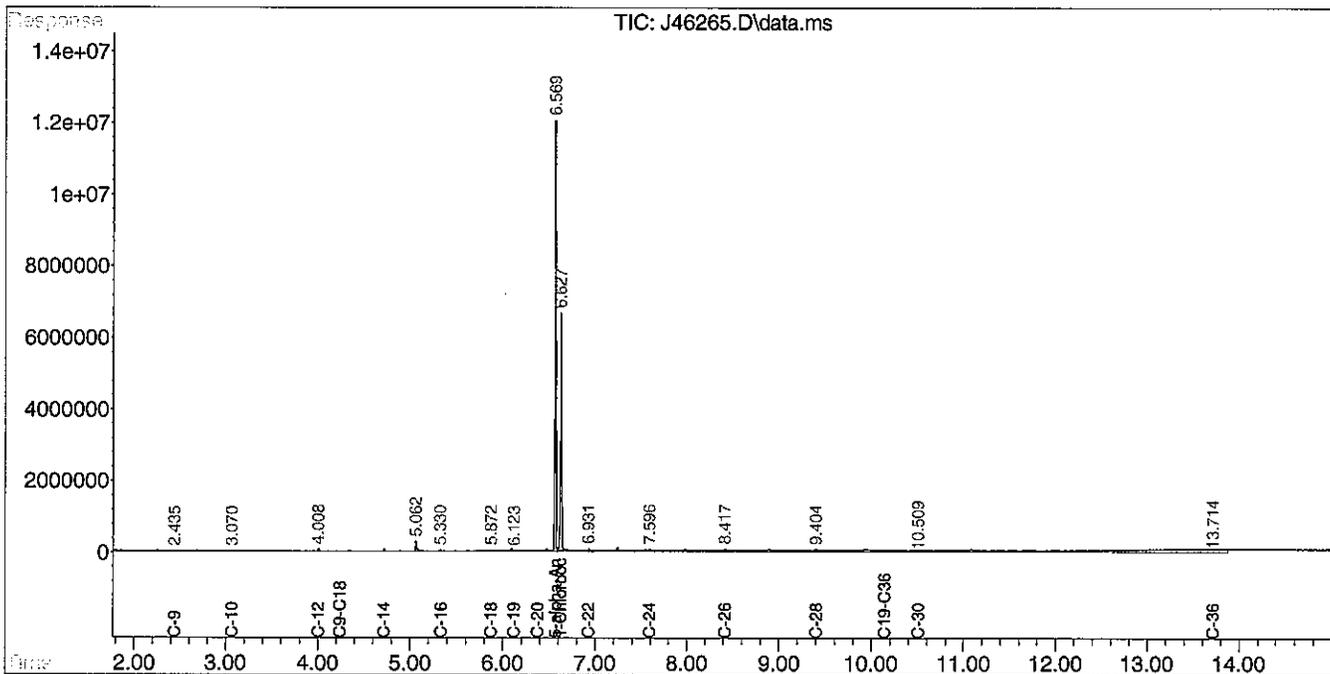
Quant Time: Aug 07 10:36:02 2012
Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
Quant Title : EPH MS AROMATICS
QLast Update : Fri Jul 27 00:00:13 2012
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080612-J\
 Data File : J46265.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 6:48 am
 Operator : AR
 Sample : 73487-4
 Misc : SOIL,ALI
 ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 07 11:42:47 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-5
Matrix: Solid
Percent Solid: 91
Dilution Factor: 1.1
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS105

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	14400	µg/kg	221000
Diesel PAH Analytes	Naphthalene	288	µg/kg U
	2-Methylnaphthalene	288	µg/kg U
	Phenanthrene	288	µg/kg U
	Acenaphthene	288	µg/kg U
Other Target PAH Analytes	Acenaphthylene	288	µg/kg U
	Fluorene	288	µg/kg U
	Anthracene	288	µg/kg U
	Fluoranthene	288	µg/kg 260 J
	Pvrene	288	µg/kg 299
	Benzo[a]anthracene	288	µg/kg 172 J
	Chrysene	288	µg/kg 331
	Benzo[b]fluoranthene	288	µg/kg 504
	Benzo[k]fluoranthene	288	µg/kg 191 J
	Benzo[a]pyrene	288	µg/kg 329
	Indeno[1,2,3-cd]pvrene	288	µg/kg 343
	Dibenzo[a,h]anthracene	288	µg/kg U
Benzo[g,h,i]perylene	288	µg/kg 371	
C9-C18 Aliphatic Hydrocarbons ¹	576000	µg/kg	383000 J
C19-C36 Aliphatic Hydrocarbons ¹	576000	µg/kg	2340000
C11-C22 Aromatic Hydrocarbons ^{1,2}	14400	µg/kg	218000
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			*
Aromatic Surrogate % Recovery (O-Terphenyl)			70
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			86
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			80
Fractionation Surrogate Acceptance Range	--	--	40-140%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
²C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.
RL = Report Limit
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

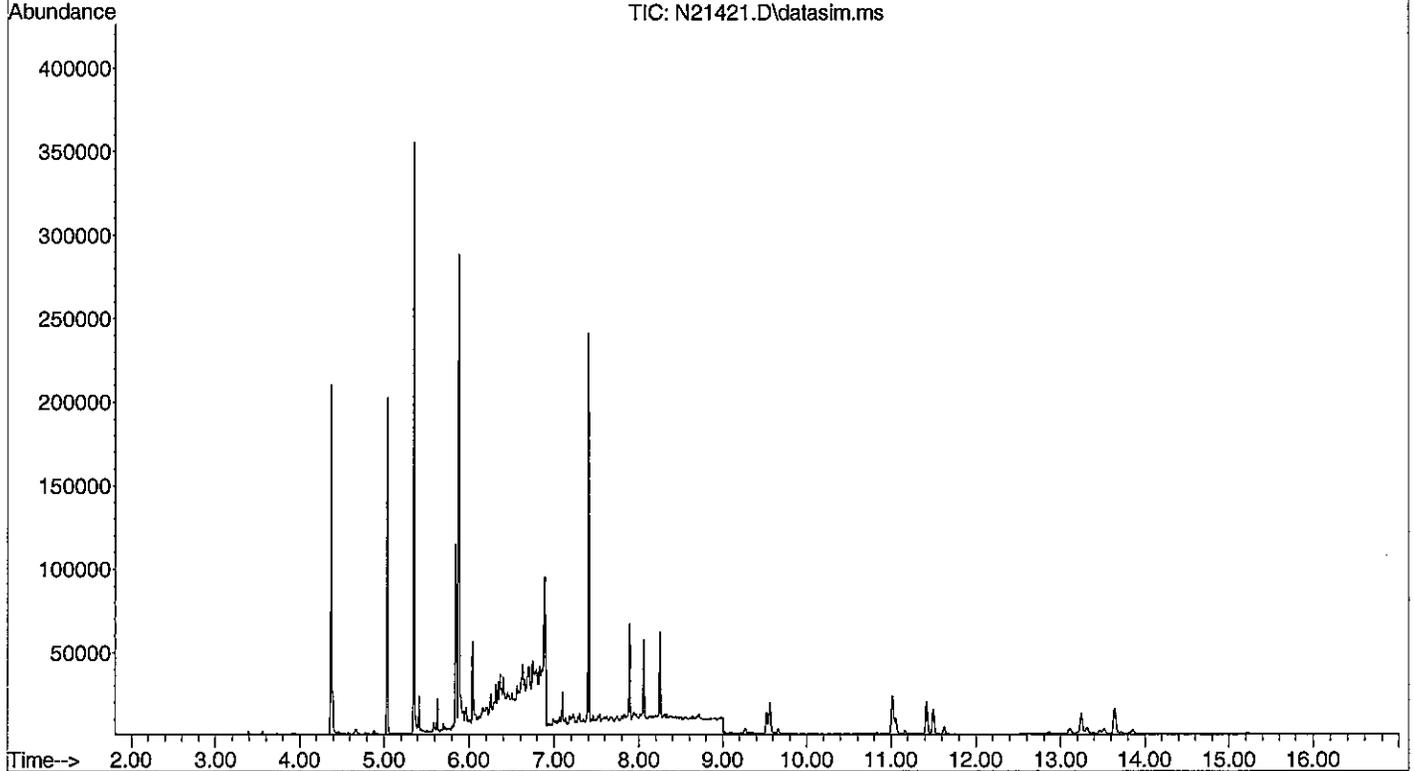
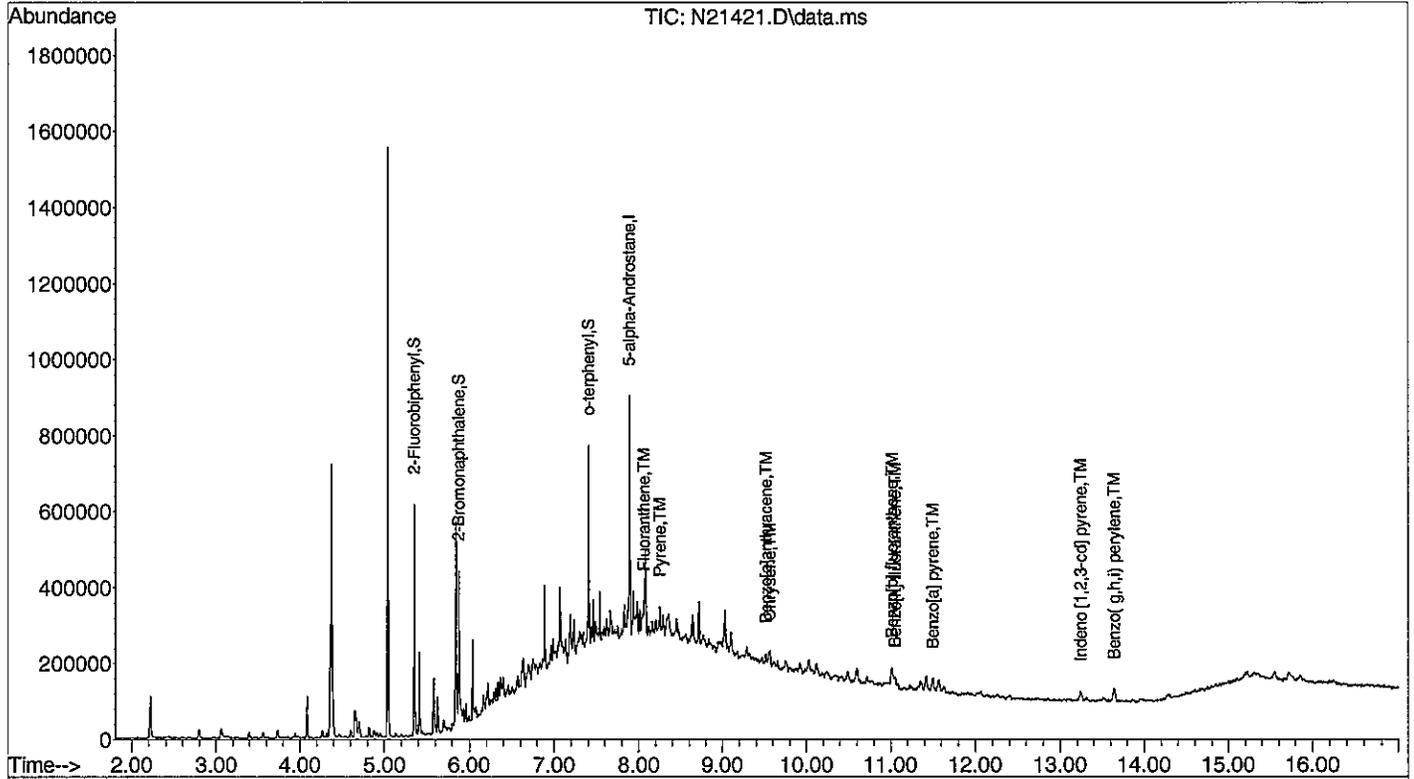
METHODOLOGY MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS: EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a dry weight basis.
* The surrogate was diluted out.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080612-N\
 Data File : N21421.D
 Acq On : 7 Aug 2012 9:52 am
 Operator : AR
 Sample : 73487-5
 Misc : SOIL,ARO
 ALS Vial : 34 Sample Multiplier: 1

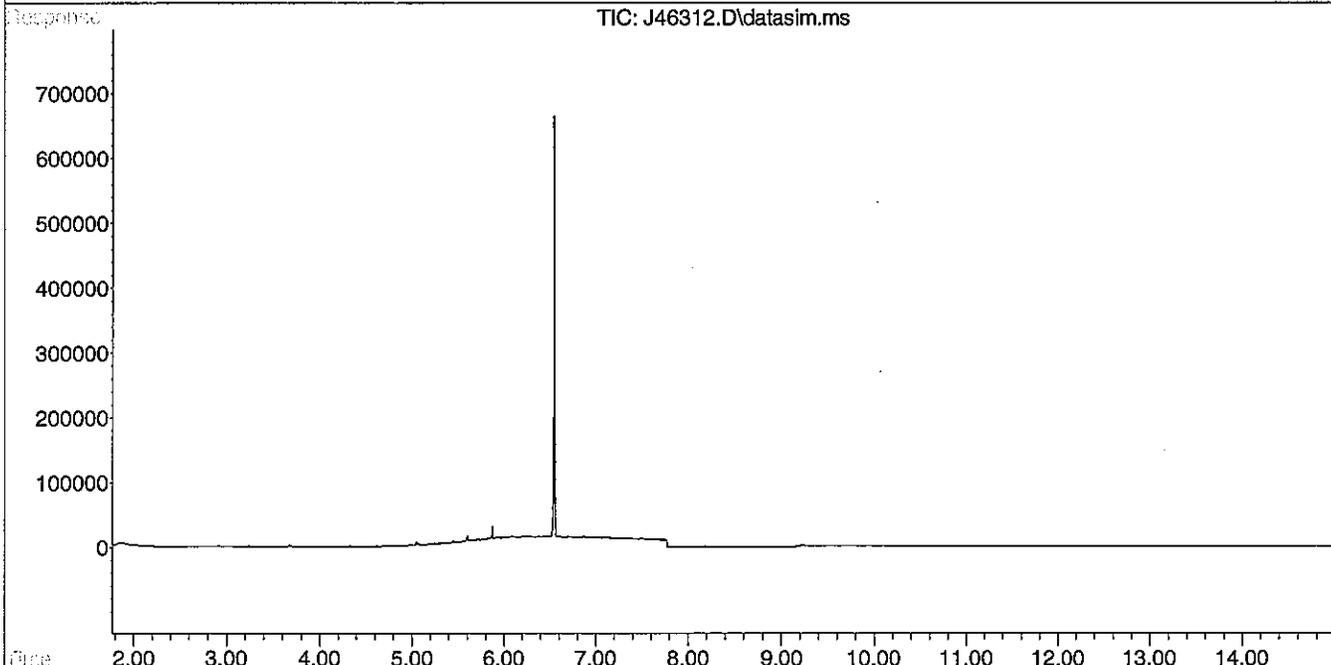
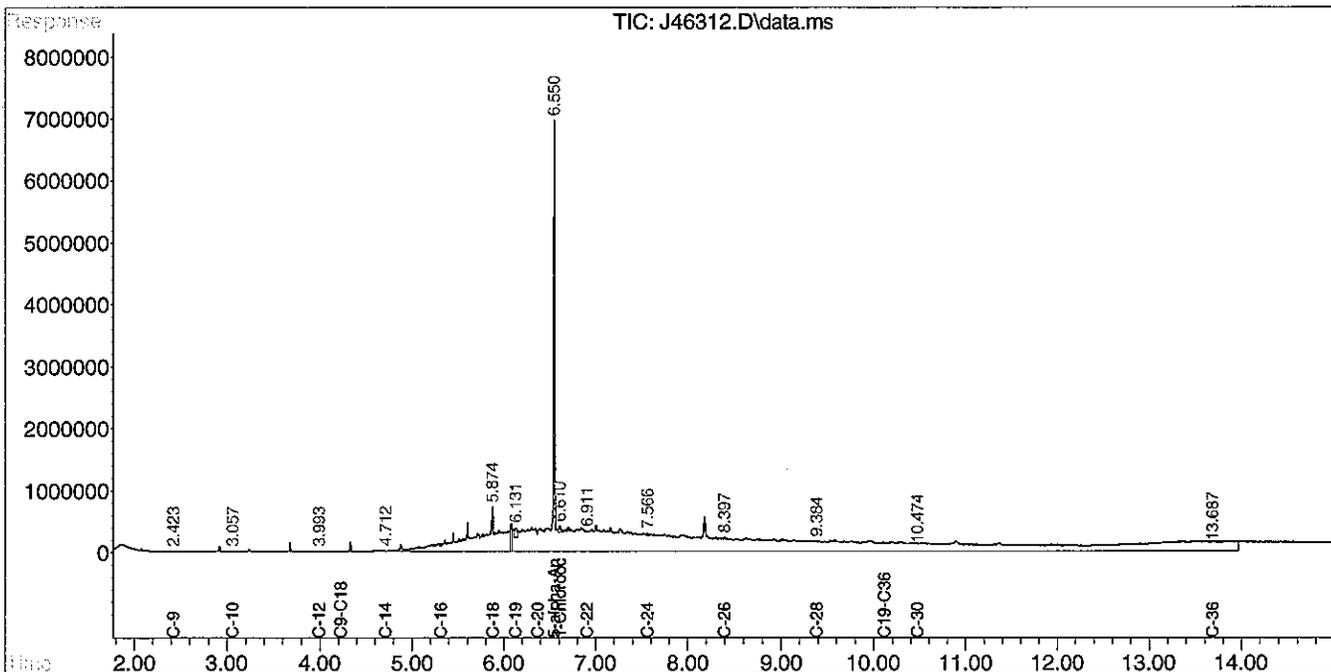
Quant Time: Aug 07 11:06:59 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:13 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080812-J\
 Data File : J46312.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 8 Aug 2012 6:33 am
 Operator : AR
 Sample : 73487-5,,1:40
 Misc : SOIL
 ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 18:15:49 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Wed Aug 08 04:33:48 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-6
Matrix: Solid
Percent Solid: 94
Dilution Factor: 1.0
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS106

EPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	RL	Units	Result	
Unadjusted C11-C22 Aromatics ¹	13600	µg/kg	39800	
Diesel PAH Analytes	Naphthalene	273	µg/kg	143 J
	2-Methylnaphthalene	273	µg/kg	U
	Phenanthrene	273	µg/kg	U
	Acenaphthene	273	µg/kg	U
Other Target PAH Analytes	Acenaphthylene	273	µg/kg	U
	Fluorene	273	µg/kg	U
	Anthracene	273	µg/kg	U
	Fluoranthene	273	µg/kg	U
	Pyrene	273	µg/kg	U
	Benzo[a]anthracene	273	µg/kg	U
	Chrysene	273	µg/kg	U
	Benzo[b]fluoranthene	273	µg/kg	U
	Benzo[k]fluoranthene	273	µg/kg	U
	Benzo[a]pyrene	273	µg/kg	U
	Indeno[1,2,3-cd]pyrene	273	µg/kg	U
	Dibenzof[a,h]anthracene	273	µg/kg	U
Benzo[g,h,i]perylene	273	µg/kg	U	
C9-C18 Aliphatic Hydrocarbons ¹	13600	µg/kg	17300	
C19-C36 Aliphatic Hydrocarbons ¹	13600	µg/kg	72000	
C11-C22 Aromatic Hydrocarbons ^{1,2}	13600	µg/kg	39600	
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			62	
Aromatic Surrogate % Recovery (O-Terphenyl)			68	
Sample Surrogate Acceptance Range	--	--	40-140%	
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			89	
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			87	
Fractionation Surrogate Acceptance Range	--	--	40-140%	

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
²C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.
 RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

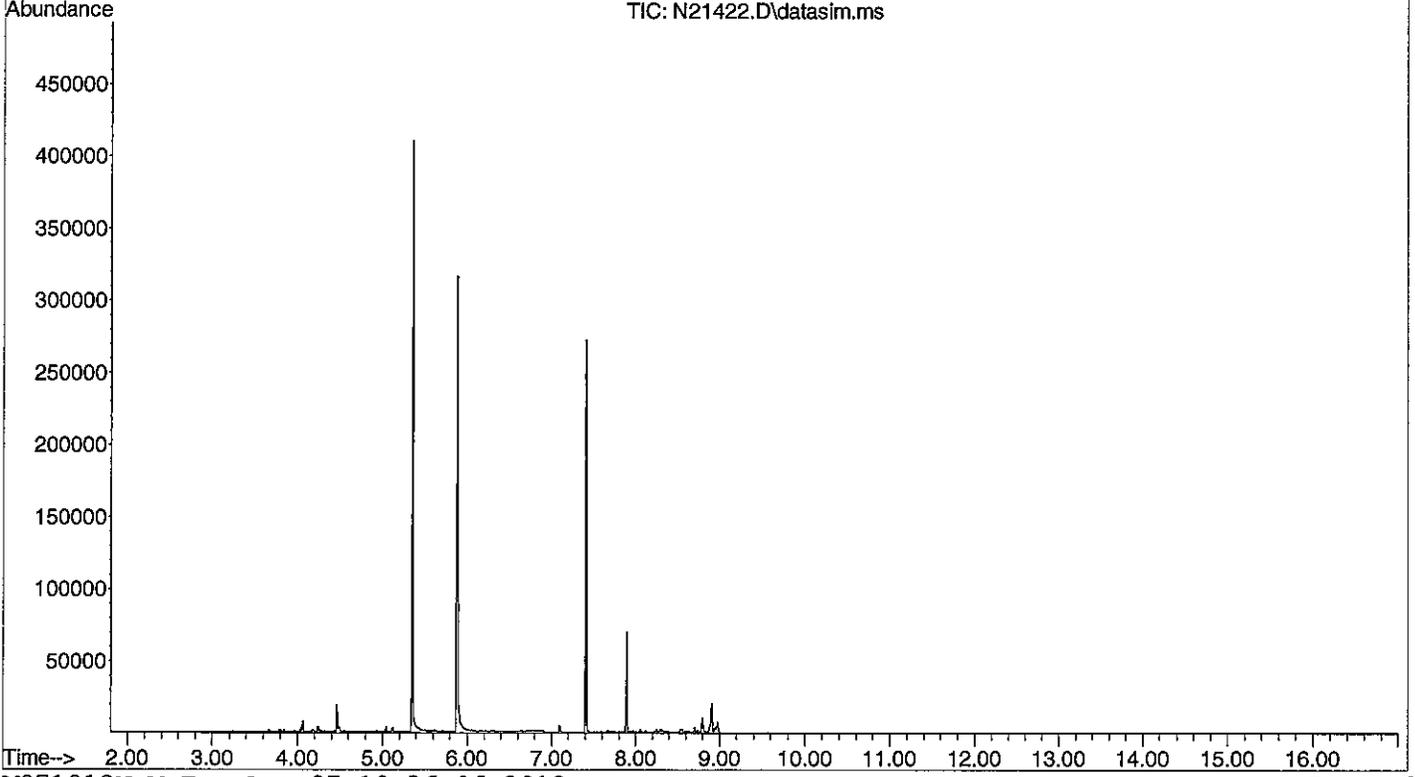
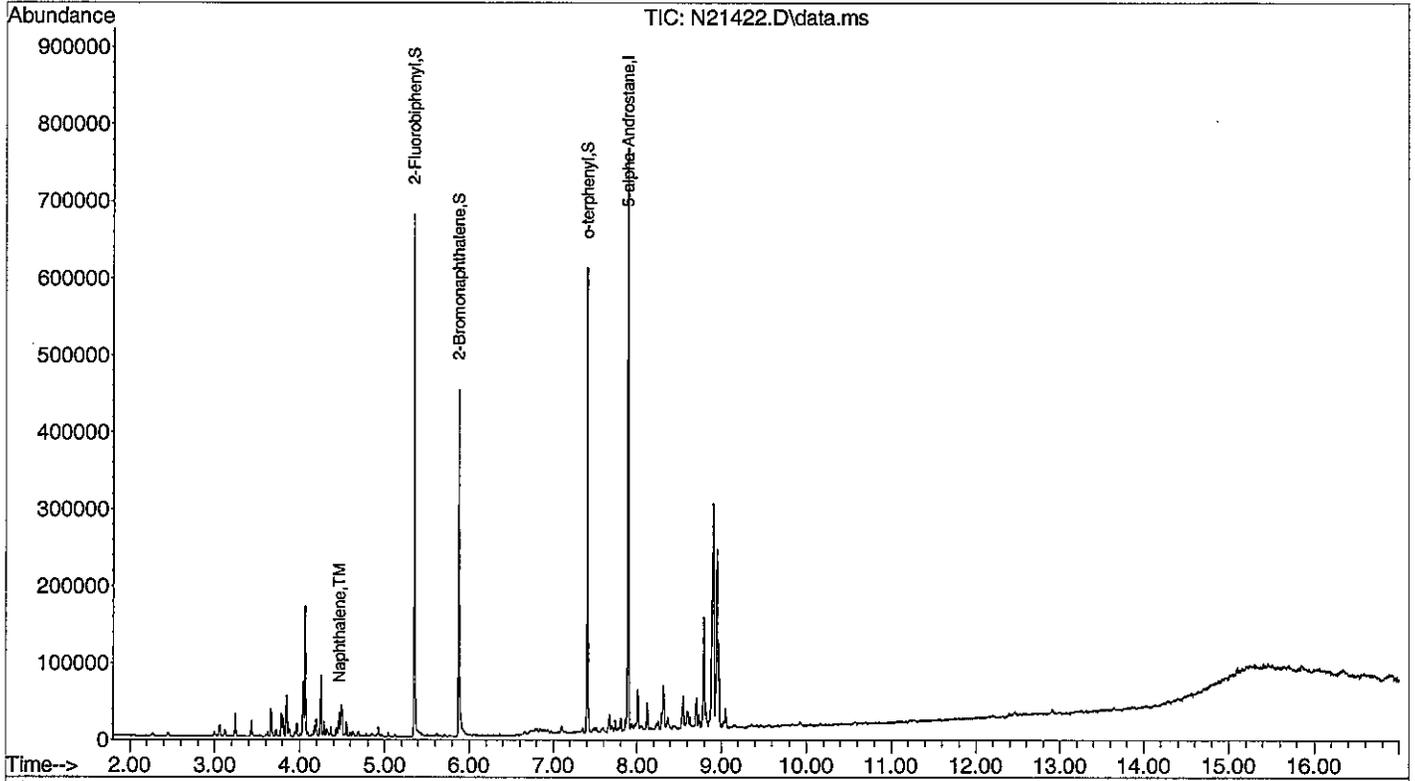
METHODOLOGY MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS: EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a dry weight basis.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080612-N\
 Data File : N21422.D
 Acq On : 7 Aug 2012 10:13 am
 Operator : AR
 Sample : 73487-6
 Misc : SOIL, ARO
 ALS Vial : 35 Sample Multiplier: 1

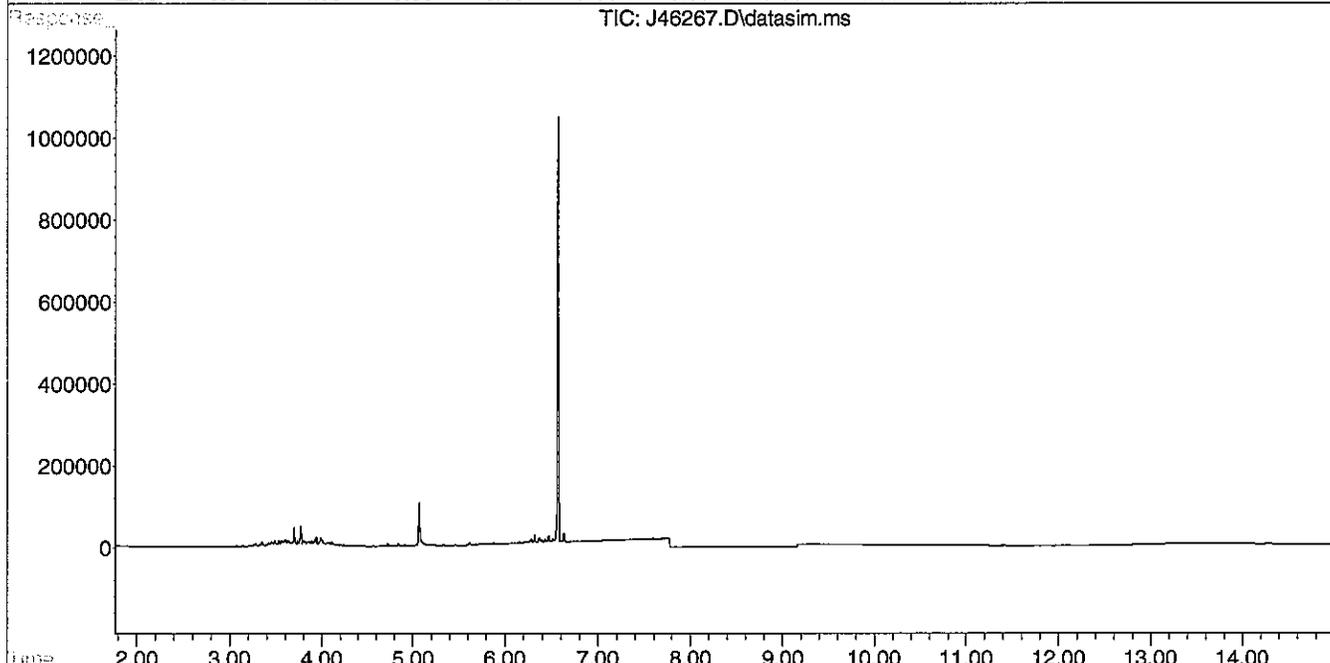
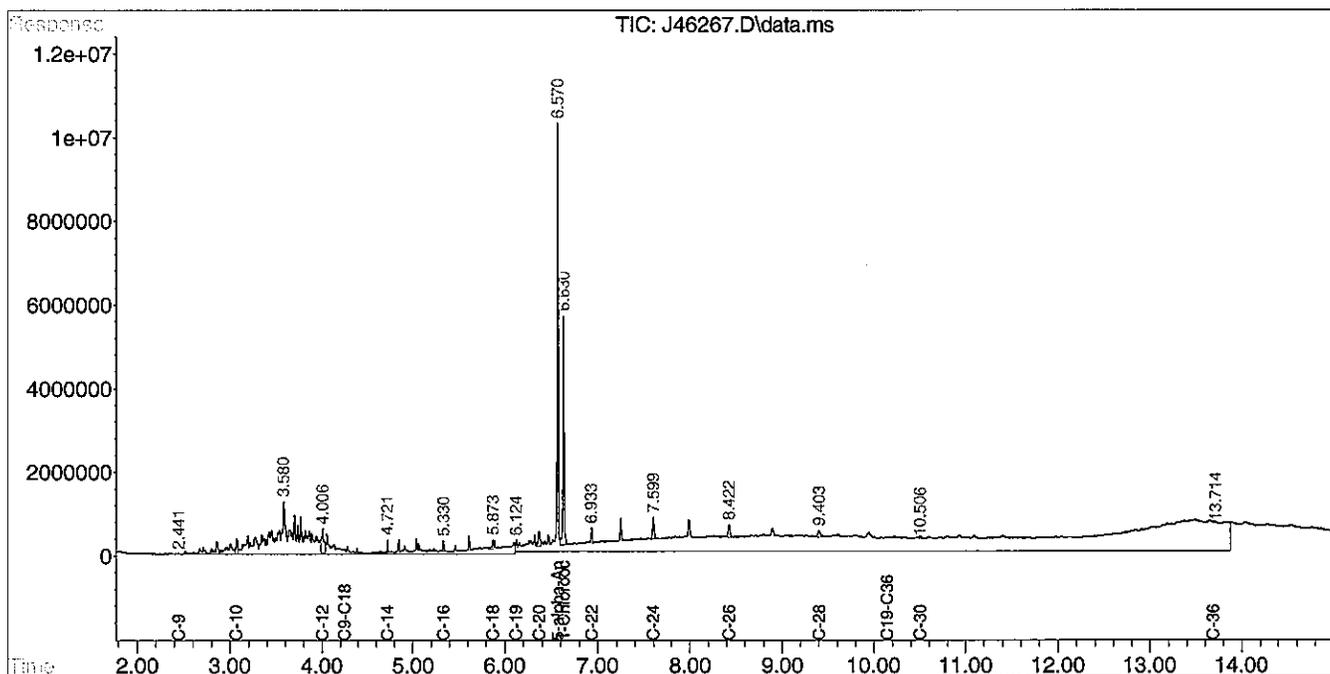
Quant Time: Aug 07 10:36:06 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:13 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080612-J\
 Data File : J46267.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 7:30 am
 Operator : AR
 Sample : 73487-6
 Misc : SOIL,ALI
 ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 07 11:42:51 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-7
Matrix: Solid
Percent Solid: 98
Dilution Factor: 1.0
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS107

EPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	13600	µg/kg	12800 J
Diesel PAH Analytes	Naphthalene	272	µg/kg U
	2-Methylnaphthalene	272	µg/kg U
	Phenanthrene	272	µg/kg U
	Acenaphthene	272	µg/kg U
Other Target PAH Analytes	Acenaphthylene	272	µg/kg U
	Fluorene	272	µg/kg U
	Anthracene	272	µg/kg U
	Fluoranthene	272	µg/kg U
	Pyrene	272	µg/kg U
	Benzo[a]anthracene	272	µg/kg U
	Chrysene	272	µg/kg U
	Benzo[b]fluoranthene	272	µg/kg U
	Benzo[k]fluoranthene	272	µg/kg U
	Benzo[a]pyrene	272	µg/kg U
	Indeno[1,2,3-cd]pyrene	272	µg/kg U
	Dibenzo[a,h]anthracene	272	µg/kg U
Benzo[g,h,i]perylene	272	µg/kg U	
C9-C18 Aliphatic Hydrocarbons ¹	13600	µg/kg	U
C19-C36 Aliphatic Hydrocarbons ¹	13600	µg/kg	25300
C11-C22 Aromatic Hydrocarbons ^{1,2}	13600	µg/kg	12800 J
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			67
Aromatic Surrogate % Recovery (O-Terphenyl)			79
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			89
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			86
Fractionation Surrogate Acceptance Range	--	--	40-140%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
²C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.
 RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

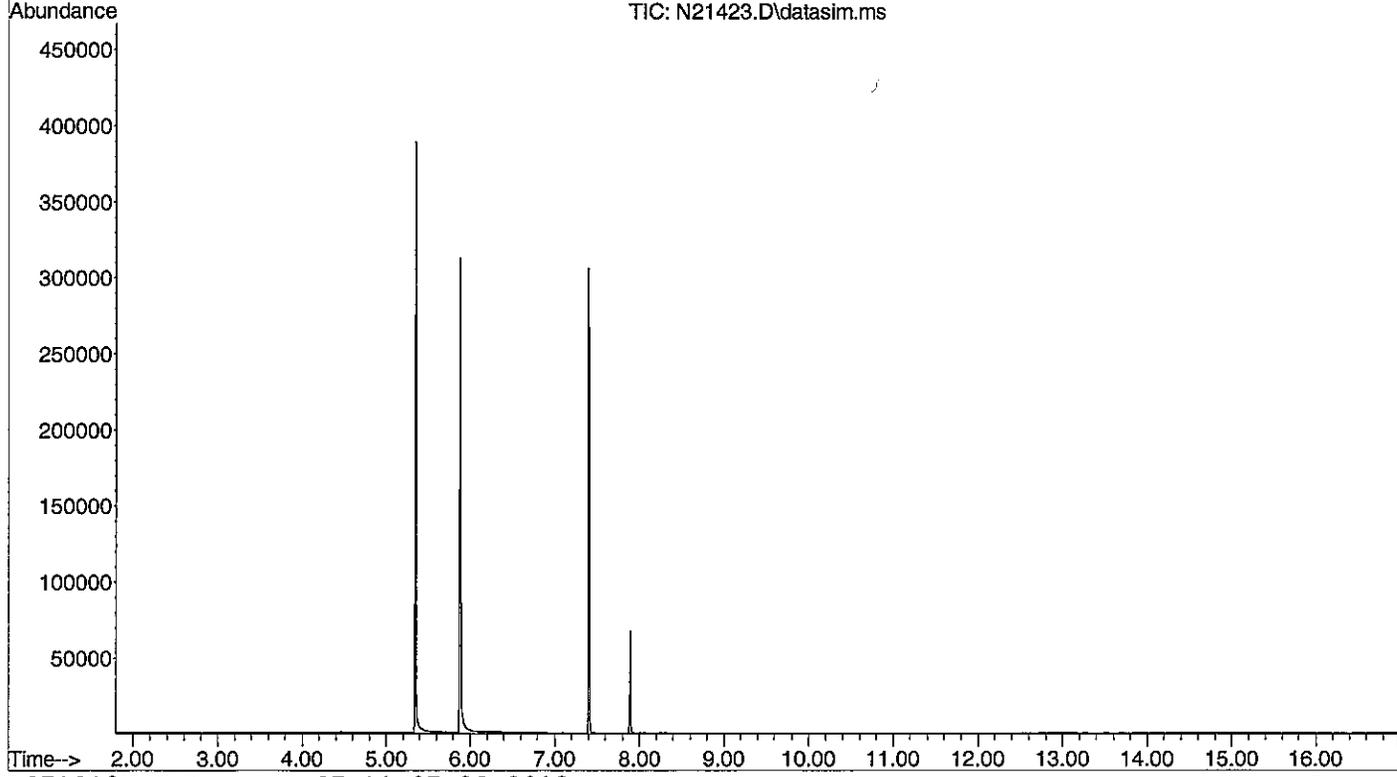
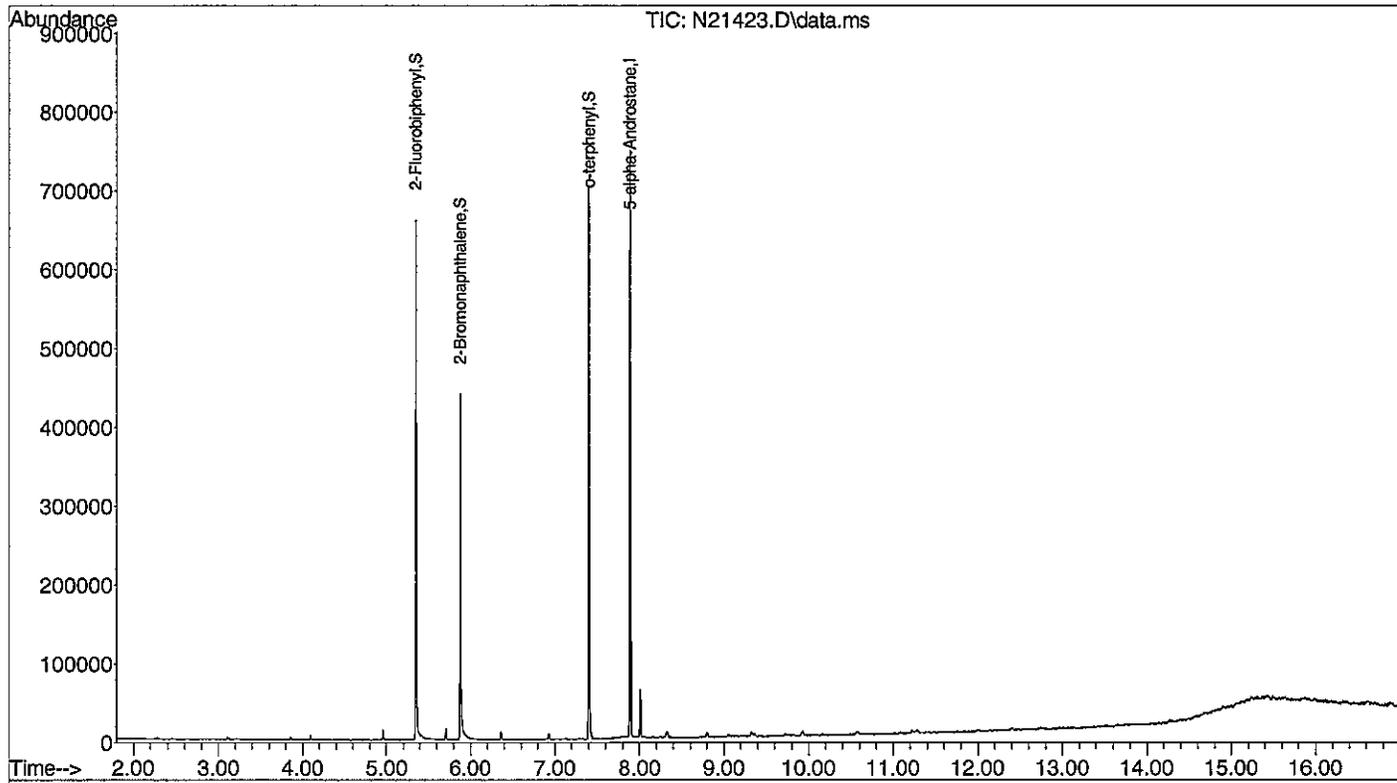
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a dry weight basis.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080612-N\
Data File : N21423.D
Acq On : 7 Aug 2012 10:33 am
Operator : AR
Sample : 73487-7
Misc : SOIL,ARO
ALS Vial : 36 Sample Multiplier: 1

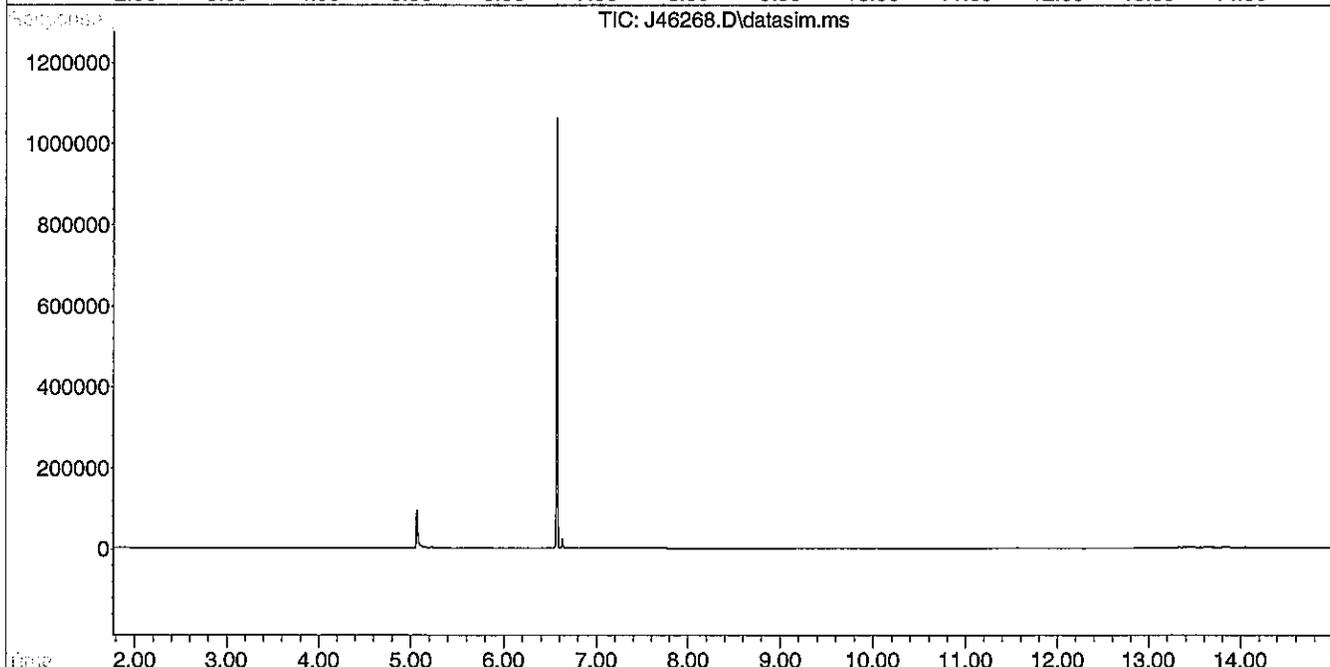
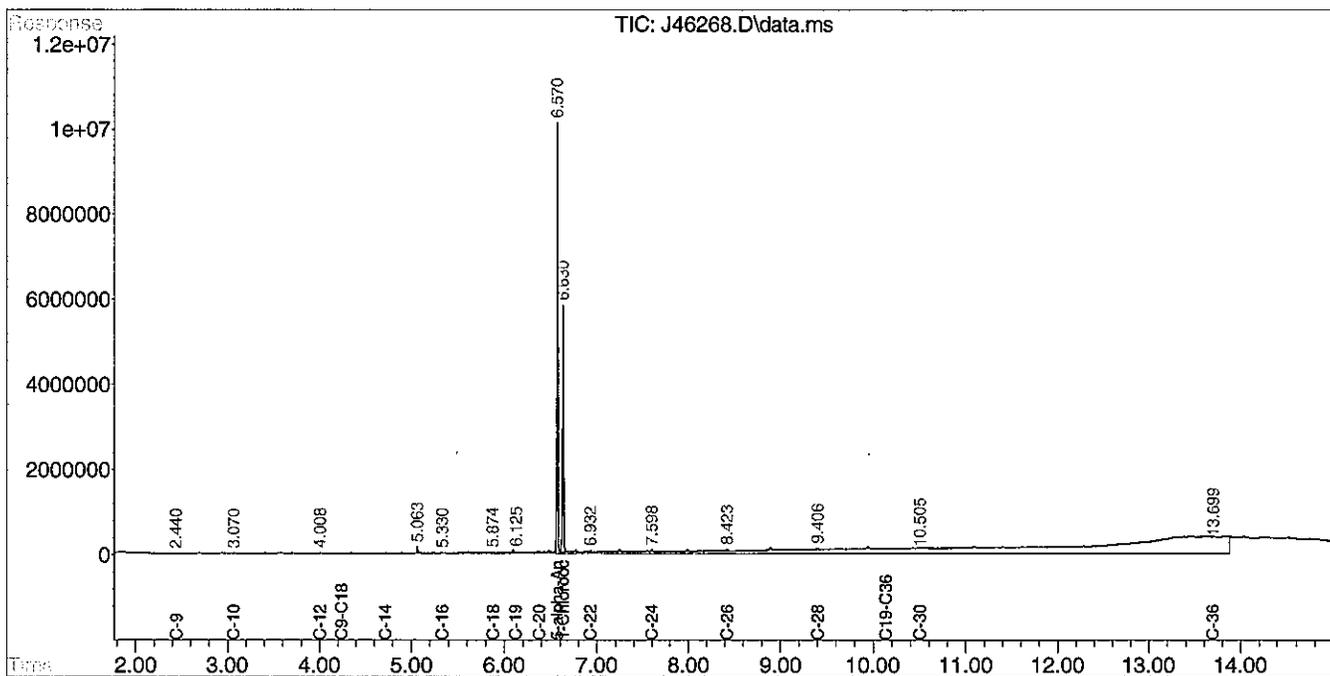
Quant Time: Aug 07 11:07:29 2012
Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
Quant Title : EPH MS AROMATICS
QLast Update : Fri Jul 27 00:00:14 2012
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080612-J\
 Data File : J46268.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 7:51 am
 Operator : AR
 Sample : 73487-7
 Misc : SOIL,ALI
 ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 07 11:42:53 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS108

SAMPLE DATA

Lab Sample ID: 73487-8
Matrix: Solid
Percent Solid: 96
Dilution Factor: 1.0
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

EPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	RL	Units	Result	
Unadjusted C11-C22 Aromatics ¹	13200	µg/kg	64000	
Diesel PAH Analytes	Naphthalene	265	µg/kg	443
	2-Methylnaphthalene	265	µg/kg	U
	Phenanthrene	265	µg/kg	249 J
	Acenaphthene	265	µg/kg	U
Other Target PAH Analytes	Acenaphthylene	265	µg/kg	U
	Fluorene	265	µg/kg	U
	Anthracene	265	µg/kg	236 J
	Fluoranthene	265	µg/kg	566
	Pyrene	265	µg/kg	476
	Benzo[a]anthracene	265	µg/kg	303
	Chrysene	265	µg/kg	523
	Benzo[b]fluoranthene	265	µg/kg	498
	Benzo[k]fluoranthene	265	µg/kg	155 J
	Benzo[a]pyrene	265	µg/kg	236 J
	Indeno[1,2,3-cd]pyrene	265	µg/kg	241 J
	Dibenzof[a,h]anthracene	265	µg/kg	U
Benzo[g,h,i]perylene	265	µg/kg	223 J	
C9-C18 Aliphatic Hydrocarbons ¹	26500	µg/kg	48100	
C19-C36 Aliphatic Hydrocarbons ¹	26500	µg/kg	139000	
C11-C22 Aromatic Hydrocarbons ^{1,2}	13200	µg/kg	59800	
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			72	
Aromatic Surrogate % Recovery (O-Terphenyl)			81	
Sample Surrogate Acceptance Range	--	--	40-140%	
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			92	
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			85	
Fractionation Surrogate Acceptance Range	--	--	40-140%	

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
²C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.
RL = Report Limit
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

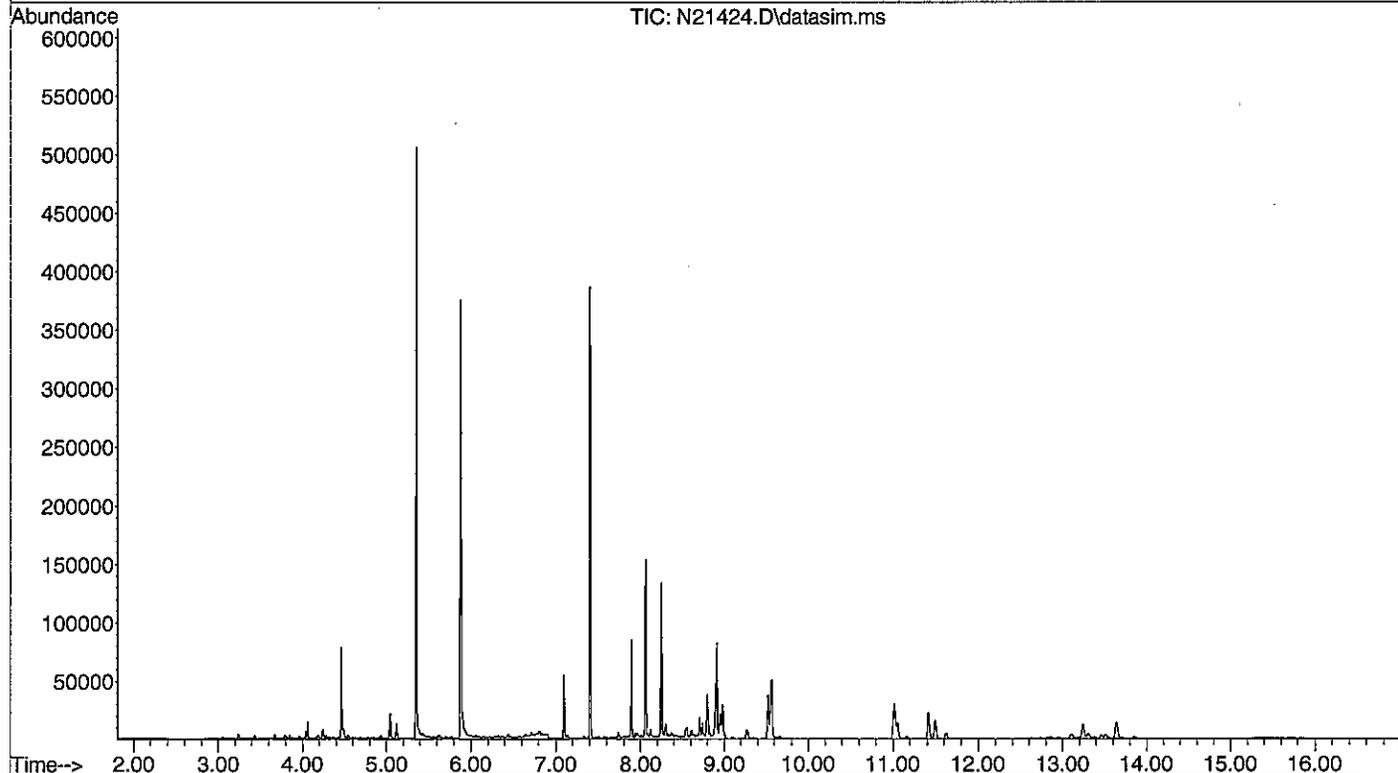
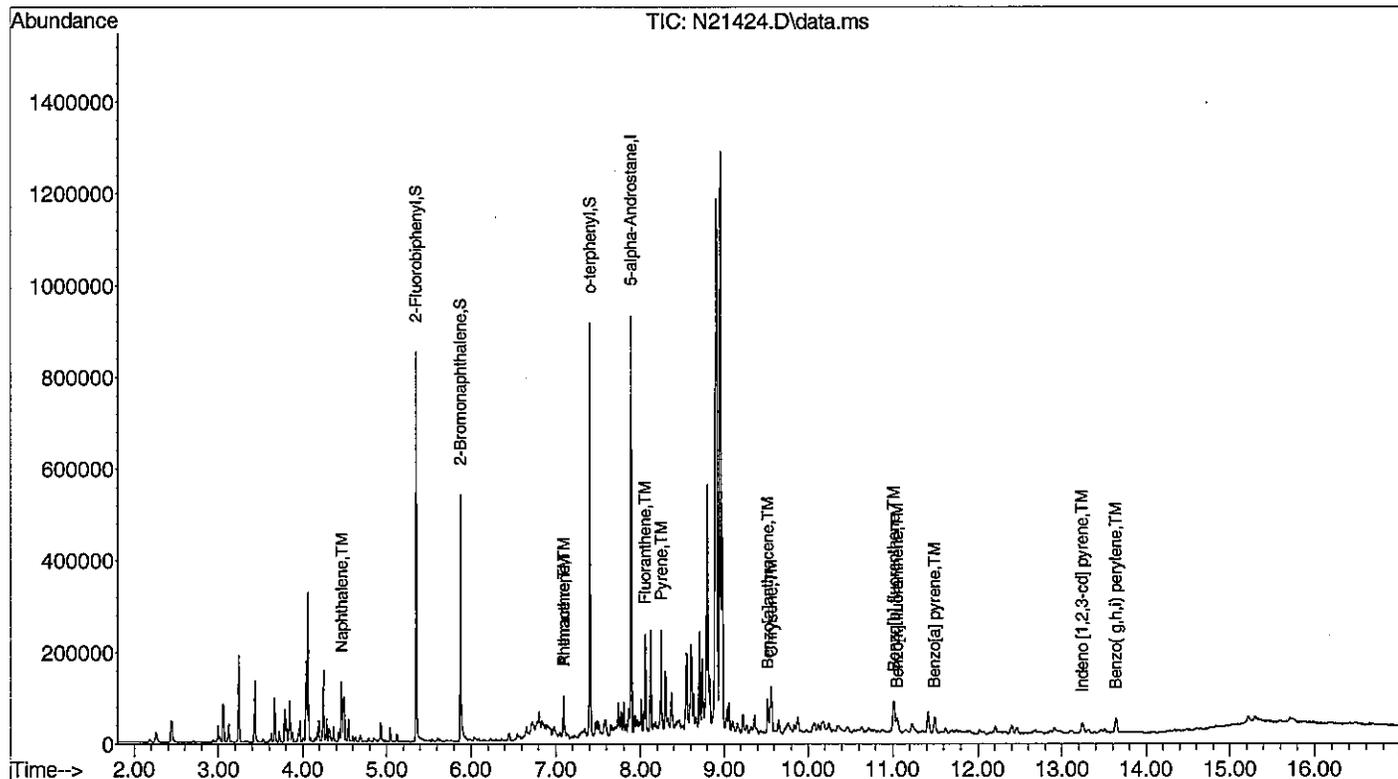
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist.
Results are expressed on a dry weight basis.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080612-N\
 Data File : N21424.D
 Acq On : 7 Aug 2012 10:54 am
 Operator : AR
 Sample : 73487-8
 Misc : SOIL,ARO
 ALS Vial : 37 Sample Multiplier: 1

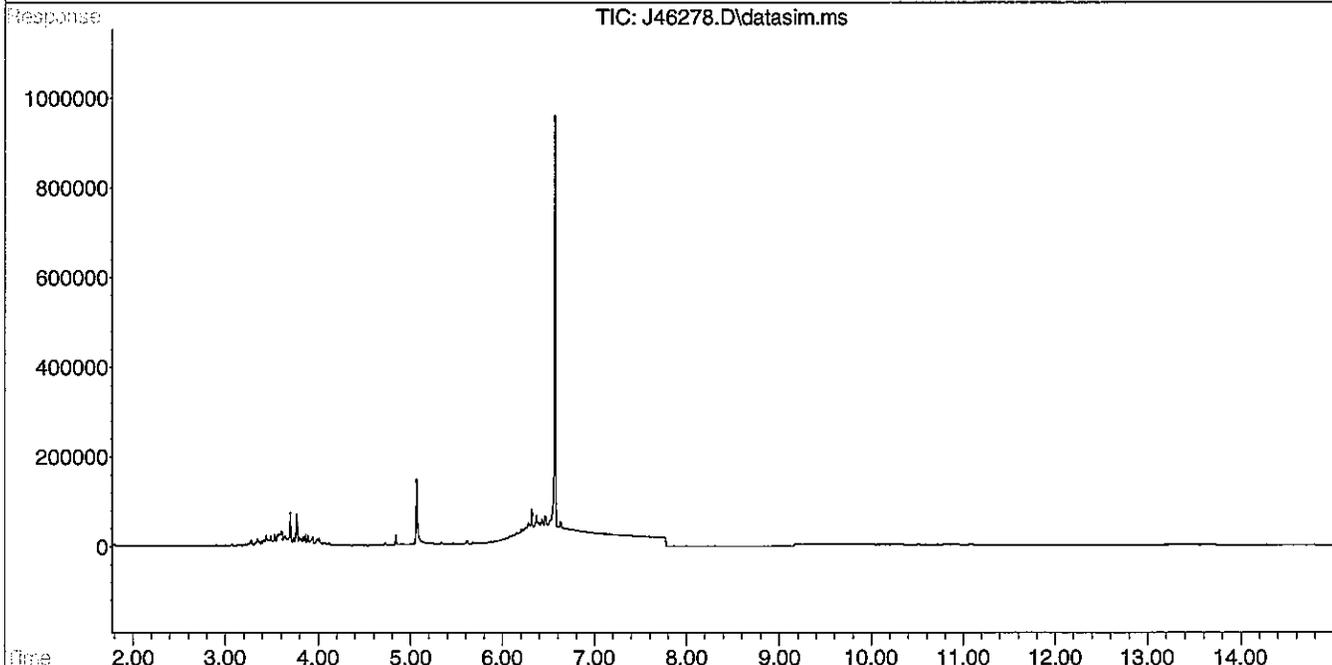
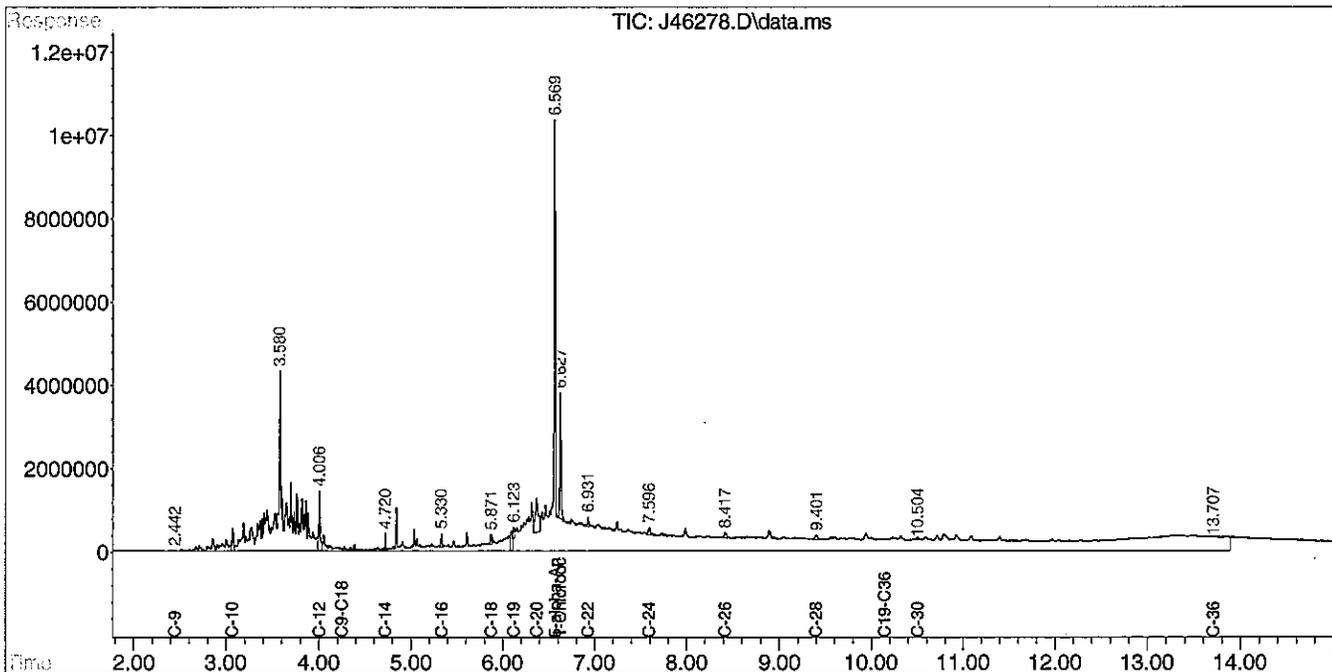
Quant Time: Aug 07 11:11:14 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:14 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080712-J\
 Data File : J46278.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 1:58 pm
 Operator : AR
 Sample : 73487-8,,1:2
 Misc : SOIL
 ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 07 15:54:07 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-9
Matrix: Solid
Percent Solid: 97
Dilution Factor: 1.0
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS109

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	13700	µg/kg	16800
Diesel PAH Analytes	Naphthalene	275	µg/kg
	2-Methylnaphthalene	275	µg/kg
	Phenanthrene	275	µg/kg
	Acenaphthene	275	µg/kg
Other Target PAH Analytes	Acenaphthylene	275	µg/kg
	Fluorene	275	µg/kg
	Anthracene	275	µg/kg
	Fluoranthene	275	µg/kg
	Pyrene	275	µg/kg
	Benzo[a]anthracene	275	µg/kg
	Chrysene	275	µg/kg
	Benzo[b]fluoranthene	275	µg/kg
	Benzo[k]fluoranthene	275	µg/kg
	Benzo[a]pyrene	275	µg/kg
	Indeno[1,2,3-cd]pyrene	275	µg/kg
	Dibenzo[a,h]anthracene	275	µg/kg
Benzo[g,h,i]perylene	275	µg/kg	
C9-C18 Aliphatic Hydrocarbons ¹	13700	µg/kg	23000
C19-C36 Aliphatic Hydrocarbons ¹	13700	µg/kg	32600
C11-C22 Aromatic Hydrocarbons ^{1,2}	13700	µg/kg	16400
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			59
Aromatic Surrogate % Recovery (O-Terphenyl)			59
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			98
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			85
Fractionation Surrogate Acceptance Range	--	--	40-140%
¹ Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.			
² C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.			
RL = Report Limit			
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank			

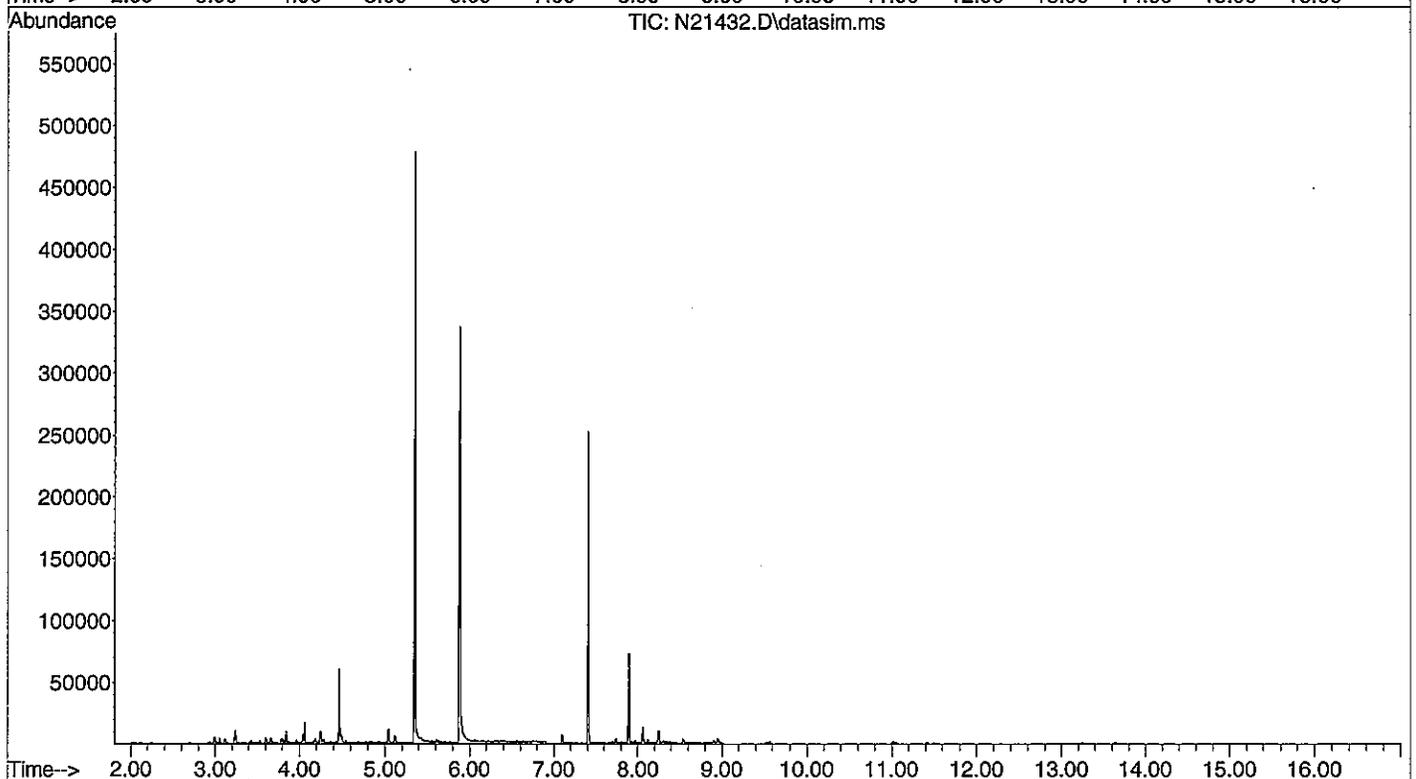
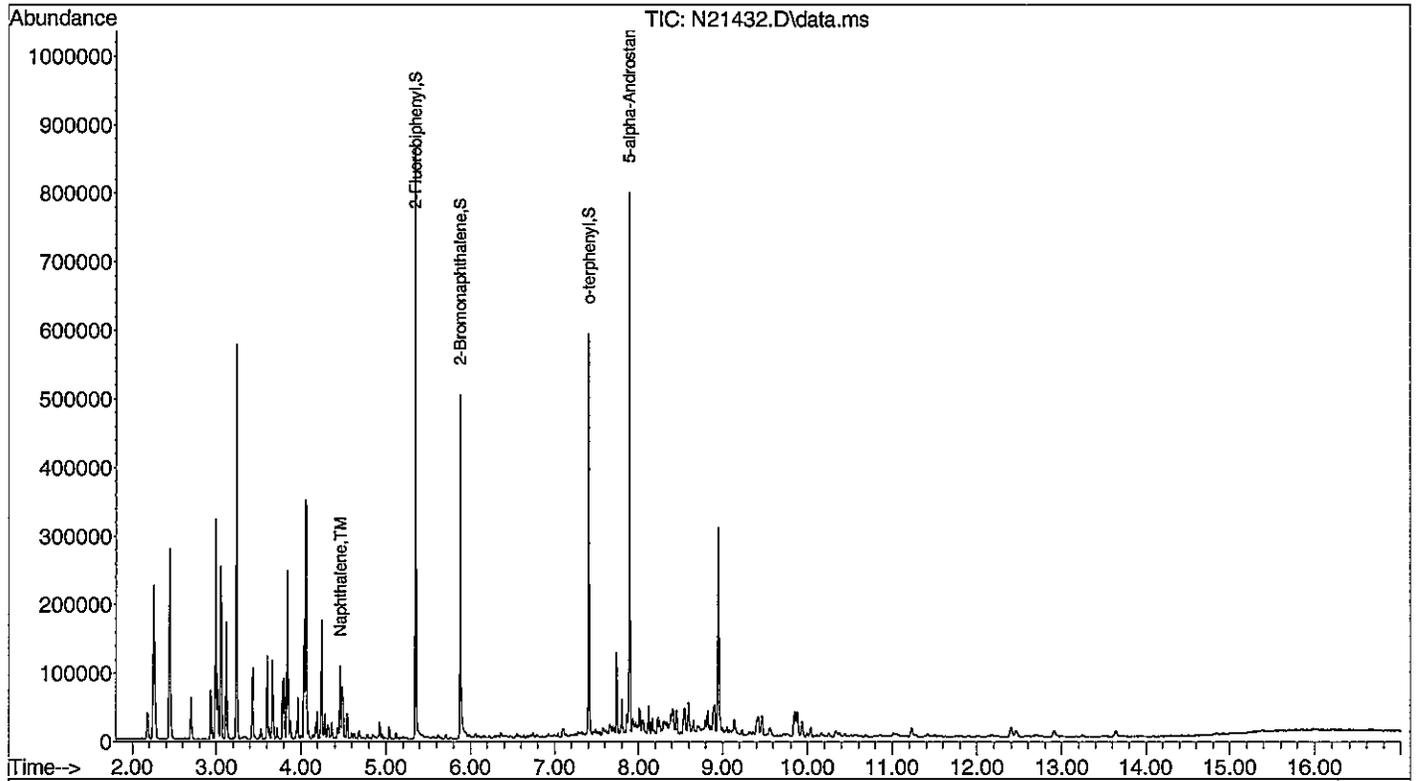
METHODOLOGY-MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS: EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a dry weight basis.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080712-N\
 Data File : N21432.D
 Acq On : 7 Aug 2012 2:17 pm
 Operator : AR
 Sample : 73487-9
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

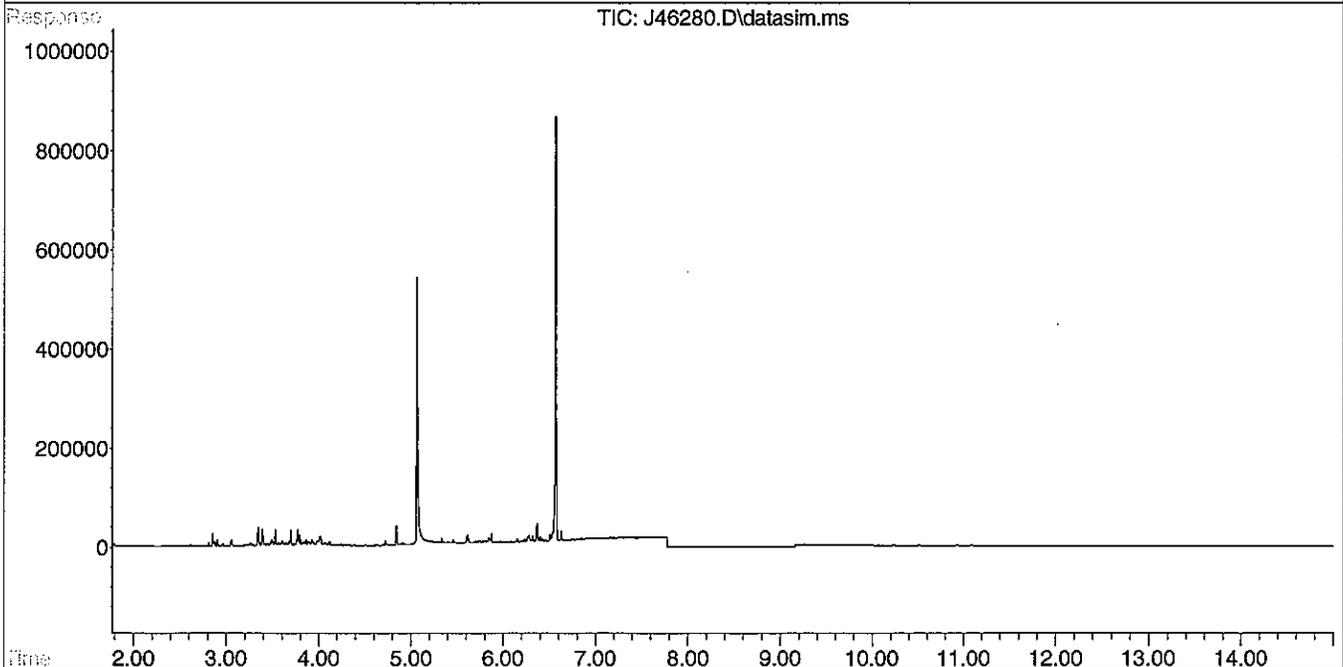
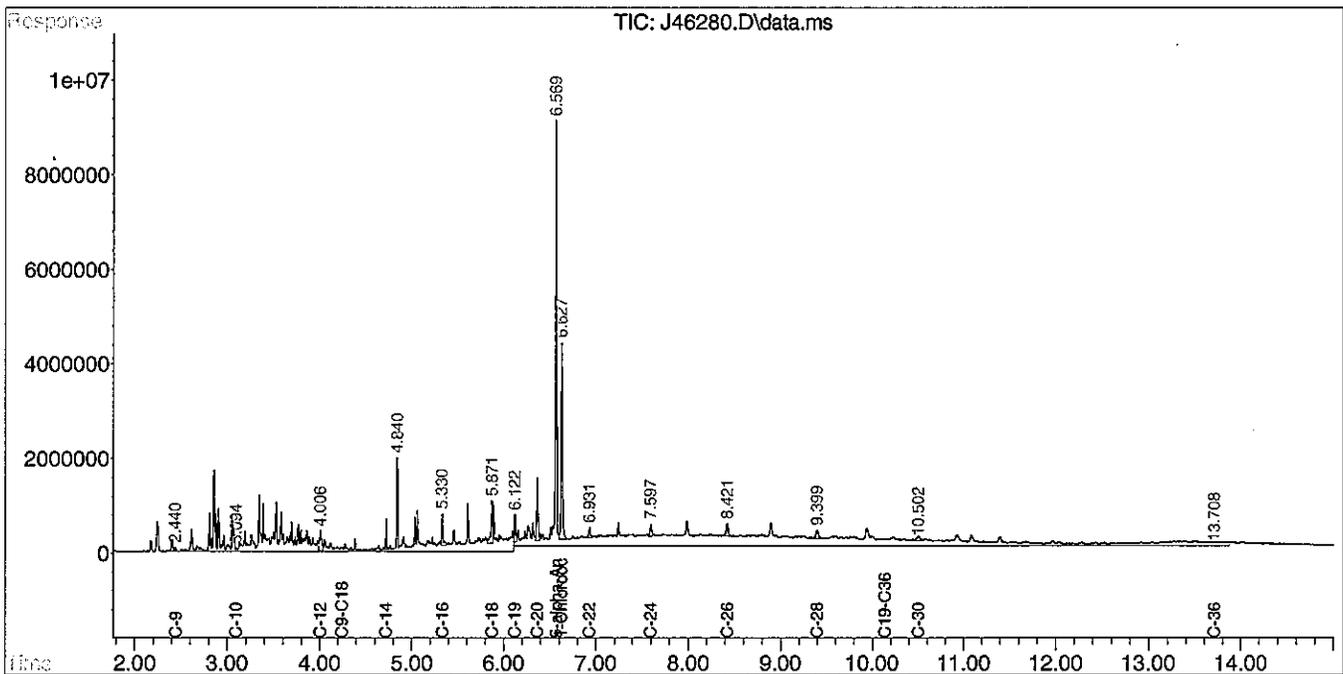
Quant Time: Aug 07 15:07:59 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:13 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080712-J\
 Data File : J46280.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 2:39 pm
 Operator : AR
 Sample : 73487-9
 Misc : SOIL
 ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 07 15:53:00 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-10
Matrix: Solid
Percent Solid: 92
Dilution Factor: 4.3
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/08/12

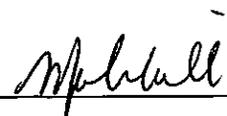
CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS110

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	57500	µg/kg	590000
Diesel PAH Analytes	Naphthalene	1150	µg/kg U
	2-Methylnaphthalene	1150	µg/kg 901 J
	Phenanthrene	1150	µg/kg 2490
	Acenaphthene	1150	µg/kg U
Other Target PAH Analytes	Acenaphthylene	1150	µg/kg U
	Fluorene	1150	µg/kg U
	Anthracene	1150	µg/kg U
	Fluoranthene	1150	µg/kg 1670
	Pyrene	1150	µg/kg 969 J
	Benzo[a]anthracene	1150	µg/kg U
	Chrysene	1150	µg/kg U
	Benzo[b]fluoranthene	1150	µg/kg U
	Benzo[k]fluoranthene	1150	µg/kg U
	Benzo[a]pyrene	1150	µg/kg U
	Indeno[1,2,3-cd]pyrene	1150	µg/kg U
	Dibenzof[a,h]anthracene	1150	µg/kg U
Benzo[g,h,i]perylene	1150	µg/kg U	
C9-C18 Aliphatic Hydrocarbons ¹	57500	µg/kg	U
C19-C36 Aliphatic Hydrocarbons ¹	57500	µg/kg	7120000
C11-C22 Aromatic Hydrocarbons ^{1,2}	57500	µg/kg	584000
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			*
Aromatic Surrogate % Recovery (O-Terphenyl)			85
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			110
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			96
Fractionation Surrogate Acceptance Range	--	--	40-140%
¹ Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.			
² C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.			
RL = Report Limit			
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank			

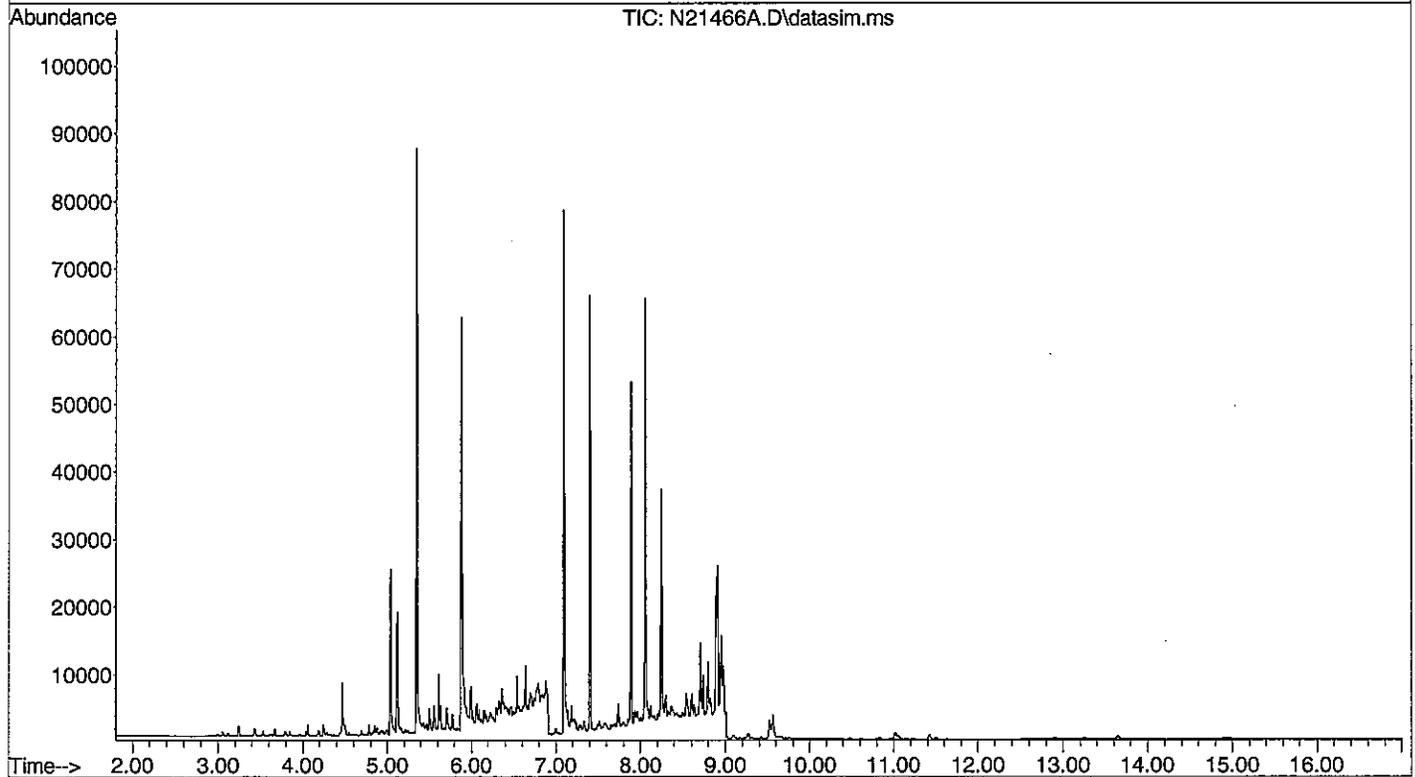
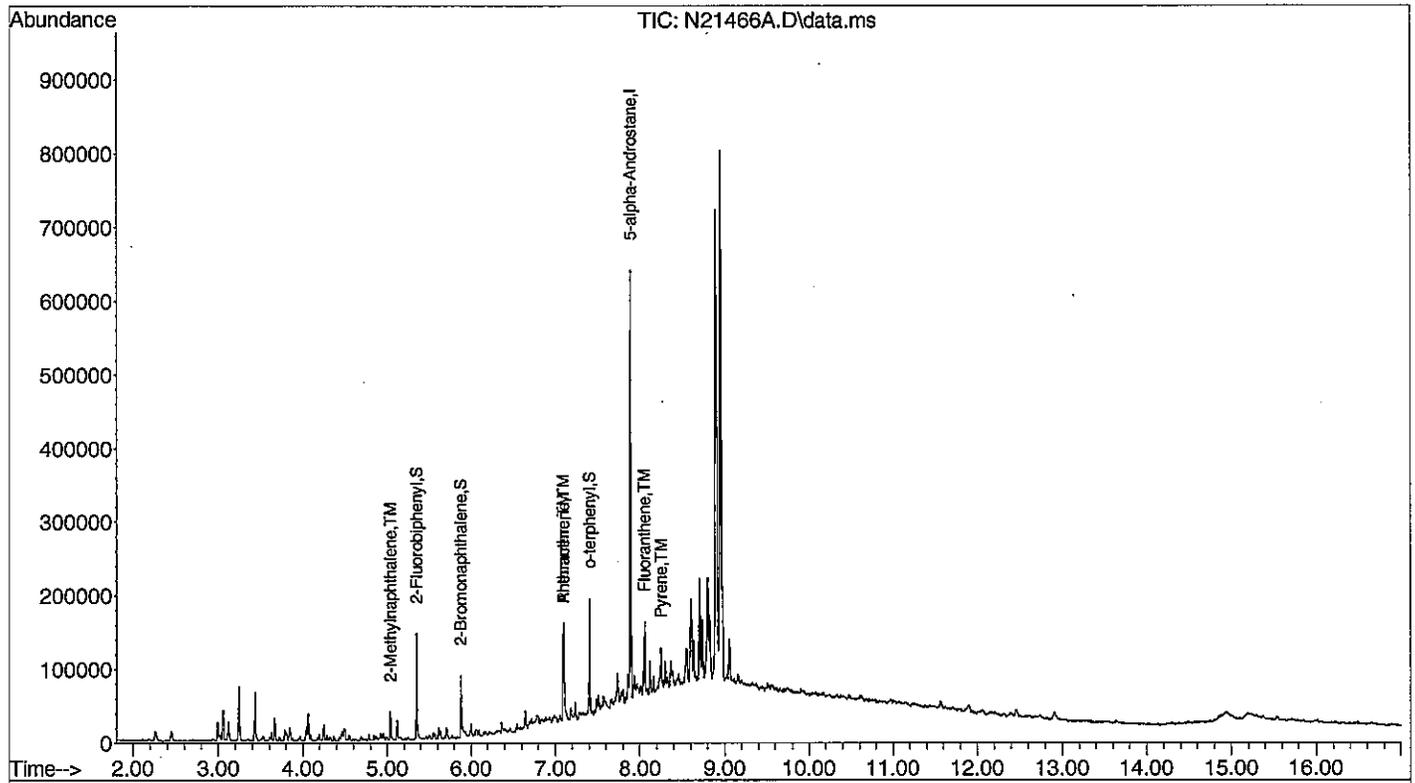
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a dry weight basis.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080812-N\
 Data File : N21466A.D
 Acq On : 8 Aug 2012 7:50 am
 Operator : AR
 Sample : 73487-10,,1:4
 Misc : SOIL,ARO
 ALS Vial : 34 Sample Multiplier: 1

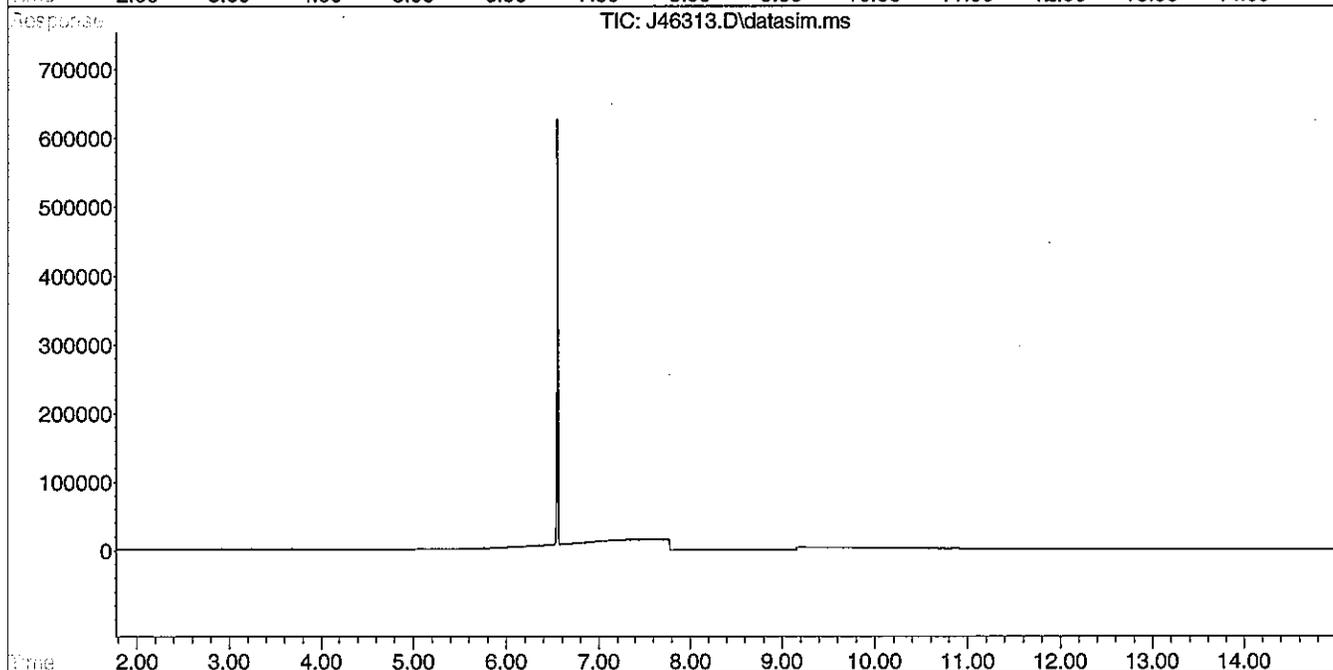
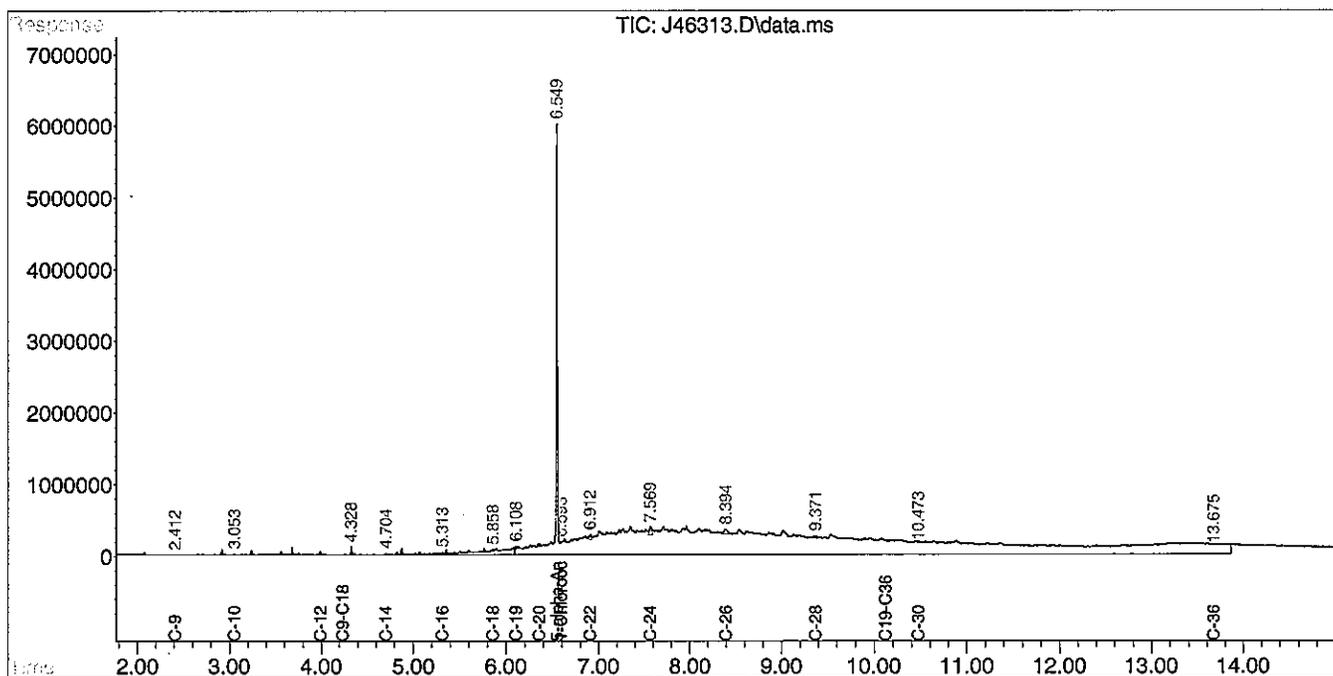
Quant Time: Aug 08 19:44:08 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:13 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080812-J\
 Data File : J46313.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 8 Aug 2012 6:54 am
 Operator : AR
 Sample : 73487-10,,1:100
 Misc : SOIL
 ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 18:16:40 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Wed Aug 08 04:33:48 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-11
Matrix: Solid
Percent Solid: 98
Dilution Factor: 1.0
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS111

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	13600	µg/kg	8780 J
Diesel PAH Analytes	Naphthalene	272	µg/kg
	2-Methylnaphthalene	272	µg/kg
	Phenanthrene	272	µg/kg
	Acenaphthene	272	µg/kg
Other Target PAH Analytes	Acenaphthylene	272	µg/kg
	Fluorene	272	µg/kg
	Anthracene	272	µg/kg
	Fluoranthene	272	µg/kg
	Pyrene	272	µg/kg
	Benzo[a]anthracene	272	µg/kg
	Chrysene	272	µg/kg
	Benzo[b]fluoranthene	272	µg/kg
	Benzo[k]fluoranthene	272	µg/kg
	Benzo[a]pyrene	272	µg/kg
	Indeno[1,2,3-cd]pyrene	272	µg/kg
	Dibenzo[a,h]anthracene	272	µg/kg
Benzo[g,h,i]perylene	272	µg/kg	
C9-C18 Aliphatic Hydrocarbons ¹	13600	µg/kg	U
C19-C36 Aliphatic Hydrocarbons ¹	13600	µg/kg	14800
C11-C22 Aromatic Hydrocarbons ^{1,2}	13600	µg/kg	8780 J
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			76
Aromatic Surrogate % Recovery (O-Terphenyl)			90
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			100
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			94
Fractionation Surrogate Acceptance Range	--	--	40-140%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
²C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.
 RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

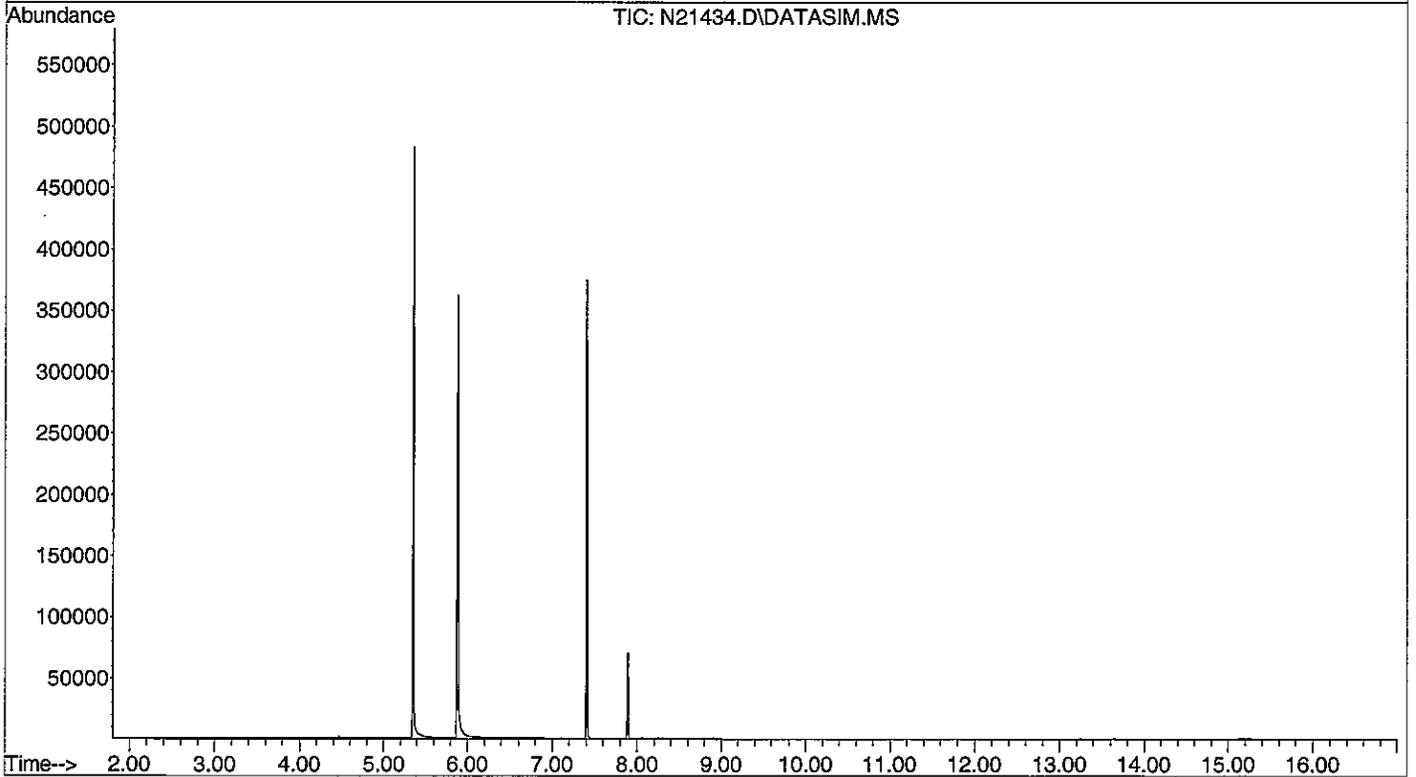
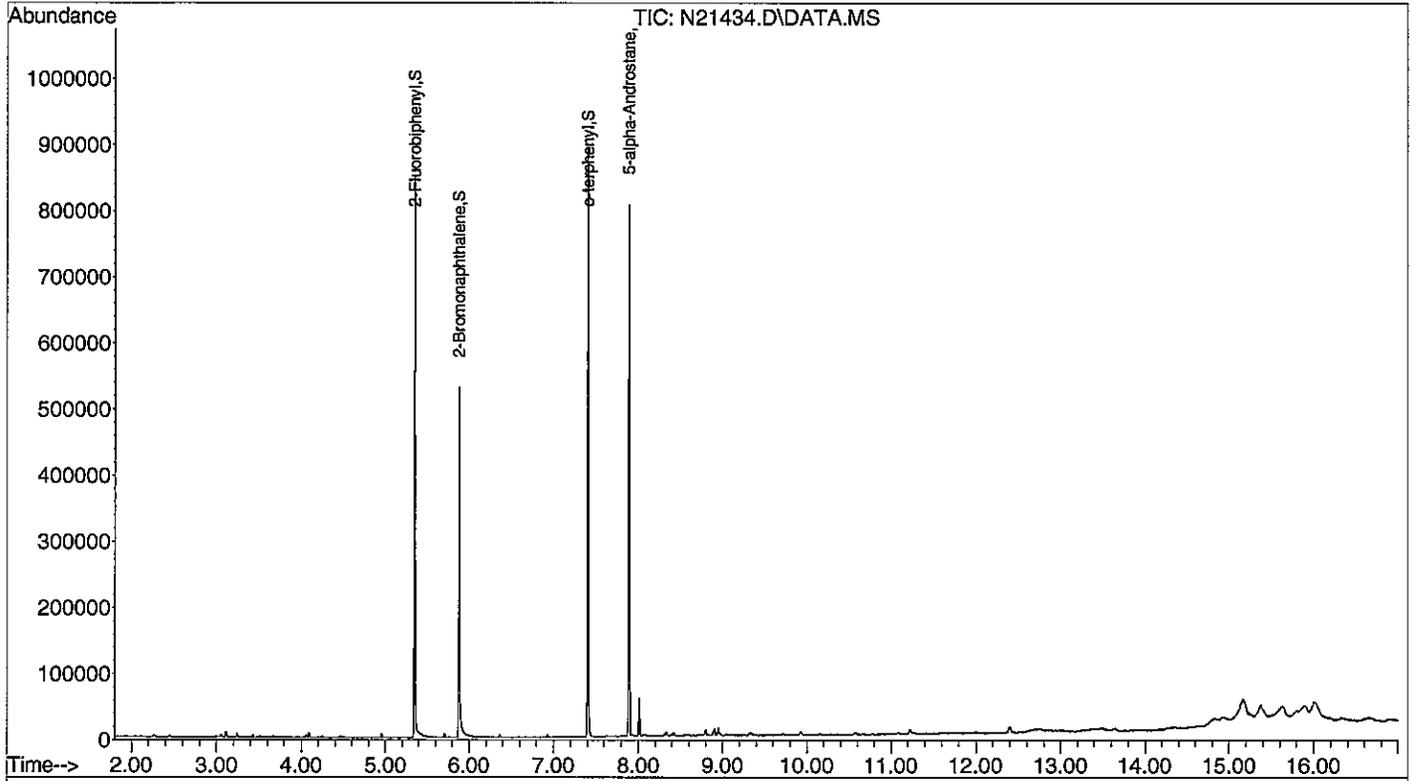
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a dry weight basis.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080712-N\
 Data File : N21434.D
 Acq On : 7 Aug 2012 2:58 pm
 Operator : AR
 Sample : 73487-11
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

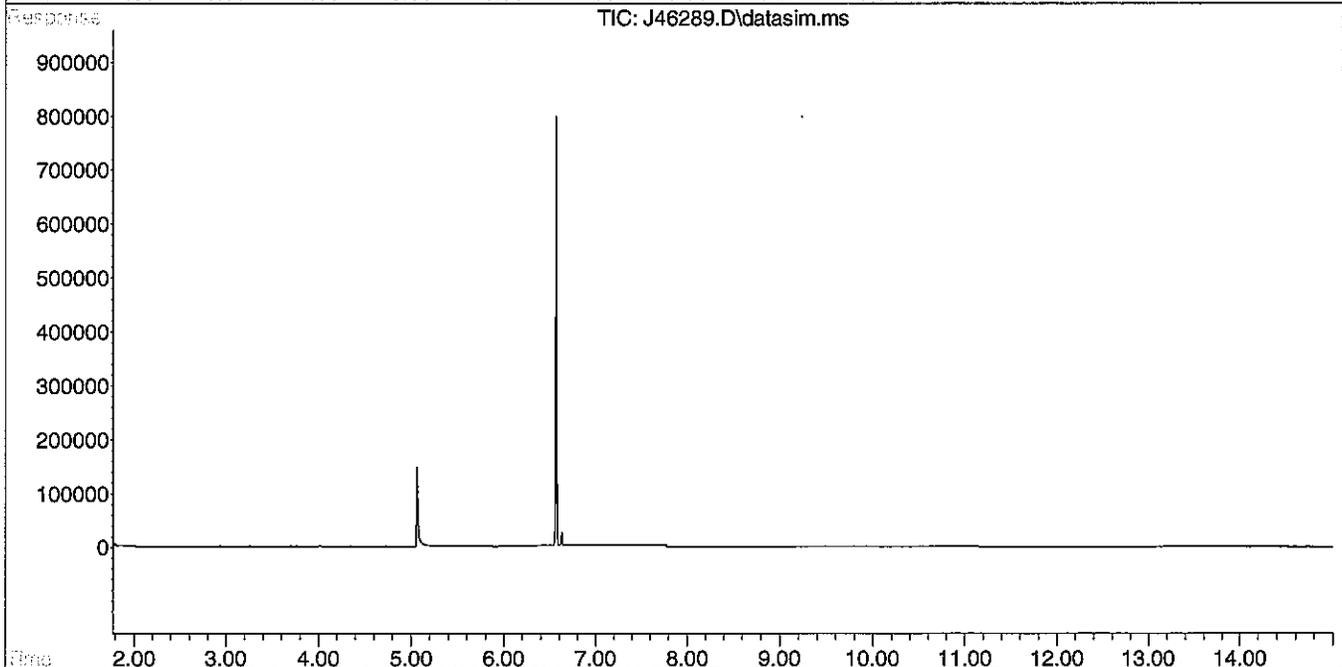
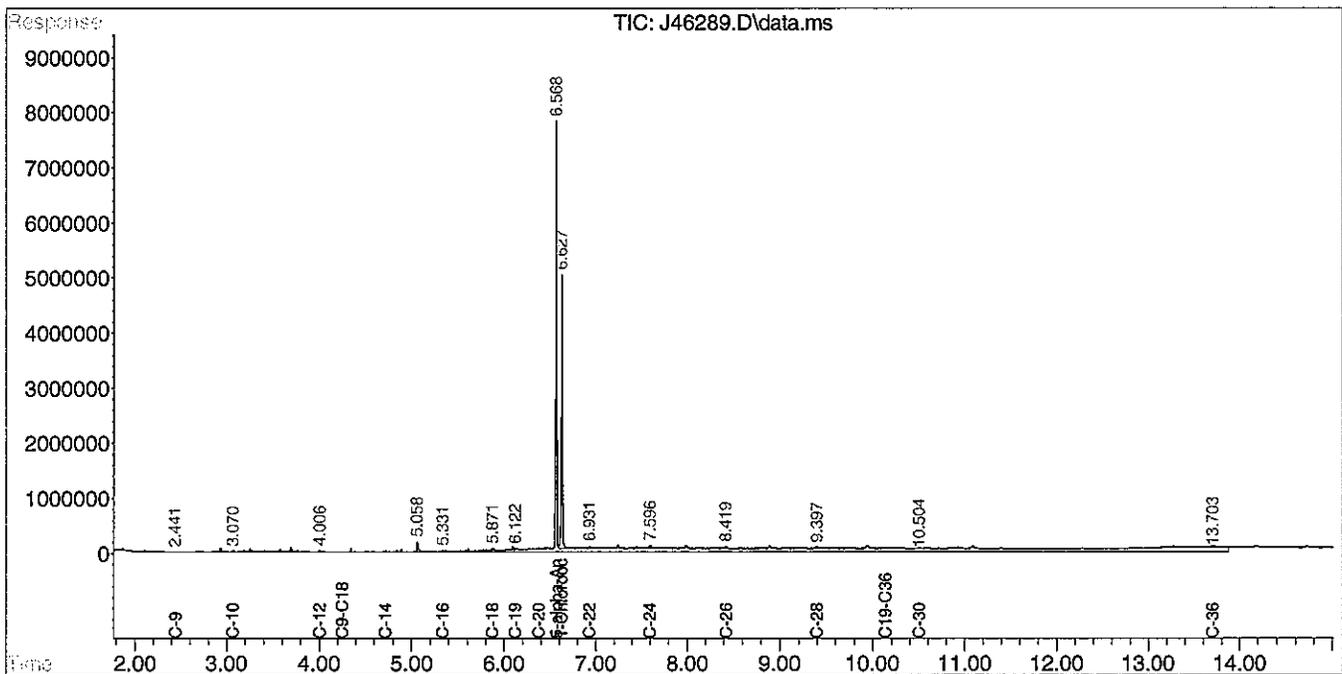
Quant Time: Aug 07 15:38:26 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:14 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080712-J\
 Data File : J46289.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 5:45 pm
 Operator : AR
 Sample : 73487-11,RR
 Misc : SOIL
 ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 00:04:26 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-12
Matrix: Solid
Percent Solid: 97
Dilution Factor: 1.0
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS112

EPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	13500	µg/kg	U
Diesel PAH Analytes	Naphthalene	270	µg/kg
	2-Methylnaphthalene	270	µg/kg
	Phenanthrene	270	µg/kg
	Acenaphthene	270	µg/kg
Other Target PAH Analytes	Acenaphthylene	270	µg/kg
	Fluorene	270	µg/kg
	Anthracene	270	µg/kg
	Fluoranthene	270	µg/kg
	Pyrene	270	µg/kg
	Benzo[a]anthracene	270	µg/kg
	Chrysene	270	µg/kg
	Benzo[b]fluoranthene	270	µg/kg
	Benzo[k]fluoranthene	270	µg/kg
	Benzo[a]pyrene	270	µg/kg
	Indeno[1,2,3-cd]pyrene	270	µg/kg
	Dibenzo[a,h]anthracene	270	µg/kg
Benzo[g,h,i]perylene	270	µg/kg	
C9-C18 Aliphatic Hydrocarbons ¹	13500	µg/kg	U
C19-C36 Aliphatic Hydrocarbons ¹	13500	µg/kg	9500 J
C11-C22 Aromatic Hydrocarbons ^{1,2}	13500	µg/kg	U
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			80
Aromatic Surrogate % Recovery (O-Terphenyl)			86
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			95
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			87
Fractionation Surrogate Acceptance Range	--	--	40-140%
¹ Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.			
² C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.			
RL = Report Limit			
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank			

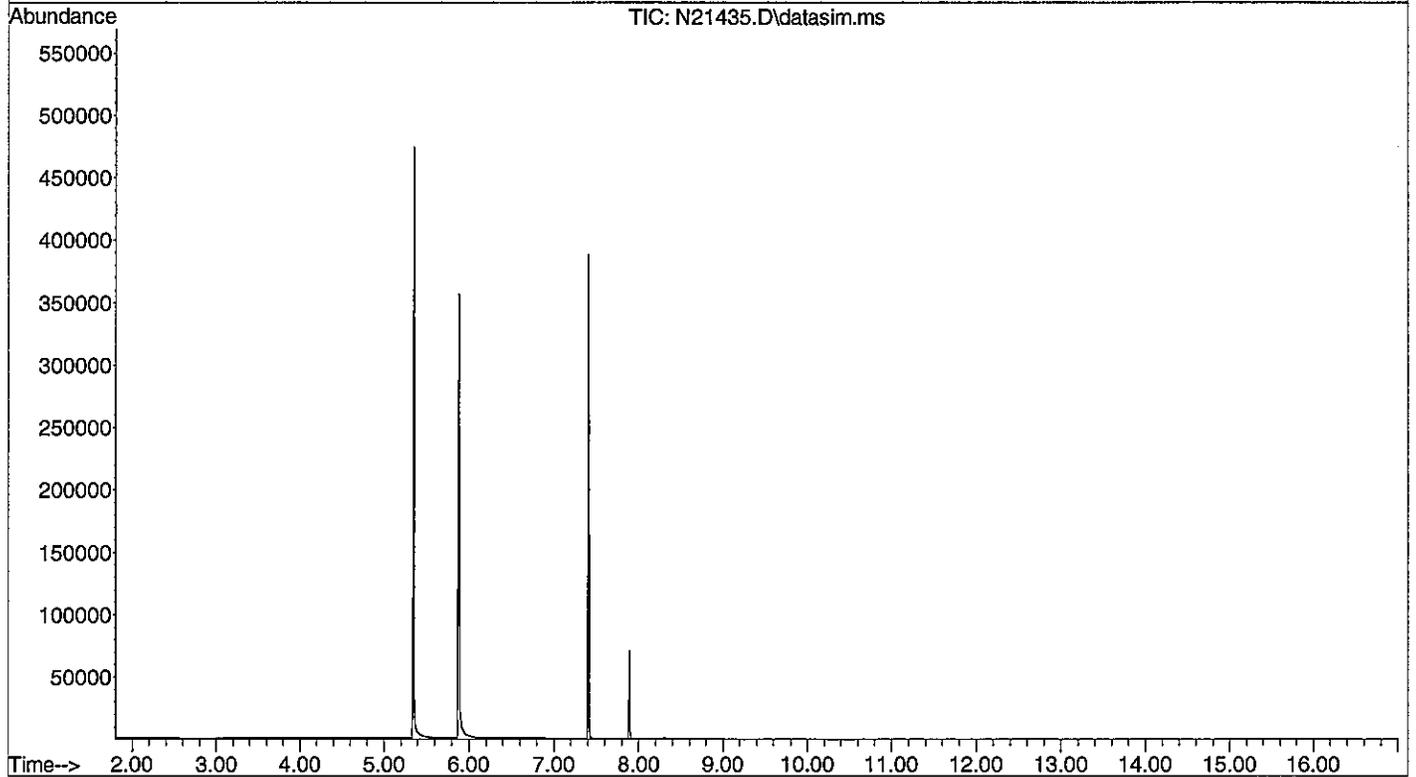
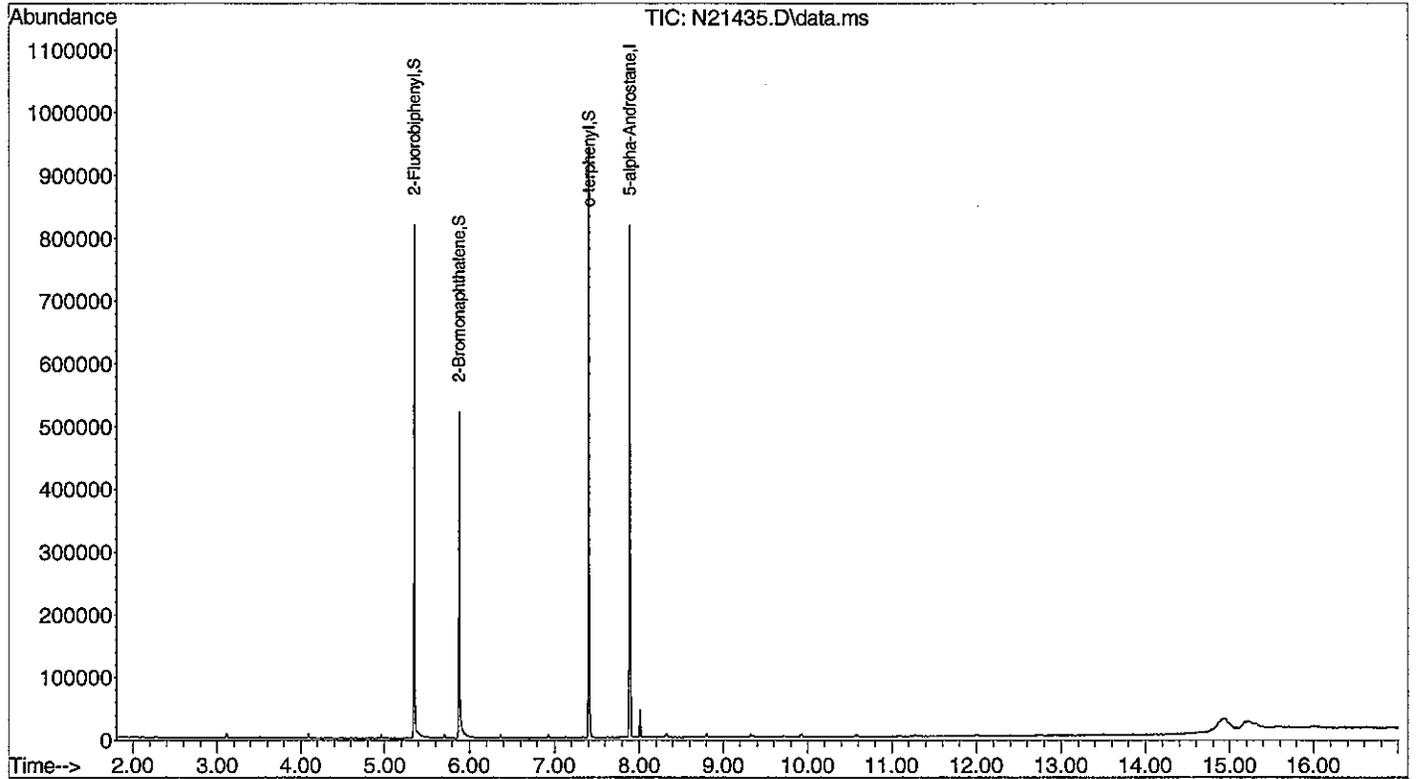
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist.
Results are expressed on a dry weight basis.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080712-N\
 Data File : N21435.D
 Acq On : 7 Aug 2012 3:19 pm
 Operator : AR
 Sample : 73487-12
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

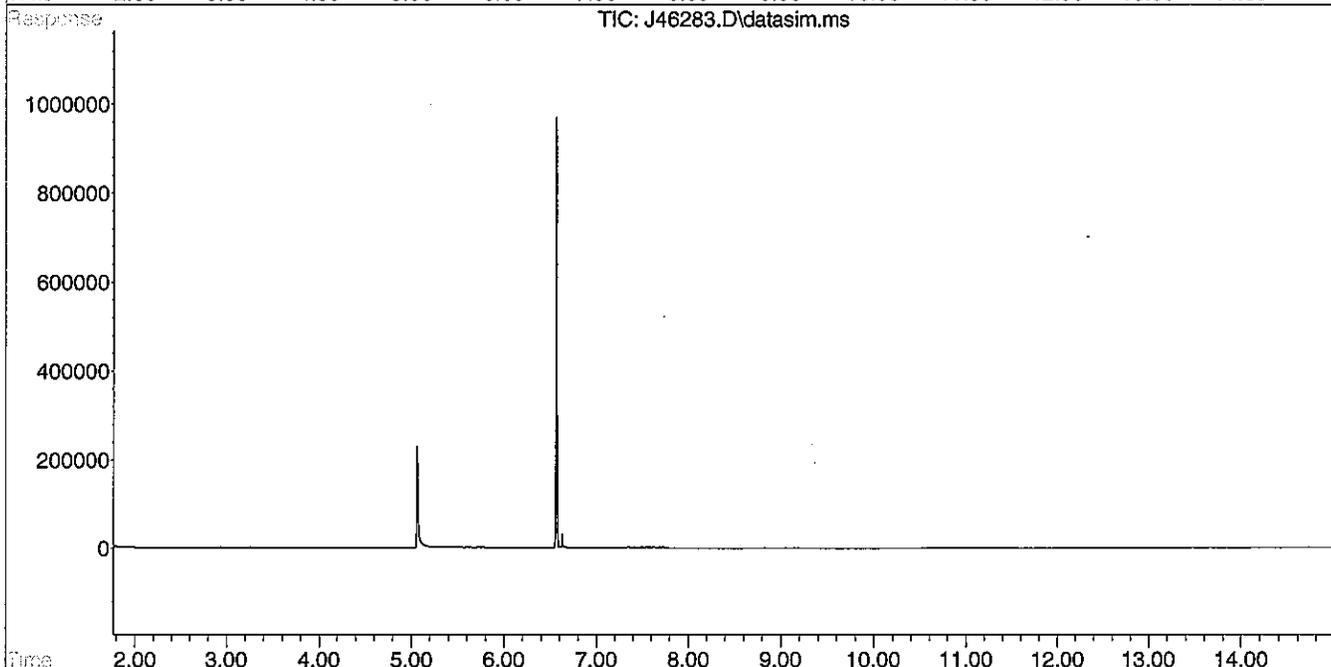
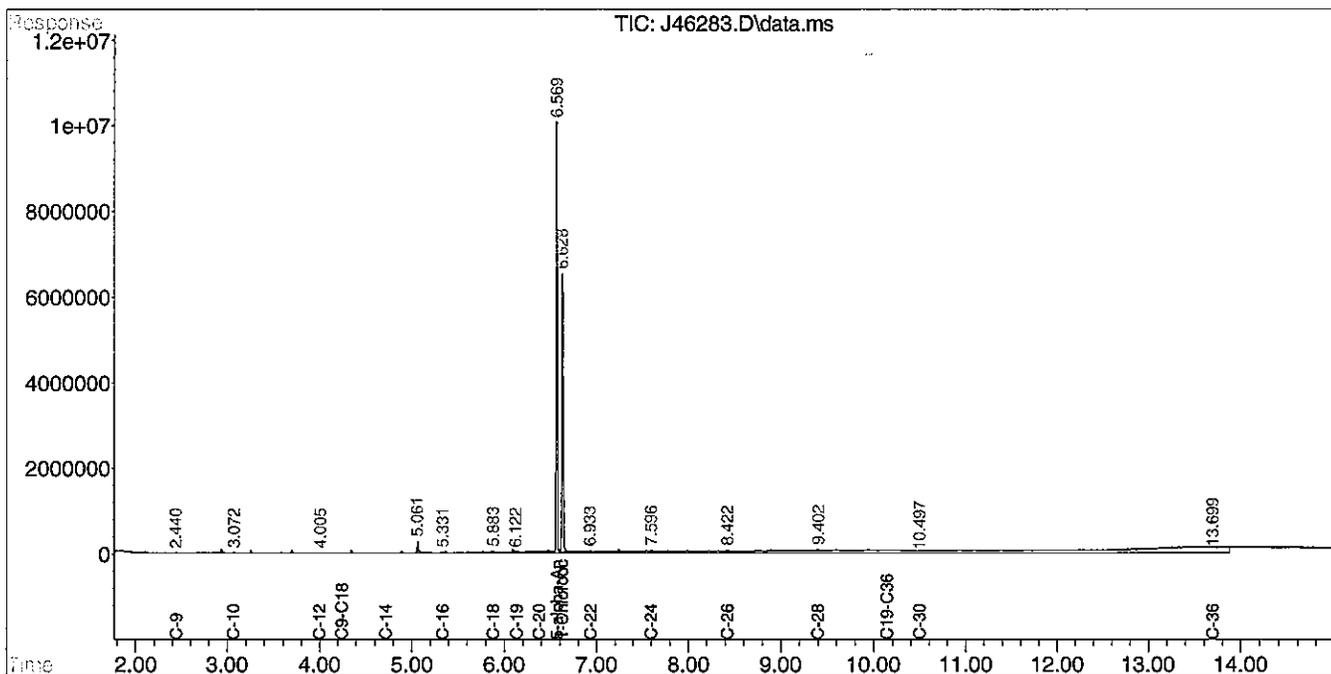
Quant Time: Aug 07 15:51:48 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:14 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080712-J\
 Data File : J46283.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 3:41 pm
 Operator : AR
 Sample : 73487-12
 Misc : SOIL
 ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 07 16:18:42 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-13
Matrix: Solid
Percent Solid: 91
Dilution Factor: 1.1
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS113

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	14500	µg/kg	9480 J
Diesel PAH Analytes	Naphthalene	291	µg/kg U
	2-Methylnaphthalene	291	µg/kg U
	Phenanthrene	291	µg/kg U
	Acenaphthene	291	µg/kg U
Other Target PAH Analytes	Acenaphthylene	291	µg/kg U
	Fluorene	291	µg/kg U
	Anthracene	291	µg/kg U
	Fluoranthene	291	µg/kg U
	Pyrene	291	µg/kg U
	Benzo[a]anthracene	291	µg/kg U
	Chrysene	291	µg/kg U
	Benzo[b]fluoranthene	291	µg/kg U
	Benzo[k]fluoranthene	291	µg/kg U
	Benzo[a]pyrene	291	µg/kg U
	Indeno[1,2,3-cd]pyrene	291	µg/kg U
	Dibenzof[a,h]anthracene	291	µg/kg U
Benzo[g,h,i]perylene	291	µg/kg U	
C9-C18 Aliphatic Hydrocarbons ¹	14500	µg/kg	U
C19-C36 Aliphatic Hydrocarbons ¹	14500	µg/kg	30300
C11-C22 Aromatic Hydrocarbons ^{1,2}	14500	µg/kg	9480 J
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			68
Aromatic Surrogate % Recovery (O-Terphenyl)			81
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			90
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			86
Fractionation Surrogate Acceptance Range	--	--	40-140%
¹ Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.			
² C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.			
RL = Report Limit			
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank			

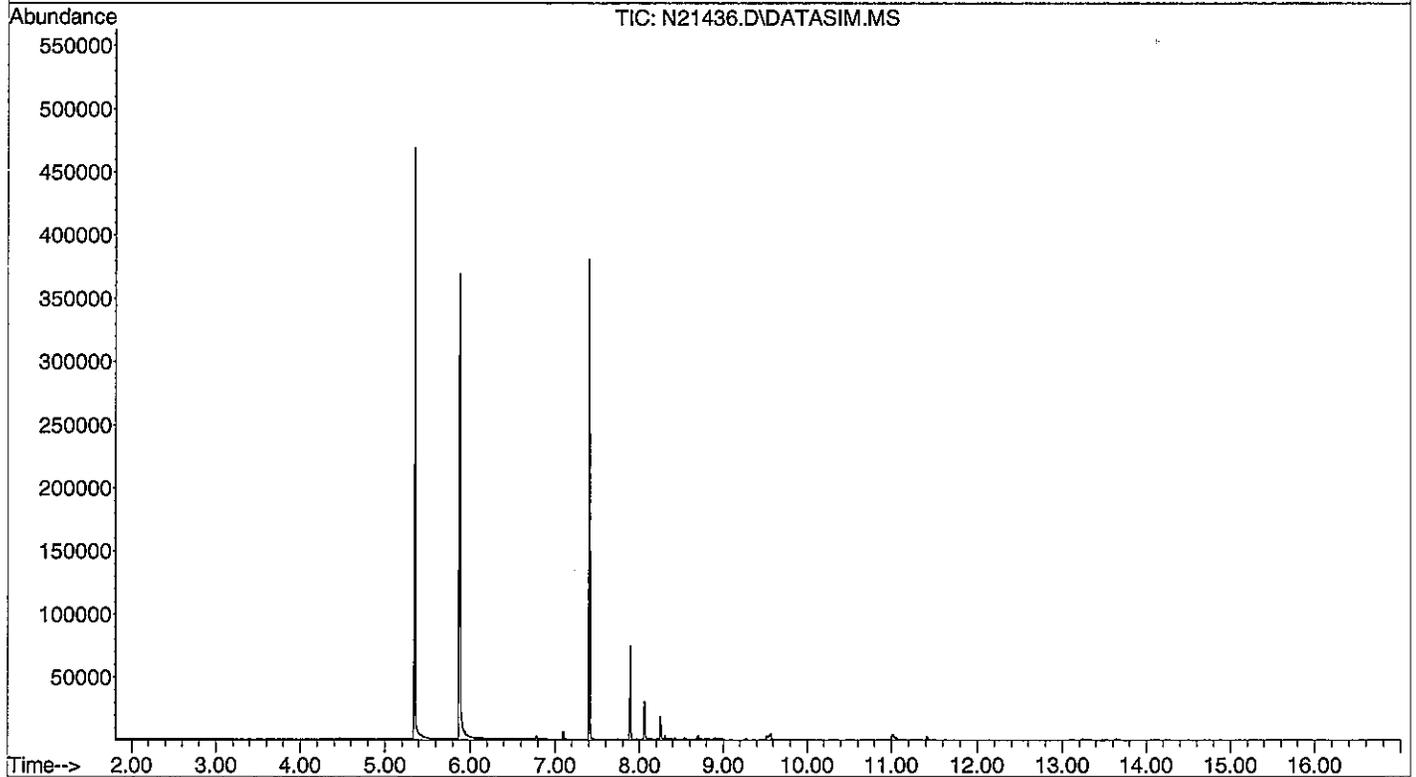
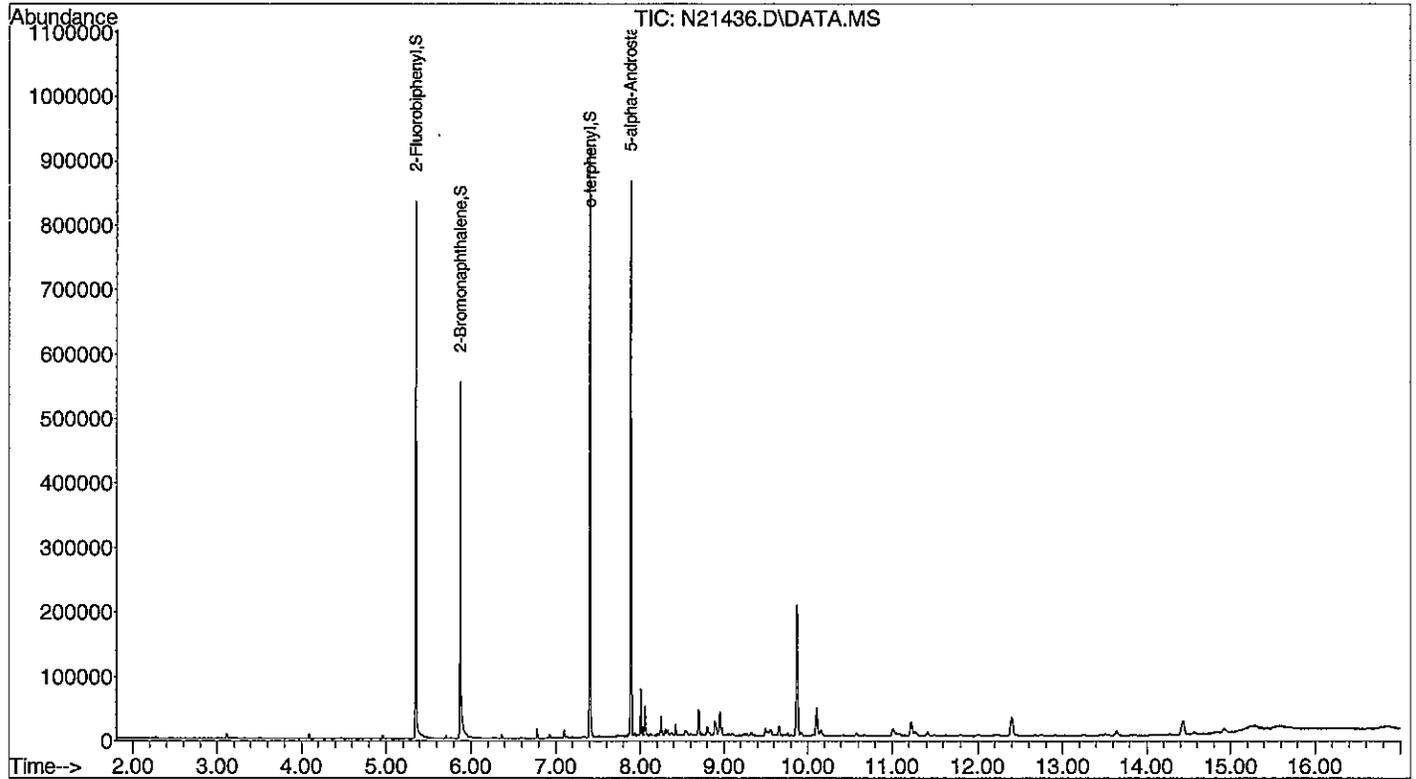
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist.
Results are expressed on a dry weight basis.

SIGNATURE: *M. J. Hill*

Data Path : C:\msdchem\1\DATA\080712-N\
 Data File : N21436.D
 Acq On : 7 Aug 2012 3:39 pm
 Operator : AR
 Sample : 73487-13
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

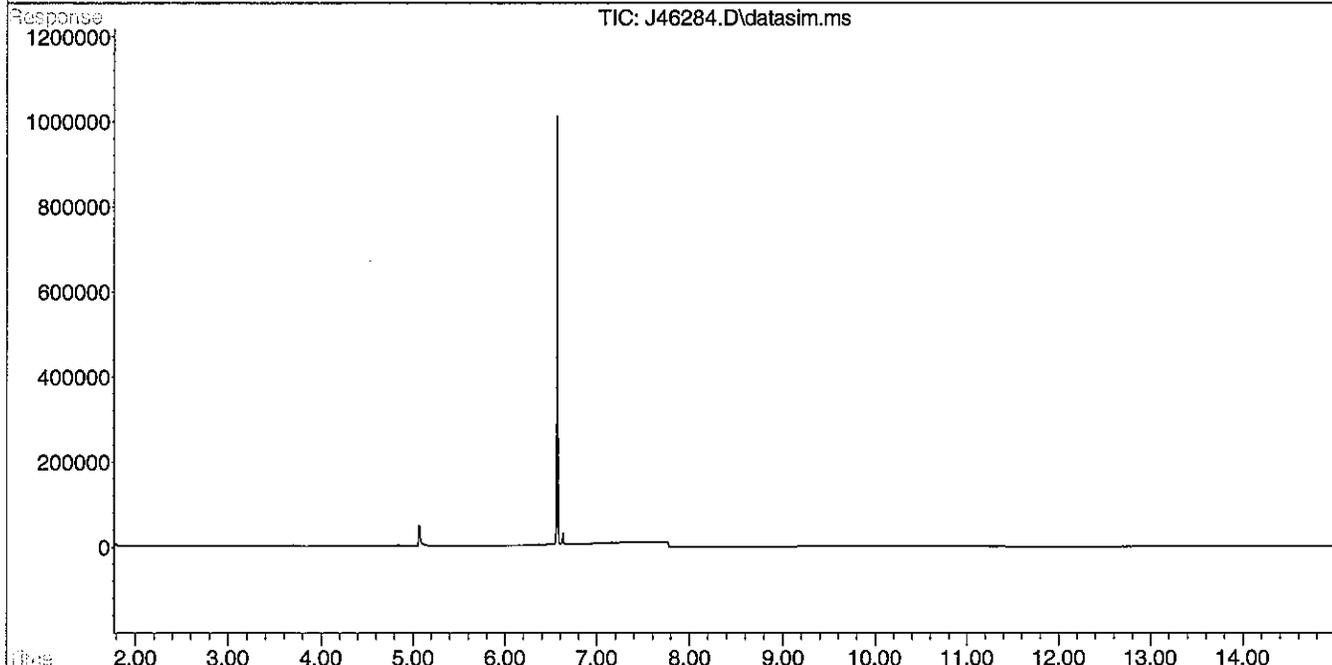
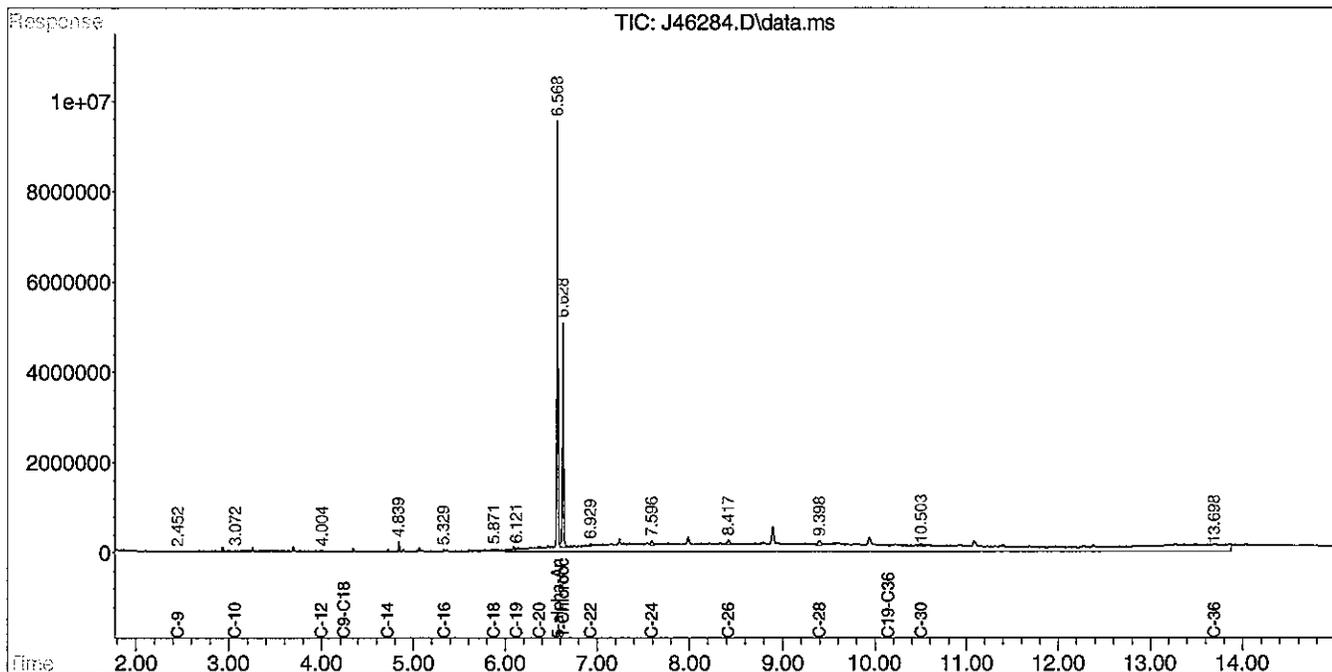
Quant Time: Aug 07 16:33:00 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:14 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080712-J\
 Data File : J46284.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 4:02 pm
 Operator : AR
 Sample : 73487-13
 Misc : SOIL
 ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 00:04:16 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-14
Matrix: Solid
Percent Solid: 97
Dilution Factor: 10
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/08/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS114

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	137000	µg/kg	1010000
Diesel PAH Analytes	Naphthalene	2740	µg/kg U
	2-Methylnaphthalene	2740	µg/kg U
	Phenanthrene	2740	µg/kg U
	Acenaphthene	2740	µg/kg U
Other Target PAH Analytes	Acenaphthylene	2740	µg/kg U
	Fluorene	2740	µg/kg U
	Anthracene	2740	µg/kg U
	Fluoranthene	2740	µg/kg U
	Pyrene	2740	µg/kg U
	Benzo[a]anthracene	2740	µg/kg U
	Chrysene	2740	µg/kg U
	Benzo[b]fluoranthene	2740	µg/kg U
	Benzo[k]fluoranthene	2740	µg/kg U
	Benzo[a]pyrene	2740	µg/kg U
	Indeno[1,2,3-cd]pyrene	2740	µg/kg U
	Dibenzo[a,h]anthracene	2740	µg/kg U
Benzo[g,h,i]perylene	2740	µg/kg U	
C9-C18 Aliphatic Hydrocarbons ¹	6850000	µg/kg	U
C19-C36 Aliphatic Hydrocarbons ¹	6850000	µg/kg	34100000
C11-C22 Aromatic Hydrocarbons ^{1,2}	137000	µg/kg	1010000
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			*
Aromatic Surrogate % Recovery (O-Terphenyl)			100
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			102
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			93
Fractionation Surrogate Acceptance Range	--	--	40-140%
¹ Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.			
² C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.			
RL = Report Limit			
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank			

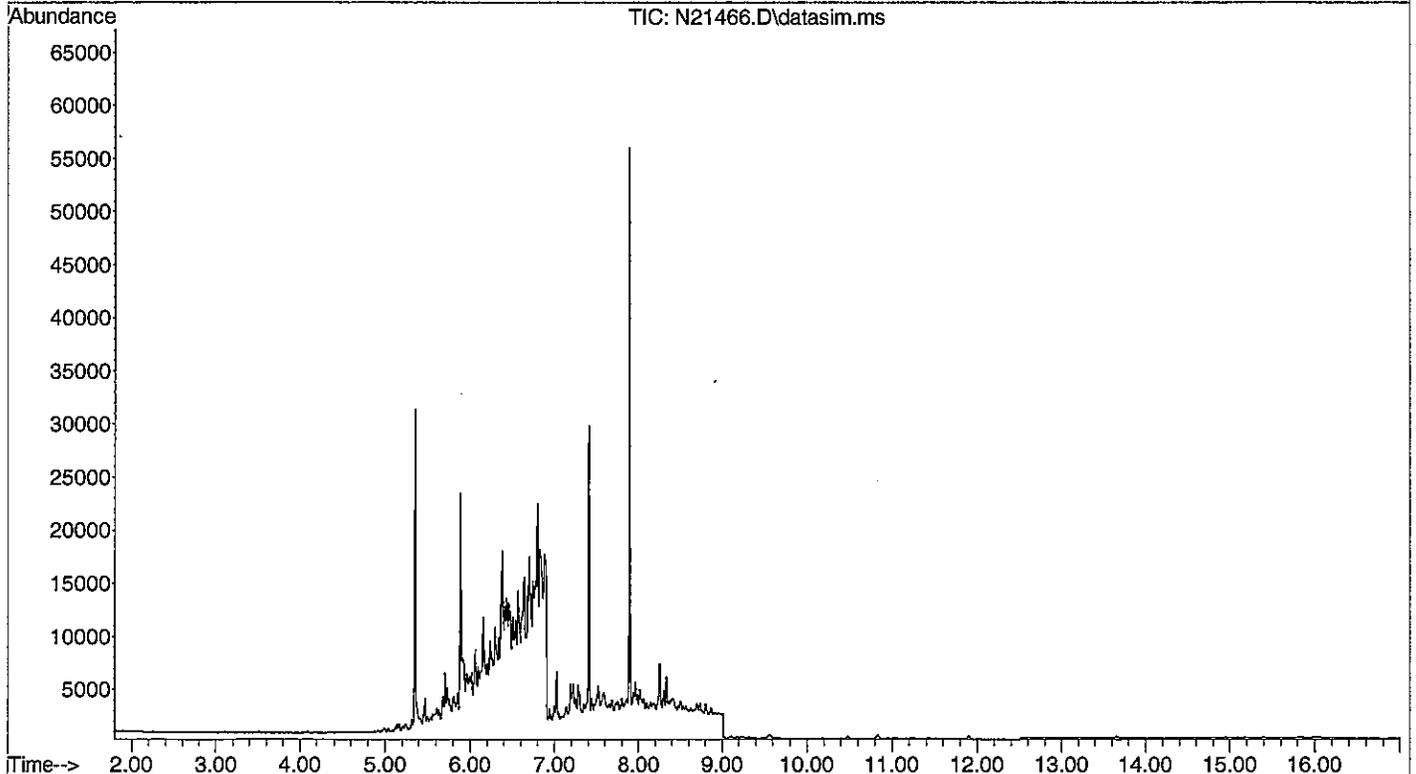
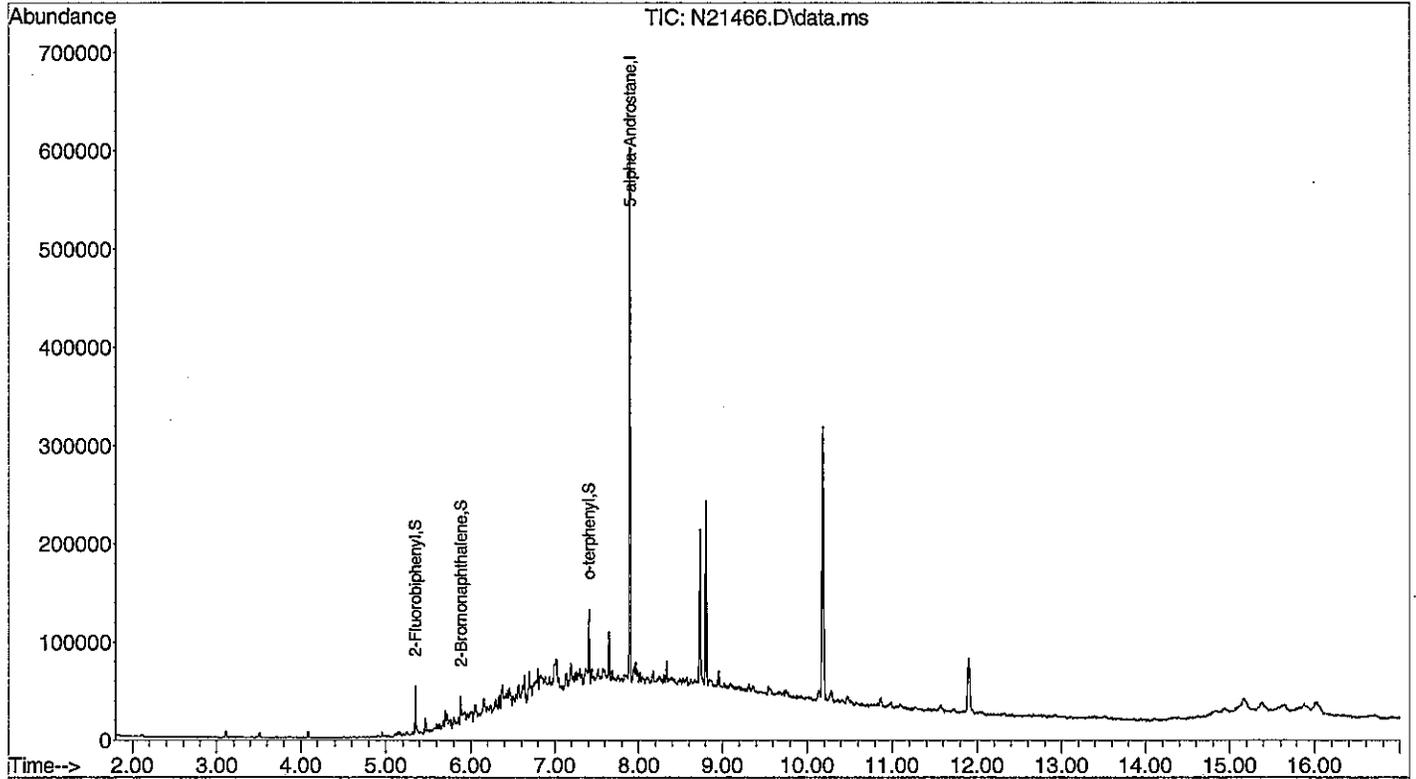
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a dry weight basis.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080812-N\
 Data File : N21466.D
 Acq On : 8 Aug 2012 7:30 am
 Operator : AR
 Sample : 73487-14,,1:10
 Misc : SOIL,ARO
 ALS Vial : 33 Sample Multiplier: 1

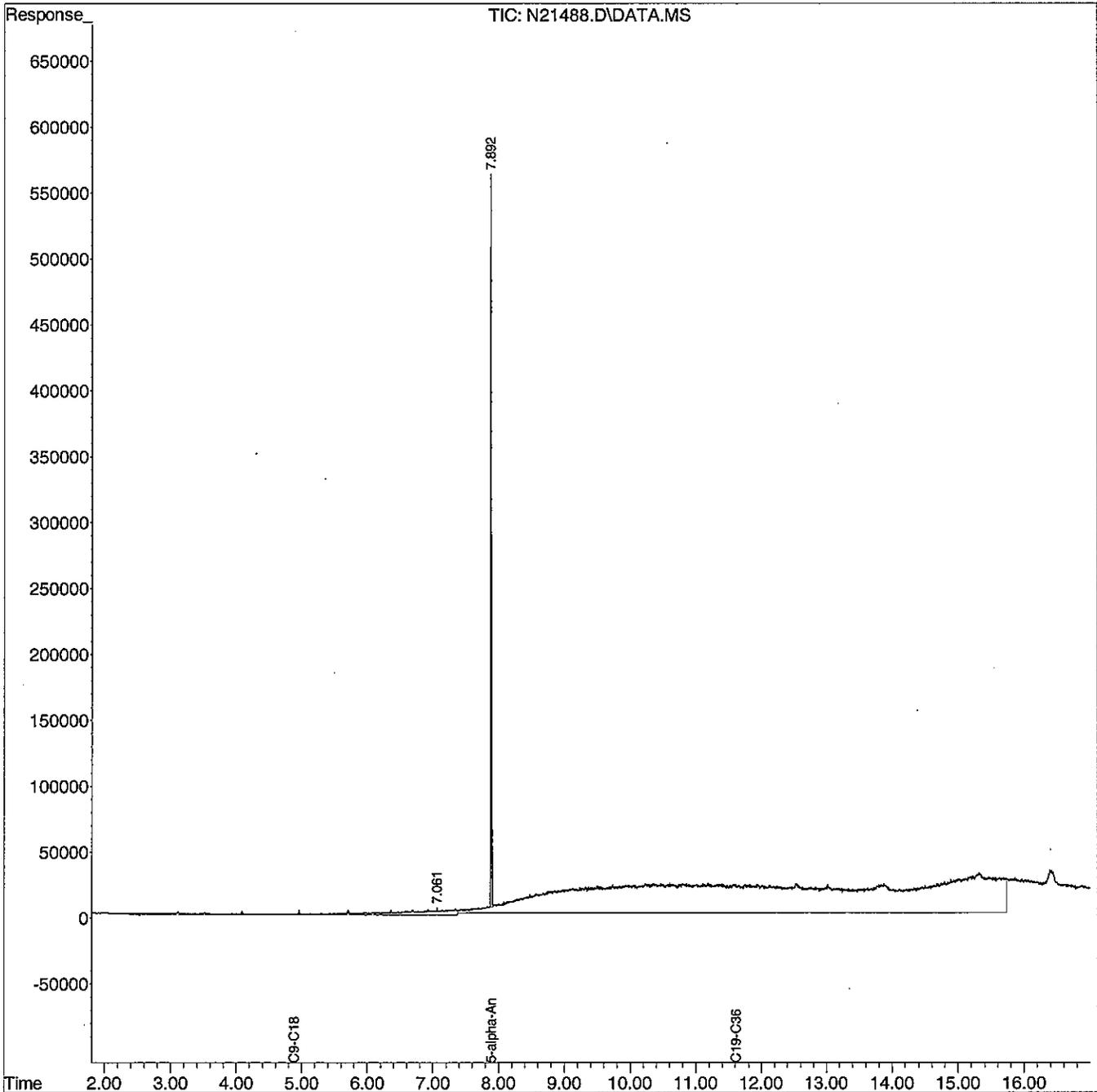
Quant Time: Aug 08 19:44:06 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:13 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080812-N\
Data File : N21488.D
Signal(s) : DATA.MS
Acq On : 8 Aug 2012 9:31 pm
Operator : AR
Sample : 73487-14,1:500
Misc : SOIL
ALS Vial : 20 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Aug 09 02:59:13 2012
Quant Method : C:\msdchem\1\METHODS\ALG080312N.M
Quant Title : EPH GC ALIPHATICS
QLast Update : Fri Aug 03 17:58:51 2012
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-15
Matrix: Solid
Percent Solid: 81
Dilution Factor: 1.2
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS115

EPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	16200	µg/kg	18400
Diesel PAH Analytes	Naphthalene	325	µg/kg U
	2-Methylnaphthalene	325	µg/kg U
	Phenanthrene	325	µg/kg U
	Acenaphthene	325	µg/kg U
Other Target PAH Analytes	Acenaphthylene	325	µg/kg U
	Fluorene	325	µg/kg U
	Anthracene	325	µg/kg U
	Fluoranthene	325	µg/kg U
	Pyrene	325	µg/kg U
	Benzo[a]anthracene	325	µg/kg U
	Chrysene	325	µg/kg U
	Benzo[b]fluoranthene	325	µg/kg U
	Benzo[k]fluoranthene	325	µg/kg U
	Benzo[a]pyrene	325	µg/kg U
	Indeno[1,2,3-cd]pyrene	325	µg/kg U
	Dibenzo[a,h]anthracene	325	µg/kg U
Benzo[g,h,i]perylene	325	µg/kg U	
C9-C18 Aliphatic Hydrocarbons ¹	16200	µg/kg	U
C19-C36 Aliphatic Hydrocarbons ¹	16200	µg/kg	72800
C11-C22 Aromatic Hydrocarbons ^{1,2}	16200	µg/kg	18400
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			67
Aromatic Surrogate % Recovery (O-Terphenyl)			69
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			93
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			91
Fractionation Surrogate Acceptance Range	--	--	40-140%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
²C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.
 RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

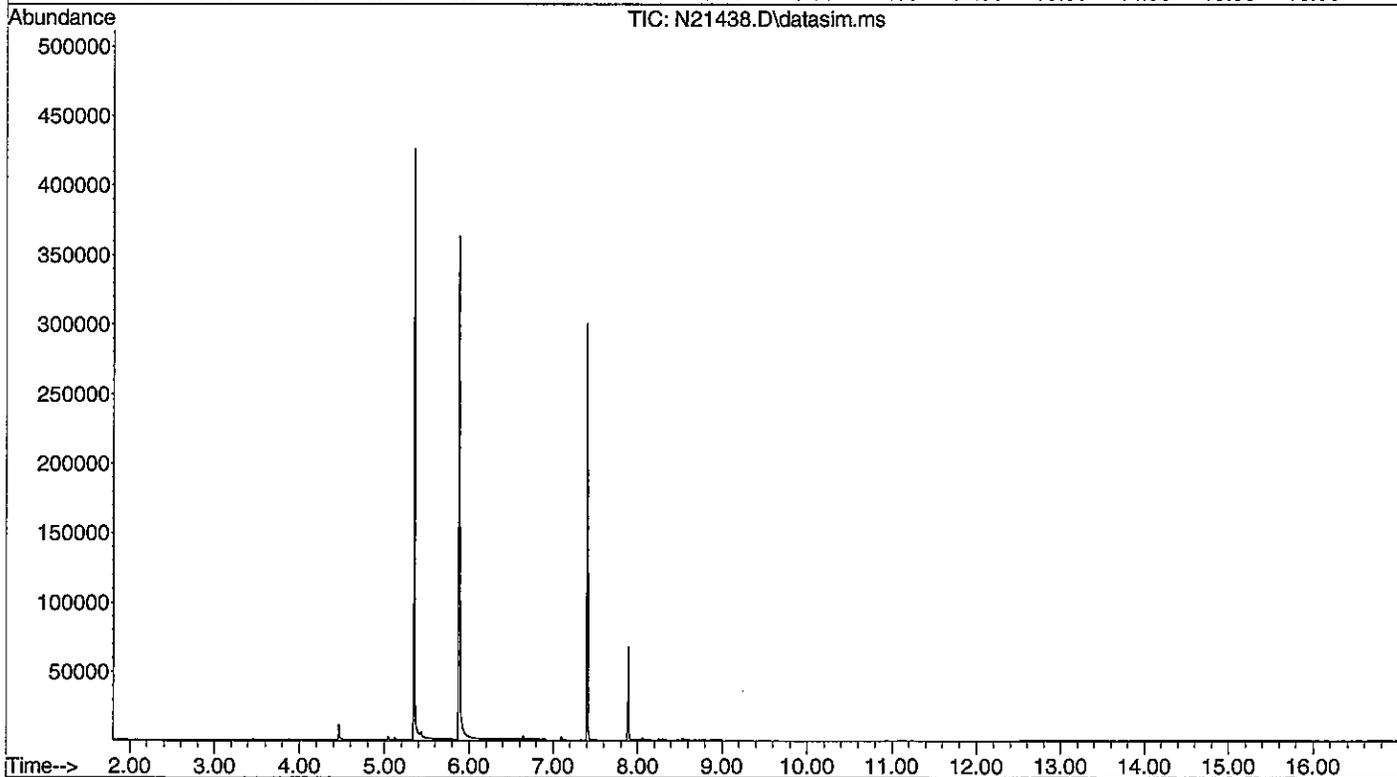
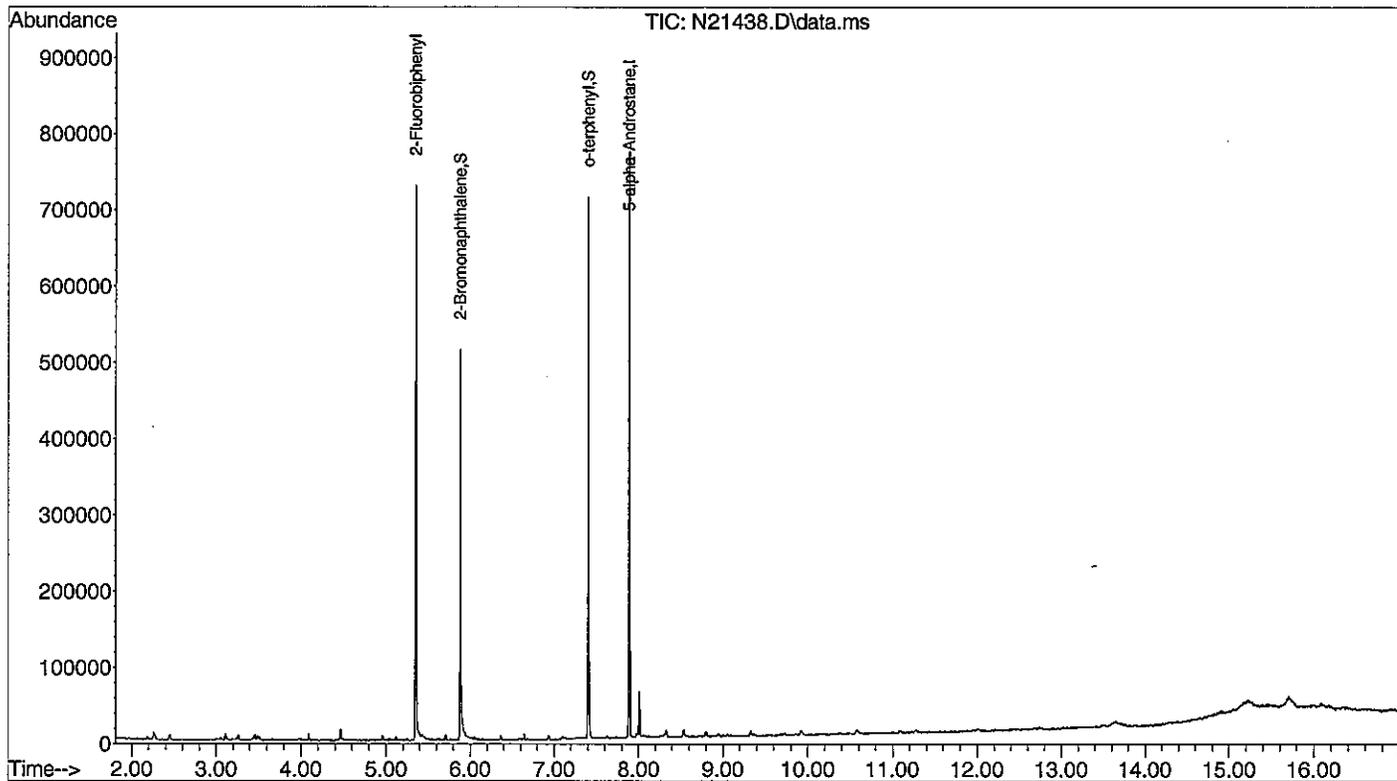
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a dry weight basis.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080712-N\
 Data File : N21438.D
 Acq On : 7 Aug 2012 4:21 pm
 Operator : AR
 Sample : 73487-15
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

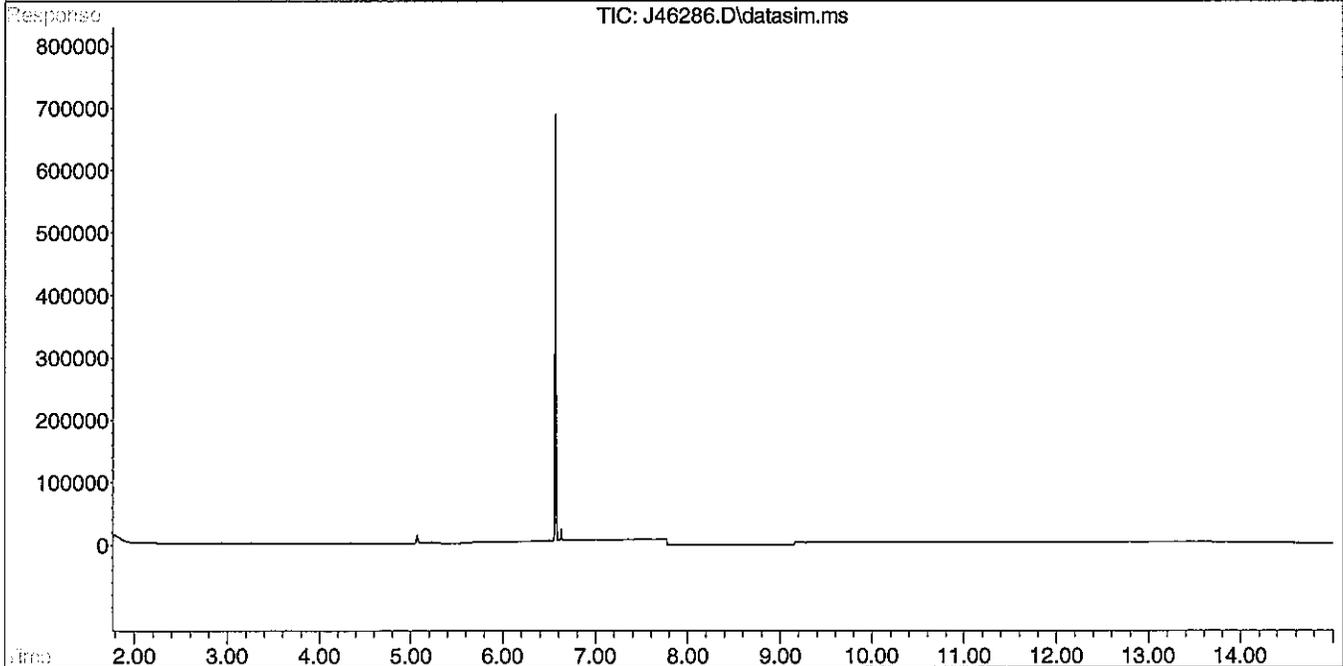
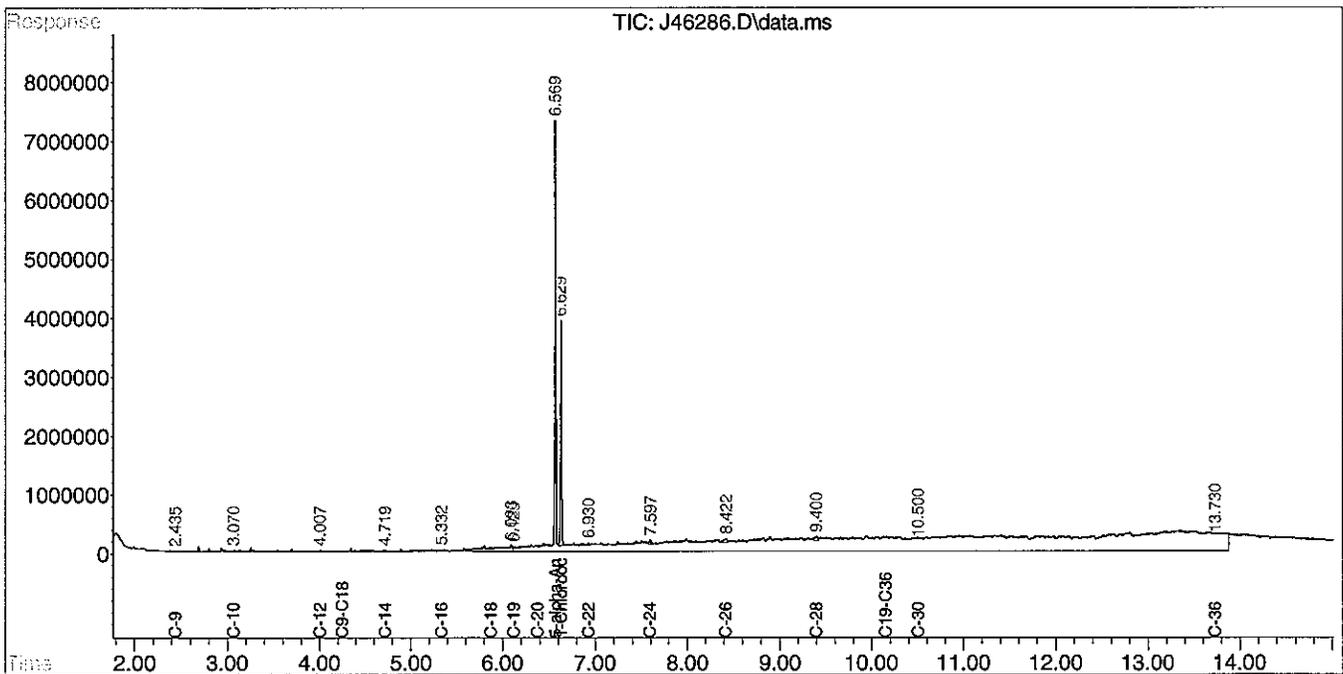
Quant Time: Aug 08 05:11:42 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:14 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080712-J\
 Data File : J46286.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 4:43 pm
 Operator : AR
 Sample : 73487-15
 Misc : SOIL
 ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 00:04:20 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-16
Matrix: Solid
Percent Solid: 97
Dilution Factor: 1.0
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: SS10X

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	13400	µg/kg	U
Diesel PAH Analytes	Naphthalene	268	µg/kg
	2-Methylnaphthalene	268	µg/kg
	Phenanthrene	268	µg/kg
	Acenaphthene	268	µg/kg
Other Target PAH Analytes	Acenaphthylene	268	µg/kg
	Fluorene	268	µg/kg
	Anthracene	268	µg/kg
	Fluoranthene	268	µg/kg
	Pyrene	268	µg/kg
	Benzo[a]anthracene	268	µg/kg
	Chrysene	268	µg/kg
	Benzo[b]fluoranthene	268	µg/kg
	Benzo[k]fluoranthene	268	µg/kg
	Benzo[a]pyrene	268	µg/kg
	Indeno[1,2,3-cd]pyrene	268	µg/kg
	Dibenzo[a,h]anthracene	268	µg/kg
Benzo[g,h,i]perylene	268	µg/kg	
C9-C18 Aliphatic Hydrocarbons ¹	13400	µg/kg	U
C19-C36 Aliphatic Hydrocarbons ¹	13400	µg/kg	11300 J
C11-C22 Aromatic Hydrocarbons ^{1,2}	13400	µg/kg	U
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			73
Aromatic Surrogate % Recovery (O-Terphenyl)			87
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			104
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			99
Fractionation Surrogate Acceptance Range	--	--	40-140%

¹ Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
² C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.
 RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

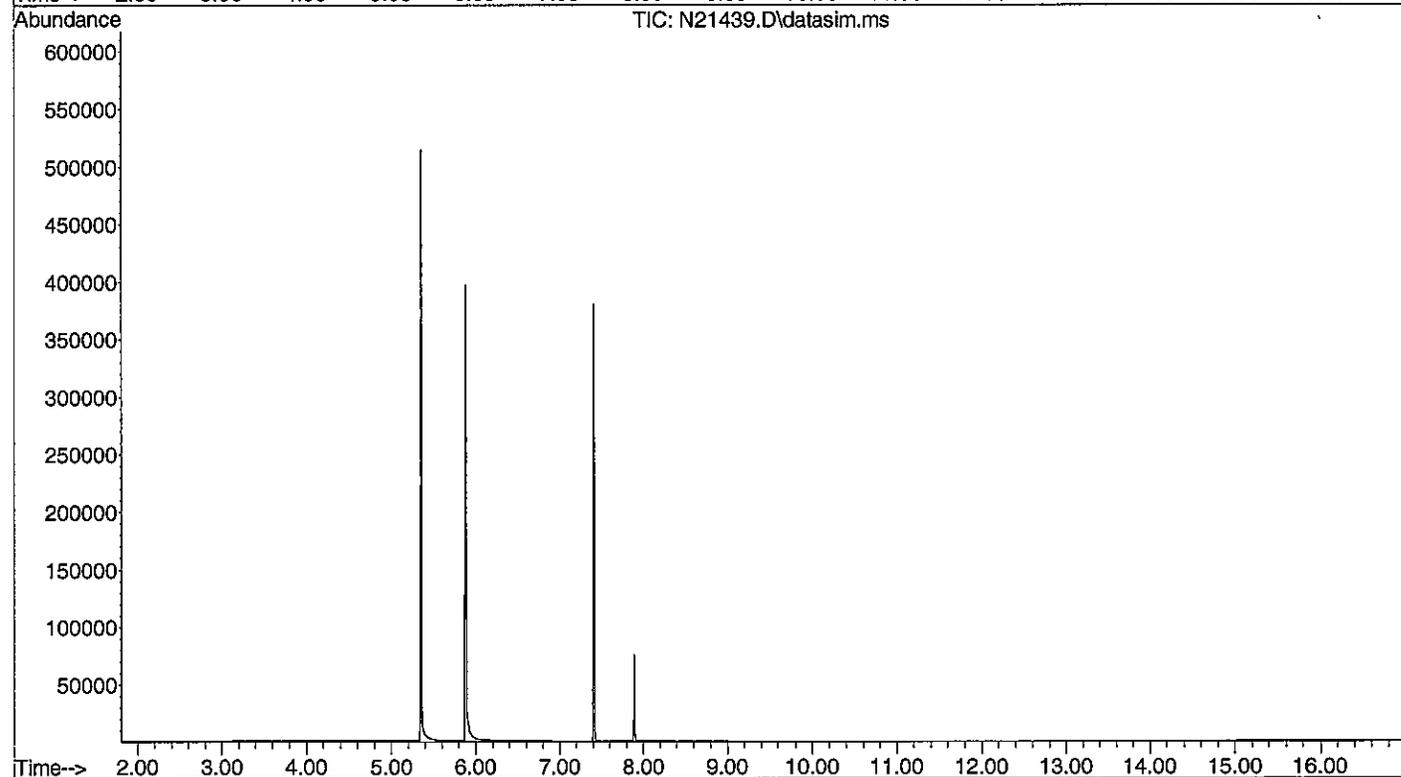
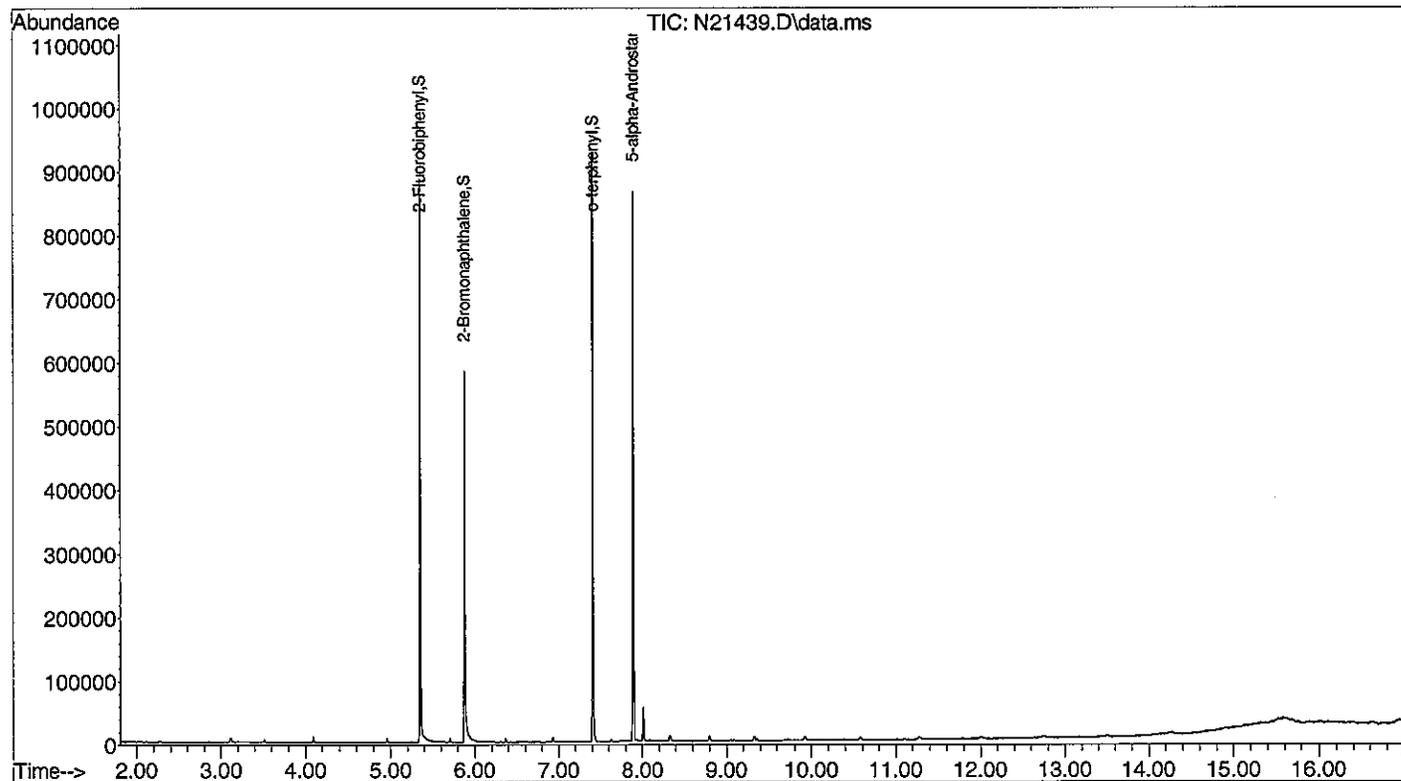
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a dry weight basis.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080712-N\
 Data File : N21439.D
 Acq On : 7 Aug 2012 4:41 pm
 Operator : AR
 Sample : 73487-16
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

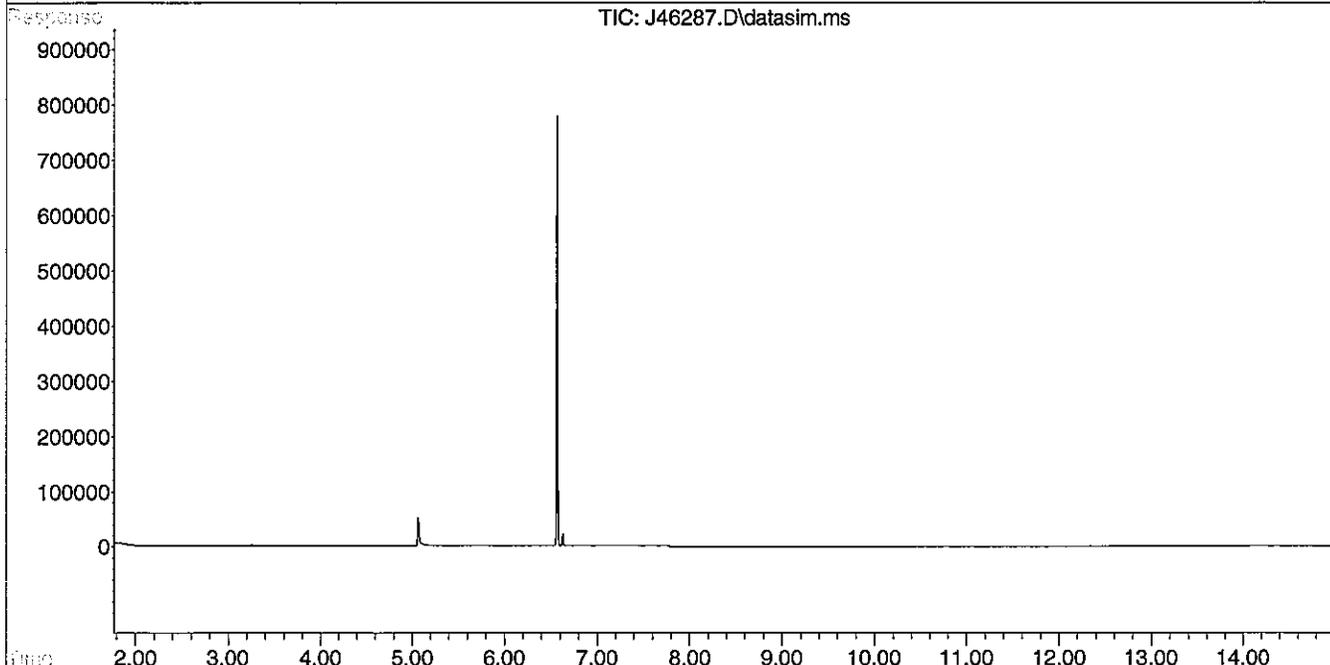
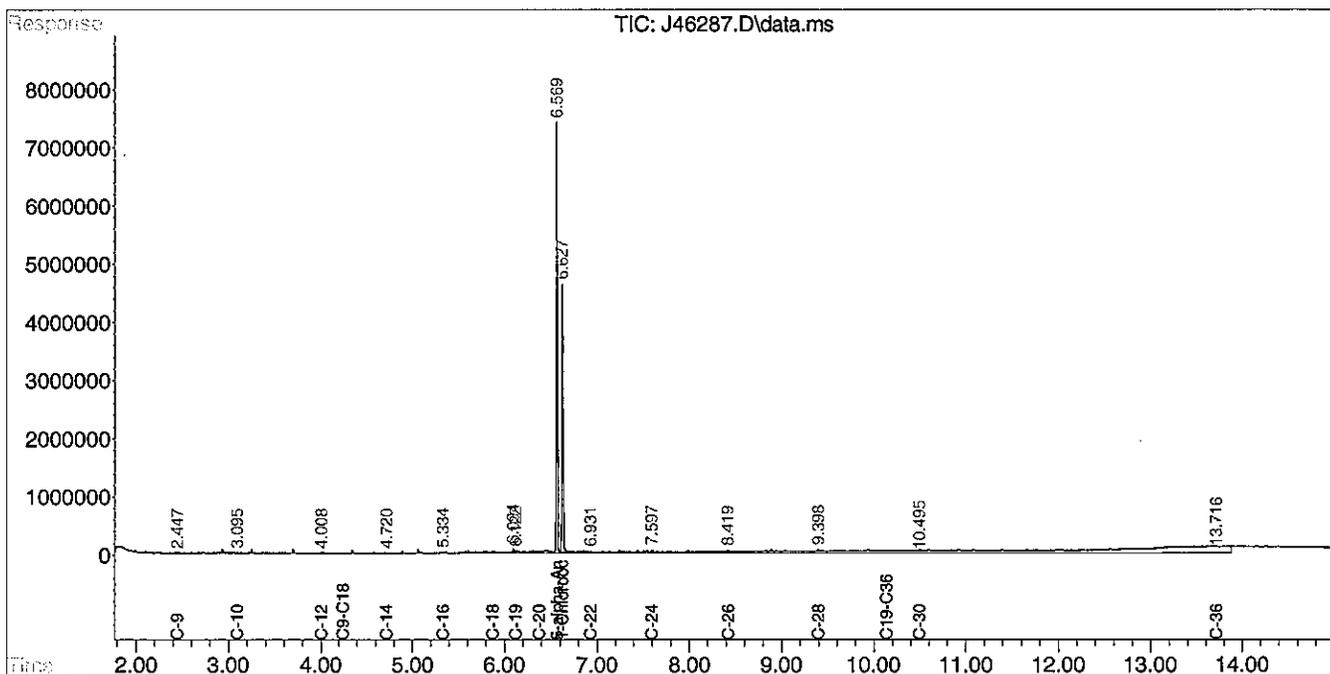
Quant Time: Aug 08 05:11:49 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:14 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080712-J\
 Data File : J46287.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 5:04 pm
 Operator : AR
 Sample : 73487-16
 Misc : SOIL
 ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 00:04:22 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 9, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-17
Matrix: Solid
Percent Solid: 78
Dilution Factor: 1.3
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: BK-1

EPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	16900	µg/kg	14000 J
Diesel PAH Analytes	Naphthalene	338	µg/kg U
	2-Methylnaphthalene	338	µg/kg U
	Phenanthrene	338	µg/kg U
	Acenaphthene	338	µg/kg U
Other Target PAH Analytes	Acenaphthylene	338	µg/kg U
	Fluorene	338	µg/kg U
	Anthracene	338	µg/kg U
	Fluoranthene	338	µg/kg U
	Pvrene	338	µg/kg U
	Benzo[a]anthracene	338	µg/kg U
	Chrysene	338	µg/kg U
	Benzo[b]fluoranthene	338	µg/kg U
	Benzo[k]fluoranthene	338	µg/kg U
	Benzo[a]pyrene	338	µg/kg U
	Indeno[1,2,3-cd]pyrene	338	µg/kg U
	Dibenzo[a,h]anthracene	338	µg/kg U
Benzo[g,h,i]perylene	338	µg/kg U	
C9-C18 Aliphatic Hydrocarbons ¹	16900	µg/kg	U
C19-C36 Aliphatic Hydrocarbons ¹	16900	µg/kg	14100 J
C11-C22 Aromatic Hydrocarbons ^{1,2}	16900	µg/kg	14000 J
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			70
Aromatic Surrogate % Recovery (O-Terphenyl)			76
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			99
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			90
Fractionation Surrogate Acceptance Range	--	--	40-140%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

²C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.

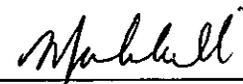
RL = Report Limit

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

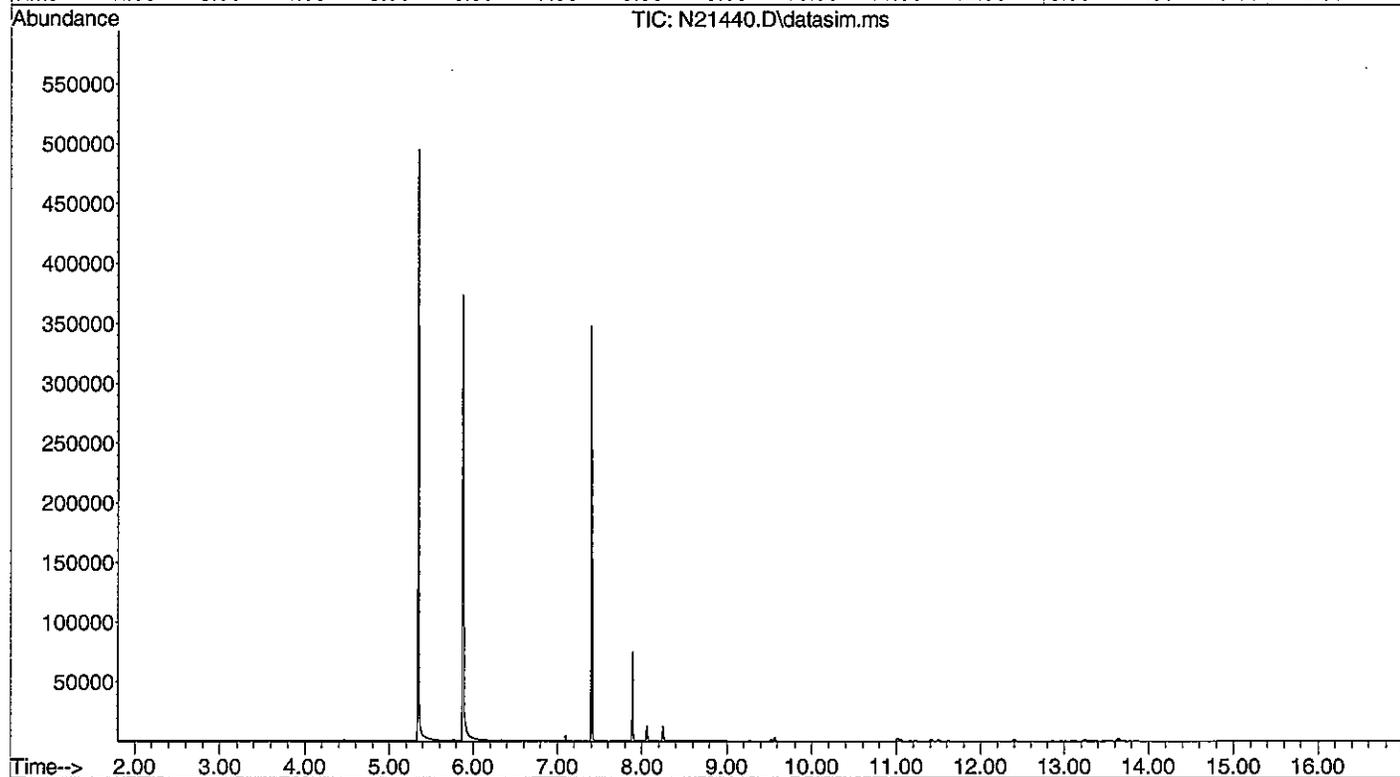
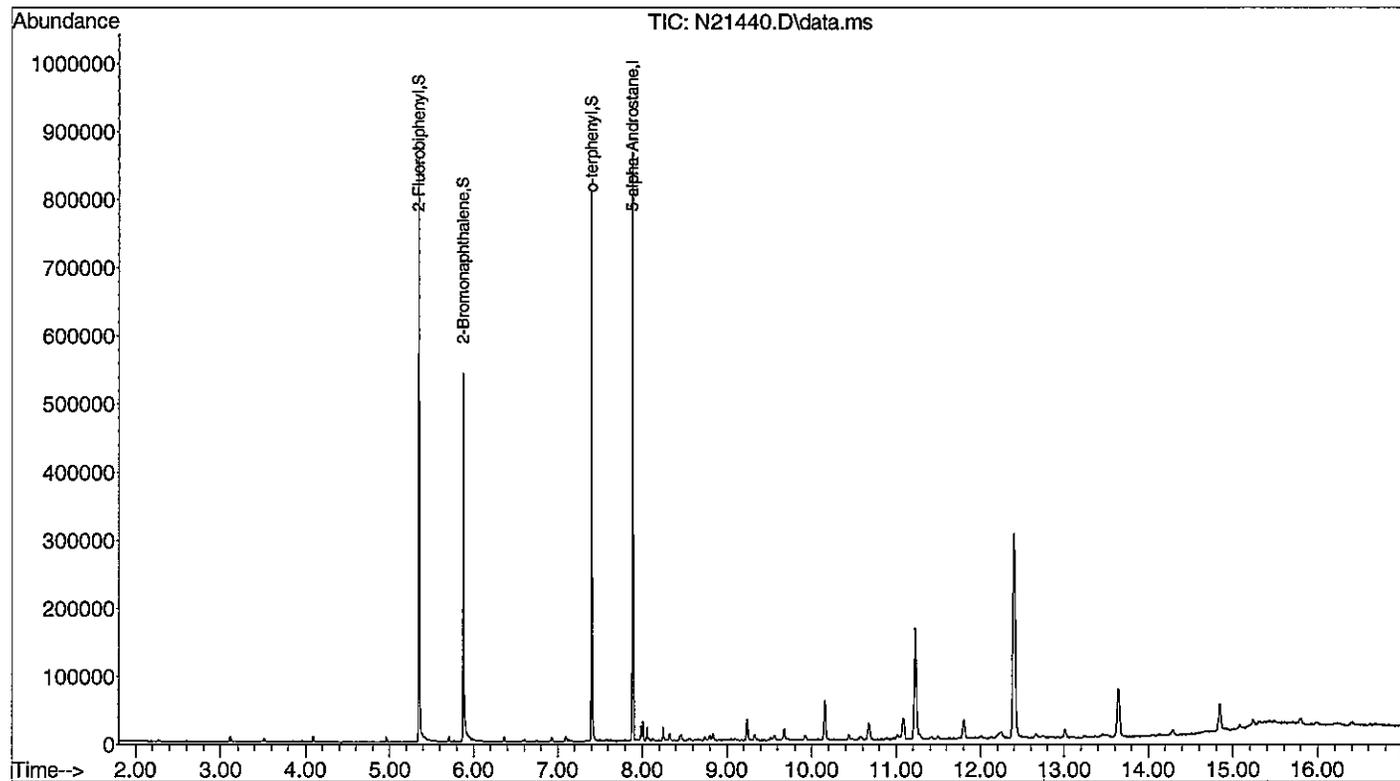
COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a dry weight basis.

SIGNATURE: _____



Data Path : C:\msdchem\1\DATA\080712-N\
 Data File : N21440.D
 Acq On : 7 Aug 2012 5:02 pm
 Operator : AR
 Sample : 73487-17
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

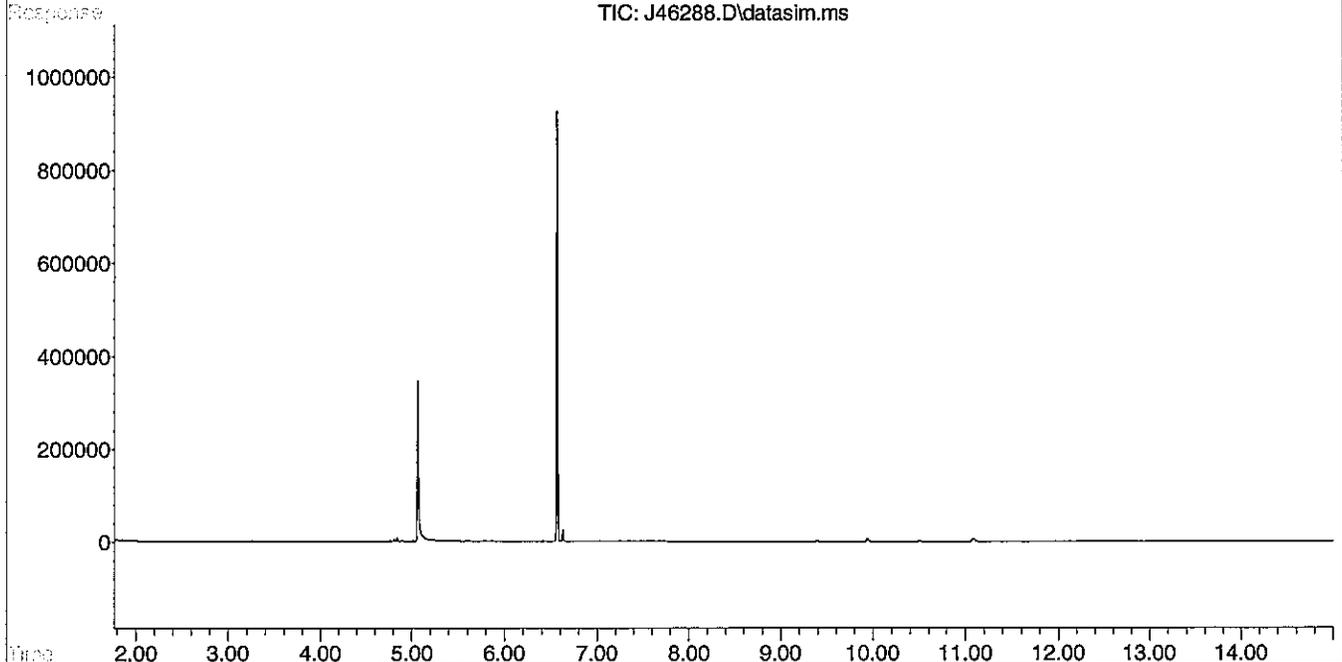
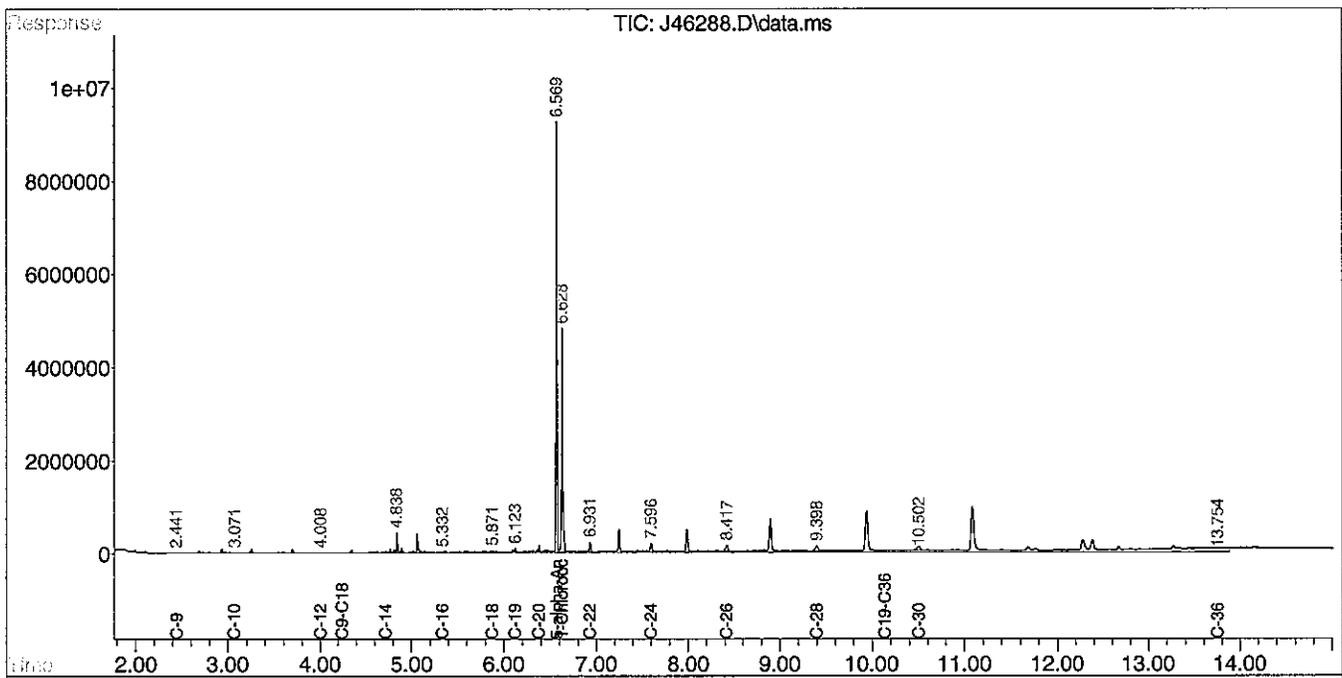
Quant Time: Aug 08 05:11:55 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:14 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080712-J\
 Data File : J46288.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 5:24 pm
 Operator : AR
 Sample : 73487-17
 Misc : SOIL
 ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 00:04:24 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 8, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-21
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: MW101

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	100	µg/L	U
Diesel PAH Analytes	Naphthalene	4	µg/L
	2-Methylnaphthalene	4	µg/L
	Phenanthrene	4	µg/L
	Acenaphthene	4	µg/L
Other Target PAH Analytes	Acenaphthylene	4	µg/L
	Fluorene	4	µg/L
	Anthracene	4	µg/L
	Fluoranthene	4	µg/L
	Pyrene	4	µg/L
	Benzo[a]anthracene	4	µg/L
	Chrysene	4	µg/L
	Benzo[b]fluoranthene	4	µg/L
	Benzo[k]fluoranthene	4	µg/L
	Benzo[a]pyrene	4	µg/L
	Indeno[1,2,3-cd]pyrene	4	µg/L
	Dibenzo[a,h]anthracene	4	µg/L
Benzo[g,h,i]perylene	4	µg/L	
C9-C18 Aliphatic Hydrocarbons ¹	100	µg/L	U
C19-C36 Aliphatic Hydrocarbons ¹	100	µg/L	U
C11-C22 Aromatic Hydrocarbons ^{1,2}	100	µg/L	U
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			73
Aromatic Surrogate % Recovery (O-Terphenyl)			92
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			93
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			84
Fractionation Surrogate Acceptance Range	--	--	40-140%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
²C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.
RL = Report Limit
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

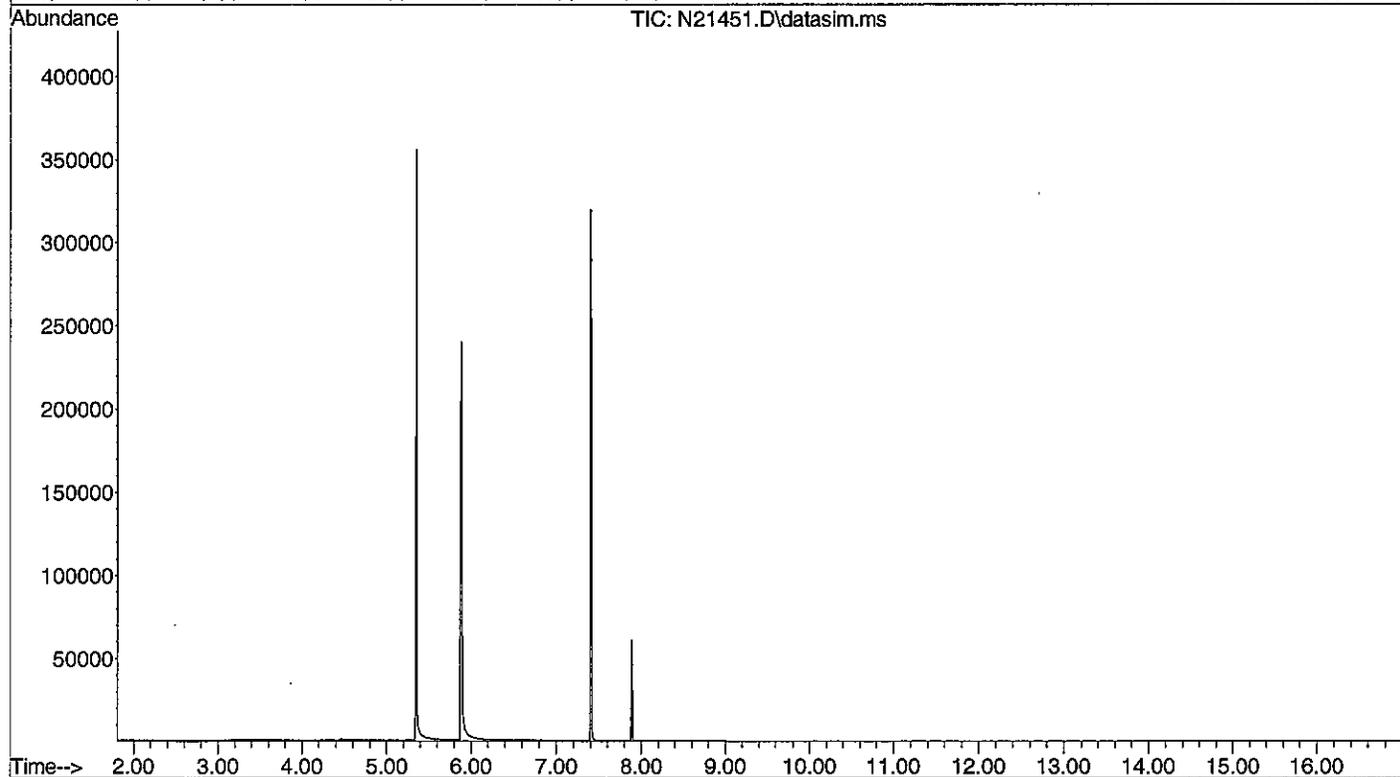
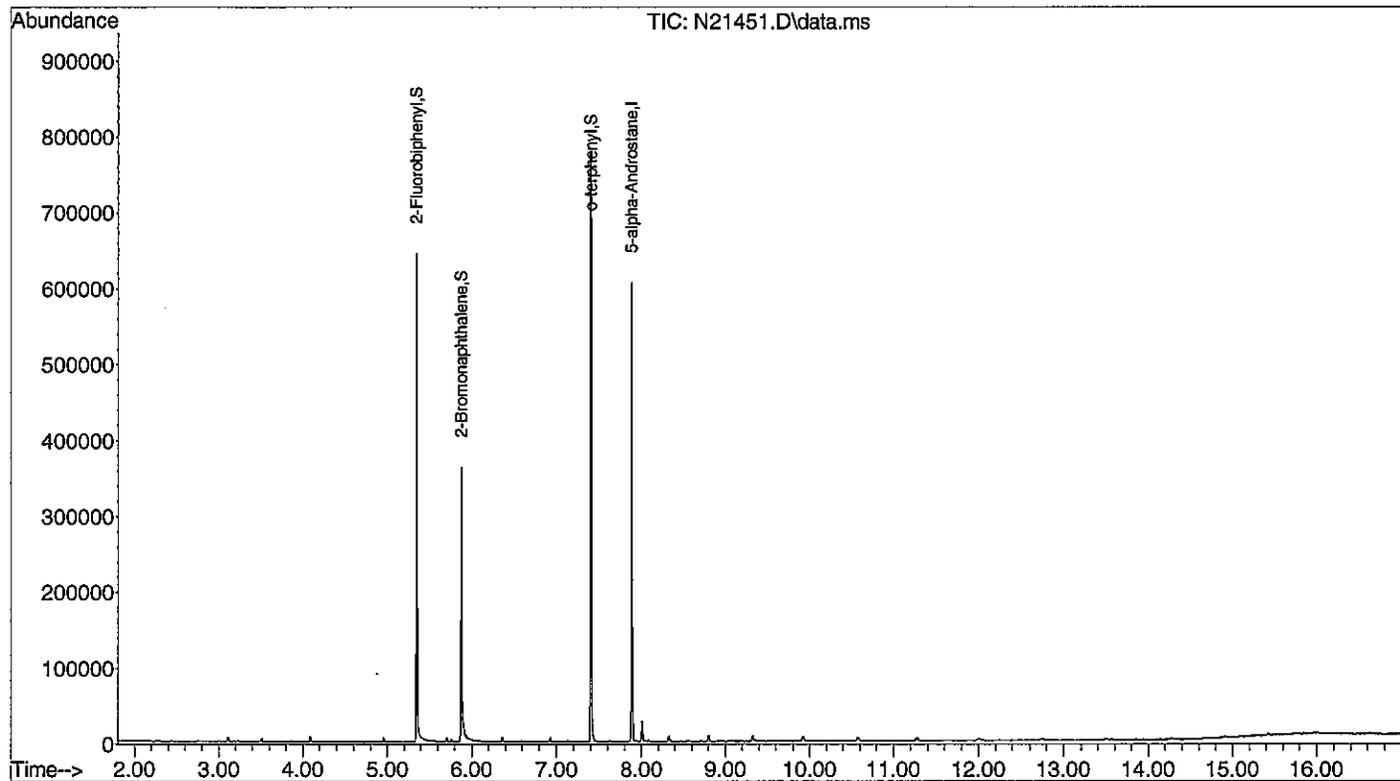
METHODOLOGY MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3510C.

COMMENTS: EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

SIGNATURE: *Angela Richard*

Data Path : C:\msdchem\1\DATA\080712-N\
 Data File : N21451.D
 Acq On : 7 Aug 2012 8:49 pm
 Operator : AR
 Sample : 73487-21
 Misc :
 ALS Vial : 26 Sample Multiplier: 1

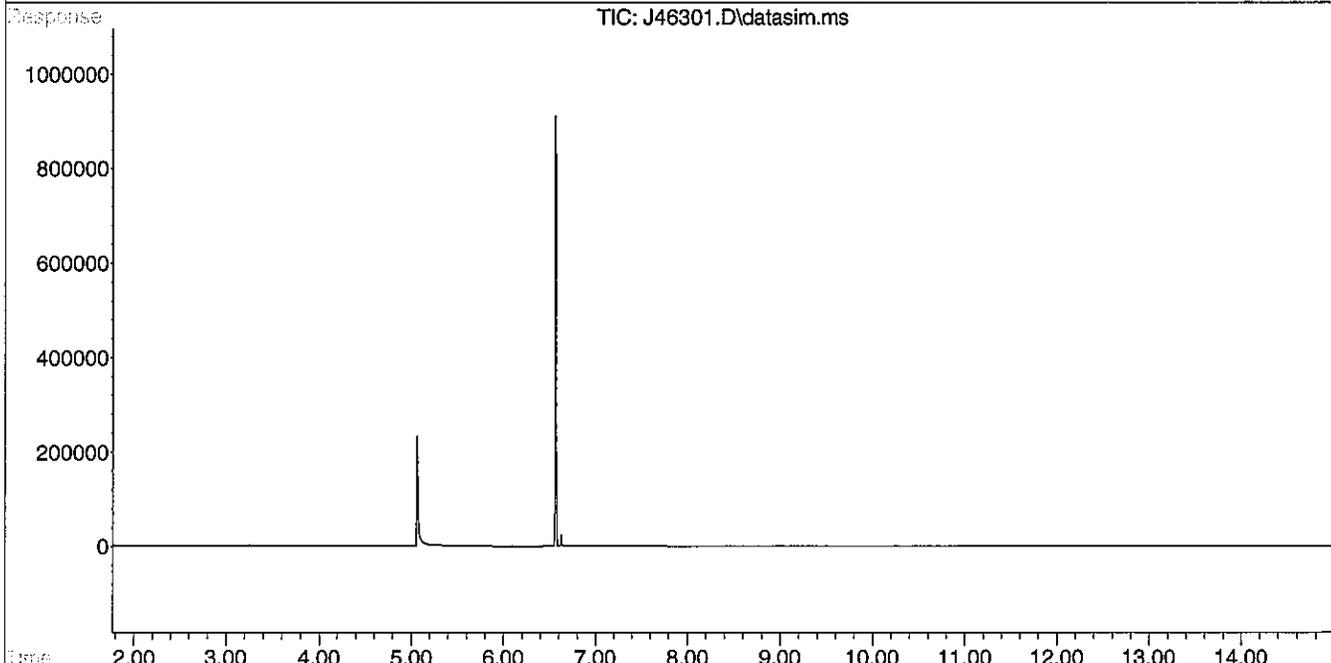
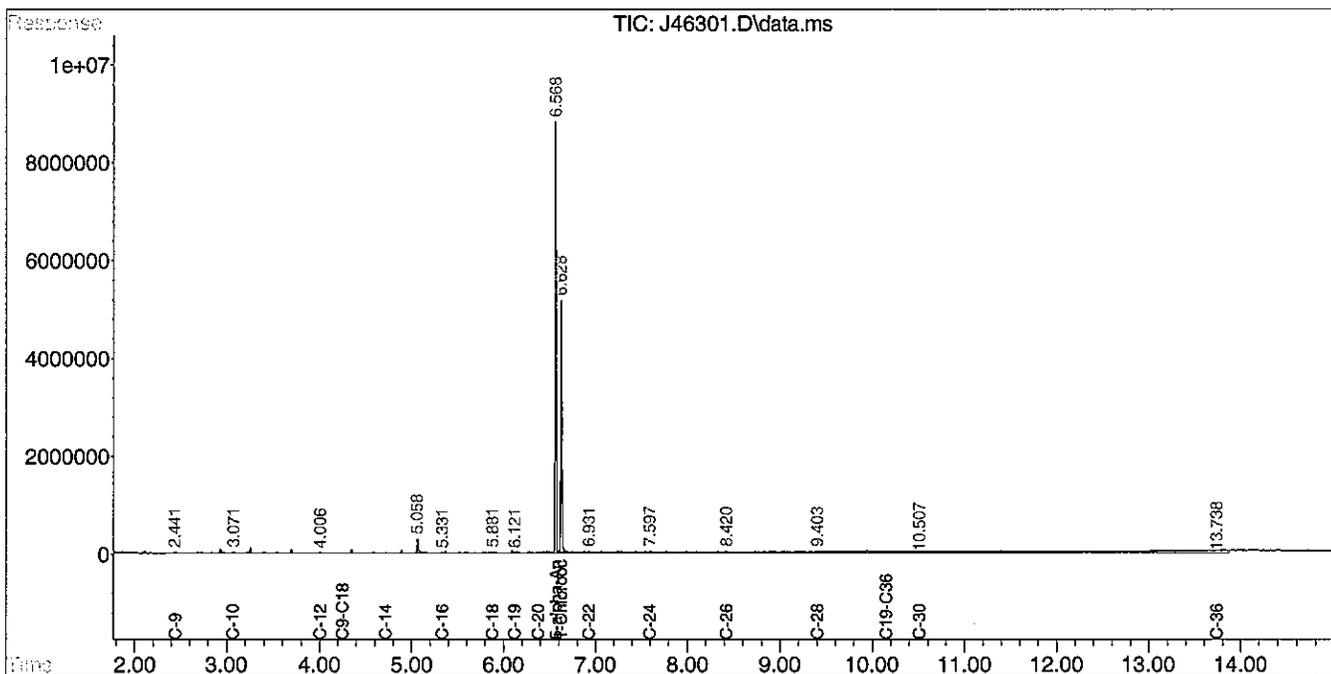
Quant Time: Aug 08 05:16:32 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:14 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080712-J\
 Data File : J46301.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 9:52 pm
 Operator : AR
 Sample : 73487-21
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 00:04:50 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 8, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-22
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: MWX

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	100	µg/L	U
Diesel PAH Analytes	Naphthalene	4	µg/L
	2-Methylnaphthalene	4	µg/L
	Phenanthrene	4	µg/L
	Acenaphthene	4	µg/L
Other Target PAH Analytes	Acenaphthylene	4	µg/L
	Fluorene	4	µg/L
	Anthracene	4	µg/L
	Fluoranthene	4	µg/L
	Pyrene	4	µg/L
	Benzo[a]anthracene	4	µg/L
	Chrysene	4	µg/L
	Benzo[b]fluoranthene	4	µg/L
	Benzo[k]fluoranthene	4	µg/L
	Benzo[a]pyrene	4	µg/L
	Indeno[1,2,3-cd]pyrene	4	µg/L
	Dibenzo[a,h]anthracene	4	µg/L
	Benzo[ghi]perylene	4	µg/L
C9-C18 Aliphatic Hydrocarbons ¹	100	µg/L	U
C19-C36 Aliphatic Hydrocarbons ¹	100	µg/L	U
C11-C22 Aromatic Hydrocarbons ^{1,2}	100	µg/L	U
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			70
Aromatic Surrogate % Recovery (O-Terphenyl)			90
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			91
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			83
Fractionation Surrogate Acceptance Range	--	--	40-140%
¹ Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.			
² C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.			
RL = Report Limit			
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank			

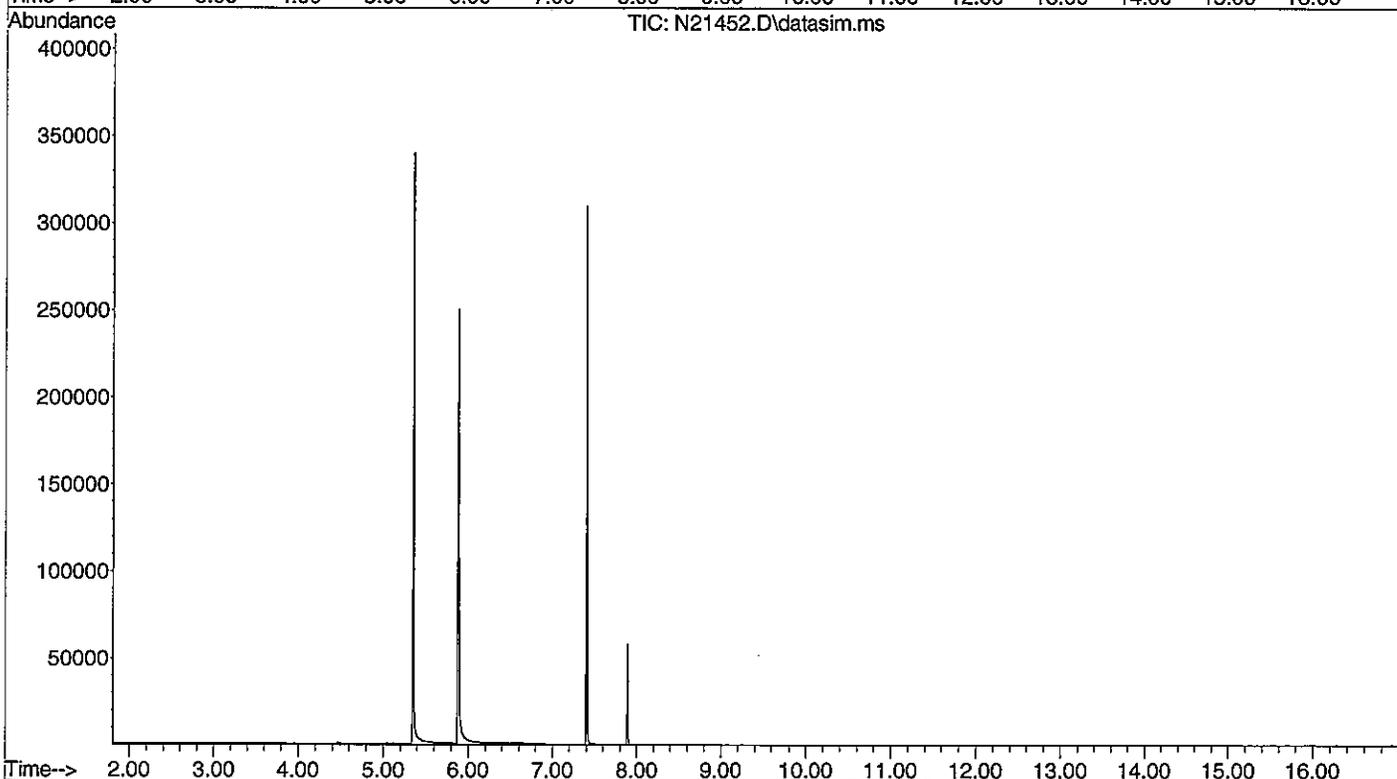
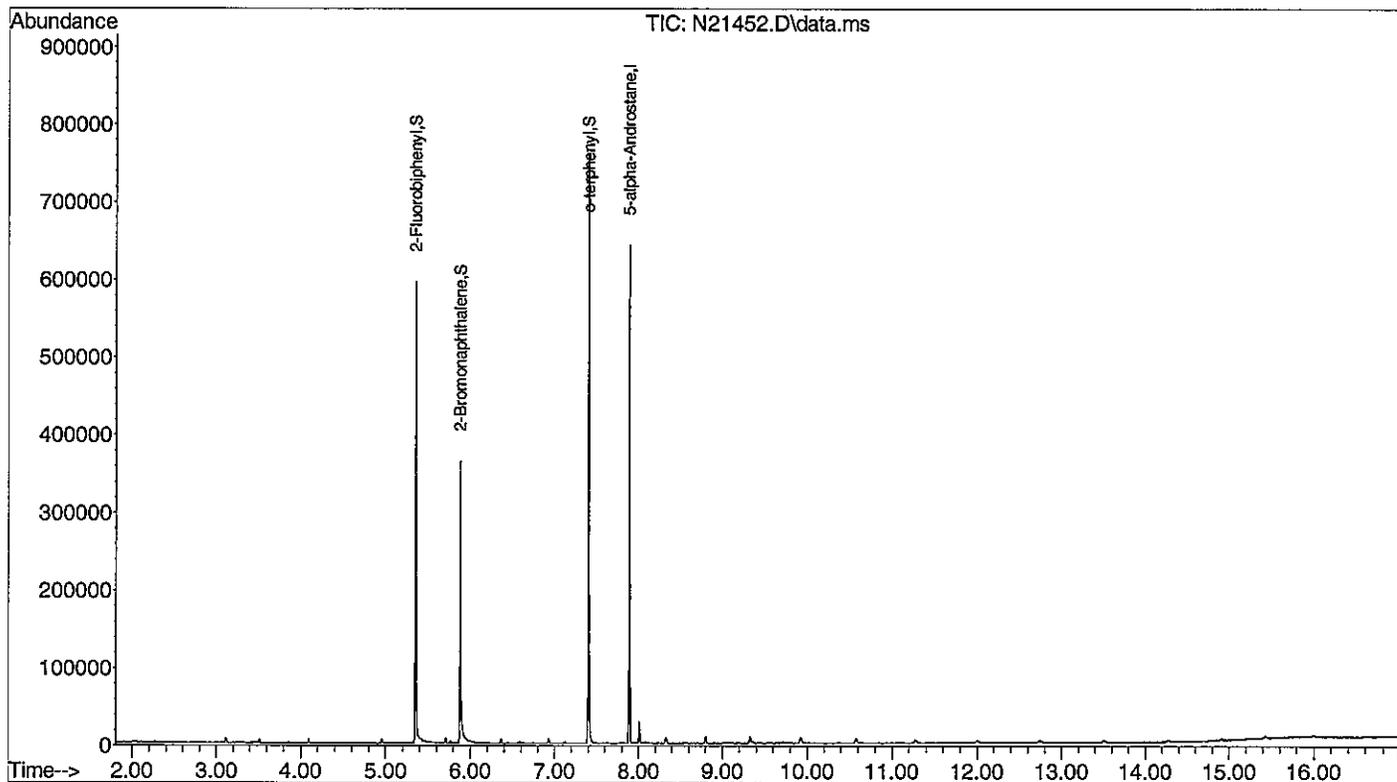
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3510C.

COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080712-N\
 Data File : N21452.D
 Acq On : 7 Aug 2012 9:10 pm
 Operator : AR
 Sample : 73487-22
 Misc :
 ALS Vial : 27 Sample Multiplier: 1

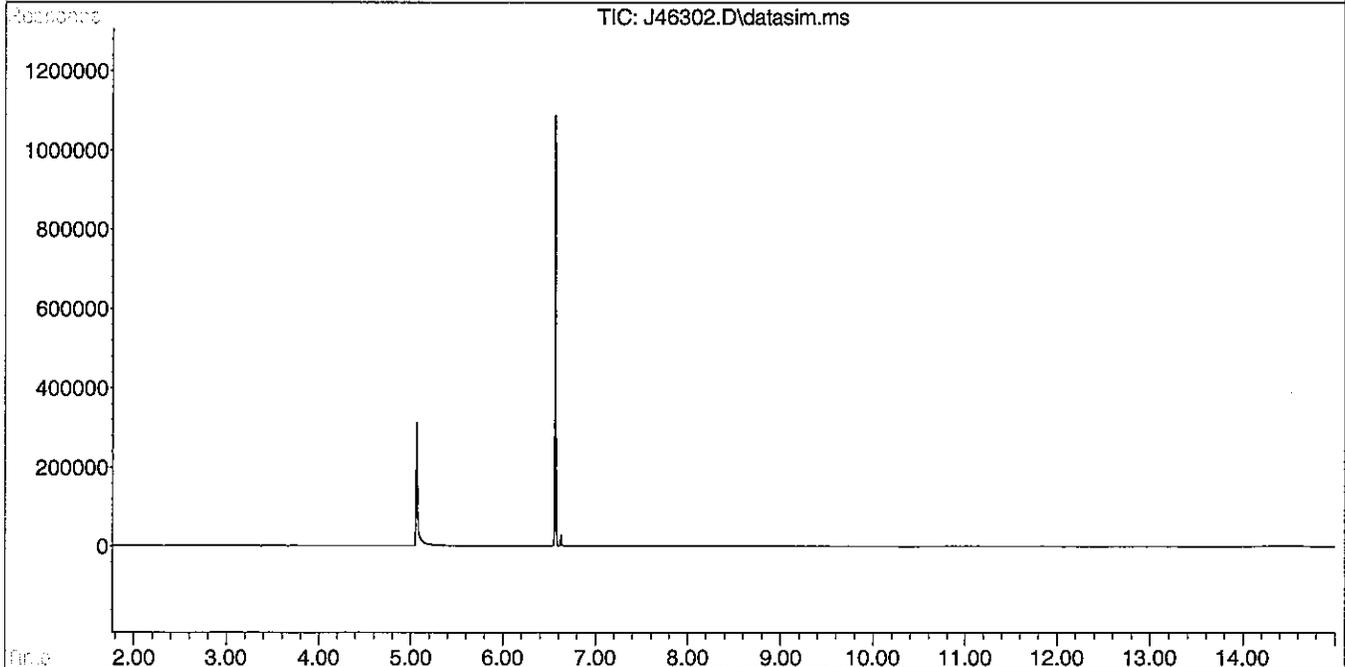
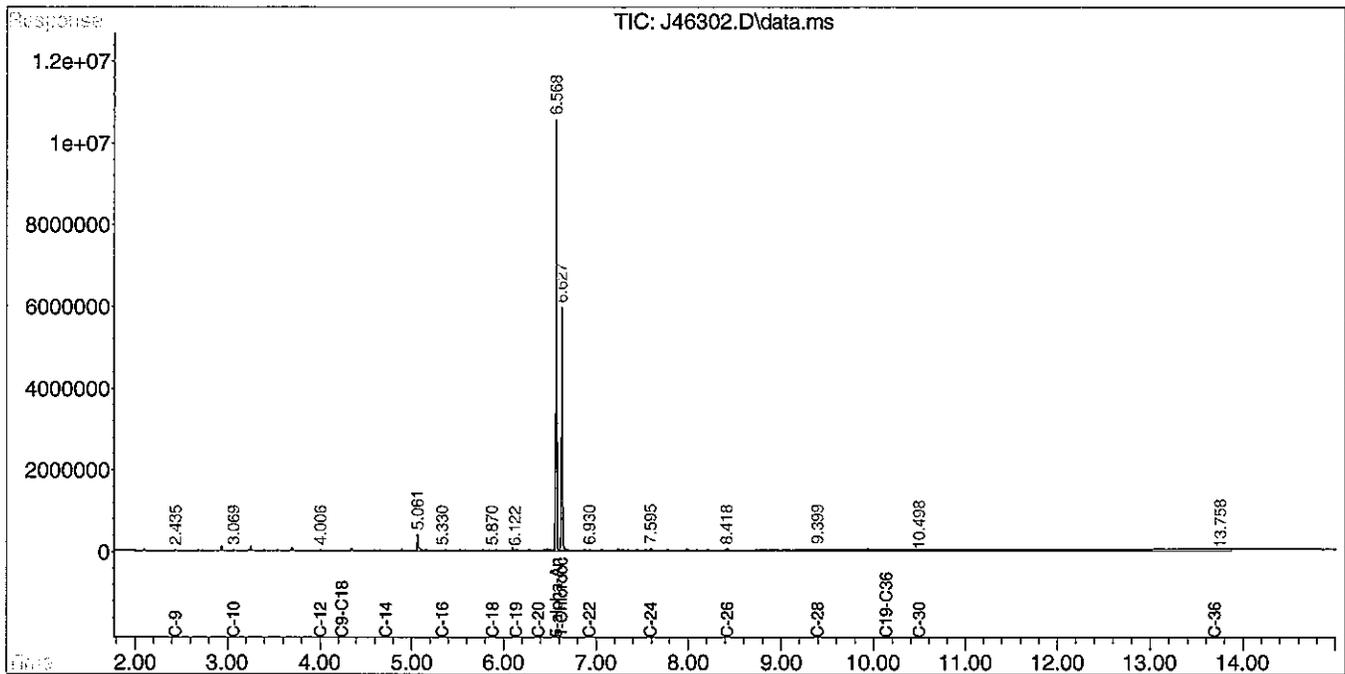
Quant Time: Aug 08 05:16:45 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:14 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080712-J\
 Data File : J46302.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 10:13 pm
 Operator : AR
 Sample : 73487-22
 Misc :
 ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 00:04:52 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 8, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-23
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/07/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: PW101

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	101	µg/L	U
Diesel PAH Analytes	Naphthalene	4	µg/L
	2-Methylnaphthalene	4	µg/L
	Phenanthrene	4	µg/L
	Acenaphthene	4	µg/L
Other Target PAH Analytes	Acenaphthylene	4	µg/L
	Fluorene	4	µg/L
	Anthracene	4	µg/L
	Fluoranthene	4	µg/L
	Pyrene	4	µg/L
	Benzo[a]anthracene	4	µg/L
	Chrysene	4	µg/L
	Benzo[b]fluoranthene	4	µg/L
	Benzo[k]fluoranthene	4	µg/L
	Benzo[a]pyrene	4	µg/L
	Indeno[1,2,3-cd]pyrene	4	µg/L
	Dibenzo[a,h]anthracene	4	µg/L
	Benzo[g,h,i]perylene	4	µg/L
C9-C18 Aliphatic Hydrocarbons ¹	101	µg/L	U
C19-C36 Aliphatic Hydrocarbons ¹	101	µg/L	U
C11-C22 Aromatic Hydrocarbons ^{1,2}	101	µg/L	U
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			66
Aromatic Surrogate % Recovery (O-Terphenyl)			87
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			91
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			82
Fractionation Surrogate Acceptance Range	--	--	40-140%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
²C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.
RL = Report Limit
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

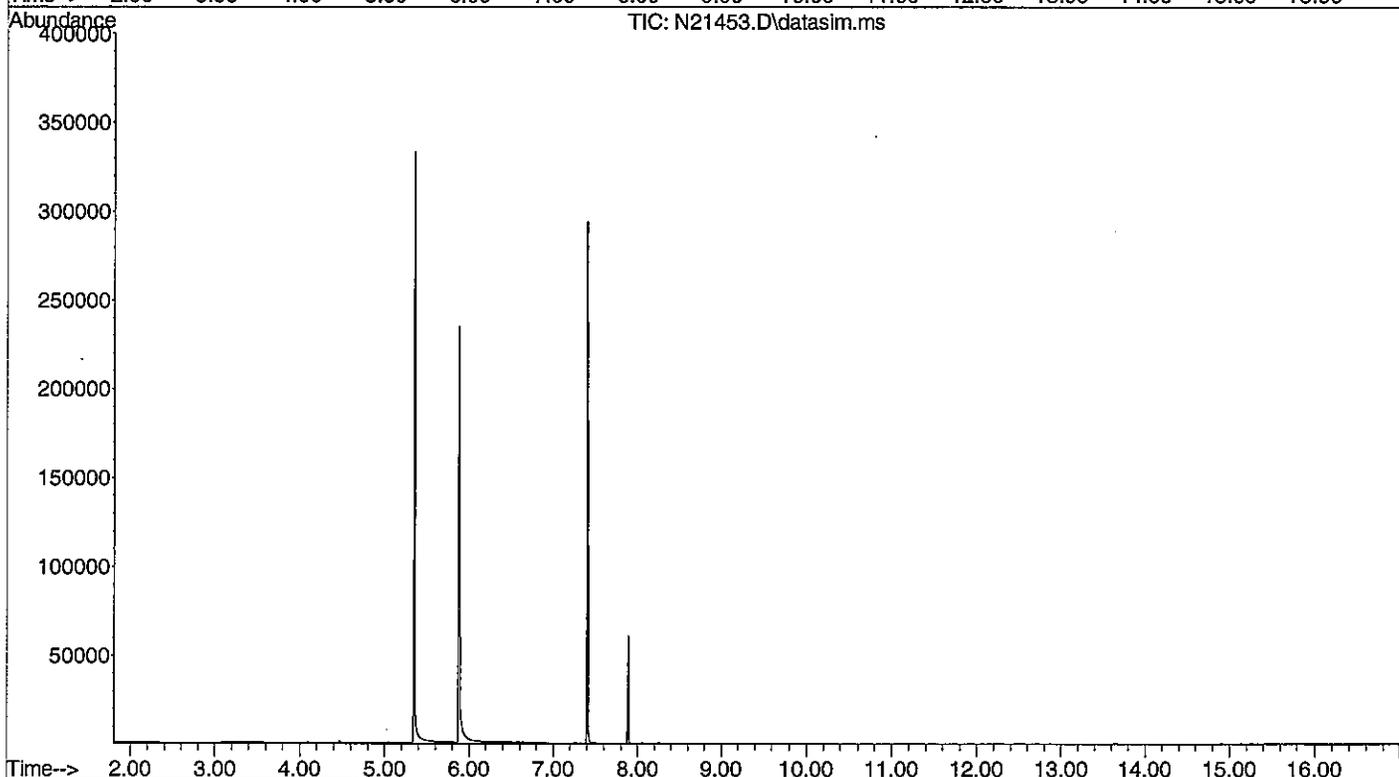
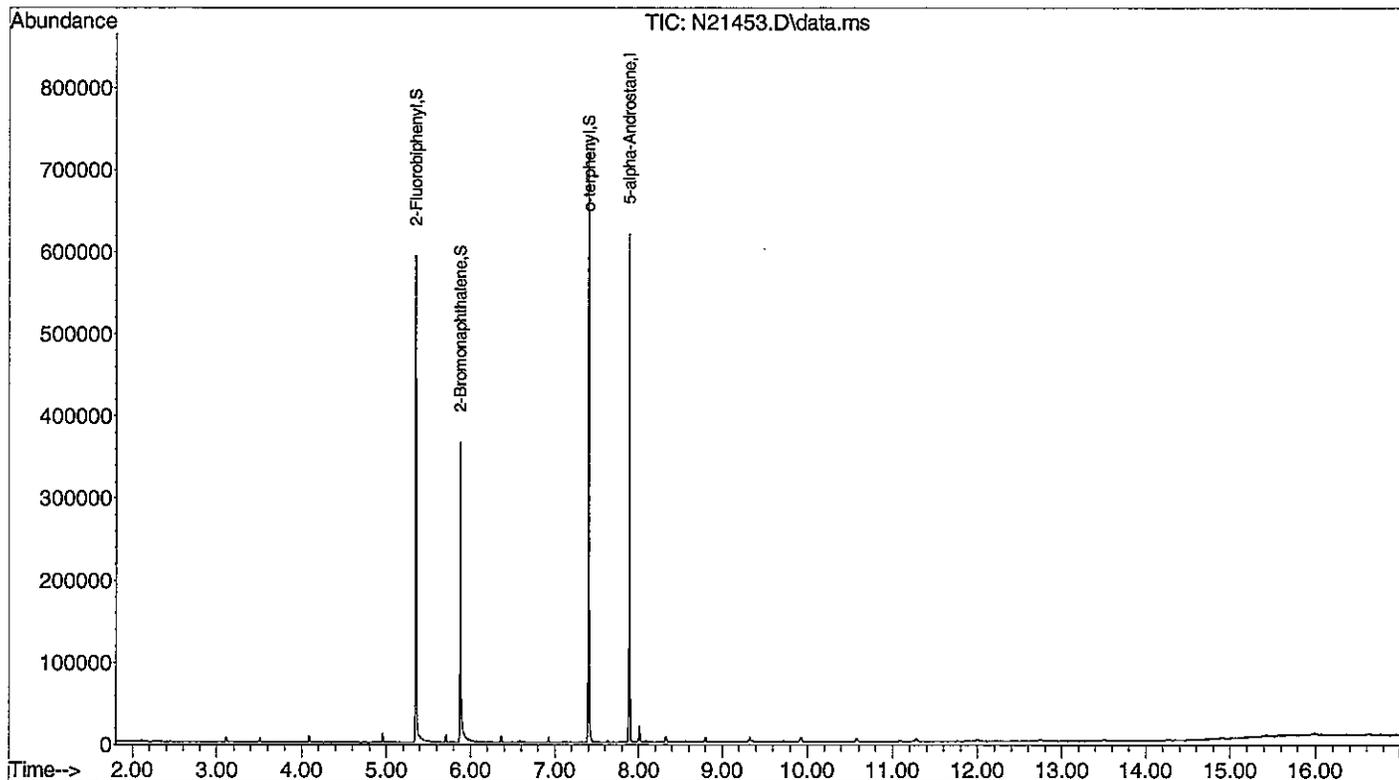
METHODOLOGY MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3510C.

COMMENTS: EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

SIGNATURE: *Angelina Richard*

Data Path : C:\msdchem\1\DATA\080712-N\
 Data File : N21453.D
 Acq On : 7 Aug 2012 9:30 pm
 Operator : AR
 Sample : 73487-23
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

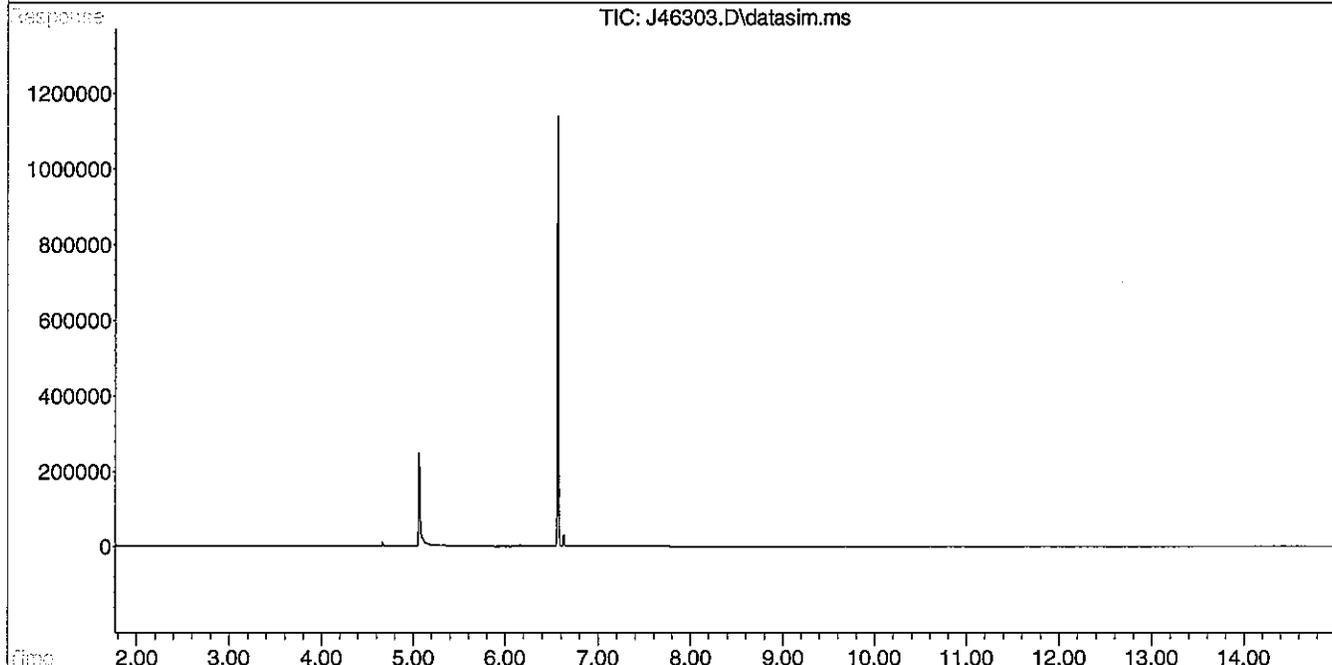
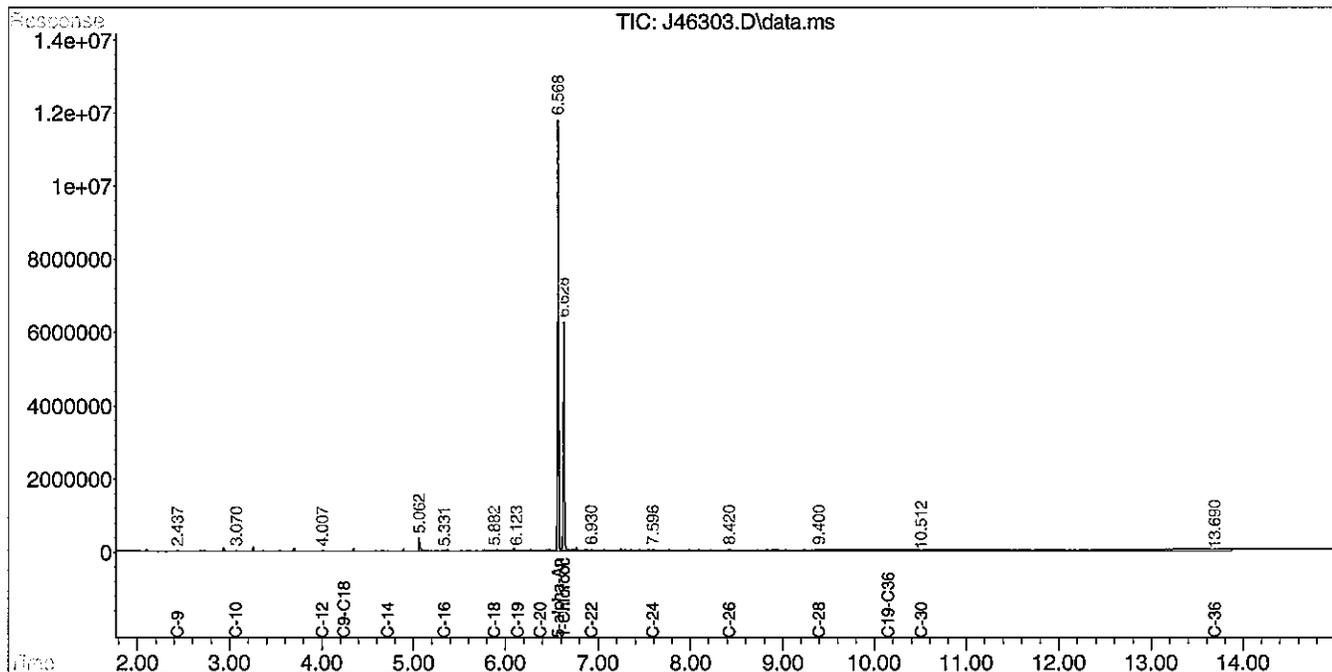
Quant Time: Aug 08 05:16:49 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:14 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080712-J\
 Data File : J46303.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 10:34 pm
 Operator : AR
 Sample : 73487-23
 Misc :
 ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 00:04:54 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



August 8, 2012

Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 73487-24
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/07/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: PW DUP

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	103	µg/L	U
Diesel PAH Analytes	Naphthalene	4	µg/L
	2-Methylnaphthalene	4	µg/L
	Phenanthrene	4	µg/L
	Acenaphthene	4	µg/L
Other Target PAH Analytes	Acenaphthylene	4	µg/L
	Fluorene	4	µg/L
	Anthracene	4	µg/L
	Fluoranthene	4	µg/L
	Pyrene	4	µg/L
	Benzo[a]anthracene	4	µg/L
	Chrysene	4	µg/L
	Benzo[b]fluoranthene	4	µg/L
	Benzo[k]fluoranthene	4	µg/L
	Benzo[a]pyrene	4	µg/L
	Indeno[1,2,3-cd]pyrene	4	µg/L
	Dibenzo[a,h]anthracene	4	µg/L
Benzo[g,h,i]perylene	4	µg/L	
C9-C18 Aliphatic Hydrocarbons ¹	103	µg/L	U
C19-C36 Aliphatic Hydrocarbons ¹	103	µg/L	U
C11-C22 Aromatic Hydrocarbons ^{1,2}	103	µg/L	U
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			70
Aromatic Surrogate % Recovery (O-Terphenyl)			86
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			98
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			84
Fractionation Surrogate Acceptance Range	--	--	40-140%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
²C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.
 RL = Report Limit
 U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

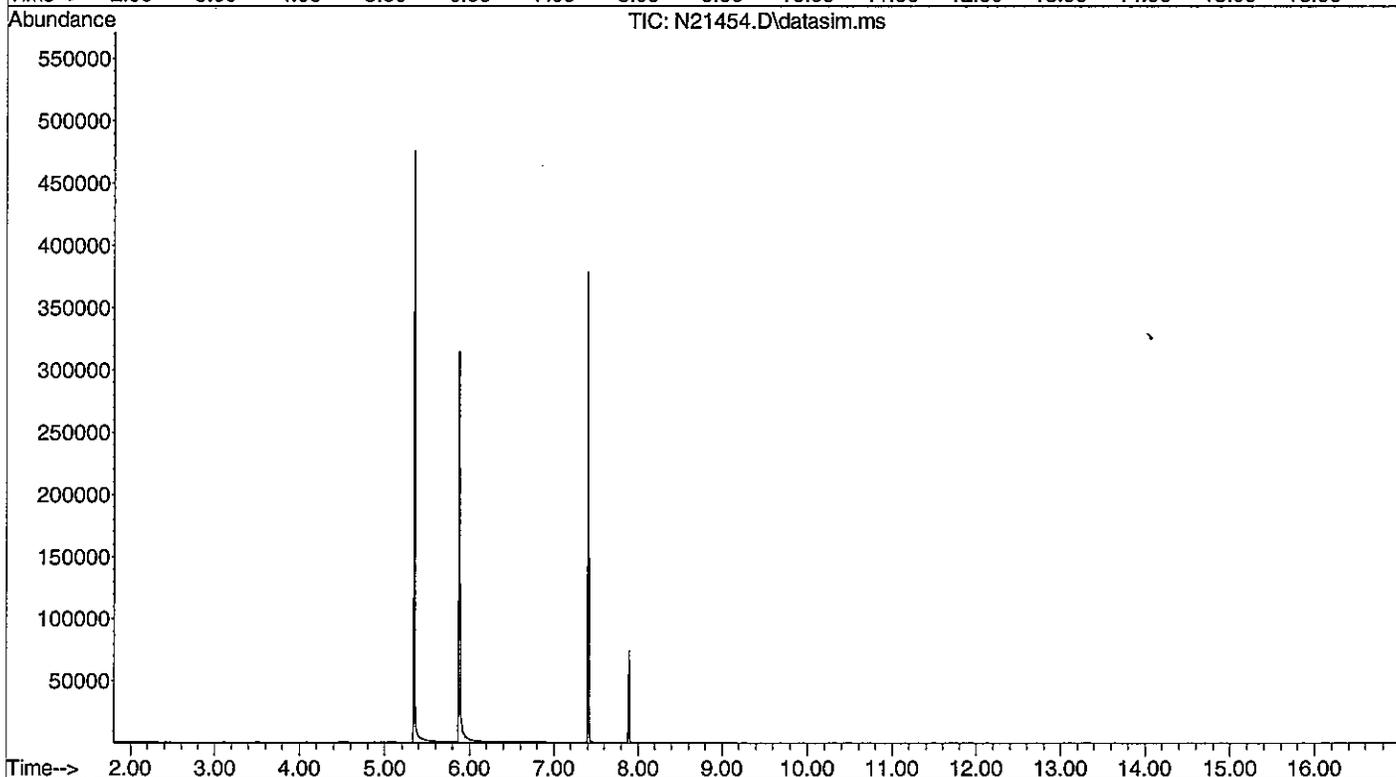
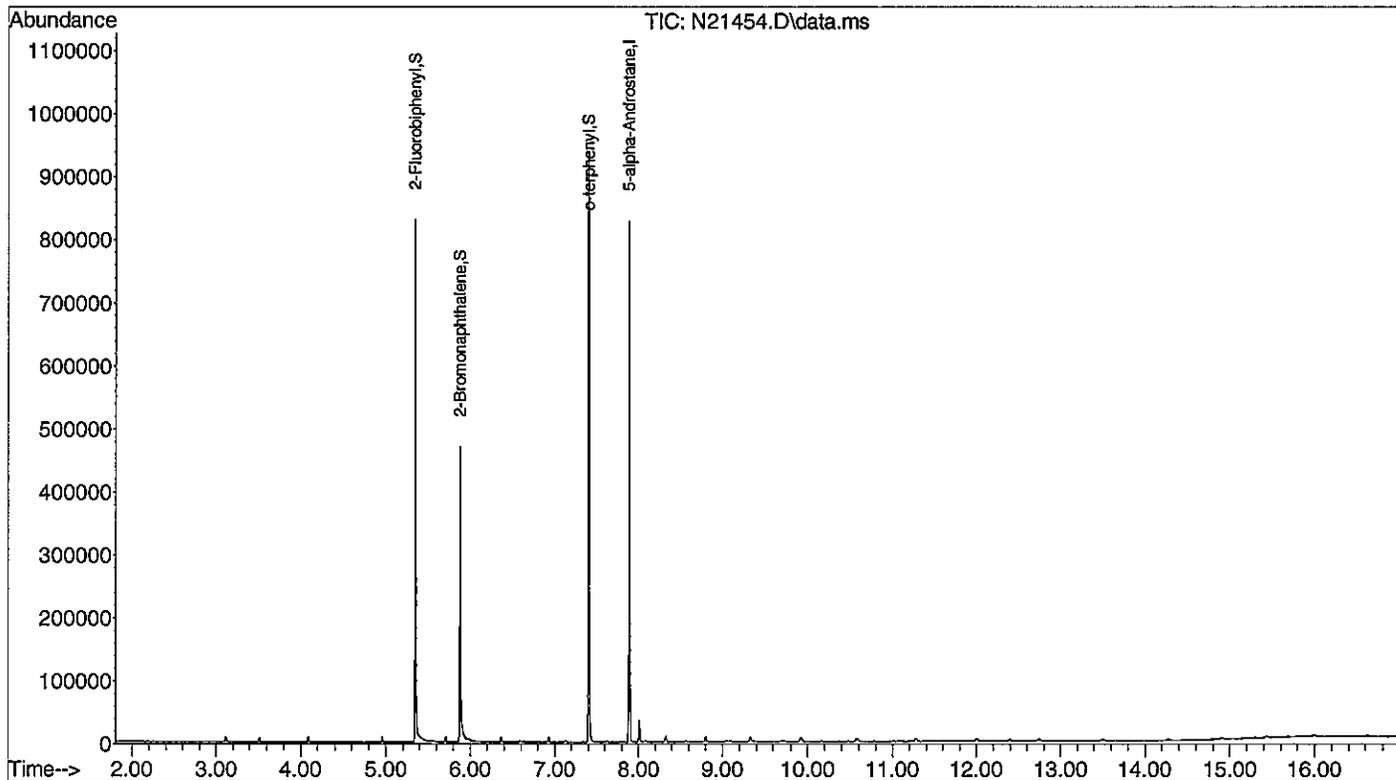
METHODOLOGY MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3510C.

COMMENTS: EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080712-N\
 Data File : N21454.D
 Acq On : 7 Aug 2012 9:51 pm
 Operator : AR
 Sample : 73487-24
 Misc :
 ALS Vial : 29 Sample Multiplier: 1

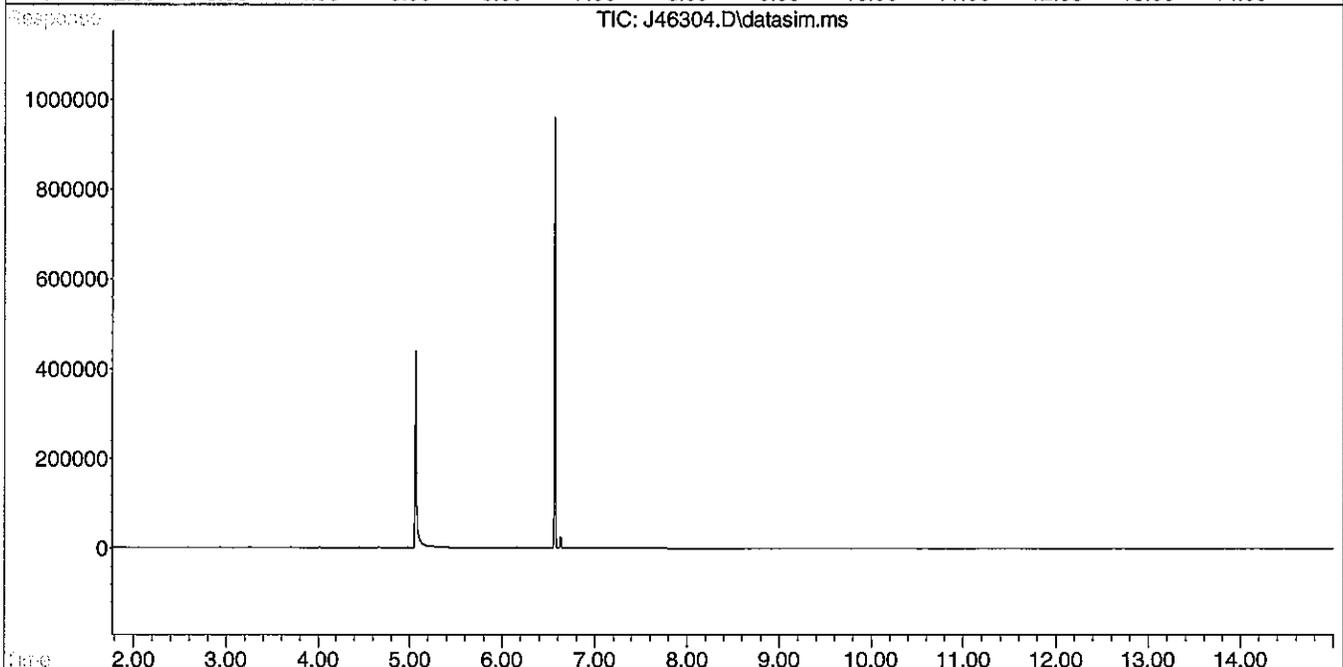
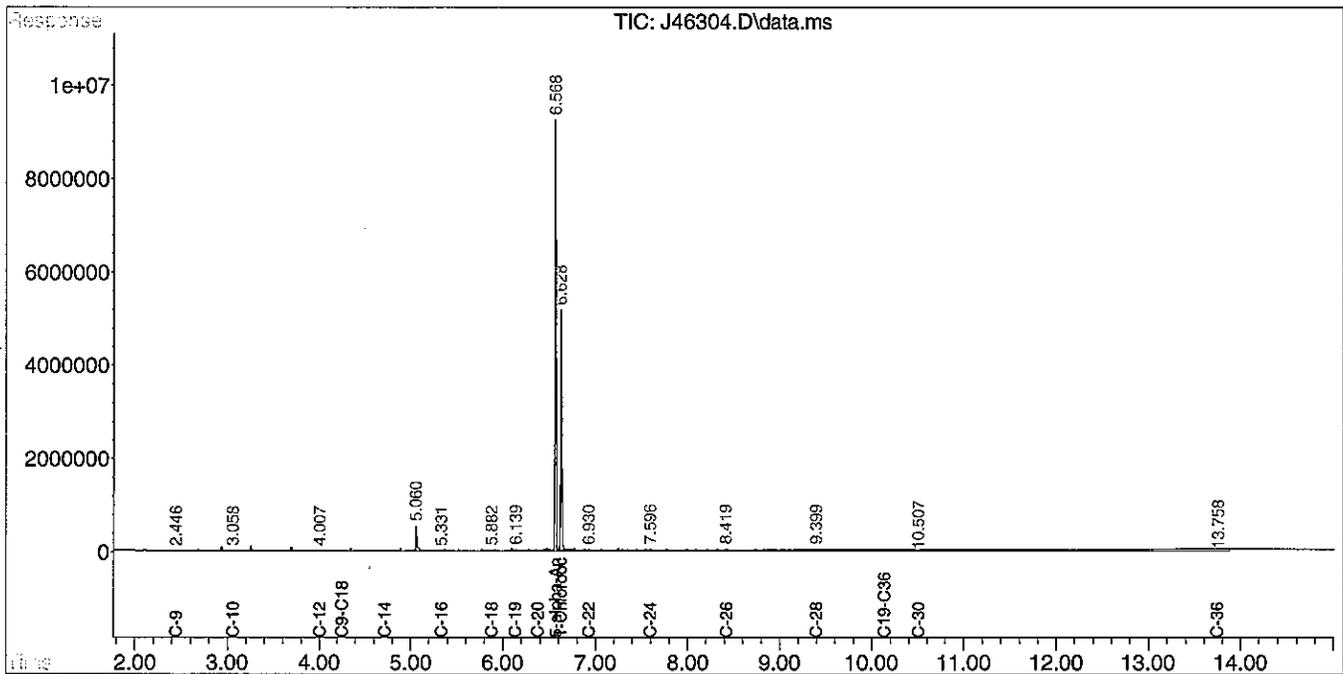
Quant Time: Aug 08 05:16:53 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:14 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080712-J\
 Data File : J46304.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 10:54 pm
 Operator : AR
 Sample : 73487-24
 Misc :
 ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 00:04:56 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



EPH
QC FORMS

August 8, 2012

Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: B080612EW
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date:
Lab Receipt Date:
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: LabQC

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics	100	µg/L	U
Diesel PAH Analytes	Naphthalene	4	µg/L
	2-Methylnaphthalene	4	µg/L
	Phenanthrene	4	µg/L
	Acenaphthene	4	µg/L
Other Target PAH Analytes	Acenaphthylene	4	µg/L
	Fluorene	4	µg/L
	Anthracene	4	µg/L
	Fluoranthene	4	µg/L
	Pyrene	4	µg/L
	Benzo[a]anthracene	4	µg/L
	Chrysene	4	µg/L
	Benzo[b]fluoranthene	4	µg/L
	Benzo[k]fluoranthene	4	µg/L
	Benzo[a]pyrene	4	µg/L
	Indeno[1,2,3-cd]pyrene	4	µg/L
	Dibenzof[a,h]anthracene	4	µg/L
Benzo[g,h,i]perylene	4	µg/L	
C9-C18 Aliphatic Hydrocarbons ¹	100	µg/L	U
C19-C36 Aliphatic Hydrocarbons ¹	100	µg/L	U
C11-C22 Aromatic Hydrocarbons ^{1,2}	100	µg/L	U
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			79
Aromatic Surrogate % Recovery (O-Terphenyl)			89
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			93
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			85
Fractionation Surrogate Acceptance Range	--	--	40-140%

¹Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
²C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.
RL = Report Limit
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3510C.

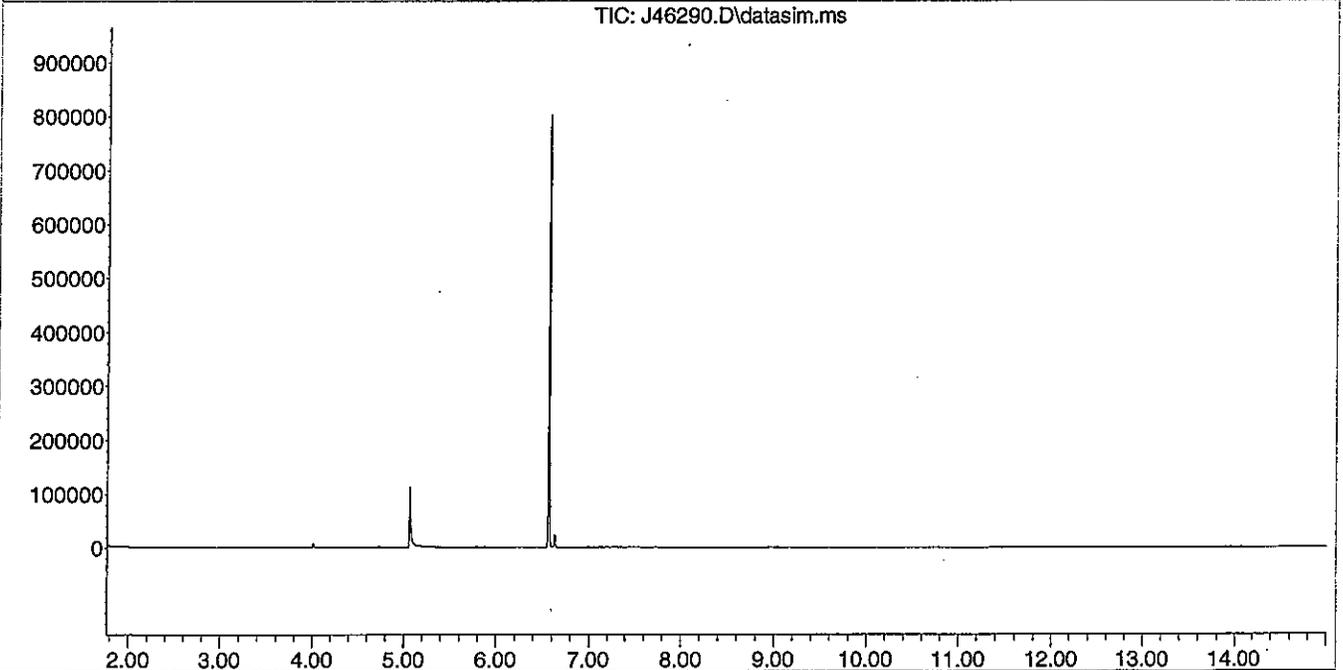
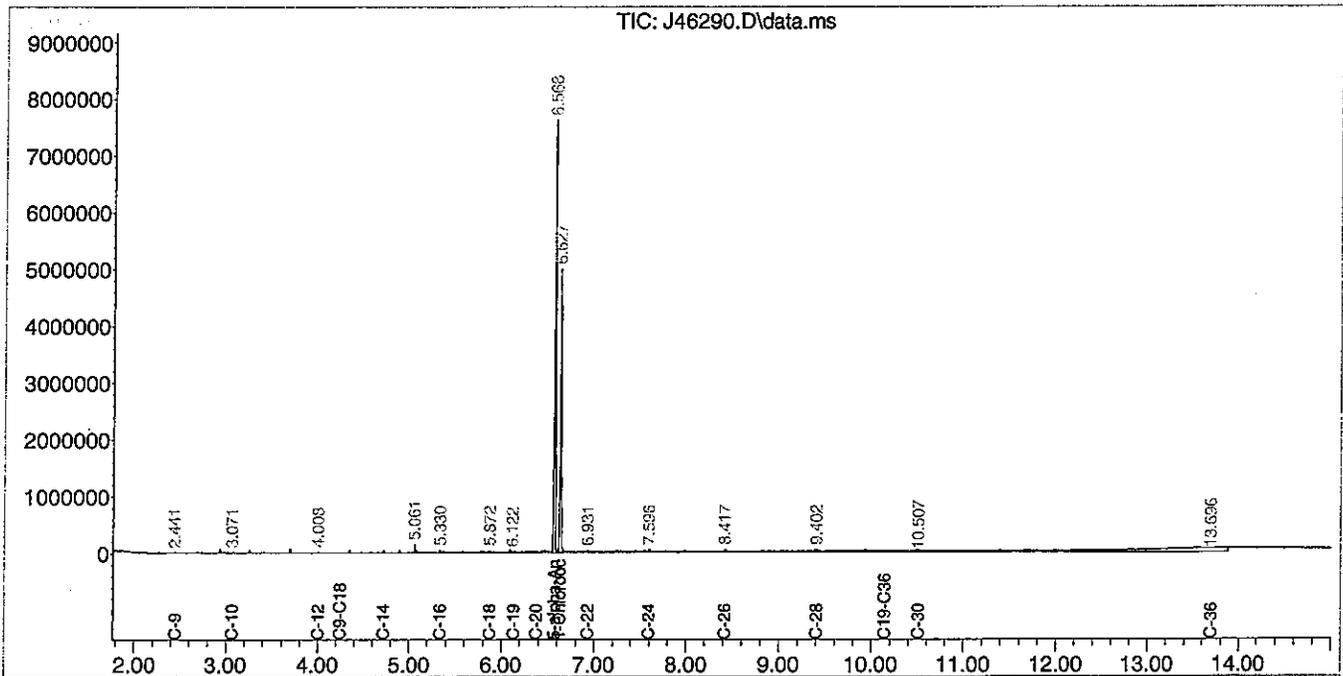
COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

SIGNATURE: *Angelina Richard*

Data Path : C:\msdchem\1\DATA\080712-J\
 Data File : J46290.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 6:05 pm
 Operator : AR
 Sample : B080612EW,RR
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

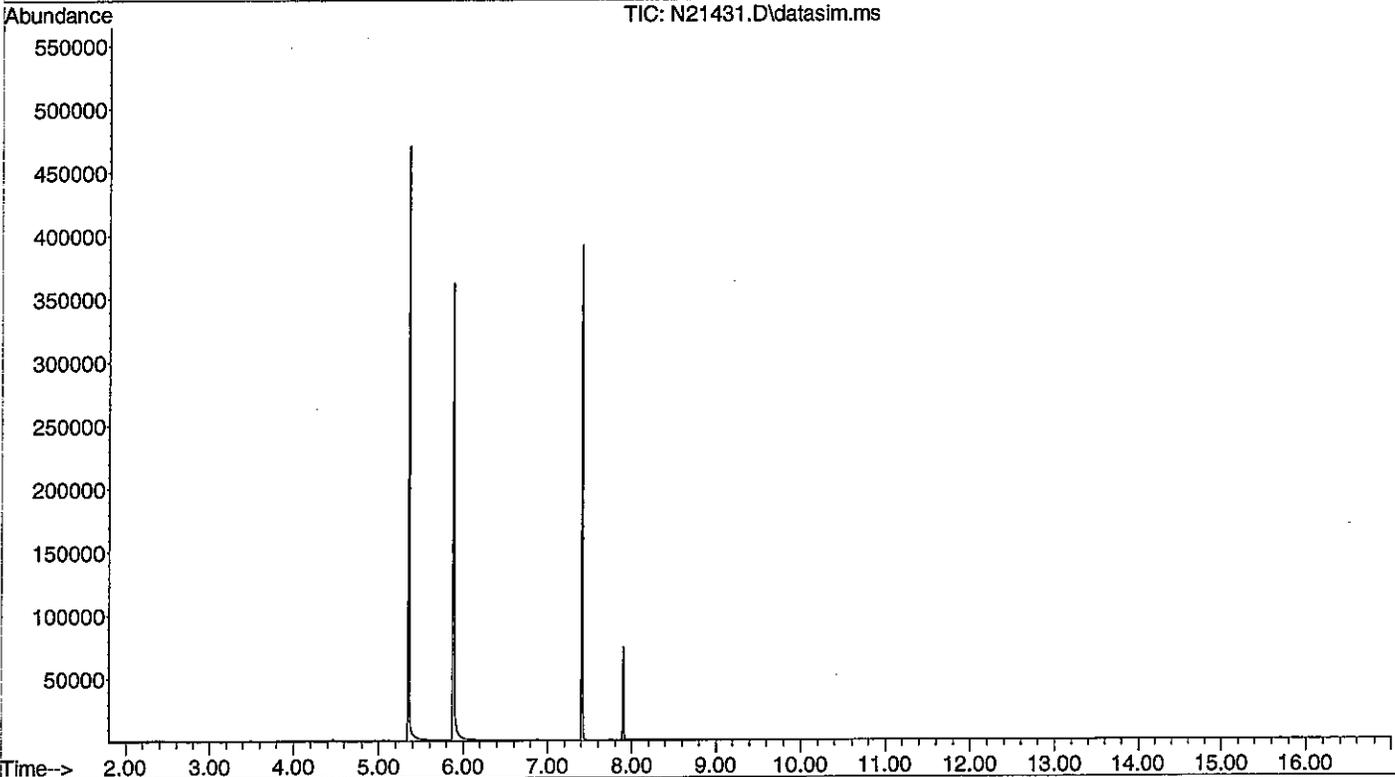
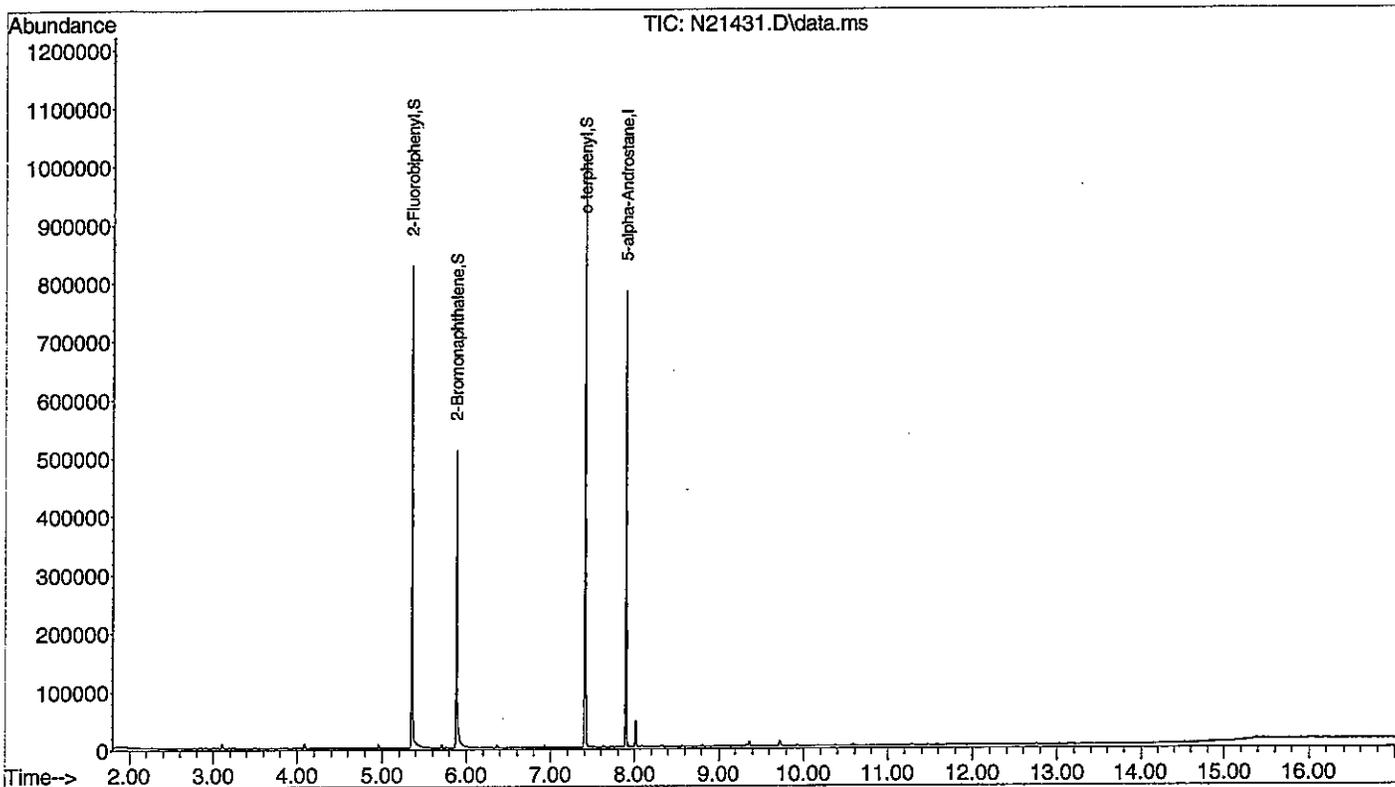
Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 00:04:28 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



Data Path : C:\msdchem\1\DATA\080712-N\
Data File : N21431.D
Acq On : 7 Aug 2012 1:56 pm
Operator : AR
Sample : B080612EW
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 07 15:07:57 2012
Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
Quant Title : EPH MS AROMATICS
QLast Update : Fri Jul 27 00:00:13 2012
Response via : Initial Calibration



August 9, 2012

Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

SAMPLE DATA

Lab Sample ID: B080612EASE2
Matrix: Solid
Percent Solid: 100
Dilution Factor: 1.0
Collection Date:
Lab Receipt Date:
Extraction Date: 08/06/12
Analysis Date: 08/07/12

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Client Sample ID: LabQC

EPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	13300	µg/kg	U
Diesel PAH Analytes	Naphthalene	267	µg/kg
	2-Methylnaphthalene	267	µg/kg
	Phenanthrene	267	µg/kg
	Acenaphthene	267	µg/kg
Other Target PAH Analytes	Acenaphthylene	267	µg/kg
	Fluorene	267	µg/kg
	Anthracene	267	µg/kg
	Fluoranthene	267	µg/kg
	Pyrene	267	µg/kg
	Benzo[a]anthracene	267	µg/kg
	Chrysene	267	µg/kg
	Benzo[b]fluoranthene	267	µg/kg
	Benzo[k]fluoranthene	267	µg/kg
	Benzo[a]pyrene	267	µg/kg
	Indeno[1,2,3-cd]pyrene	267	µg/kg
	Dibenzo[a,h]anthracene	267	µg/kg
Benzo[g,h,i]perylene	267	µg/kg	
C9-C18 Aliphatic Hydrocarbons ¹	13300	µg/kg	U
C19-C36 Aliphatic Hydrocarbons ¹	13300	µg/kg	U
C11-C22 Aromatic Hydrocarbons ^{1,2}	13300	µg/kg	U
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			67
Aromatic Surrogate % Recovery (O-Terphenyl)			66
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			81
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			73
Fractionation Surrogate Acceptance Range	--	--	40-140%
¹ Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.			
² C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes.			
RL = Report Limit			
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank			

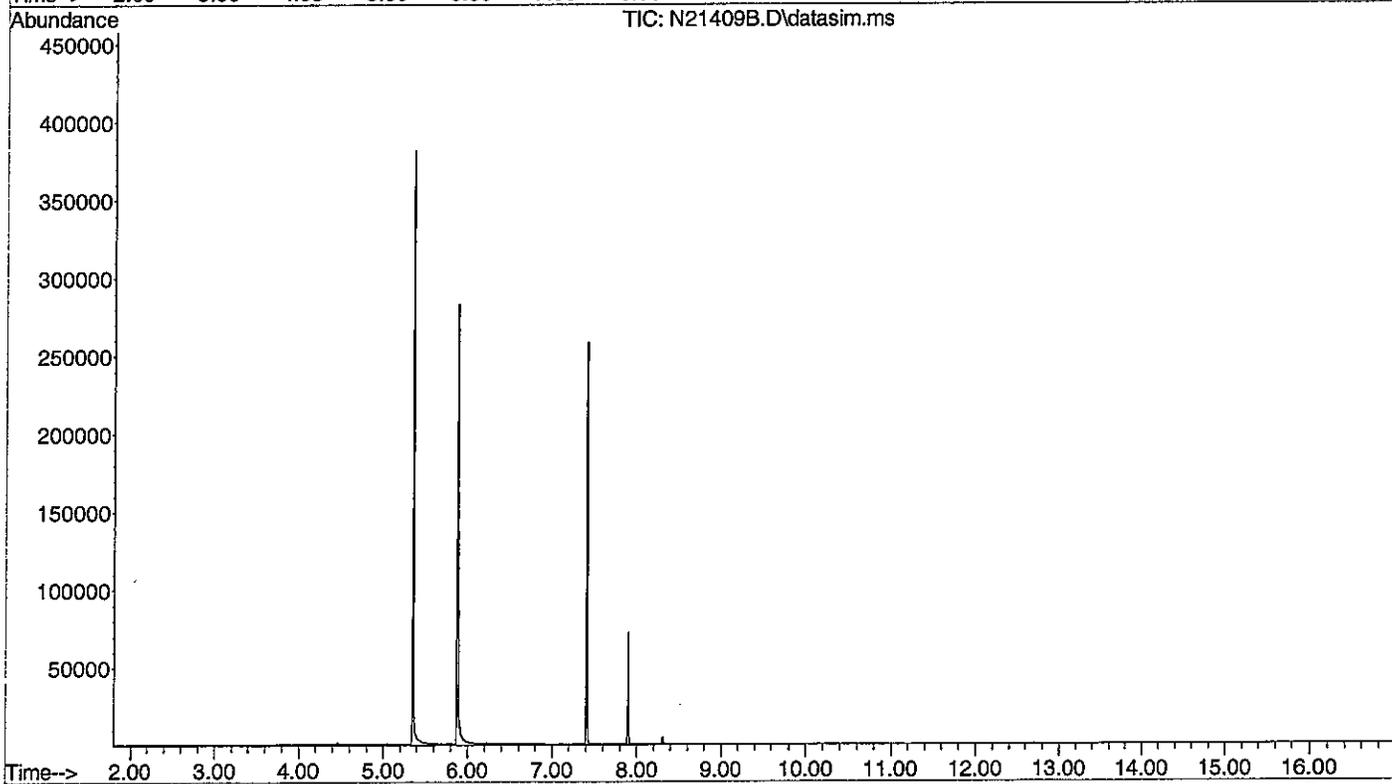
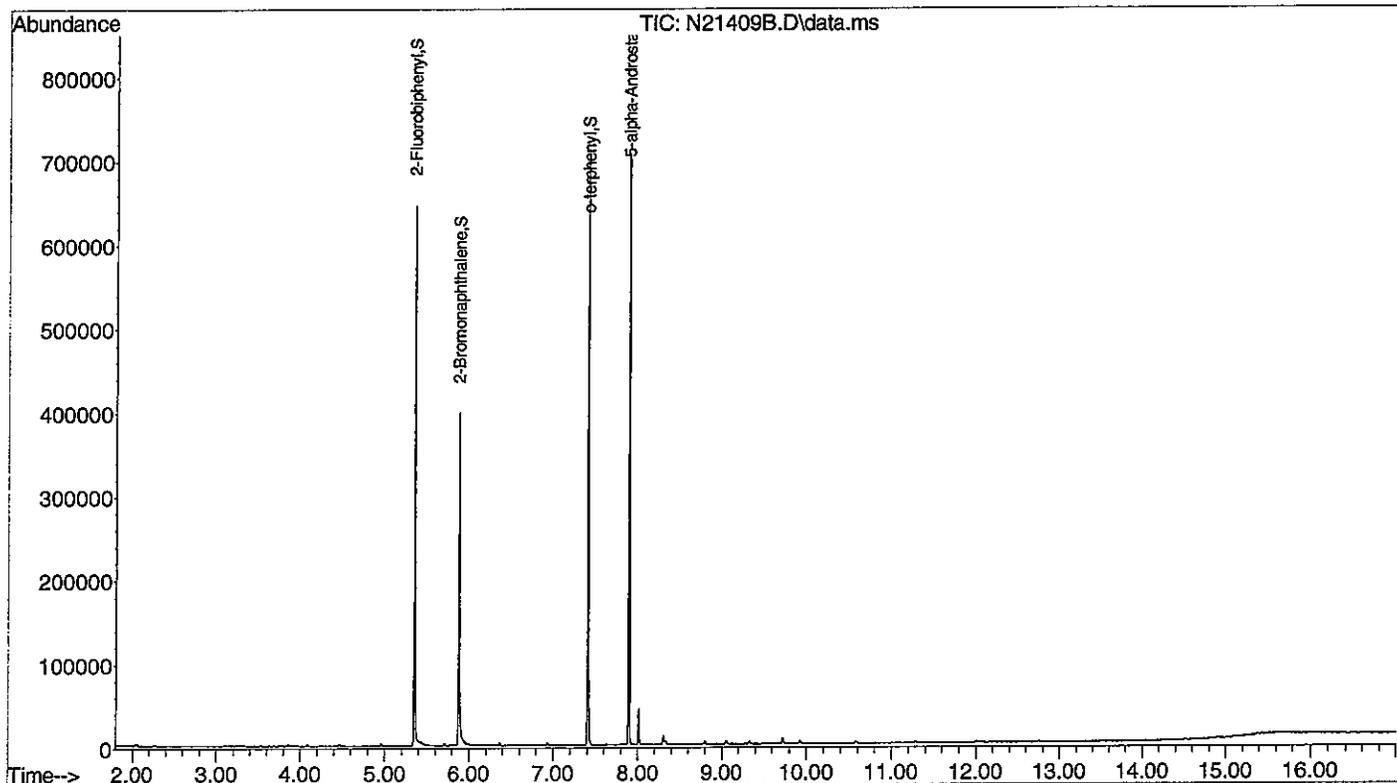
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a dry weight basis.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\080612-N\
 Data File : N21409B.D
 Acq On : 7 Aug 2012 3:42 am
 Operator : AR
 Sample : B080612EASE2
 Misc :
 ALS Vial : 24 Sample Multiplier: 1

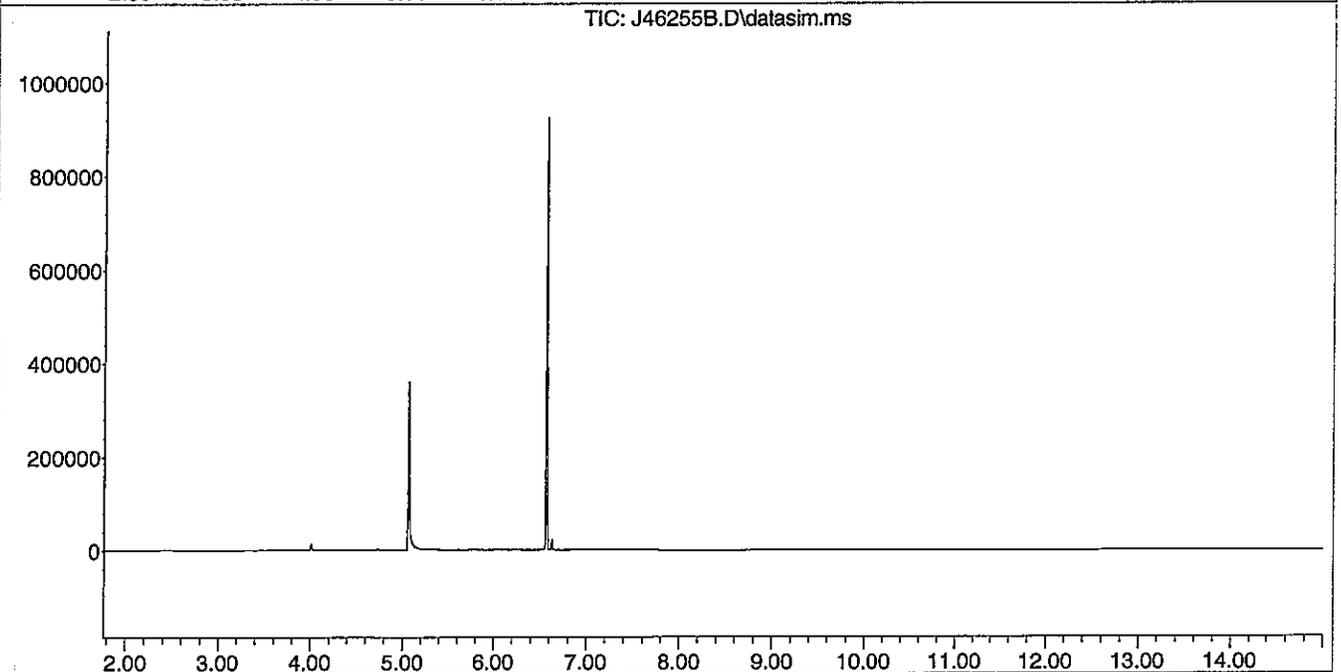
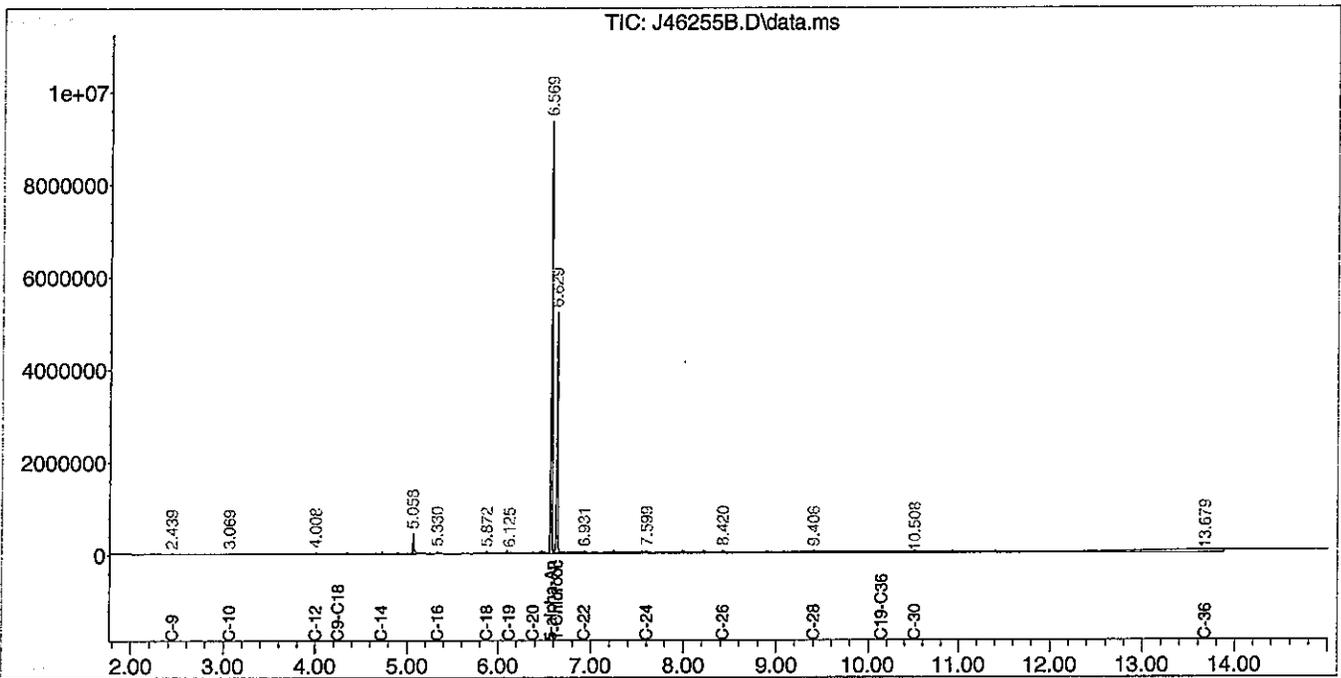
Quant Time: Aug 07 10:35:37 2012
 Quant Method : C:\msdchem\1\METHODS\ARM071012N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Jul 27 00:00:13 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080612-J\
 Data File : J46255B.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 7 Aug 2012 3:20 am
 Operator : AR
 Sample : B080612EASE2
 Misc : SOIL,ALI
 ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 07 05:24:49 2012
 Quant Method : C:\msdchem\1\METHODS\ALG080412.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Aug 06 12:36:15 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



EPH ALIPHATICS
 AQUEOUS LABORATORY CONTROL SAMPLE
 LABORATORY CONTROL SAMPLE DUPLICATE
 PERCENT RECOVERY

Instrument ID: J
 GC Column: ZB-5ms
 Column ID: 0.25 mm

SDG:
 Non-spiked sample: B080612EW,RR
 Spike: L080612EW
 Spike duplicate: LD080612EW

COMPOUND	SPIKE ADDED	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
C-9	25	30	140	25	0.0	17	67		15	62		8	
C-10	25	40	140	25	0.0	19	78		18	72		8	
C-12	25	40	140	25	0.0	21	84		19	78		8	
C-14	25	40	140	25	0.0	22	88		20	81		8	
C-16	25	40	140	25	0.0	22	90		21	84		7	
C-18	25	40	140	25	0.0	24	94		22	87		8	
C-19	25	40	140	25	0.0	24	96		22	88		9	
C-20	25	40	140	25	0.0	25	101		23	92		9	
C-22	25	40	140	25	0.0	24	96		22	89		8	
C-24	25	40	140	25	0.0	24	98		22	89		9	
C-26	25	40	140	25	0.0	24	97		22	88		9	
C-28	25	40	140	25	0.0	23	92		21	83		10	
C-30	25	40	140	25	0.0	22	87		20	79		10	
C-36	25	40	140	25	0.0	11	44		10	41		6	

C9-C18 Aliphatics	150	40	140	25	0	125	83		116	77		8	
C19-C36 Aliphatics	200	40	140	25	0	178	89		163	81		9	

Column to be used to flag recovery and RPD values outside of QC limits
 * Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery

Comments: _____

EPH AROMATICS
 AQUEOUS LABORATORY CONTROL SAMPLE
 LABORATORY CONTROL SAMPLE DUPLICATE
 PERCENT RECOVERY

Instrument ID: N
 GC Column: ZB-5ms
 Column ID: 0.25 mm

SDG:
 Non-spiked sample: B080612EW
 Spike: L080612EW
 Spike duplicate: LD080612EW

COMPOUND	SPIKE ADDED	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
Naphthalene	25	40	140	20	0.0	18	70		21	84		18	
2-Methylnaphthalene	25	40	140	20	0.0	19	76		22	90		17	
Acenaphthylene	25	40	140	20	0.0	20	79		23	91		15	
Acenaphthene	25	40	140	20	0.0	20	80		22	88		11	
Fluorene	25	40	140	20	0.0	21	83		23	93		12	
Phenanthrene	25	40	140	20	0.0	22	89		24	95		7	
Anthracene	25	40	140	20	0.0	22	89		23	93		4	
Fluoranthene	25	40	140	20	0.0	22	90		24	94		5	
Pyrene	25	40	140	20	0.0	22	90		23	92		3	
Benzo[a]anthracene	25	40	140	20	0.0	24	95		23	94		1	
Chrysene	25	40	140	20	0.0	22	88		21	86		3	
Benzo[b] fluoranthene	25	40	140	20	0.0	25	100		24	97		3	
Benzo[k] fluoranthene	25	40	140	20	0.0	24	95		22	88		7	
Benzo[a] pyrene	25	40	140	20	0.0	25	100		23	94		6	
Indeno [1,2,3-cd] pyrene	25	40	140	20	0.0	29	116		27	108		7	
Dibenz [a,h] anthracene	25	40	140	20	0.0	28	113		26	102		10	
Benzo(g,h,i) perylene	25	40	140	20	0.0	27	108		25	100		8	

Column to be used to flag recovery and RPD values outside of QC limits
 * Values outside QC limits

Non-spiked result of "0" used in place of "U" to allow calculation of spike recovery

Comments: _____

EPH AROMATIC BREAKTHROUGH REPORT
OF ALIPHATIC LABORATORY CONTROL SAMPLE

Instrument ID: N
GC Column: ZB-5ms
Column ID: 0.25 mm

SDG:
Aliphatic LCS: L080612EW
Aromatic LCS: L080612EW

COMPOUND	LOWER	UPPER	ALIPHATIC	AROMATIC	% BREAKTHROUGH	
	LIMIT	LIMIT	RESULT (ug/mL)	RESULT (ug/mL)		#
Naphthalene	0	5	0.00	17.6	0.0	
2-Methylnaphthalene	0	5	0.00	19.0	0.0	

Column to be used to flag breakthrough values outside of QC limits

* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery

Comments: _____

EPH AROMATIC BREAKTHROUGH REPORT
OF ALIPHATIC LABORATORY CONTROL SAMPLE

Instrument ID: N
GC Column: ZB-5ms
Column ID: 0.25 mm

SDG:
Aliphatic LCS: LD080612EW
Aromatic LCS: LD080612EW

COMPOUND	LOWER LIMIT	UPPER LIMIT	ALIPHATIC RESULT (ug/mL)	AROMATIC RESULT (ug/mL)	% BREAKTHROUGH	#
Naphthalene	0	5	0.00	21.0	0.0	
2-Methylnaphthalene	0	5	0.00	22.4	0.0	

Column to be used to flag breakthrough values outside of QC limits

* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery

Comments: _____

EPH ALIPHATICS
 SOIL LABORATORY CONTROL SAMPLE
 LABORATORY CONTROL SAMPLE DUPLICATE
 PERCENT RECOVERY

Instrument ID: J
 GC Column: ZB-5ms
 Column ID: 0.25 mm

SDG:
 Non-spiked sample: B080612EASE2
 Spike: L080612EASE2
 Spike duplicate: LD080612EASE2

COMPOUND	LCS SPIKE	LCD SPIKE	LOWER	UPPER	RPD	NON-SPIKE	SPIKE	SPIKE	SPIKE DUP		SPIKE DUP		RPD	
	ADDED (ug/kg)	ADDED (ug/kg)	LIMIT	LIMIT	LIMIT	RESULT (ug/kg)	RESULT (ug/kg)	% REC	#	RESULT (ug/kg)	% REC	#	RPD	#
C-9	3333	3333	30	140	25	0	1594	48		1935	58		19	
C-10	3333	3333	40	140	25	0	1858	56		2242	67		19	
C-12	3333	3333	40	140	25	0	2038	61		2446	73		18	
C-14	3333	3333	40	140	25	0	2164	65		2497	75		14	
C-16	3333	3333	40	140	25	0	2217	67		2608	78		16	
C-18	3333	3333	40	140	25	0	2268	68		2735	82		19	
C-19	3333	3333	40	140	25	0	2319	70		2757	83		17	
C-20	3333	3333	40	140	25	0	2417	72		2890	87		18	
C-22	3333	3333	40	140	25	0	2273	68		2737	82		19	
C-24	3333	3333	40	140	25	0	2274	68		2733	82		18	
C-26	3333	3333	40	140	25	0	2173	65		2649	79		20	
C-28	3333	3333	40	140	25	0	1931	58		2395	72		21	
C-30	3333	3333	40	140	25	0	1780	53		2196	66		21	
C-36	3333	3333	40	140	25	0	918	28	*	1141	34	*	22	
C9-C18 Aliphatics	20000	20000	40	140	25	0	12140	61		14463	72		17	
C19-C36 Aliphatics	26667	26667	40	140	25	0	16085	60		19497	73		19	

Column to be used to flag recovery and RPD values outside of QC limits
 * Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

EPH AROMATICS
 SOIL LABORATORY CONTROL SAMPLE
 LABORATORY CONTROL SAMPLE DUPLICATE
 PERCENT RECOVERY

Instrument ID: N
 GC Column: ZB-5ms
 Column ID: 0.25 mm

SDG:
 Non-spiked sample: B080612EASE2
 Spike: L080612EASE2
 Spike duplicate: LD080612EASE2

COMPOUND	LCS SPIKE	LCSD SPIKE	LOWER	UPPER	RPD	NON-SPIKE	SPIKE	SPIKE	SPIKE DUP	SPIKE DUP	RPD	#
	ADDED (ug/kg)	ADDED (ug/kg)	LIMIT	LIMIT	LIMIT	RESULT (ug/kg)	RESULT (ug/kg)	% REC	RESULT (ug/kg)	% REC		
Naphthalene	3333	3333	40	140	30	0	1772	53	1963	59	10	
2-Methylnaphthalene	3333	3333	40	140	30	0	1874	56	2107	63	12	
Acenaphthylene	3333	3333	40	140	30	0	1963	59	2226	67	13	
Acenaphthene	3333	3333	40	140	30	0	1897	57	2154	65	13	
Fluorene	3333	3333	40	140	30	0	2053	62	2363	71	14	
Phenanthrene	3333	3333	40	140	30	0	2191	66	2561	77	16	
Anthracene	3333	3333	40	140	30	0	2199	66	2528	76	14	
Fluoranthene	3333	3333	40	140	30	0	2255	68	2618	79	15	
Pyrene	3333	3333	40	140	30	0	2261	68	2595	78	14	
Benzo[a]anthracene	3333	3333	40	140	30	0	2308	69	2729	82	17	
Chrysene	3333	3333	40	140	30	0	2146	64	2569	77	18	
Benzo[b]fluoranthene	3333	3333	40	140	30	0	2318	70	2878	86	22	
Benzo[k]fluoranthene	3333	3333	40	140	30	0	2192	66	2637	79	18	
Benzo[a]pyrene	3333	3333	40	140	30	0	2271	68	2811	84	21	
Indeno [1,2,3-cd] pyrene	3333	3333	40	140	30	0	2498	75	3103	93	22	
Dibenz [a,h] anthracene	3333	3333	40	140	30	0	2494	75	3062	92	20	
Benzo[g,h,i] perylene	3333	3333	40	140	30	0	2358	71	2925	88	21	

Column to be used to flag recovery and RPD values outside of QC limits
 * Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

EPH AROMATIC BREAKTHROUGH REPORT
OF ALIPHATIC LABORATORY CONTROL SAMPLE

Instrument ID: N

SDG:

GC Column: ZB-5ms

Aliphatic LCS: L080612EASE,ALI

Column ID: 0.25 mm

Aromatic LCS: L080612EASE

COMPOUND	LOWER	UPPER	ALIPHATIC	AROMATIC	% BREAKTHROUGH	
	LIMIT	LIMIT	RESULT (ug/mL)	RESULT (ug/mL)		#
Naphthalene	0	5	0.00	14.1	0.0	
2-Methylnaphthalene	0	5	0.00	14.8	0.0	

Column to be used to flag breakthrough values outside of QC limits

* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery

Comments: _____

EPH AROMATIC BREAKTHROUGH REPORT
OF ALIPHATIC LABORATORY CONTROL SAMPLE

Instrument ID: N

SDG:

GC Column: ZB-5ms

Aliphatic LCS: LD080612EASE,ALI

Column ID: 0.25 mm

Aromatic LCS: LD080612EASE

COMPOUND	LOWER	UPPER	ALIPHATIC	AROMATIC	% BREAKTHROUGH	
	LIMIT	LIMIT	RESULT (ug/mL)	RESULT (ug/mL)		#
Naphthalene	0	5	0.00	18.6	0.0	
2-Methylnaphthalene	0	5	0.00	18.7	0.0	

Column to be used to flag breakthrough values outside of QC limits

* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery

Comments: _____

EPH ALIPHATICS
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE
PERCENT RECOVERY

Instrument ID: J
GC Column: ZB-5ms
Column ID: 0.25 mm

SDG:
Non-spiked sample: 73487-1
Spike: 73487-1,MS
Spike duplicate: 73487-1,MSD

COMPOUND	MS SPIKE	MSD SPIKE	LOWER	UPPER	RPD	NON-SPIKE	SPIKE	SPIKE		SPIKE DUP		SPIKE DUP		RPD	
	ADDED (ug/kg)	ADDED (ug/kg)	LIMIT	LIMIT	LIMIT	RESULT (ug/kg)	RESULT (ug/kg)	% REC	#	RESULT (ug/kg)	% REC	#	RESULT (ug/kg)	% REC	#
C-9	3867	3794	30	140	50	0	2143	55		2078	55				3
C-10	3867	3794	40	140	50	0	2510	65		2449	65				2
C-12	3867	3794	40	140	50	0	2774	72		2652	70				4
C-14	3867	3794	40	140	50	0	2933	76		2878	76				2
C-16	3867	3794	40	140	50	0	3123	81		3030	80				3
C-18	3867	3794	40	140	50	0	3277	85		3260	86				1
C-19	3867	3794	40	140	50	0	3323	86		3011	79				10
C-20	3867	3794	40	140	50	0	3466	90		3413	90				2
C-22	3867	3794	40	140	50	0	3136	81		3114	82				1
C-24	3867	3794	40	140	50	0	3252	84		3218	85				1
C-26	3867	3794	40	140	50	0	3173	82		3168	84				0
C-28	3867	3794	40	140	50	0	2921	76		2906	77				1
C-30	3867	3794	40	140	50	0	2733	71		2757	73				1
C-36	3867	3794	40	140	50	0	1313	34	*	1335	35	*			2
C9-C18 Aliphatics	23203	22763	40	140	50	0	16760	72		16348	72				2
C19-C36 Aliphatics	30937	30350	40	140	50	0	23317	75		22923	76				2

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits

Non-spiked result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

EPH AROMATICS
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE
PERCENT RECOVERY

Instrument ID: N
GC Column: ZB-5ms
Column ID: 0.25 mm

SDG:
Non-spiked sample: 73487-1
Spike: 73487-1,MS
Spike duplicate: 73487-1,MSD

COMPOUND	MS SPIKE	MSD SPIKE	LOWER	UPPER	RPD	NON-SPIKE	SPIKE	SPIKE	SPIKE DUP	SPIKE DUP	RPD	#
	ADDED (ug/kg)	ADDED (ug/kg)	LIMIT	LIMIT	LIMIT	RESULT (ug/kg)	RESULT (ug/kg)	% REC	RESULT (ug/kg)	% REC		
Naphthalene	3867	3794	40	140	50	0	2290	59	2154	57	6	
2-Methylnaphthalene	3867	3794	40	140	50	0	2338	60	2290	60	2	
Acenaphthylene	3867	3794	40	140	50	0	2533	65	2507	66	1	
Acenaphthene	3867	3794	40	140	50	0	2456	64	2366	62	4	
Fluorene	3867	3794	40	140	50	0	2598	67	2572	68	1	
Phenanthrene	3867	3794	40	140	50	0	2759	71	2649	70	4	
Anthracene	3867	3794	40	140	50	0	2757	71	2650	70	4	
Fluoranthene	3867	3794	40	140	50	0	2814	73	2715	72	4	
Pyrene	3867	3794	40	140	50	0	2810	73	2743	72	2	
Benzo[a]anthracene	3867	3794	40	140	50	0	2796	72	2810	74	0	
Chrysene	3867	3794	40	140	50	0	2693	70	2681	71	0	
Benzo[b] fluoranthene	3867	3794	40	140	50	0	3019	78	2951	78	2	
Benzo[k] fluoranthene	3867	3794	40	140	50	0	2825	73	2811	74	1	
Benzo[a] pyrene	3867	3794	40	140	50	0	2936	76	2959	78	1	
Indeno [1,2,3-cd] pyrene	3867	3794	40	140	50	0	3278	85	3276	86	0	
Dibenz [a,h] anthracene	3867	3794	40	140	50	0	3322	86	3399	90	2	
Benzo(g,h,i) perylene	3867	3794	40	140	50	0	3057	79	3070	81	0	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

PCB
DATA SUMMARIES

Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 9, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS101

Lab Sample ID: 73487-1
Matrix: Solid
Percent Solid: 86
Dilution Factor: 1.1
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/08/12

PCB ANALYTICAL RESULTS

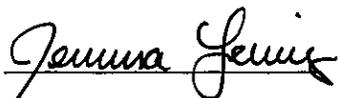
COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Results $\mu\text{g}/\text{kg}$
PCB-1016	36	U
PCB-1221	36	U
PCB-1232	36	U
PCB-1242	36	U
PCB-1248	36	U
PCB-1254	36	U
PCB-1260	36	U

<u>Surrogate Standard Recovery</u>		
2,4,5,6-Tetrachloro-m-xylene	101	%
Decachlorobiphenyl	114	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.
 Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.
 Sample cleanup was conducted according to SW-846 Method 3665A.

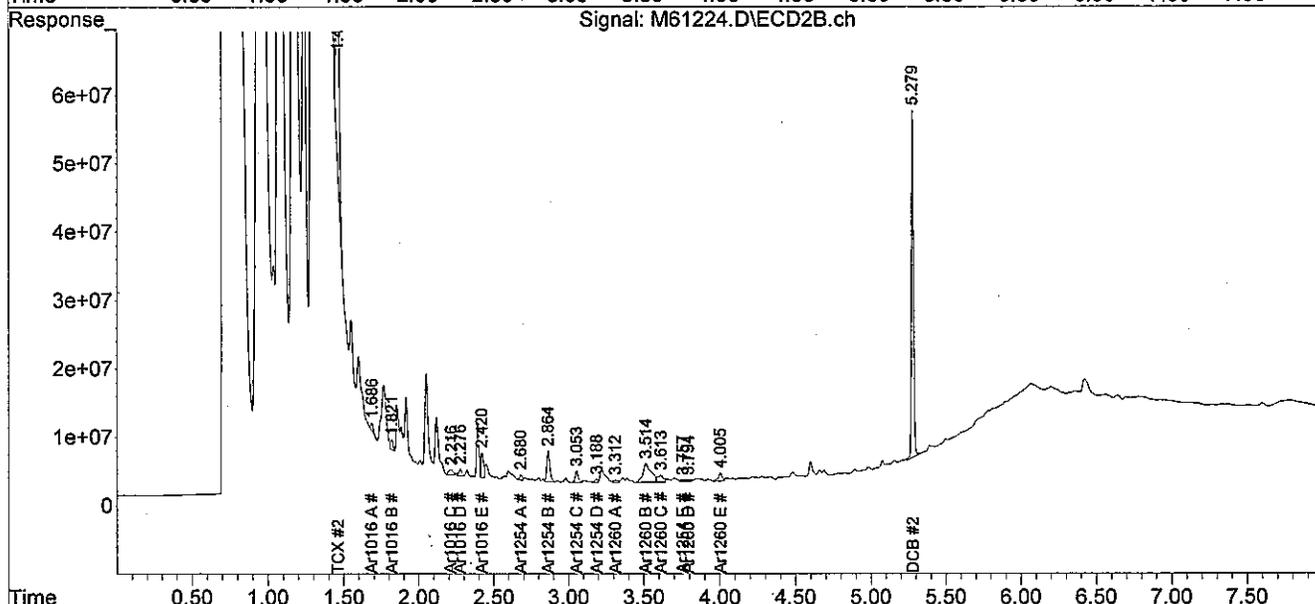
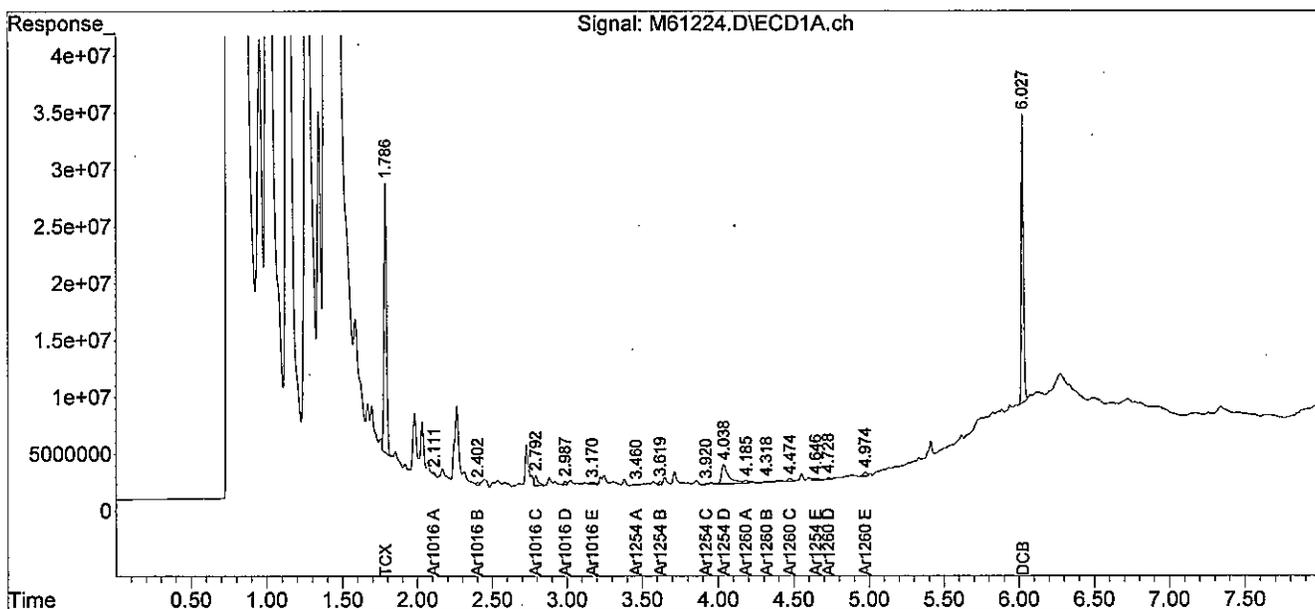
COMMENTS: Results are expressed on a dry weight basis.

Authorized signature 

Data Path : C:\msdchem\1\DATA\080812-M\
 Data File : M61224.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 8 Aug 2012 2:00 pm
 Operator : JK
 Sample : 73487-1,,A/C
 Misc : SOIL
 ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: events.e
 Integration File signal 2: events2.e
 Quant Time: Aug 09 08:47:34 2012
 Quant Method : C:\msdchem\1\METHODS\PCB071612.M
 Quant Title : SW-846 METHOD 8082 Aroclor 1016/1260/1254
 QLast Update : Mon Aug 06 08:47:04 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 2 uL
 Signal #1 Phase : STX-CLPPesticides Signal #2 Phase: STX-CLPPesticides
 Signal #1 Info : 30 m x 0.25mm x 0 Signal #2 Info : 30 m x 0.25mm x 0.25 um



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 9, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS103

Lab Sample ID: 73487-3
Matrix: Solid
Percent Solid: 52
Dilution Factor: 1.9
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/08/12

PCB ANALYTICAL RESULTS		
COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Results $\mu\text{g}/\text{kg}$
PCB-1016	63	U
PCB-1221	63	U
PCB-1232	63	U
PCB-1242	63	U
PCB-1248	63	U
PCB-1254	63	U
PCB-1260	63	U
Surrogate Standard Recovery		
2,4,5,6-Tetrachloro-m-xylene	96	%
Decachlorobiphenyl	91	%
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank		

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.
 Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.
 Sample cleanup was conducted according to SW-846 Method 3665A.

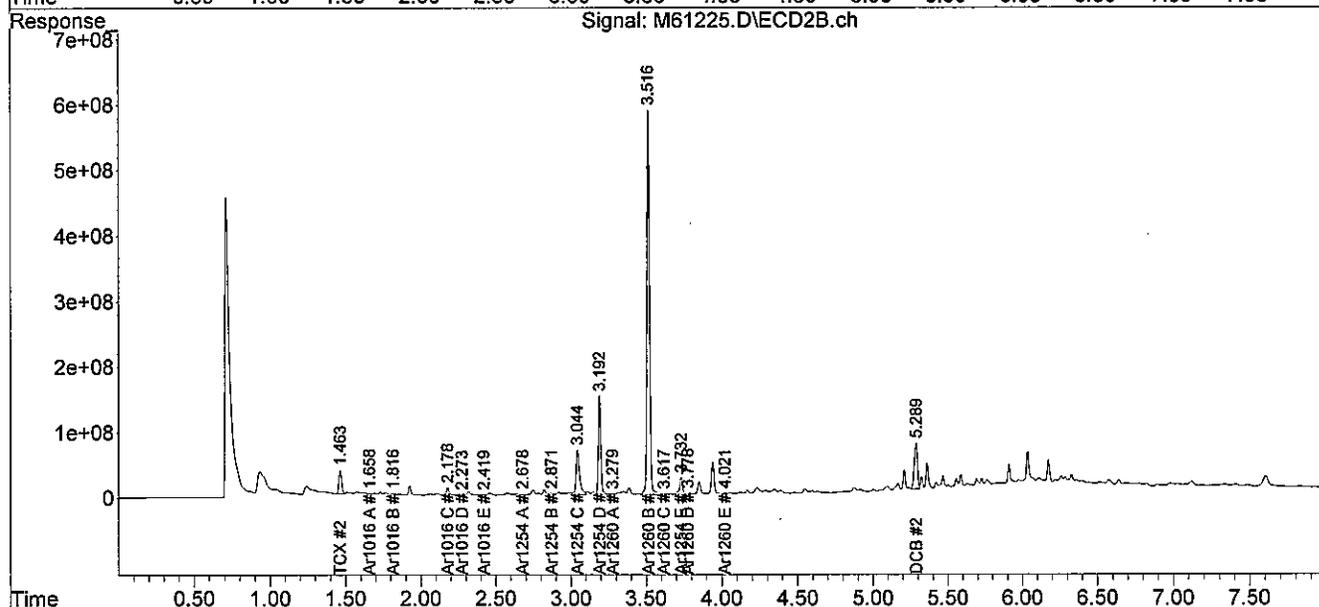
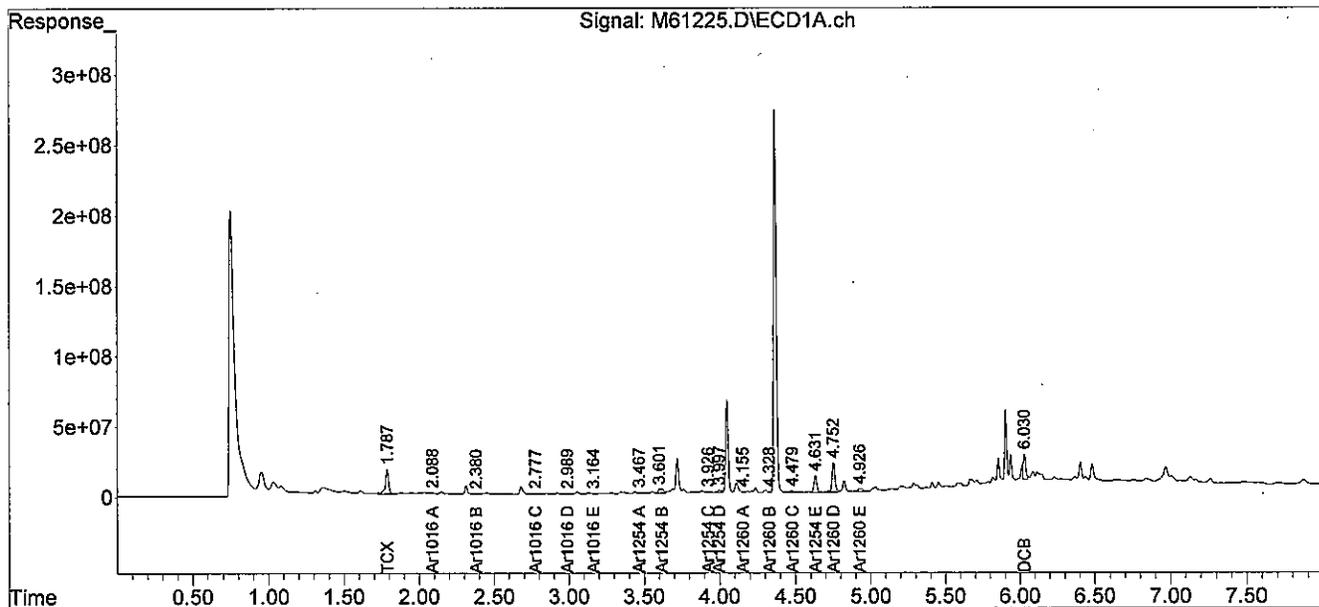
COMMENTS: Results are expressed on a dry weight basis.

Authorized signature 

Data Path : C:\msdchem\1\DATA\080812-M\
 Data File : M61225.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 8 Aug 2012 2:27 pm
 Operator : JK
 Sample : 73487-3,,A/C
 Misc : SOIL
 ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
 Integration File signal 2: events2.e
 Quant Time: Aug 09 08:52:45 2012
 Quant Method : C:\msdchem\1\METHODS\PCB071612.M
 Quant Title : SW-846 METHOD 8082 Aroclor 1016/1260/1254
 QLast Update : Mon Aug 06 08:47:04 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 2 uL
 Signal #1 Phase : STX-CLPPesticides Signal #2 Phase: STX-CLPPesticides
 Signal #1 Info : 30 m x 0.25mm x 0 Signal #2 Info : 30 m x 0.25mm x 0.25 um



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 9, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS106

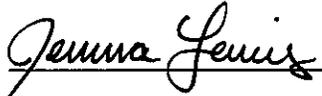
Lab Sample ID: 73487-6
Matrix: Solid
Percent Solid: 94
Dilution Factor: 1.0
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/08/12

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	33	U
PCB-1221	33	U
PCB-1232	33	U
PCB-1242	33	U
PCB-1248	33	U
PCB-1254	33	U
PCB-1260	33	U
Surrogate Standard Recovery		
2,4,5,6-Tetrachloro-m-xylene	80	%
Decachlorobiphenyl	75	%
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank		

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.
 Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.
 Sample cleanup was conducted according to SW-846 Method 3665A.

COMMENTS: Results are expressed on a dry weight basis.

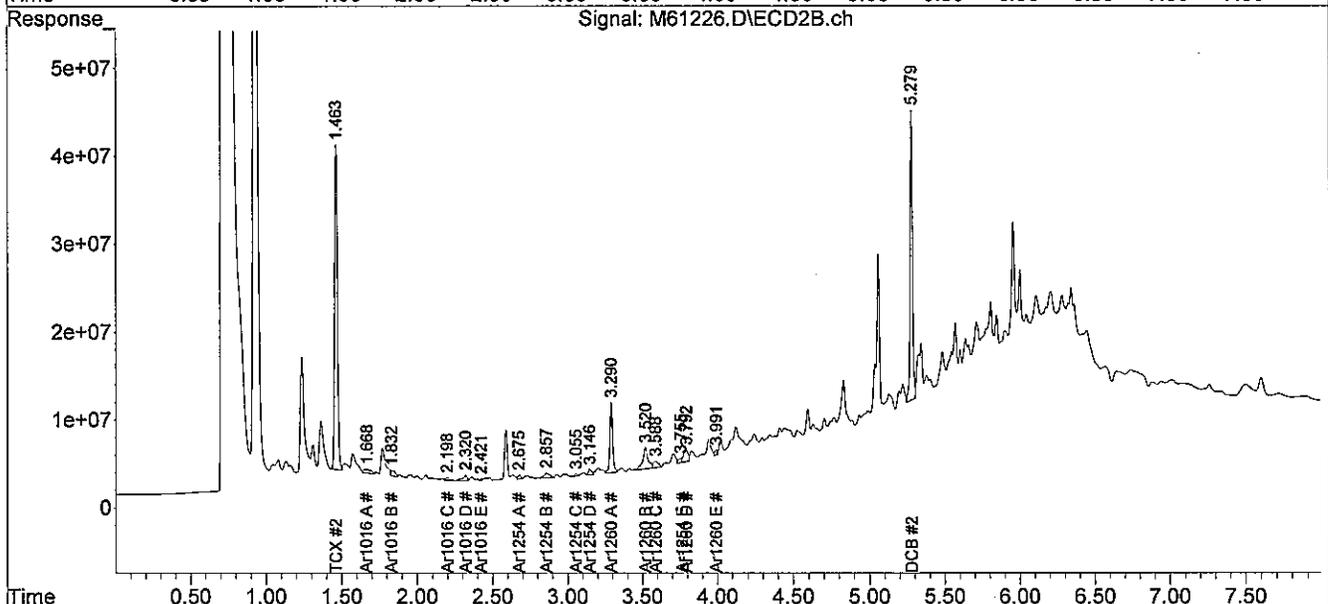
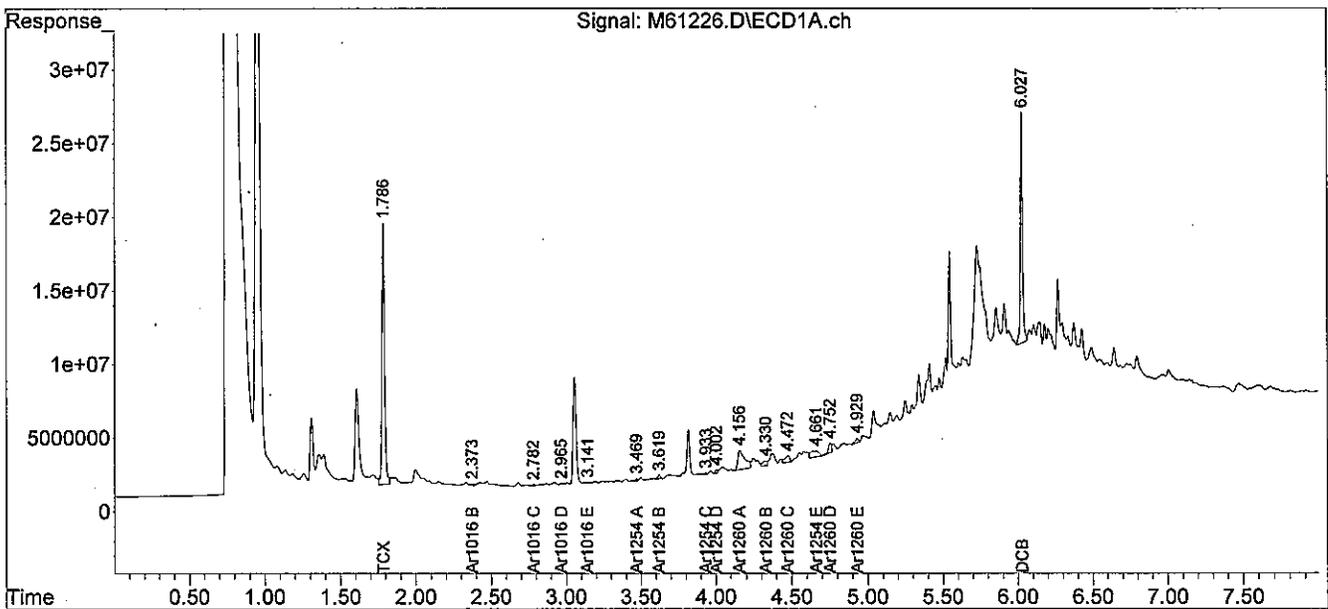
Authorized signature 

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080812-M\
 Data File : M61226.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 8 Aug 2012 2:37 pm
 Operator : JK
 Sample : 73487-6,,A/C
 Misc : SOIL
 ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: events.e
 Integration File signal 2: events2.e
 Quant Time: Aug 09 08:54:23 2012
 Quant Method : C:\msdchem\1\METHODS\PCB071612.M
 Quant Title : SW-846 METHOD 8082 Aroclor 1016/1260/1254
 QLast Update : Mon Aug 06 08:47:04 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 2 uL
 Signal #1 Phase : STX-CLPPesticides Signal #2 Phase: STX-CLPPesticides
 Signal #1 Info : 30 m x 0.25mm x 0 Signal #2 Info : 30 m x 0.25mm x 0.25 um



Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 9, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS112

Lab Sample ID: 73487-12
Matrix: Solid
Percent Solid: 97
Dilution Factor: 1.0
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/08/12

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	33	U
PCB-1221	33	U
PCB-1232	33	U
PCB-1242	33	U
PCB-1248	33	U
PCB-1254	33	U
PCB-1260	33	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	76	%
Decachlorobiphenyl	64	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.
 Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.
 Sample cleanup was conducted according to SW-846 Method 3665A.

COMMENTS: Results are expressed on a dry weight basis.

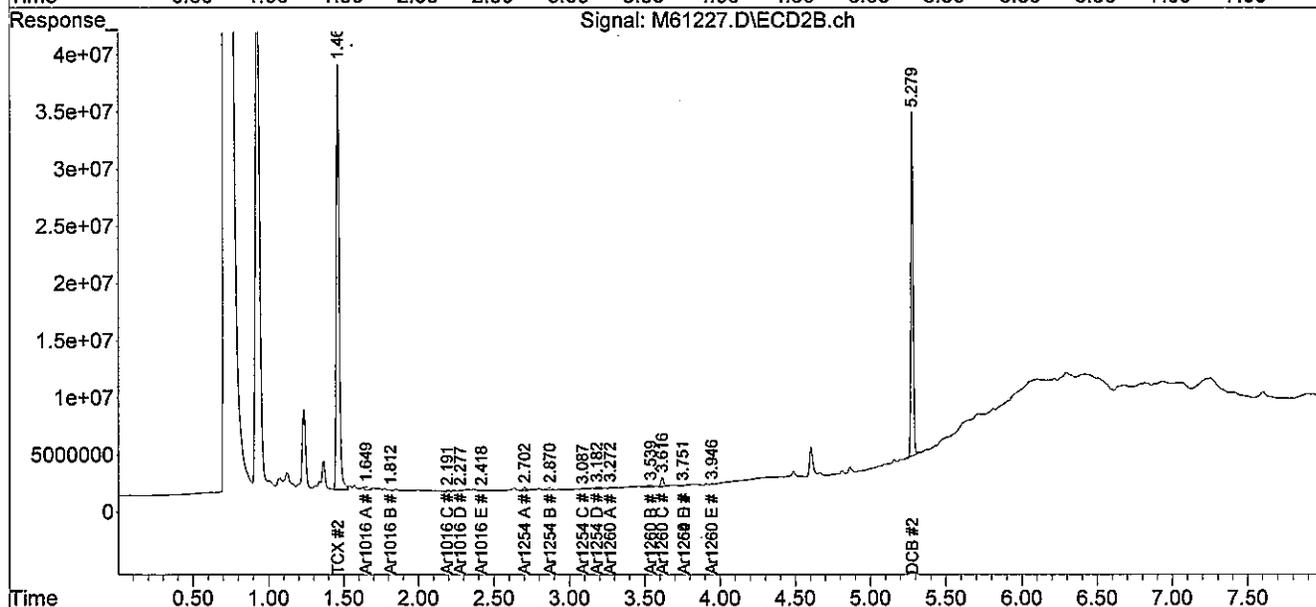
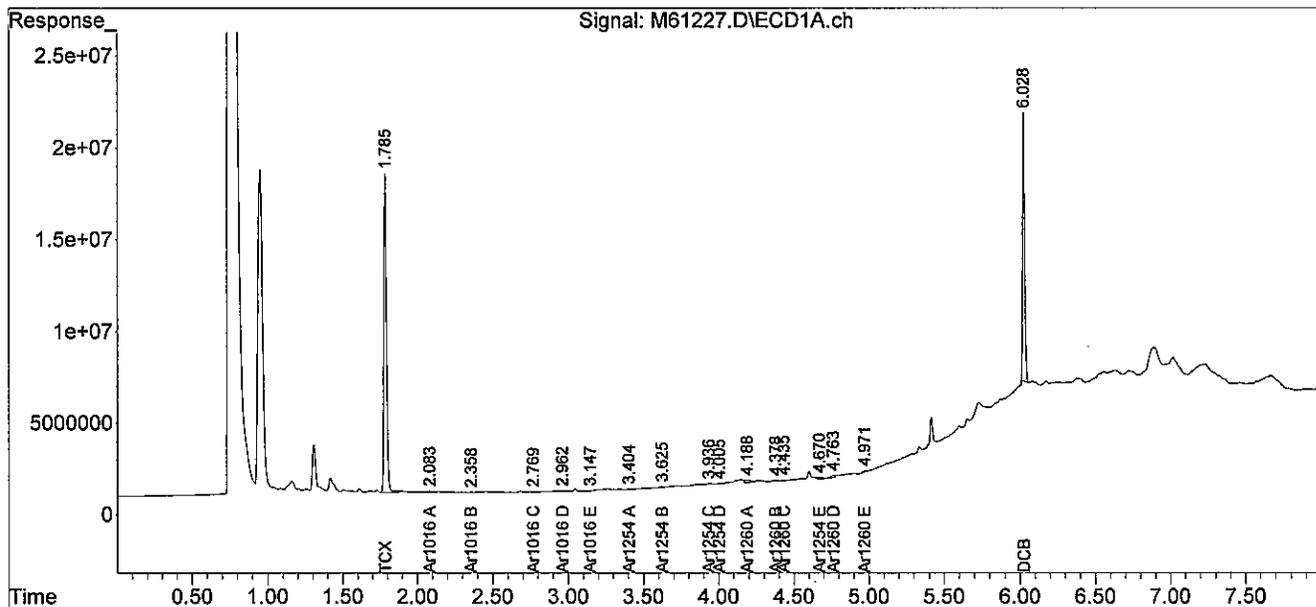
Authorized signature *Jenna Lewis*

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080812-M\
 Data File : M61227.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 8 Aug 2012 2:47 pm
 Operator : JK
 Sample : 73487-12,,A/C
 Misc : SOIL
 ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: events.e
 Integration File signal 2: events2.e
 Quant Time: Aug 08 16:25:06 2012
 Quant Method : C:\msdchem\1\METHODS\PCB071612.M
 Quant Title : SW-846 METHOD 8082 Aroclor 1016/1260/1254
 QLast Update : Mon Aug 06 08:47:04 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 2 uL
 Signal #1 Phase : STX-CLPPesticides Signal #2 Phase: STX-CLPPesticides
 Signal #1 Info : 30 m x 0.25mm x 0 Signal #2 Info : 30 m x 0.25mm x 0.25 um



Mr. Peter Sherr
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

August 9, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: SS10X

Lab Sample ID: 73487-16
Matrix: Solid
Percent Solid: 97
Dilution Factor: 1.0
Collection Date: 08/02/12
Lab Receipt Date: 08/03/12
Extraction Date: 08/06/12
Analysis Date: 08/08/12

PCB ANALYTICAL RESULTS		
COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Results $\mu\text{g}/\text{kg}$
PCB-1016	33	U
PCB-1221	33	U
PCB-1232	33	U
PCB-1242	33	U
PCB-1248	33	U
PCB-1254	33	U
PCB-1260	33	U
Surrogate Standard Recovery		
2,4,5,6-Tetrachloro-m-xylene	82	%
Decachlorobiphenyl	72	%
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank		

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.
Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.
Sample cleanup was conducted according to SW-846 Method 3665A.

COMMENTS: Results are expressed on a dry weight basis.

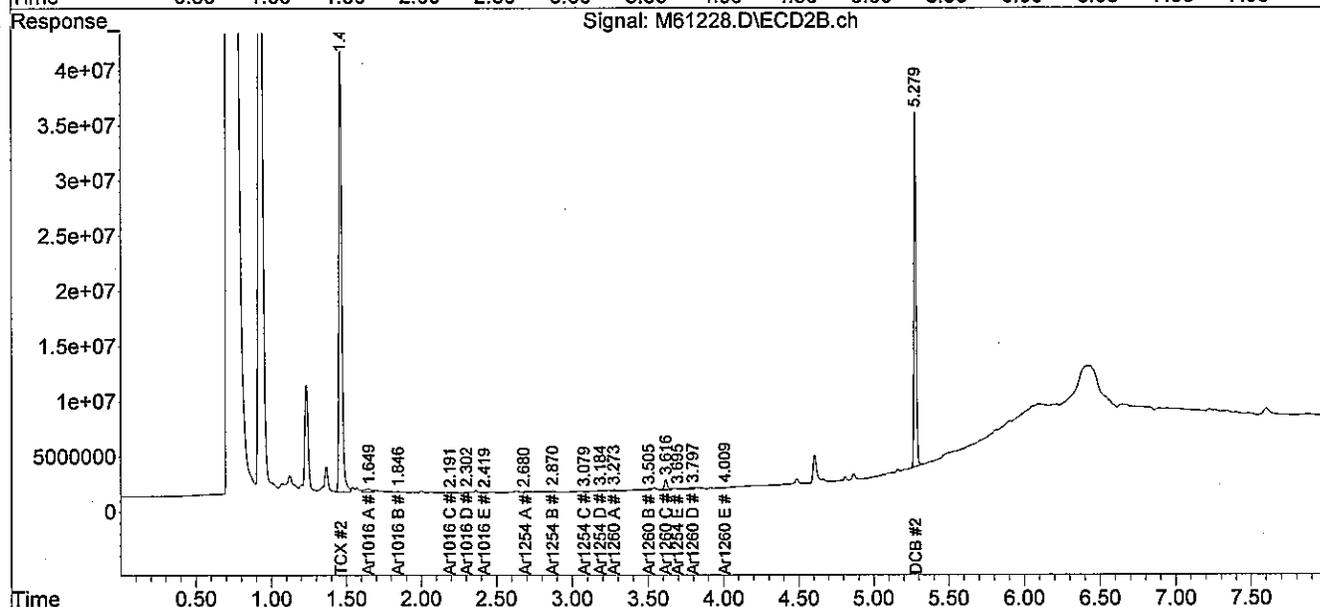
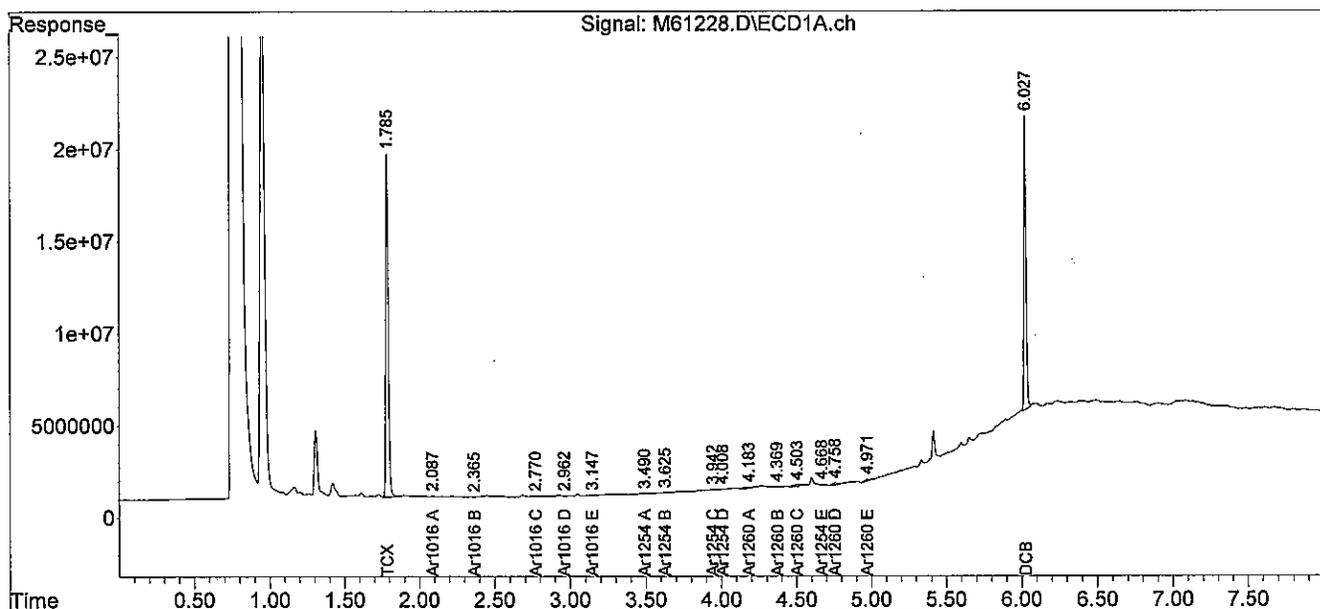
Authorized signature 

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080812-M\
 Data File : M61228.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 8 Aug 2012 2:57 pm
 Operator : JK
 Sample : 73487-16,,A/C
 Misc : SOIL
 ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: events.e
 Integration File signal 2: events2.e
 Quant Time: Aug 09 08:55:36 2012
 Quant Method : C:\msdchem\1\METHODS\PCB071612.M
 Quant Title : SW-846 METHOD 8082 Aroclor 1016/1260/1254
 QLast Update : Mon Aug 06 08:47:04 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 2 uL
 Signal #1 Phase : STX-CLPPesticides Signal #2 Phase: STX-CLPPesticides
 Signal #1 Info : 30 m x 0.25mm x 0 Signal #2 Info : 30 m x 0.25mm x 0.25 um



PCB
QC FORMS

Mr. Peter Sherr
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

August 9, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Belfast Boatyard-38 Waterville Rd.
Project Number: 111.06134
Field Sample ID: Lab QC

Lab Sample ID: B080612PSOX RR
Matrix: Soil
Percent Solid: 100
Dilution Factor: 1.0
Collection Date:
Lab Receipt Date:
Extraction Date: 08/06/12
Analysis Date: 08/08/12

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	33	U
PCB-1221	33	U
PCB-1232	33	U
PCB-1242	33	U
PCB-1248	33	U
PCB-1254	33	U
PCB-1260	33	U
<u>Surrogate Standard Recovery</u>		
2,4,5,6-Tetrachloro-m-xylene	83	%
Decachlorobiphenyl	74	%
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank		

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.
 Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.
 Sample cleanup was conducted according to SW-846 Method 3665A.

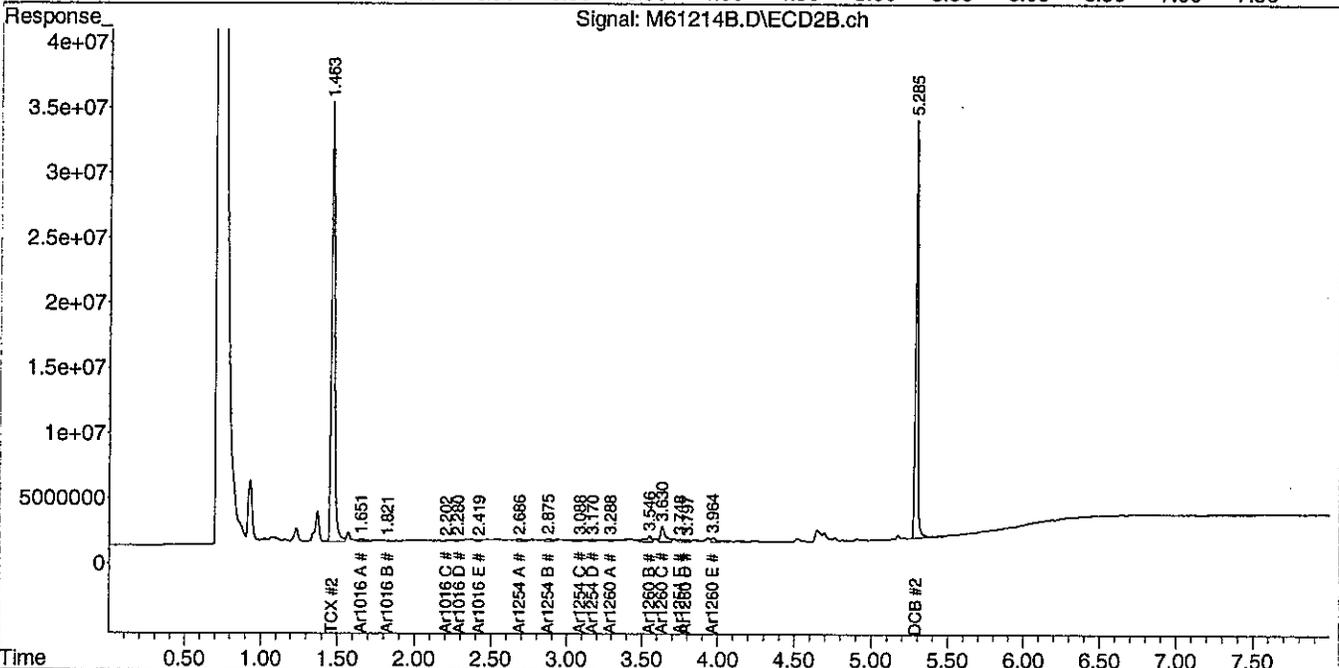
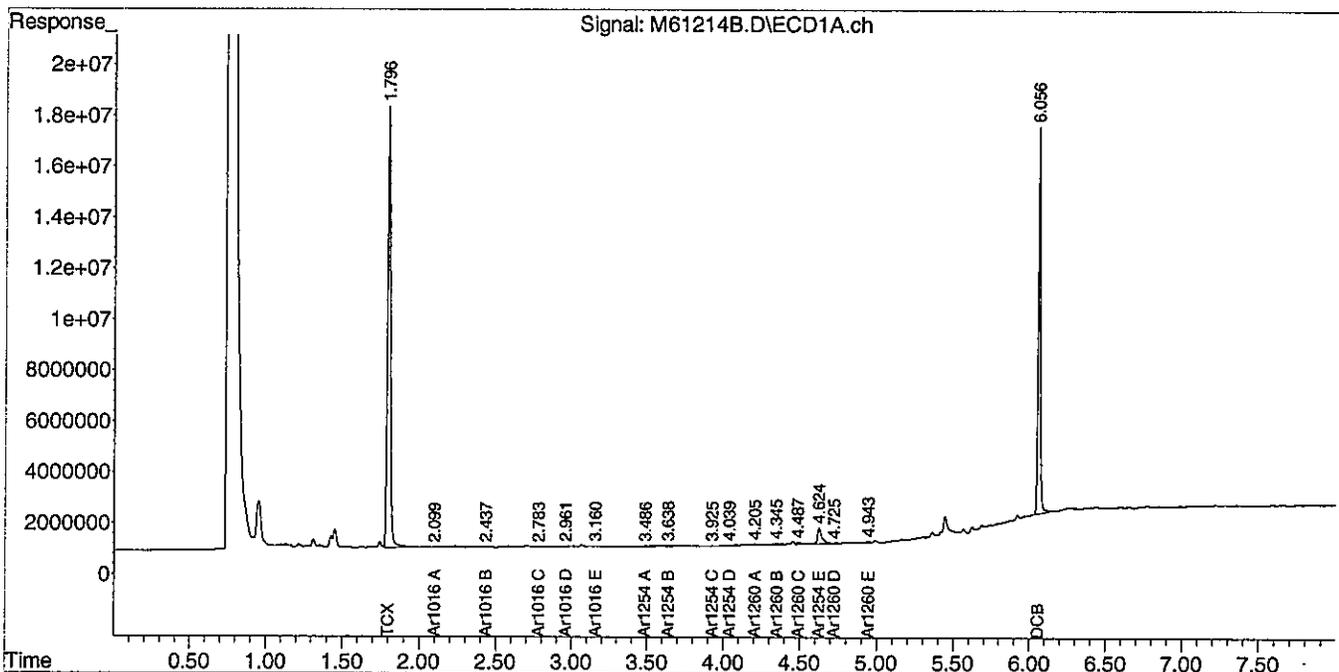
COMMENTS: Results are expressed on a dry weight basis.

Authorized signature 

Data Path : C:\msdchem\1\DATA\080812-M\
 Data File : M61214B.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 8 Aug 2012 12:20 pm
 Operator : JK
 Sample : B080612PSOX,RR,,A/C
 Misc : SOIL
 ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
 Integration File signal 2: events2.e
 Quant Time: Aug 08 16:24:40 2012
 Quant Method : C:\msdchem\1\METHODS\PCB071612.M
 Quant Title : SW-846 METHOD 8082 Aroclor 1016/1260/1254
 QLast Update : Mon Aug 06 08:47:04 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 2 uL
 Signal #1 Phase : STX-CLPPesticides Signal #2 Phase: STX-CLPPesticides
 Signal #1 Info : 30 m x 0.25mm x 0 Signal #2 Info : 30 m x 0.25mm x 0.25 um



PCB SOIL
LABORATORY CONTROL SAMPLE/DUPLICATE
PERCENT RECOVERY

Instrument ID: M

GC Column #1: STX-CLPesticides I

Column ID: 0.25 mm

GC Column #2: STX-CLPesticides II

Column ID: 0.25 mm

SDG: 73487

Non-spiked sample: B080612PSOX,RR,,A/C

Spike: L080612PSOX,RR,,A/C

Spike duplicate: LD080612PSOX,RR,,A/C

COMPOUND	LCS SPIKE	LCS D SPIKE	LOWER	UPPER	RPD	NON-SPIKE	SPIKE	SPIKE		SPIKE DUP		SPIKE DUP		RPD	
	ADDED (ug/kg)	ADDED (ug/kg)	LIMIT	LIMIT	LIMIT	RESULT (ug/kg)	RESULT (ug/kg)	% REC	#	RESULT (ug/kg)	% REC	#	RPD	#	
PCB 1016	200	200	65	140	30	0	160	80		154	77		3.8		
PCB 1260	200	200	60	130	30	0	162	81		156	78		4.1		
PCB 1016 #2	200	200	65	140	30	0	153	76		144	72		6.0		
PCB 1260 #2	200	200	60	130	30	0	164	82		158	79		3.3		

Column to be used to flag recovery and RPD values outside of QC limits

* Values outside QC limits

LCS/LCSD spike added values have been weight adjusted.

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

PCB SOIL
MATRIX SPIKE/DUPLICATE
PERCENT RECOVERY

Instrument ID: M

GC Column #1: STX-CLPesticides I

Column ID: 0.25 mm

GC Column #2: STX-CLPesticides II

Column ID: 0.25 mm

SDG: 73487

Non-spiked sample: 73487-16,,A/C

Spike: 73487-16,MS,,A/C

Spike duplicate: 73487-16,MSD,,A/C

COMPOUND	MS SPIKE	MSD SPIKE	LOWER	UPPER	RPD	NON-SPIKE	SPIKE	SPIKE		SPIKE DUP		SPIKE DUP		RPD	
	ADDED (ug/kg)	ADDED (ug/kg)	LIMIT	LIMIT	LIMIT	RESULT (ug/kg)	RESULT (ug/kg)	% REC	#	RESULT (ug/kg)	% REC	#	RPD	#	
PCB 1016	195	194	65	140	30	0	148	76		159	82		7.3		
PCB 1260	195	194	60	130	30	0	133	68		149	77		11.0		
PCB 1016 #2	195	194	65	140	30	0	141	72		150	77		6.1		
PCB 1260 #2	195	194	60	130	30	0	133	68		157	81		16.4		

Column to be used to flag recovery and RPD values outside of QC limits

* Values outside QC limits

MS/MSD spike added values have been weight adjusted.

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

METALS
DATA SUMMARIES



Client: Ransom Consulting, Inc.
Project name: Belfast Boatyard-38 Waterville Rd.
Project NO: 111.06134

Sample ID: SS101

Report Date: 08/08/2012

SDG ID: 73487
Lab ID: 73487-1
Date Sampled: 08/02/12
Date Received: 08/03/12
Matrix: Solid
% Solid: 86
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	12		mg/Kg	0.57	1.1	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/Kg	0.29	0.57	08/07/12	08/08/12	TD	1.00
Copper	27		mg/Kg	0.72	1.4	08/07/12	08/08/12	TD	1.00
Lead	12		mg/Kg	0.14	0.29	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
 Project name: Belfast Boatyard-38 Waterville Rd.
 Project NO: 111.06134

Sample ID: SS102

Report Date: 08/08/2012

SDG ID: 73487
 Lab ID: 73487-2
 Date Sampled: 08/02/12
 Date Received: 08/03/12
 Matrix: Solid
 % Solid: 85
 Method: 6010B
 Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	10		mg/Kg	0.55	1.1	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/Kg	0.27	0.55	08/07/12	08/08/12	TD	1.00
Copper	245		mg/Kg	0.68	1.4	08/07/12	08/08/12	TD	1.00
Lead	26		mg/Kg	0.14	0.27	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
 Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
Project name: Belfast Boatyard-38 Waterville Rd.
Project NO: 111.06134

Sample ID: SS103

Report Date: 08/08/2012

SDG ID: 73487
Lab ID: 73487-3
Date Sampled: 08/02/12
Date Received: 08/03/12
Matrix: Solid
% Solid: 52
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	15		mg/Kg	0.8	1.6	08/07/12	08/08/12	TD	1.00
Cadmium	1.1		mg/Kg	0.4	0.8	08/07/12	08/08/12	TD	1.00
Copper	4840		mg/Kg	10	20	08/07/12	08/08/12	TD	10
Lead	229		mg/Kg	0.2	0.4	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
 Project name: Belfast Boatyard-38 Waterville Rd.
 Project NO: 111.06134

Sample ID: SS105

Report Date: 08/08/2012

SDG ID: 73487
 Lab ID: 73487-5
 Date Sampled: 08/02/12
 Date Received: 08/03/12
 Matrix: Solid
 % Solid: 91
 Method: 6010B
 Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	8.9		mg/Kg	0.5	1	08/07/12	08/08/12	TD	1.00
Cadmium	0.26	J	mg/Kg	0.25	0.5	08/07/12	08/08/12	TD	1.00
Copper	1980		mg/Kg	6.2	12	08/07/12	08/08/12	TD	10
Lead	38		mg/Kg	0.12	0.25	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
 Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
 Project name: Belfast Boatyard-38 Waterville Rd.
 Project NO: 111.06134

Sample ID: SS106

Report Date: 08/08/2012

SDG ID: 73487
 Lab ID: 73487-6
 Date Sampled: 08/02/12
 Date Received: 08/03/12
 Matrix: Solid
 % Solid: 94
 Method: 6010B
 Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	13		mg/Kg	0.49	0.98	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/Kg	0.24	0.49	08/07/12	08/08/12	TD	1.00
Copper	3800		mg/Kg	6.1	12	08/07/12	08/08/12	TD	10
Lead	16		mg/Kg	0.12	0.24	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
 Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
Project name: Belfast Boatyard-38 Waterville Rd.
Project NO: 111.06134

Sample ID: SS107

Report Date: 08/08/2012

SDG ID: 73487
Lab ID: 73487-7
Date Sampled: 08/02/12
Date Received: 08/03/12
Matrix: Solid
% Solid: 98
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	2.6		mg/Kg	0.47	0.95	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/Kg	0.24	0.47	08/07/12	08/08/12	TD	1.00
Copper	12		mg/Kg	0.59	1.2	08/07/12	08/08/12	TD	1.00
Lead	3.3		mg/Kg	0.12	0.24	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
 Project name: Belfast Boatyard-38 Waterville Rd.
 Project NO: 111.06134

Sample ID: SS108

Report Date: 08/08/2012

SDG ID: 73487
 Lab ID: 73487-8
 Date Sampled: 08/02/12
 Date Received: 08/03/12
 Matrix: Solid
 % Solid: 96
 Method: 6010B
 Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	U		mg/Kg	49	99	08/07/12	08/08/12	TD	100
Cadmium	U		mg/Kg	25	49	08/07/12	08/08/12	TD	100
Copper	25100		mg/Kg	62	124	08/07/12	08/08/12	TD	100
Lead	1300		mg/Kg	12	25	08/07/12	08/08/12	TD	100

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments: Dilution required due to matrix interference.

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
 Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
Project name: Belfast Boatyard-38 Waterville Rd.
Project NO: 111.06134

Sample ID: SS109

Report Date: 08/08/2012

SDG ID: 73487
Lab ID: 73487-9
Date Sampled: 08/02/12
Date Received: 08/03/12
Matrix: Solid
% Solid: 97
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	U		mg/Kg	24	48	08/07/12	08/08/12	TD	50
Cadmium	U		mg/Kg	12	24	08/07/12	08/08/12	TD	50
Copper	106000		mg/Kg	302	604	08/07/12	08/08/12	TD	500
Lead	9970		mg/Kg	6	12	08/07/12	08/08/12	TD	50

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
 Project name: Belfast Boatyard-38 Waterville Rd.
 Project NO: 111.06134

Sample ID: SS110

Report Date: 08/08/2012

SDG ID: 73487
 Lab ID: 73487-10
 Date Sampled: 08/02/12
 Date Received: 08/03/12
 Matrix: Solid
 % Solid: 92
 Method: 6010B
 Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	U		mg/Kg	27	53	08/07/12	08/08/12	TD	50
Cadmium	U		mg/Kg	13	27	08/07/12	08/08/12	TD	50
Copper	213000		mg/Kg	333	666	08/07/12	08/08/12	TD	500
Lead	698		mg/Kg	6.7	13	08/07/12	08/08/12	TD	50

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
 Preparation: SW-846 3050B



Client: Ransom Consulting, Inc.
Project name: Belfast Boatyard-38 Waterville Rd.
Project NO: 111.06134

Sample ID: SS111

Report Date: 08/08/2012

SDG ID: 73487
Lab ID: 73487-11
Date Sampled: 08/02/12
Date Received: 08/03/12
Matrix: Solid
% Solid: 98
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	13		mg/Kg	0.51	1	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/Kg	0.26	0.51	08/07/12	08/08/12	TD	1.00
Copper	1520		mg/Kg	6.4	13	08/07/12	08/08/12	TD	10
Lead	16		mg/Kg	0.13	0.26	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
 Project name: Belfast Boatyard-38 Waterville Rd.
 Project NO: 111.06134

Sample ID: SS112

Report Date: 08/08/2012

SDG ID: 73487
 Lab ID: 73487-12
 Date Sampled: 08/02/12
 Date Received: 08/03/12
 Matrix: Solid
 % Solid: 97
 Method: 6010B
 Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	11		mg/Kg	0.5	0.99	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/Kg	0.25	0.5	08/07/12	08/08/12	TD	1.00
Copper	13		mg/Kg	0.62	1.2	08/07/12	08/08/12	TD	1.00
Lead	9*		mg/Kg	0.12	0.25	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments: * The MS/MSD on this sample had low recoveies for Pb. The laboratory control sample was in control.

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
 Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
Project name: Belfast Boatyard-38 Waterville Rd.
Project NO: 111.06134

Sample ID: SS113

Report Date: 08/09/2012

SDG ID: 73487
Lab ID: 73487-13
Date Sampled: 08/02/12
Date Received: 08/03/12
Matrix: Solid
% Solid: 91
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	15		mg/Kg	0.48	0.96	08/07/12	08/08/12	TD	1.00
Cadmium	2.4		mg/Kg	0.24	0.48	08/07/12	08/08/12	TD	1.00
Copper	2260		mg/Kg	6	12	08/07/12	08/08/12	TD	10
Lead	27		mg/Kg	0.12	0.24	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
Project name: Belfast Boatyard-38 Waterville Rd.
Project NO: 111.06134

Sample ID: SS114

Report Date: 08/09/2012

SDG ID: 73487
Lab ID: 73487-14
Date Sampled: 08/02/12
Date Received: 08/03/12
Matrix: Solid
% Solid: 97
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	9.5		mg/Kg	0.51	1	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/Kg	0.25	0.51	08/07/12	08/08/12	TD	1.00
Copper	43		mg/Kg	0.63	1.3	08/07/12	08/08/12	TD	1.00
Lead	12		mg/Kg	0.13	0.25	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
Project name: Belfast Boatyard-38 Waterville Rd.
Project NO: 111.06134

Sample ID: SS115

Report Date: 08/09/2012

SDG ID: 73487
Lab ID: 73487-15
Date Sampled: 08/02/12
Date Received: 08/03/12
Matrix: Solid
% Solid: 81
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	72		mg/Kg	0.59	1.2	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/Kg	0.3	0.59	08/07/12	08/08/12	TD	1.00
Copper	639		mg/Kg	1.5	3	08/07/12	08/08/12	TD	2.00
Lead	295		mg/Kg	0.15	0.3	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
 Project name: Belfast Boatyard-38 Waterville Rd.
 Project NO: 111.06134
 Sample ID: SS10X

Report Date: 08/09/2012

SDG ID: 73487
 Lab ID: 73487-16
 Date Sampled: 08/02/12
 Date Received: 08/03/12
 Matrix: Solid
 % Solid: 97
 Method: 6010B
 Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	11		mg/Kg	0.51	1	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/Kg	0.26	0.51	08/07/12	08/08/12	TD	1.00
Copper	10		mg/Kg	0.64	1.3	08/07/12	08/08/12	TD	1.00
Lead	6		mg/Kg	0.13	0.26	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
 Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
 Project name: Belfast Boatyard-38 Waterville Rd.
 Project NO: 111.06134

Sample ID: BK-1

Report Date: 08/09/2012

SDG ID: 73487
 Lab ID: 73487-17
 Date Sampled: 08/02/12
 Date Received: 08/03/12
 Matrix: Solid
 % Solid: 78
 Method: 6010B
 Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	3.6		mg/Kg	1.3	2.6	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/Kg	0.64	1.3	08/07/12	08/08/12	TD	1.00
Copper	12		mg/Kg	1.6	3.2	08/07/12	08/08/12	TD	1.00
Lead	17		mg/Kg	0.32	0.64	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
 Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
Project name: Belfast Boatyard-38 Waterville Rd.
Project NO: 111.06134

Sample ID: BK-2

Report Date: 08/09/2012

SDG ID: 73487
Lab ID: 73487-18
Date Sampled: 08/02/12
Date Received: 08/03/12
Matrix: Solid
% Solid: 70
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	5.6		mg/Kg	1.4	2.8	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/Kg	0.69	1.4	08/07/12	08/08/12	TD	1.00
Copper	21		mg/Kg	1.7	3.4	08/07/12	08/08/12	TD	1.00
Lead	42		mg/Kg	0.34	0.69	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
Preparation: SW-846 3050B



Client: Ransom Consulting, Inc.
Project name: Belfast Boatyard-38 Waterville Rd.
Project NO: 111.06134

Sample ID: BK-3

Report Date: 08/09/2012

SDG ID: 73487
Lab ID: 73487-19
Date Sampled: 08/02/12
Date Received: 08/03/12
Matrix: Solid
% Solid: 69
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	3.4		mg/Kg	0.6	1.2	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/Kg	0.3	0.6	08/07/12	08/08/12	TD	1.00
Copper	2.3		mg/Kg	0.75	1.5	08/07/12	08/08/12	TD	1.00
Lead	8.8		mg/Kg	0.15	0.3	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
Preparation: SW-846 3050B

Client: Ransom Consulting, Inc.
Project name: Belfast Boatyard-38 Waterville Rd.
Project NO: 111.06134

Sample ID: MW101

Report Date: 08/09/2012

SDG ID: 73487
Lab ID: 73487-21
Date Sampled: 08/02/12
Date Received: 08/03/12
Matrix: Aqueous
% Solid: NA
Method: 6010B
Preparation: 3005A

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	U		mg/L	0.004	0.008	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/L	0.002	0.003	08/07/12	08/08/12	TD	1.00
Copper	U		mg/L	0.013	0.025	08/07/12	08/08/12	TD	1.00
Lead	U		mg/L	0.003	0.005	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
Preparation: SW-846 Method 3005A

Client: Ransom Consulting, Inc.
Project name: Belfast Boatyard-38 Waterville Rd.
Project NO: 111.06134

Sample ID: MWX

Report Date: 08/09/2012

SDG ID: 73487
Lab ID: 73487-22
Date Sampled: 08/02/12
Date Received: 08/03/12
Matrix: Aqueous
% Solid: NA
Method: 6010B
Preparation: 3005A

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	U		mg/L	0.004	0.008	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/L	0.002	0.003	08/07/12	08/08/12	TD	1.00
Copper	U		mg/L	0.013	0.025	08/07/12	08/08/12	TD	1.00
Lead	U		mg/L	0.003	0.005	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
Preparation: SW-846 Method 3005A

Client: Ransom Consulting, Inc.
Project name: Belfast Boatyard-38 Waterville Rd.
Project NO: 111.06134

Sample ID: PW101

Report Date: 08/09/2012

SDG ID: 73487
Lab ID: 73487-23
Date Sampled: 08/02/12
Date Received: 08/03/12
Matrix: Aqueous
% Solid: NA
Method: 6010B
Preparation: 3005A

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	0.044		mg/L	0.004	0.008	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/L	0.002	0.003	08/07/12	08/08/12	TD	1.00
Copper	U		mg/L	0.013	0.025	08/07/12	08/08/12	TD	1.00
Lead	U		mg/L	0.003	0.005	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
Preparation: SW-846 Method 3005A

Client: Ransom Consulting, Inc.
 Project name: Belfast Boatyard-38 Waterville Rd.
 Project NO: 111.06134

Sample ID: PW DUP

Report Date: 08/09/2012

SDG ID: 73487
 Lab ID: 73487-24
 Date Sampled: 08/02/12
 Date Received: 08/03/12
 Matrix: Aqueous
 % Solid: NA
 Method: 6010B
 Preparation: 3005A

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	0.044		mg/L	0.004	0.008	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/L	0.002	0.003	08/07/12	08/08/12	TD	1.00
Copper	U		mg/L	0.013	0.025	08/07/12	08/08/12	TD	1.00
Lead	U		mg/L	0.003	0.005	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
 Preparation: SW-846 Method 3005A

METALS
QC FORMS

AEL_Documents:_TopLevelOldServer:AEL Documents LLC:Pkg Dividers:METALSQC.doc

Client: Ransom Consulting, Inc.
 Project name: Belfast Boatyard-38 Waterville Rd.
 Project NO: 111.06134

Sample ID: Lab QC

Report Date: 08/09/2012

SDG ID: 73487
 Lab ID: B080712MW
 Date Sampled: NA
 Date Received: NA
 Matrix: Aqueous
 % Solid: NA
 Method: 6010B
 Preparation: 3005A

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	U		mg/L	0.004	0.008	08/07/12	08/08/12	TD	1.00
Cadmium	U		mg/L	0.002	0.003	08/07/12	08/08/12	TD	1.00
Copper	U		mg/L	0.013	0.025	08/07/12	08/08/12	TD	1.00
Lead	U		mg/L	0.003	0.005	08/07/12	08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
 Preparation: SW-846 Method 3005A

Client: Ransom Consulting, Inc.
 Project name: Belfast Boatyard-38 Waterville Rd.
 Project NO: 111.06134
 Sample ID: Lab QC

Report Date: 08/08/2012

SDG ID: 73487
 Lab ID: B080712MS
 Date Sampled: NA
 Date Received: NA
 Matrix: Solid
 % Solid: 100
 Method: 6010B
 Preparation: 3050B

Metals Results

Analyte	Result	Qualifier	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic	U		mg/Kg	0.5	1		08/08/12	TD	1.00
Cadmium	U		mg/Kg	0.25	0.5		08/08/12	TD	1.00
Copper	U		mg/Kg	0.63	1.3		08/08/12	TD	1.00
Lead	U		mg/Kg	0.13	0.25		08/08/12	TD	1.00

Qualifier Description: U = Undetected B = Detected in Blank J = Estimated Value E = Exceeds Calibration Range

Comments:

Method Description: EPA Method 6010B Inductively Coupled Plasma - Atomic Emissions Spectrometry, Revision 2 December 1996.
 Preparation: SW-846 3050B

Metals
Laboratory Control Sample
Percent Recovery

Method: 6010B
Matrix: Soil
Date Analyzed: 8/8/2012

SDG: 73487
Non-spiked Sample B080712MS
Spike: L080712MS

Analyte	Spike added	LCS Result	Unit	% Rec	Low Limit	High Limit
Arsenic	49.1	60.7	mg/kg	124%	32.4	65.8
Cadmium	67.9	64.9	mg/kg	96%	49.7	95
Copper	50.8	45.3	mg/kg	89%	36.5	65.1
Lead	82.8	75.1	mg/kg	91%	57.5	108

Analytics Environmental Laboratory LLC
 Melissa Gullf QA/QC Officer 603-436-5111
 195 Commerce Way Suite E
 Portsmouth NH 03801

Account # 2041

USEPA Lab ID NH00032
 Study #
 Study Type Internal PT

NPDES ID #
 Open Date
 Close Date

NELAC #	Component	Method Code	Method Description	</>	Reported Value	Assigned Value	Acceptance Limits		Performance Evaluation		
							Low	High			
Part#55103	Lot#021512	RCRA Metals in Soil #2	NELAC Additional Analytes							Invoice# 125702	Units mg/Kg
1000	Aluminum					11165	5280	18759			
1035	Calcium					1813	1154	2472			
1070	Iron					11517	3208	19826			
1125	Potassium					2264	1349	3199			
1085	Magnesium					2165	1317	3038			
1155	Sodium					606	327	885			
Part#55102	Lot#030912	RCRA Metals in Soil #1	NELAC Additional Analytes							Invoice# 125702	Units mg/Kg
1005	Antimony					59.5	11.3	162			
1010	Arsenic					49.1	32.4	65.8			
1015	Barium					111	79.6	142			
1020	Beryllium					43.7	31.5	58.3			
1025	Boron					67.1	33.5	101			
1030	Cadmium					67.9	49.7	95			
1040	Chromium					57.1	38.6	75.6			
1050	Cobalt					36	26.7	48.2			
1055	Copper					50.8	36.5	65.1			
1075	Lead					82.8	57.5	108			
1090	Manganese					274	202	346			
1095	Mercury					6.91	3.54	10.3			
1100	Molybdenum					33.3	21	45.6			
1105	Nickel					53.5	37.2	71.9			
1140	Selenium					48.9	28.3	71.3			
1150	Silver					31	20.2	41.8			
1175	Tin					108	62.1	199			
1160	Strontium					62.1	43.3	84.8			
1165	Thallium					39.3	23.7	57.2			
1180	Titanium					288	0	889			
1185	Vanadium					96.1	62.4	130			
1190	Zinc					90.7	57.3	124			

ABSOLUTE STANDARDS, INC., ISO 9001 Registered, (NSF) • PO BOX 5585, HAMDEN, CT 06518, PHONE (203) 281-2917, FAX (203) 281-2922 (203) 281-2922
 [This Form: Performance Evaluation Report Form, Rev:4, Date Issued:02202002] [This Report: 2041 WP 071312.pdf, Page 1 of 4 Printed: 7/13/2012, 12:36:18 PM]
 Samples were prepared according to the principles outlined in the "2003 NELAC STANDARD"
 and the current NELAC Fields of Proficiency Testing Tables, FoPTs.
 All Part #'s are formulated and verified under Absolutes' NELAC scope, (A2LA #2429.01).

Metals
Matrix Spike/Duplicate
Percent Recovery

Method: 6010B
Matrix: Soil
Date Analyzed: 8/8/2012

SDG: 73487
Non-spiked Sample 73487-12
Spike: 73487-12 MS
Spike Duplicate: 73487-12 MSD

Analyte	Sample Result	Spike added	MS Result	MS Qualifier	Unit	% Rec	% Rec Limits
Arsenic	11.14	25	31.84		mg/kg	79%	75-125
Cadmium	0.00	25	20.97		mg/kg	84%	75-125
Copper	12.72	25	37.40		mg/kg	99%	75-125
Lead	9.05	25	26.88		mg/kg	71%	75-125

Analyte	Sample Result	Spike added	MSD Result	MSD Qualifier	Unit	% Rec	% Rec Limits	RPD	RPD Limit
Arsenic	11.14	25	32.41		mg/kg	77%	75-125	2%	25
Cadmium	0.00	25	21.16		mg/kg	85%	75-125	1%	25
Copper	12.72	25	34.55		mg/kg	87%	75-125	8%	25
Lead	9.05	25	26.88		mg/kg	71%	75-125	0%	25

Metals
 Laboratory Control Sample
 Laboratory Control Sample Duplicate
 Percent Recovery

Method: 6010B
 Matrix: Aqueous
 Date Analyzed: 8/8/2012

SDG: 73487
 Non-spiked Sample B080712MW
 Spike: L080712MW
 Spike Duplicate: LD080712MW

Analyte	Spike added	LCS Result	Unit	% Rec	% Rec Limits
Arsenic	0.5	0.5366	mg/L	107%	80-120
Cadmium	0.5	0.515	mg/L	103%	80-120
Copper	0.5	0.5312	mg/L	106%	80-120
Lead	0.5	0.5238	mg/L	105%	80-120

Analyte	Spike added	LCSD Result	Unit	% Rec	% Rec Limits	RPD	RPD Limit
Arsenic	0.5	0.5366	mg/L	107%	80-120	0%	25
Cadmium	0.5	0.5144	mg/L	103%	80-120	0%	25
Copper	0.5	0.5295	mg/L	106%	80-120	0%	25
Lead	0.5	0.5202	mg/L	104%	80-120	1%	25

Metals
Matrix Spike/Duplicate
Percent Recovery

Method: 6010B
Matrix: Aqueous
Date Analyzed: 8/8/2012

SDG: 73487
Non-spiked Sample 73487-24
Spike: 73487-24 MS
Spike Duplicate: 73487-24 MSD

Analyte	Sample Result	Spike added	MS Result	MS Qualifier	Unit	% Rec	% Rec Limits
Arsenic	0.0439	0.5	0.5939		mg/L	110%	75-125
Cadmium	0.0000	0.5	0.5195		mg/L	104%	75-125
Copper	0.0000	0.5	0.5332		mg/L	107%	75-125
Lead	0.0000	0.5	0.5215		mg/L	104%	75-125

Analyte	Sample Result	Spike added	MSD Result	MSD Qualifier	Unit	% Rec	% Rec Limits	RPD	RPD Limit
Arsenic	0.0439	0.5	0.5855		mg/L	108%	75-125	1%	25
Cadmium	0.0000	0.5	0.5144		mg/L	103%	75-125	1%	25
Copper	0.0000	0.5	0.5241		mg/L	105%	75-125	2%	25
Lead	0.0000	0.5	0.5177		mg/L	104%	75-125	1%	25

CHAIN OF CUSTODIES

Chain Of Custody Form

analytix environmental laboratory LLC

195 Commerce Way, Suite E
Portsmouth, NH 03801
(800) 929-9906

(603) 436-5111
(603) 430-2151 Fax

For Analytix Use Only

Samples were: 1) Shipped or hand-delivered: 5.5°C
 2) Temperature (°C): 5.5°C
 3) Received in good condition: PA N
 4) pH checked by: N/A
 5) Labels checked by: JB 8/16/12

Matrix Key:
 G = Concrete
 W = Wipe
 WW = Wastewater
 SW = Surface Water
 E = Extract

GW = Groundwater
 DW = Drinking Water
 S = Soil / Sludge
 O = Oil
 X = Other

Sample Identification	Sample Date	Sample Time	Field Filtered? Y or N	VOC: 8260 524.2 624	SVOC: 8270 625 PAH only SIM	Pesticides: 8081 608	PCB: 8082 608 Soxhlet? Y or N	TPH: 8015 (Gas Range) ME4217	TPH: 8015 (Diesel Range) 8100M ME4125	EPA: Full or Ranges only TETPH	VPH: Full or Ranges only	Metals: RCRA8 P13 TAL23 Other**	Matrix		Analytix Sample #
													No. of Containers	pH checked	
SS101	8/2/12	940	N	X		X	X	X	X	X	X	X	6		73487-1
SS102	8/2/12	920	N	X		X	X	X	X	X	X	X	1		2
SS103	8/2/12	845	N	X		X	X	X	X	X	X	X	6		3
SS104	8/2/12	1005	N	X		X	X	X	X	X	X	X	1		4
SS105	8/2/12	1245	N	X		X	X	X	X	X	X	X	5		5
SS106	8/2/12	1100	N	X		X	X	X	X	X	X	X	5		6
SS107	8/2/12	1130	N	X		X	X	X	X	X	X	X	4		7
SS108	8/2/12	1200	N	X		X	X	X	X	X	X	X	4		8
SS109	8/2/12	1245	N	X		X	X	X	X	X	X	X	4		9
SS110	8/2/12	1230	N	X		X	X	X	X	X	X	X	5		10

Comments, Additional Analyses, or Special Instructions: FPA Brownfields

** List requested metals here

Report Type: MCP* Level II* Level III* Level IV* Standard

State: NH MA ME CT RI Other: _____

State Standard: MEDEP
(eg. S-1 or GW-1)
EDD Required: N
Type: MEDEP

Email Results to: peter.shewers@analytix.com ep@analytix.com

Turnaround Time (TAT): 24 Hours* 48 Hours* 96 Hours* 5 Days* 10 Days

*Fee may apply; lab approval required

Sampler Name (Print): Amor Martin

Relinquished By Sampler: Amor Martin

Relinquished By: _____

Relinquished By: _____

Please note: For volatile analyses, a trip blank has been provided in the cooler. If you want the trip blank run and reported please write the trip blank on the COC. Trip Blank analyses will be charged unless other arrangements have been made.

*Samples only have 1 Meott preserved vial w/% solid vial for both VOCs and VPH - 8/16/12

Chain Of Custody Form

environmental laboratory LLC

195 Commerce Way, Suite E
Portsmouth, NH 03801
(800) 929-9906

(603) 436-5111
(603) 430-2151 Fax

For Analytics Use Only

Samples were: hand-delivered

1) Shipped or hand-delivered

2) Temperature (°C): 5.5°C

3) Received in good condition: Y or N

4) pH checked by: N/A

5) Labels checked by: JB 8/6/12

Project Name: Belfast Boatyard-38 Wackerville Road

Project#: 11.06134

Company: Ransom Consulting

Report to: Eric Phelix/Peter Sherr

Address: 400 Commercial St., Suite 501

Portland, ME 04101

Phone: 207-772-2891

Quote #:

PO# (if required):

Sample Identification	Sample Date	Sample Time	Please fill in preservation code here										Field Filtered? Y or N	Metals: RCRA8 P13 TAL23 Other**	
			VOC: 8260-524.2 624	SVOC: 8270 625 PAH only SIM	Pesticides: 8081 608	PCB: 8083 608 Soxhlet? Y or N	TPH: 8015 (Gas Range) ME4217	TPH: 8015 (Diesel Range) 8100M ME4125	EPA: Full or Ranges only	VPH: Full or Ranges only	TETPH	TPH: 8015 (Gas Range) ME4217			TPH: 8015 (Diesel Range) 8100M ME4125
SS111	8/2/12	1425	N	X											X
SS112	8/2/12	1355	N	X											X
SS113	8/2/12	1435	N	X											X
SS114	8/2/12	1410	N	X											X
SS115	8/2/12	1300	N	X											X
SS10X	8/2/12	1400	N	X											X
BK-1	8/2/12	1450	N	X											X
BK-2	8/2/12	1455	N	X											X
BK-3	8/2/12	1455	N	X											X
Trip Blank	8/2/12	-	N	X											X

Matrix Key: C = Concrete, WP = Wipe, WW = Wastewater, SW = Surface Water, E = Extract

Matrix: SW

No. of Containers checked: 2

pH checked:

Analytics Sample #: 73487-11

Project Requirements: *Fee may apply

Report Type: MCP*, Level II*, CTRCP*, DOD*, Standard

State: NH, MA, ME, CT, RI

State Standard: MEDEP (eg. S-1 or GW-1)

EDD Required: N

Type: MEDEP

Comments, Additional Analyses, or Special Instructions: * EPA Brownfields

Email Results to: epelix@ransomenv.com
peter.sherr@ransomenv.com

Turnaround Time (TAT): 24 Hours*, 48 Hours*, 96 Hours*, 5 Days*, 10 Days

*Fee may apply; lab approval required

Sampler Name (Print): Aaron Martin

Relinquished By Sampler: [Signature]

Relinquished By: [Signature]

Relinquished By: [Signature]

Please note: For volatile analyses, a trip blank has been provided in the cooler. If you want the trip blank run and reported please write the trip blank on the COC. Trip Blank analyses will be charged unless other arrangements have been made.

** List requested metals here

Received By: [Signature]

Date: 8/3/12 Time: 14:30

Date: Time:

Date: Time:

Chain Of Custody Form

analytix environmental laboratory LLC

195 Commerce Way, Suite E
 Portsmouth, NH 03801
 (800) 929-9906

(603) 436-5111
 (603) 430-2151 Fax

For Analytics Use Only

Samples were: 33C
 1) Shipped or hand-delivered
 2) Temperature (°C): CP 8/16/12
 3) Received in good condition: CP 8/16/12
 4) pH checked by: CP 8/16/12
 5) Labels checked by: CP 8/16/12

Matrix Key:
 C = Concrete
 WP = Wipe
 WW = Wastewater
 SW = Surface Water
 E = Extract
 GW = Groundwater
 DW = Drinking Water
 S = Soil / Sludge
 O = Oil
 X = Other

Sample Identification	Sample Date	Sample Time	Field Filtered? Y or N	VOC: 8260 524.2 624	SVOC: 8270 625 PAH only SIM	Pesticides: 8081 608	PCB: 8082 608 Soxhlet? Y or N	TPH: 8015 (Gas Range) ME427	TPH: 8015 (Diesel Range) 8100M ME425	EPA: Full or Ranges only	VPH: Full or Ranges only	Metals: RCRA8 P13 TAL23 Other**	Please fill in preservation code here	Preservation Code:	
														A= HCL B= 4°C C= Unpres D= MeOH E= HNO3 F= H2SO4 G= Hexane H= Other	Sample Time
MW101	8/2/12	1000	Y	X	X	X	X	X	X	X	X	X			
MWX	8/2/12	1400	Y	X	X	X	X	X	X	X	X	X			
PW101	8/2/12	1530	Y	X	X	X	X	X	X	X	X	X			
PW Dup	8/2/12	1035	Y	X	X	X	X	X	X	X	X	X			
Trip Blank															

Matrix: GW No. of Containers: 8 pH checked: 73487-21 Analytics Sample #

Project Requirements: *Fee may apply

Report Type: MCP* Level II* CTRCP* Level III* DOD* Level IV* Standard

State: NH MA ME CT RI Other: _____

State Standard: MEDEP (eg. S-1 or GW-1) EDD Required: Y N Type: MEDEP

Comments, Additional Analyses, or Special Instructions: EPA Brownfields

Email Results to: peter.sherr@ransonenv.com
ephenix@ransonenv.com

Turnaround Time (TAT): 24 Hours* 48 Hours* 96 Hours* 5 Days* 10 Days

*Fee may apply; lab approval required

Sampler Name (Print): Aaron Martin

Relinquished By Sampler: [Signature]

Relinquished By: _____

Relinquished By: _____

Please note: For volatile analyses, a trip blank has been provided in the cooler. If you want the trip blank run and reported please write the trip blank on the COC. Trip Blank analyses will be charged unless other arrangements have been made.

Date: 8/3/12 Time: 1430 Received By: [Signature]

Date: _____ Time: _____ Received By: _____

Date: _____ Time: _____ Received By: _____

ANALYTICS SAMPLE RECEIPT CHECKLIST



AEL LAB#: 73487 COOLER NUMBER: 163
 CLIENT: Ransom NUMBER OF COOLERS: 1
 PROJECT: BELFAST BOATYARD - 38
Waterville Rd

A: PRELIMINARY EXAMINATION:

1. Cooler received by (initials): W DATE COOLER RECEIVED/OPENED: 8/3/12
2. Circle one: Hand delivered (if so, ship's) Shipped
3. Did cooler come with a shipping slip? Y N
- 3a. Enter carrier name and airbill number here: _____
4. Were custody seals on the outside of cooler? Y N
 How many & where: _____ Seal Date: _____ Seal Name: _____
5. Did the custody seals arrive unbroken and intact upon arrival? Y N/A
6. COC#: _____
7. Were Custody papers filled out properly (ink, signed, legible, project information etc)? Y N
8. Were custody papers sealed in a plastic bag? Y N
9. Did you sign the COC in the appropriate place? Y N
10. Was enough ice used to chill the cooler? Y N Temp. of cooler: 5.5°C

B. Log-In: Date samples were logged in: 8/6/12 By: CP

11. Were all bottles sealed in separate plastic bags? Y N
12. Did all bottles arrive unbroken and were labels in good condition? Y N
13. Were all bottle labels complete (ID, Date, time, etc.) Y N
14. Did all bottle labels agree with custody papers? Y N
15. Were the correct containers used for the tests indicated? Y N
16. Were samples received at the correct pH? Y N
17. Was sufficient amount of sample sent for the tests indicated? Y N
18. Were all samples submitted within holding time? Y N
19. Were all containers used within expiration date? Y N
20. Were VOA samples absent of greater than pea-sized bubbles? Y N*

EPH + Metals all had pH of 2 or below on AQ samples

see non-compliance sheet and PG 1 & COC

*If NO, List Sample ID's, Lab #'s: _____

When bubbles are present in VOA samples they are labelled from smallest (or no bubbles) to largest. Lab to analyze VOA samples with no bubbles or smallest bubbles first

20. Laboratory labeling verified by (initials): JB Date: 8/6/12

**SAMPLE RECEIPT
NON-COMPLIANCE NOTIFICATION
(SENT VIA FACSIMILE/Email)**

DATE 8/6/12 FROM Sample Rec'd
FAX CONTACT Erik Phenix/Peter Sherr FAX NUMBER _____
CLIENT Ransom AEL LAB NUMBER 73487

The exceptions noted below were found on the sample(s) received on the attached Chain of Custody (COC) form. These exceptions may render the data results as non-defensible. Analytics will continue to proceed with the analysis of the sample(s) unless notified in writing to stop the analysis. This document may become part of the final report.

Please check the appropriate box, sign below and fax back to "Sample Receipt" at 603-430-2151 or email back to Analytics Project Manager.

Exceptions:

Sample(s) not between 2°C and 6°C.
Temperature of samples upon receipt: _____ Ice present in cooler: Yes No

Sample(s) received unpreserved or not at the proper pH.
(pH was adjusted or preservative added at the laboratory)

Sample(s) received in incorrect containers

Insufficient sample volume received
(Quantitation limits may be elevated due to this exception)

SS106, SS107, SS108 and
SS109 only had 1 MeOH
preserved vial given
for both UPH + 8260

Trip Blank recorded on the chain of custody but not provided in cooler

Other: _____

Acknowledgment:

Please do not analyze/report Trip Blank, proceed with other analyses

Proceed with the analysis.

Please stop the analysis and wait for further instructions.

Signed: _____ Print Name: _____

Date: _____

APPENDIX D

Hazardous Building Materials Inventory

Phase II Environmental Site Assessment

Belfast Boatyard
38 Waterville Road
Belfast, Maine

August 22, 2012

Project 111.06134.016

Mr. Thomas Kittredge
Economic Development Director
City of Belfast
131 Church Street
Belfast, Maine 04915

RE: Hazardous Building Materials Inventory
Belfast Boatyard
38 Waterville Road
Belfast, Maine

Dear Mr. Kittredge:

Ransom Consulting, Inc. (Ransom) has prepared this report presenting the results of the Hazardous Building Materials Inventory (HMI) performed at the Belfast Boatyard located at 38 Waterville Road in Belfast, Maine (the Site). The Site is currently developed with seven buildings, identified herein, as the Maintenance Shop and Storage Structures Nos. 1 through 6. Ransom understands that the Site is included in a potential real estate transaction and is proposed for redevelopment as a boat yard. The work performed by Ransom was authorized by the City of Belfast Brownfields program and the United States Environmental Protection Agency (EPA), as part of environmental due diligence, prior to the proposed property transfer/redevelopment. This report has been prepared for the City of Belfast in accordance with the scope of work outlined in the EPA- and Maine Department of Environmental Protection (MEDEP)-approved Site Specific Quality Assurance Project Plan (SSQAPP) dated July 30, 2012.

BACKGROUND

Seven buildings are included in the scope of this report, referred to herein, as the Maintenance Shop and Storage Structures Nos. 1 through 6. The Maintenance Shop building was constructed in 1988 and consists of 2,420 square-foot wood-frame building with 16-foot ceilings and a concrete slab floor. The roof of the Maintenance Shop is sheet metal. A small section of roof (approximately 12 square feet) was constructed over the access door to prevent injury from falling ice. This section of roof was finished with asphalt shingles. The interior of the Maintenance Shop is largely unfinished, and includes rolled fiberglass insulation, and unfinished dry wall (no tape or joint compound).

Storage Structures No. 1 through 5 were constructed at the Site between 1989 and 2001, each encompassing 3,200 square feet, and are characterized by 16-foot ceilings and dirt floors. The interior of the buildings are unfinished. The Storage Structures are sided with painted plywood and the roofs are constructed of sheet metal. A small addition was constructed onto the side of Storage Structure No. 1, which was roofed with asphalt shingles.

400 Commercial Street, Suite 404, Portland, Maine 04101, Tel (207) 772-2891, Fax (207) 772-3248

Pease International Tradeport, 112 Corporate Drive, Portsmouth, New Hampshire 03801, Tel (603) 436-1490

12 Kent Way, Suite 100, Byfield, Massachusetts 01922, Tel (978) 465-1822

2127 Hamilton Avenue, Hamilton, New Jersey 08619, Tel (609) 584-0090

60 Valley Street, Building F, Suite 106, Providence, Rhode Island 02909, Tel (401) 433-2160

Mr. Thomas Kittredge
City of Belfast

Storage Structure No. 6 was constructed in 2004 and encompasses 6,030 square feet. Storage Structure No. 6 is also characterized by 16-foot ceilings, dirt floor, wood siding, and sheet metal roof.

ASBESTOS-CONTAINING MATERIALS

Ransom completed an asbestos survey at the Site on August 2, 2012. The asbestos survey was performed under the supervision of Ransom's U.S. EPA- and State of Maine-certified asbestos inspector. The scope of the ACM inspection included the identification and quantification of accessible suspect building materials associated with the Site buildings. Ransom identified and collected bulk samples of several building materials that had the potential to contain asbestos. These materials included drywall and asphalt shingles associated with the Maintenance Shop building, and asphalt shingles associated with the small addition constructed on Storage Structure No. 1. It should be noted that the attic area of the Maintenance Shop building was not accessible, and therefore, could not be inspected for the presence of potential asbestos-containing materials. Asbestos-containing components may also be associated with the forced hot air furnace located in the Maintenance Shop building. Ransom did not dismantle the heating system to identify potential asbestos-containing materials associated with this system.

Samples were analyzed by Optimum Analytical and Consulting, LLC (Optimum) of Salem, New Hampshire. Optimum is certified to perform bulk sample analysis by the State of Maine and the National Voluntary Laboratory Accreditation Program (NVLAP).

OSHA defines asbestos-containing material (ACM) as "any material containing more than one percent asbestos," while the MEDEP defines ACM as "greater than or equal to one percent asbestos." The EPA and MEDEP are responsible for developing and enforcing regulations necessary to protect the general public from airborne contaminants that are known to be hazardous to human health.

Laboratory analysis of the bulk samples submitted did not detect asbestos in any of the suspect material. The laboratory report is included as Attachment A.

LEAD-BASED PAINT

Concurrent with the asbestos survey, Ransom performed a lead-based paint (LBP) survey using a direct-reading x-ray fluorescence analyzer (XRF). The inspection included XRF readings from accessible walls, windows, doors, casings/jambes, and other miscellaneous painted surfaces associated with the Site buildings. Tested surfaces included the following:

- Gray exterior paint on wood siding of all Site buildings;
- White interior paint on drywall associated with Maintenance Shop building;
- White paint on concrete block chimney of Maintenance Shop building; and
- Gray paint on stairs and plywood floor of mezzanine in Maintenance Shop building.

Mr. Thomas Kittredge
City of Belfast

It should be noted that Ransom was unable to access or test the sheet metal roofs of the Site buildings. Results of the LBP survey did not identify concentrations of lead in painted surfaces in excess of 0.00 milligrams per square centimeter (mg/cm²).

OTHER POTENTIALLY HAZARDOUS MATERIALS AND COMPONENTS

Polychlorinated Biphenyls (PCBs)

PCB-containing oil is sometimes found in the dielectric fluid of older electrical transformers, including the capacitors associated with older fluorescent light fixture ballasts. Although electrical equipment which contains PCBs is required to be properly labeled indicating the presence of PCBs, this is not always the case. Ransom inspected light fixture ballasts throughout the Site Building for the presence of PCB labeling. Our inventory identified 21 light ballasts throughout the Site buildings, and Ransom inspected two (2) representative fixtures; neither ballast inspected had “No PCBs” labeling. It is therefore assumed that all fluorescent fixtures identified in the Site buildings contain PCBs.

Since not all of the fixtures at the Site were inspected, Ransom recommends that each ballast that will be impacted by future renovations, if applicable, be individually inspected for the “No PCBs” label, and if not present, the ballast should be disposed/recycled in accordance with U.S. EPA and State of Maine universal waste regulations. Since the cost of disposal (approximately \$20 each) is significantly less than the cost of testing (\$250), Ransom recommends that those ballasts that are not labeled be treated and disposed of as PCB-containing waste during future building renovations or demolition activities.

Mercury-Containing Components

Mercury-containing components such as fluorescent light tubes, cathode ray tubes (CRTs), mercury vapor lamps, and thermostat switches are classified as universal waste and are regulated by the U.S. EPA, under 40 CFR Parts 260–273. Classifying an item as a universal waste provides flexibility for its proper management and can prevent the item from entering municipal or construction and demolition (C&D) waste streams. Ransom identified 42 fluorescent light tubes (FLT) associated with the Site buildings. No thermostats were identified in connection with the Maintenance Shop building (the only heated building on-Site). Components known or assumed to contain mercury that will be impacted by future renovations or demolition activities should be removed and recycled in accordance with universal waste regulations.

Mr. Thomas Kittredge
City of Belfast

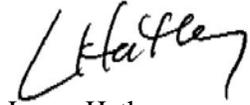
Disposal costs associated with the universal wastes identified during this inspection are summarized in the following table:

Component	Estimated Quantity	Unit Cost	Total
Fluorescent fixture ballast	21	\$20 each	\$420
Fluorescent lamps	42	\$5 each	\$210
Subtotal:			\$630
Contingency (20%):			\$125
TOTAL ESTIMATED OTHER HAZARDOUS MATERIALS REMOVAL COST:			\$755

If you have any questions regarding the information in this report please do not hesitate to contact us.

Sincerely,

RANSOM CONSULTING, INC.



Lucas Hathaway
Project Scientist/Hazardous Materials Specialist



Erik P. Phenix, P.G.
Associate Project Manager



Peter J. Sherr, P.E.
Senior Project Manager

EPP/PJS: jsh
Attachments

ATTACHMENT A

Laboratory Analytical Report

Hazardous Building Materials Inventory
Belfast Boatyard
38 Waterville Road
Belfast, Maine



OPTIMUM

Analytical and Consulting, LLC

85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

Erik Phenix
Ransom Environmental Consultants, Inc.
400 Commercial Street
Portland ME 04101

Project #: 111.06134.016
Laboratory Batch #: 1204208
Date Samples Received: 08/07/2012
Date Samples Analyzed: 08/09/2012
Date of Final Report: 08/10/2012

SAMPLE IDENTIFICATION:

Nine (9) Bulk samples from Belfast Boatyard - Waterville Rd; 38 Waterville Rd Belfast, ME; submitted by: Erik Phenix

These bulk samples were delivered to Optimum Analytical Consulting, LLC for asbestos content determination.

ANALYTICAL METHOD:

Analytical procedures were performed in accordance with the U.S. Environmental Protection Agency (EPA) Recommended Method for the Determination of Asbestos in Bulk Samples by Polarized Light Microscopy and Dispersion Staining (PLM/DS)(EPA-600/M4-82-020, EPA-600/ R-93-116) and the New York Department of Health Environmental Laboratory Approval Program (NYDOH-ELAP 198.1) with the exception of resinously bound materials (please refer to the comments at the end of this report). This report relates only to those samples actually analyzed, and may not be indicative of other similar appearing materials existing at this, or other sites.

Quantification of asbestos content was determined by Calibrated Visual Estimation.

The EPA requires that friable samples with analytical results of 10% or less asbestos, by visual estimation, be treated as asbestos-containing material unless these quantities are verified using the point counting method. The point counting method is a systematic technique for estimating concentration, also using PLM. The point counting method, however, does not increase the analyst's ability to detect fibers. If you would like any of your friable samples with an asbestos content of less than 10% to be point counted, please contact our office. Point counting is not required for those samples in which no asbestos is detected during analysis by PLM.

In any given material, fibers with a small diameter (<0.25mm) may not be detected by the PLM method. Floor tile and other resinously bound material may yield a false negative if the asbestos fibers are too small to be resolved using PLM. Additional analytical methods may be required. Optimum recommends using Transmission Electron Microscopy (TEM) for a more definitive analysis.

New York state regulations require that all friable samples in which asbestos is detected be point counted (using the NYDOH-ELAP stratified point counting method). New York state regulations also require TEM confirmation of NOB (Non Organically Bound) samples found to have No Asbestos Detected by PLM. These regulations apply only to samples taken within the State of New York.

Optimum Analytical and Consulting, LLC will retain all samples for a minimum of three months. Further analysis or return of samples must be requested within this three month period to guarantee their availability.

This report may not be reproduced except in full, without the written approval of Optimum Analytical and Consulting, LLC.

Use of the NVLAP and AIHA Logo in no way constitutes or implies product certification, approval, or endorsement by the National Institute of Standards and Technology or the American Industrial Hygiene Association.

This report is considered preliminary until signed by the Laboratory Director and Supervisor.

If you have any questions regarding this report, please do not hesitate to contact us.

Jamie L. Noel
Laboratory Director

Kristina Scaviola
Laboratory Supervisor

NVLAP Lab ID#: 101433-0



85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

CLIENT: Ransom Environmental Consultants, Inc.
ADDRESS: 400 Commercial Street
CITY / STATE / ZIP: Portland ME 04101
CONTACT: Erik Phenix
DESCRIPTION: PLM Analysis
LOCATION: Belfast Boatyard - Waterville Rd; 38 Waterville Rd Belfast, ME

ORDER #: 1204208
PROJECT #: 111.06134.016
DATE COLLECTED: 08/02/2012
COLLECTED BY: Erik Phenix
DATE RECEIVED: 08/07/2012
ANALYSIS DATE: 08/09/2012
REPORT DATE: 08/10/2012
ANALYST: Jamie Noel

REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type (%)	Non-Asbestos Components (%)
1204208-001 ASB-1A	Maintenance Shop Drywall, White/Brown	LAYER 1 100%	None Detected	Cellulose Fiber 10% Binder/Filler 90%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204208-002 ASB-1B	Maintenance Shop Drywall, White/Brown	LAYER 1 100%	None Detected	Cellulose Fiber 10% Binder/Filler 90%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204208-003 ASB-1C	Maintenance Shop Drywall, White/Brown	LAYER 1 100%	None Detected	Cellulose Fiber 10% Binder/Filler 90%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204208-004 ASB-2A	Maintenance Shop Asphalt Shingles, Black	LAYER 1 100%	None Detected	Cellulose Fiber 15% Binder/Filler 85%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204208-005 ASB-2B	Maintenance Shop Asphalt Shingles, Black	LAYER 1 100%	None Detected	Cellulose Fiber 15% Binder/Filler 85%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204208-006 ASB-2C	Maintenance Shop Asphalt Shingles, Black	LAYER 1 100%	None Detected	Cellulose Fiber 15% Binder/Filler 85%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204208-007 ASB-3A	Storage Structure #1 Asphalt Shingles, Black	LAYER 1 100%	None Detected	Cellulose Fiber 70% Binder/Filler 30%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204208-008 ASB-3B	Storage Structure #1 Asphalt Shingles, Black	LAYER 1 100%	None Detected	Cellulose Fiber 70% Binder/Filler 30%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%



OPTIMUM

Analytical and Consulting, LLC

85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-600/M4-82-020, EPA-600/ R-93-116) NVLAP Lab Code: 101433-0

CLIENT: Ransom Environmental Consultants, Inc.
ADDRESS: 400 Commercial Street
CITY / STATE / ZIP: Portland ME 04101
CONTACT: Erik Phenix
DESCRIPTION: PLM Analysis
LOCATION: Belfast Boatyard - Waterville Rd; 38 Waterville Rd Belfast, ME

ORDER #: 1204208
PROJECT #: 111.06134.016
DATE COLLECTED: 08/02/2012
COLLECTED BY: Erik Phenix
DATE RECEIVED: 08/07/2012
ANALYSIS DATE: 08/09/2012
REPORT DATE: 08/10/2012
ANALYST: Jamie Noel

REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type (%)	Non-Asbestos Components (%)
1204208-009 ASB-3C	Storage Structure #1 Asphalt Shingles, Black	LAYER 1 100%	None Detected	Cellulose Fiber 70% Binder/Filler 30%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%

Approved Signatory: _____

Approved Signatory: _____





OPTIMUM

Analytical and Consulting, LLC

85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-600/M4-82-020, EPA-600/ R-93-116) NVLAP Lab Code: 101433-0

CLIENT: Ransom Environmental Consultants, Inc.
ADDRESS: 400 Commercial Street
CITY / STATE / ZIP: Portland ME 04101
CONTACT: Erik Phenix
DESCRIPTION: PLM Analysis
LOCATION: Belfast Boatyard - Waterville Rd; 38 Waterville Rd Belfast, ME

ORDER #: 1204208
PROJECT #: 111.06134.016
DATE COLLECTED: 08/02/2012
COLLECTED BY: Erik Phenix
DATE RECEIVED: 08/07/2012
ANALYSIS DATE: 08/09/2012
REPORT DATE: 08/10/2012
ANALYST: Jamie Noel

4208

Client	Ransom Consulting, Inc. 400 Commercial St Portland ME 04101
Contact	Erik Phenix
Phone	207-772-2891
Project	Belfast Boatyard - Waterville Rd.
Location	38 Waterville Road, Belfast ME
Ransom Client	City of Belfast
Ransom Project #	111.06134.016
Sample Date	8/2/2012
Analysis	Bulk PLM/Gravimetric Reduction for asbestos
TAT	Standard Turnaround
Report Results to:	ephenix@ransomenv.com
PO	4426
Notes/Requests	Please analyze NOB samples via Gravimetric Reduction, per MEDEP regulations. Stop analysis on positive detection for all.

Sample ID	Location	Material
ASB-1A	Maintenance Shop	Drywall
ASB-1B	Maintenance Shop	Drywall
ASB-1C	Maintenance Shop	Drywall
ASB-2A	Maintenance Shop	Asphalt Shingles
ASB-2B	Maintenance Shop	Asphalt Shingles
ASB-2C	Maintenance Shop	Asphalt Shingles
ASB-3A	Storage Structure #1	Asphalt Shingles
ASB-3B	Storage Structure #1	Asphalt Shingles
ASB-3C	Storage Structure #1	Asphalt Shingles

Erik Phenix 8/6/12

JB 8/11/12