

**PHASE II ENVIRONMENTAL SITE ASSESSMENT
40 MAIN STREET
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)

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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 property located at 40 Main Street 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).

The Site consists of a rectangular parcel of land, encompassing approximately 0.15 acres, located at the southwesterly corner of the intersection of Main and Cross Streets in downtown Belfast. The Site is currently vacant and a majority of the property is utilized as a park. The southeasterly portion is utilized as a gravel parking area. Properties in the Site vicinity are utilized for commercial purposes. Municipal sewer and water are currently available to the Site and surrounding properties, and the Site is proposed to be redeveloped for mixed residential and/or commercial purposes.

Based on the available information, the Site was originally developed circa 1917 for commercial/retail use. The Site was redeveloped circa 1931 as a gasoline filling station and automobile repair facility. The filling station and auto repair facility operated from circa 1931 until 1980. The facility was utilized for small engine repair from 1980 until 2005, at which time the property was sold, and the Site building was renovated for use as a café/coffee shop. The coffee shop closed in 2007, and the former Site building was demolished in 2008. The Site has reportedly been vacant and utilized as a park, since that time.

A Phase I ESA, dated November 26, 2012, was completed by Ransom, which identified *Recognized Environmental Conditions (RECs)* associated with the Site's historic use as a gasoline filling station and automobile repair facility. Previous environmental investigations conducted at the Site documented residual petroleum contamination in connection with the former underground storage tanks (USTs), gasoline storage/dispensing activities, and/or automotive service operations at the Site. Based on the findings from the Phase I ESA, four areas of concern (AOCs) were identified and targeted for additional investigation through the completion of a Phase II ESA, discussed herein.

The objective of the Phase II ESA was to collect sufficient data to confirm or dismiss the *RECs* identified during the Phase I ESA, to identify potential exposure risks, and to evaluate the suitability of the Site for the proposed redevelopment use. The Phase II scope of work included the advancement of soil borings, installation of temporary groundwater monitoring wells, installation of temporary soil vapor sample points, and the collection and chemical analysis of soil, groundwater, and soil vapor samples throughout the Site. The Phase II ESA field investigation was completed on December 5, 2012.

The results of the Phase II ESA indicate that low-level concentrations of petroleum constituents are present in subsurface soils and slightly elevated concentrations of petroleum constituents are present in groundwater at the northern portion of the Site. These contaminants are inferred to be representative of residual petroleum contamination associated with two 550-gallon petroleum USTs formerly located at the Site. The presence of low-level petroleum contamination was also identified in subsurface soils and groundwater at the northeastern and eastern portions of the Site, which are inferred to be associated with former automotive repair operations and/or residual petroleum contamination associated with former gasoline storage and/or dispensing activities at the Site. The residual petroleum-impacted soils were observed at depths greater than 2 feet below ground surface (bgs); therefore, they do not represent a significant or chronic direct contact health risk to current park users, commercial workers, and/or future Site occupants or employees at this time. However, contaminated soils in the subsurface may represent a

direct contact risk to future excavation/construction workers, and may require handling and disposal as a special waste, if these soils are disturbed or excavated during future construction projects at the Site.

The slightly elevated concentrations of petroleum constituents in groundwater at the northern portion of the Site (in the area of the two former 550-gallon petroleum USTs) were detected at concentrations that exceeded their respective drinking water or petroleum remediation guidelines. In addition, low level concentrations of petroleum constituents, which did not exceed their respective drinking water or petroleum remediation guidelines, were detected in groundwater at the area of the former gas station/auto repair building and at the location of the former 2,000-gallon gasoline UST. Furthermore, 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 during the Phase II ESA. Municipal water is available to the Site; therefore, ingestion of contaminated groundwater is not anticipated to represent an exposure route for these contaminants. .

Based on field observations and Site topography, the localized shallow groundwater flow is presumed to be to the north/northeast. Therefore, dissolved-phase contaminants from the Site have the potential to migrate onto the neighboring properties to the north/northeast; specifically the Cross Street right-of-way. However, the closest occupied structure to the north/northeast of the Site is located approximately 50 feet from the UST source area. According to previous research commissioned by the MEDEP (GEI Consultants, Inc. 2012), structures located at distances greater than 30 feet from the source area are not expected to experience vapor intrusion due to attenuation of contaminant concentrations. Considering the distance from the source area (greater than 30 feet), the dissolved-phase contaminants are not anticipated to represent a vapor intrusion risk to occupied structures in the Site vicinity.

Soil vapor at the eastern portion of the Site contains slightly elevated concentrations of various volatile petroleum constituents and chlorinated volatile organic compounds (VOCs), specifically tetrachloroethene (PCE). The source of these contaminants is inferred to be associated with former automotive repair operations and gasoline storage and dispensing activities at the Site. The concentrations of soil vapor contaminants present at the eastern portion of the Site exceeded their current and proposed Soil Gas Targets for residential use, but did not exceed their current or proposed Soil Gas Target for commercial use. The vapor-phase contaminants detected at the Site have the potential to represent a vapor intrusion risk if the Site property is developed for residential use in the future.

Arsenic was detected in every soil sample collected at the Site at concentrations exceeding its respective MEDEP Remedial Action Guidelines (RAGs) for “Park User”, “Residential”, “Outdoor Commercial Worker”, and “Excavation/Construction Worker” exposure scenarios, but is likely representative of naturally occurring concentrations for this metal in the State of Maine. Lead was only detected in one surficial soil sample at the Site at a concentration exceeding its respective MEDEP RAGs for “Park User”, “Residential”, and “Outdoor Commercial Worker” exposure scenarios. The presence of this slightly elevated concentration of lead is not anticipated to represent naturally occurring concentrations, but is likely representative of urban fill-impacted soils observed at the Site.

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 Further Action Assurance “ or a “No Action Assurance” letter and a “Certificate of Completion” (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 slightly elevated concentrations of contaminants of concern identified in soil, groundwater, and/or soil vapor at the Site should be mitigated in the form of a Declaration of Environmental Covenant (DEC). As part of the DEC, extraction of groundwater at the Site for drinking water use should be prohibited. Since public water is currently supplied to the Site and vicinity, this institutional control will not impact the current use of the Site as a park or the proposed redevelopment and reuse of the Site for residential and/or commercial use. As part of the DEC, a Soil and Groundwater Management Plan should also be developed in order to insure proper characterization, handling, and management of potentially impacted soils and groundwater, which may be encountered and displaced during redevelopment of the Site property (e.g., displaced and excess soils generated during installation of new foundations may require off-site disposal); and
3. A vapor barrier and/or passive sub-slab depressurization system should also be incorporated into the design of any new proposed Site structures to mitigate potential impacts to indoor air quality from potential vapor intrusion of volatile compounds identified in soil vapor samples collected at the Site. Vapor mitigation systems are similar and/or analogous to radon mitigation systems and are relatively easy to install and incorporate into the design of new building foundations.

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1.0 INTRODUCTION

On behalf of the City of Belfast, Ransom Consulting, Inc. (Ransom) is pleased to present this report documenting the results of a Phase II Environmental Site Assessment (ESA) performed for the property located at 40 Main Street 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. 27), dated November 26, 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 November 26, 2012, was completed by Ransom, which identified *Recognized Environmental Conditions (RECs)* associated with the Site's historic use as a gasoline filling station and automobile repair facility with documented soil and groundwater contamination and potential undocumented spills and/or releases, resulting from historic use and/or storage of petroleum and/or other hazardous materials at the Site. Based on the findings of the Phase I ESA, four (4) areas of concern (AOCs) were identified for additional environmental investigation. It is Ransom's understanding that the Site is proposed to be redeveloped for mixed commercial and residential use.

The purpose of the Phase II ESA was to evaluate each of the identified AOCs for the presence 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. Revisions to the proposed scope of work and methodologies were implemented based on conditions encountered in the field and following consultation with MEDEP personnel. Any revisions to the scope of work or methodologies outlined in the SSQAPP are discussed in the appropriate sections of this report.

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 consists of a rectangular parcel of land, encompassing approximately 0.15 acres, located at the southwesterly corner of the intersection of Main and Cross Streets in downtown Belfast. The Site is identified by the City of Belfast Assessor's Office as Tax Map 11, Lot 59, which corresponds to 40 Main Street. The Site is currently vacant and a majority of the property is utilized as a park. The southeasterly portion is utilized as a gravel parking area. Properties in the Site vicinity are utilized for commercial purposes. Municipal sewer and water are currently available to the Site and surrounding properties, and the Site is proposed to be redeveloped for mixed residential and/or commercial purposes. Refer to the appended Figures 1 and 2, Site Location Map and Site Plan, for the layout of the Site and adjoining properties.

Based on the available information, the Site was originally developed circa 1917, for commercial/retail use. The Site was redeveloped circa 1931 as a gasoline filling station and automobile repair facility. The filling station and auto repair facility operated from circa 1931 until 1980. The facility was utilized for small engine repair from 1980 until 2005, at which time the property was sold, and the Site building was renovated for use as a café/coffee shop. The coffee shop closed in 2007, and the former Site building was demolished in 2008. The Site has reportedly been vacant and utilized as a park since that time.

Previous environmental reports reviewed during the Phase I ESA identified three former underground storage tanks (USTs) at the Site, including one 2,000-gallon presumed gasoline tank and two 550-gallon presumed petroleum storage tanks. One in-ground hydraulic lift was also reportedly located inside the former building and a second in-ground lift was located just outside the southerly corner of the former building. The USTs were reportedly removed from the Site in 1980; Ransom did not identify documentation of environmental conditions in connection with the tank removals. It also does not appear that the former USTs were ever registered with the MEDEP UST program, since the tanks were operated at a time when these records were not required by the State.

A limited subsurface investigation was performed at the Site in 1995 by Acadia Environmental Technology (Acadia), in support of a potential property transaction. Based on both field screening and laboratory analytical results, the highest concentrations of residual petroleum contamination appeared to be in soil samples collected from the area of the two former 550-gallon petroleum USTs, located along the front (northwest) side of the former Site building. Residual petroleum contamination was also detected at lower concentrations in soil samples collected from the area of the former 2,000-gallon petroleum UST, located along the rear side of the Site building, and the areas of an in-ground hydraulic lift located inside the building and an in-ground hydraulic lift located outside of the building near its southwestern corner.

In addition to petroleum constituents, low levels of acetone and 1,2-dichloroethene (DCE), both common automotive solvents/degreasers, were detected in a groundwater sample collected near the 2,000-gallon gasoline UST excavation along the rear of the former Site building. In accordance with the cleanup guidelines in affect at the time, the property was determined to be a "Baseline-2" cleanup site under the MEDEP "Decision Tree". Reporting and remediation of identified contaminated soil and groundwater at the Site were not required by MEDEP at that time.

2.2 RECOGNIZED ENVIRONMENTAL CONDITIONS

A Phase I ESA was completed by Ransom on November 26, 2012. Both the MEDEP and US EPA have reviewed and approved the Phase I ESA and agree that the *Recognized Environmental Condition (REC)* listed in the report was appropriate and inclusive, based on the data presented, as follows: Documented soil and groundwater contamination and potential undocumented spills and/or releases, resulting from historic use and/or storage of petroleum and/or other hazardous materials, associated with the former gasoline filling station and automotive repair activities at the Site. This residual contamination has the potential to represent a risk to human health and the environment, depending on future Site use and/or redevelopment.

Based on the findings of our Phase I ESA, it was Ransom's opinion that additional investigation was warranted to address the above-stated *REC*, document Site conditions in relation to current regulatory cleanup guidelines, and evaluate the suitability of the Site property for redevelopment.

2.3 AREAS OF CONCERN

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

AOC 1 – Former 550-Gallon Petroleum USTs

AOC 1 encompasses the area of two former 550-gallon presumed petroleum USTs located in the north-central portion of the Site (existing grassed park area). Based on available information, the highest concentrations of residual petroleum constituents were detected in soils collected from the northwest side of the former Site building (the former location of the two 550-gallon petroleum USTs) during Acadia's 1995 subsurface investigation. Laboratory analysis also detected low levels of acetone, a common solvent/degreaser, in a composite soil sample collected from the vicinity of the former USTs.

Specific contaminants of concern (COCs) associated with this AOC include petroleum compounds, volatile petroleum hydrocarbons (VPH) with their associated petroleum volatile organic compounds (VOCs), air-phase petroleum hydrocarbons (APH), and potentially lead (a metal). Due to the likely use and storage of leaded gasoline at the Site, lead scavenger compounds (1,2-dichloroethane, chlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, and 1,2-dibromoethane) are also considered COCs associated with this AOC.

AOC 2 – Former Gas Station/Auto Repair Building

AOC 2 encompasses the footprint and vicinity of the former Site building, which was located on the northeastern portion of the Site (existing grassed park and gravel parking areas). The former building was utilized as a gas station and a full-service automobile repair facility. These activities likely included the use, storage, and possible disposal of petroleum products and hazardous materials such as chlorinated solvents and degreasers, antifreeze, lubricants, motor oils, waste oils, metals, and potentially PCB-containing hydraulic fluids. As previously discussed, petroleum-impacted soils were reportedly encountered during Acadia's 1995 subsurface investigation at the Site in the vicinity of the interior in-ground hydraulic lift that was reportedly located in the building near its southwestern corner. The interior in-ground hydraulic lift was reportedly removed from the ground when the building was demolished in 2008.

Specific COCs associated with this AOC include petroleum, VPH, extractable petroleum hydrocarbons (EPH), polycyclic aromatic hydrocarbons (PAHs), VOCs (including petroleum and chlorinated solvents), APH, Metals, and polychlorinated byphenyls (PCBs). Several metals may be associated with waste oils or other waste fluids, which may have been generated or disposed of at the Site. Of these, the metals arsenic and lead have the potential to represent a greater exposure risk due to their relatively high toxicity characteristics. The remaining metals associated with waste oils or other waste fluids are not anticipated to represent a significant exposure risk, due to their relatively low toxicity characteristics.

AOC 3 – Former Exterior In-Ground Hydraulic Lift

AOC 3 encompasses the area of the exterior in-ground hydraulic lift, which was reportedly located outside of the former Site building near its southern corner (existing gravel parking area). Since automotive repair activities were conducted at the location of this exterior in-ground hydraulic lift, these activities likely included the use, storage, and possible disposal of petroleum products and hazardous materials such as chlorinated solvents and degreasers, antifreeze, lubricants, motor oils, waste oils, metals, and potentially PCB-containing hydraulic fluids. As previously discussed, petroleum-impacted soils were reportedly encountered during Acadia's 1995 subsurface investigation at the Site in the vicinity of the exterior in-ground hydraulic lift, which was also reportedly removed from the ground when the building was demolished in 2008.

Specific COCs associated with this AOC include volatile and semi-volatile petroleum constituents, PAHs, VOCs (including petroleum and chlorinated solvents), APH, Metals, and PCBs. Several metals may be associated with waste oils or other waste fluids, which may have been generated or disposed of at the Site. Of these, the metals arsenic and lead have the potential to represent a greater exposure risk due to their relatively high toxicity characteristics. The remaining metals associated with waste oils or other waste fluids are not anticipated to represent a significant exposure risk, due to their relatively low toxicity characteristics.

AOC 4 – Former 2,000-Gallon Gasoline UST

AOC 4 encompasses the area of the former 2,000-gallon gasoline UST that was reportedly located in the northeastern portion of the Site (existing gravel parking area). Based on available information, residual petroleum constituents were detected in soils in the vicinity of this former UST and low levels of acetone and 1,2-DCE, both common automotive solvents/degreasers, were detected in a groundwater sample collected near the 2,000-gallon gasoline UST excavation along the rear of the former Site building.

The objective for investigating AOC 4 was to assess current soil and groundwater conditions and evaluate potential exposure risks associated with reported residual contamination in this area.

Specific COCs associated with this AOC include petroleum compounds, VPH with their associated petroleum VOCs, APH, and potentially lead. Due to the likely use and storage of leaded gasoline at the Site, lead scavenger compounds (1,2-dichloroethane, chlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, and 1,2-dibromoethane) are also considered COCs associated with this AOC.

3.0 INVESTIGATION METHODOLOGY

The Phase II Investigation was designed to collect sufficient data to characterize the environmental condition of the Site in relation to current risk-based regulatory standards, identify potential exposure risks to current and future Site occupants, and evaluate the suitability of the Site for the proposed redevelopment.

The scope of work for the Phase II ESA was developed, based on the conceptual site model presented in the SSQAPP, and included the advancement of six soil borings, installation of five temporary groundwater monitoring wells, installation of three temporary soil vapor sample points, and the collection and chemical analysis of soil, groundwater, and soil vapor samples. Soil boring, monitoring well, and soil vapor point sample locations are shown on Figure 2.

Soil Boring Advancement

On December 5, 2012, Ransom observed the advancement of six soil borings, identified as SB-1 through SB-6, 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 5.5 to 10 feet bgs.

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.

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. Select soil samples (generally representing surficial soil conditions) were also screened for metals using an x-ray fluorescence meter (XRF). During field screening activities, no evidence of gross contamination or chemical saturated soils were observed in the soil samples collected.

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.

Soil Sampling and Analytical Testing

Soil samples collected from the soil borings 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. 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 2.3.

Additionally, a duplicate soil sample (SB-DUP) was collected from soil boring SB-3 and submitted for laboratory analysis for quality assurance/quality control (QA/QC) protocols as outlined in the SSQAPP.

Temporary Groundwater Monitoring Well Installation

On December 5, 2012, soil borings SB-1, SB-2, SB-4, SB-5, and SB-6 were completed as temporary groundwater monitoring wells (MW-1 through MW-5, respectively). During advancement of these soil borings, groundwater was measured at depths ranging from approximately 4.57 to 6.59 feet bgs. Groundwater was not encountered in soil boring SB-2, which was advanced to presumed bedrock refusal; however, a temporary monitoring well (MW-2) was installed in this boring as an effort to yield groundwater from surrounding soils for sample collection. Each monitoring well was constructed using 1-inch-diameter Schedule 40 PVC well casing and factory-slotted screen. 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.

Groundwater Sampling and Analytical Testing

Prior to sample collection, each well was developed using a peristaltic pump and dedicated tubing. The wells were developed in an effort to remove silt and fines and to restore the natural permeability of the soils surrounding the well screens. During the course of well development, no evidence of light non-aqueous phase liquid (LNAPL) was observed. When purging was complete, the monitoring wells were sampled in accordance with the low-flow sampling methods specified in the SSQAPP.

The groundwater samples were collected directly from the sampling equipment and transferred into laboratory-prepared sample 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. Groundwater 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 2.3.

A duplicate groundwater sample (MW DUP) was collected from monitoring well MW-1 and submitted for laboratory analysis for quality assurance/quality control (QA/QC) protocols as outlined in the SSQAPP.

Temporary Soil Vapor Point Installation

On December 5, 2012, Ransom observed the installation of three temporary soil vapor points (SV-1 through SV-3) at the Site. The soil vapor points were installed by EPI utilizing a stainless steel sampling probe, which were advanced utilizing direct-push (i.e., GeoProbe®) drilling techniques. Each soil vapor point was advanced to a maximum depth of 4 feet bgs in order to collect a soil vapor sample from a depth of 3.5 to 4 feet bgs. Once the soil vapor point was installed in the ground, a bentonite seal was placed around the soil vapor point at the ground surface in order to prevent the influx of ambient air during sample collection.

Soil Vapor Sampling and Analytical Testing

Prior to sampling, the disposable Teflon® tubing was purged for several minutes using a PID and multi-gas meter. Total volatile organic compounds (VOCs), oxygen, and carbon dioxide concentrations were recorded prior to sample collection. After purging, a soil vapor sample was collected in accordance with MEDEP standard operating procedures, using laboratory-prepared SUMMA® passivated stainless steel canisters and flow control valves. Soil gas sampling field data sheets providing additional information regarding the soil vapor samples are included in Appendix B. The samples were submitted to Alpha Analytical Inc. (Alpha) of Mansfield, Massachusetts 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 2.3.

A duplicate soil vapor sample (SV DUP) was also collected from soil vapor point SV-2 and submitted for laboratory analysis for quality assurance/quality control (QA/QC) protocols, as outlined in the SSQAPP.

3.1 BACKGROUND SAMPLES

Soil

In order to compare site-specific soil concentrations of metals and EPH with background soil conditions in the vicinity of the Site, three surficial soil samples (zero to two feet bgs) were collected from areas at the perimeter of the Site, which were presumed to be unaffected by the Site operations. Background soil samples BK-1 and BK-2 were collected with hand tools (i.e., shovels and pick axes) concurrent with the field activities on December 5, 2012. Background sample BK-3 was collected from the 0-2-foot interval in soil boring SB-6. 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 and arsenic 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 (BK-1 only) and metals (specifically arsenic and lead).

Groundwater

Additionally, one soil boring (SB-6) was advanced near the southeastern Site boundary and was subsequently completed as a temporary groundwater monitoring well (MW-5). This background monitoring well was installed at an inferred hydraulically upgradient location from the on-site AOCs in order to compare site-specific groundwater concentrations of dissolved-phase COCs likely originating from OHM releases at the Site to potential dissolved-phase COCs that may be migrating in groundwater onto the Site from hydraulically upgradient properties in the Site vicinity.

The background groundwater sample obtained from MW-5 was collected directly from the sampling equipment and transferred into laboratory-prepared sample containers. The sample was preserved in the field in accordance with applicable protocols and delivered on ice under chain-of-custody protocol to Analytics for laboratory analysis of VOCs (including petroleum and chlorinated VOCs), VPH and EPH fractions, target PAHs, and dissolved arsenic and lead (metals).

3.2 AOC 1– FORMER 550-GALLON PETROLEUM USTs

AOC 1 encompasses the area of two former 550-gallon presumed petroleum USTs located in the northern portion of the Site (existing grassed park area). The objective for investigating AOC 1 was to assess current soil, groundwater, and soil vapor conditions and evaluate potential exposure risks associated with reported residual contamination in this area. Contaminant sources and exposure pathways associated with AOC 1 are described in Section 2.3.

In order to characterize current soil and groundwater conditions in the area of the former USTs, one soil boring (SB-1) was advanced in this area and was subsequently converted to temporary monitoring well (MW-1). Additionally, soil vapor sample (SV-1) was collected in this area to evaluate potential vapor intrusion into future structures which may be constructed at the Site.

Based on field screening results and observations, which indicated that petroleum-impacted soils were not present in surficial soils (0-2 feet bgs), but were present in subsurface soils (greater than 2 feet bgs) directly above presumed bedrock; Ransom submitted a subsurface soil sample (4 to 5.5 feet bgs) collected from boring SB-1 for laboratory analysis of VPH fractions and target petroleum VOCs, lead scavenger VOCs, EPH fractions, target PAHs, and lead.

The groundwater sample collected from temporary monitoring well MW-1 was also submitted for laboratory analysis of VPH fractions and target petroleum VOCs, lead scavenger VOCs, EPH fractions, target PAHs, and dissolved lead. Ransom also collected soil vapor sample SV-1 adjacent to SB-1/MW-1 and submitted the sample for laboratory analysis of APH compounds.

3.3 AOC 2– FORMER GAS STATION/AUTO REPAIR BUILDING

AOC 2 encompasses the footprint and vicinity of the former gas station/auto repair building at the Site located at the northeastern portion of the Site. The objective of investigating AOC 2 was to confirm or dismiss the presence of COCs associated with the former automotive repair activities, including potential hydraulic oil leaks from hydraulic oil reservoir(s) associated with the former interior hydraulic lift, and to evaluate potential exposure risks associated with redevelopment of the property. Contaminant sources and exposure pathways associated with AOC 2 are described in Section 2.3.

In order to characterize current soil and groundwater conditions in the area of the former gas station/auto repair building, soil boring (SB-2) was advanced at the northern portion of the former building footprint and was subsequently converted to temporary monitoring well (MW-2) and soil boring (SB-3) was advanced in the area of the former interior in-ground hydraulic lift. Additionally, soil vapor sample (SV-2) was collected to evaluate potential vapor intrusion into any future structures which may be constructed at the Site.

Based on the conceptual site model, which suggests that contaminants of concern associated with historic automotive repair activities would likely be present in subsurface soils, Ransom submitted subsurface soil samples collected from borings SB-2 (4 to 5 feet bgs) and SB-3 (4 to 5.5 feet bgs) for laboratory analysis of VOCs (including petroleum and chlorinated VOCs), VPH and EPH fractions, target PAHs, arsenic and lead (metals), and PCBs.

As previously discussed, a temporary monitoring well (MW-2) was installed in soil boring SB-2 as an effort to yield groundwater from surrounding soils for sample collection; however, this monitoring well did not yield groundwater for sample collection during the course of our field investigation. Ransom also collected soil vapor sample SV-2 and submitted the sample for laboratory analysis of APH compounds and VOCs.

3.4 AOC 3– FORMER EXTERIOR IN-GROUND HYDRAULIC LIFT

AOC 3 encompasses the area of the exterior in-ground hydraulic lift, which was reportedly located outside of the former Site building near its southwestern corner. The objective of investigating this AOC was to confirm or dismiss the presence of COCs associated with the former automotive repair activities likely performed at the location of this former exterior in-ground hydraulic lift, including potential hydraulic oil leaks from hydraulic oil reservoir(s) associated with the former hydraulic lift, and to evaluate potential exposure risks associated with redevelopment of the property. Contaminant sources and exposure pathways associated with AOC 3 are described in Section 2.3.

In order to characterize current soil and groundwater conditions in the area of the former exterior in-ground hydraulic lift, one soil boring (SB-4) was advanced in this area and was subsequently converted to temporary monitoring well (MW-3). Additionally, soil vapor sample (SV-3) was collected in this area to evaluate potential vapor intrusion into any future structures which may be constructed at the Site.

Based on field screening results and observations, which did not indicate the presence of petroleum-impacted soils in surficial soils (0-2 feet bgs) or subsurface soils (greater than 2 feet bgs) in boring SB-4; Ransom submitted a subsurface soil sample collected within the measured groundwater interface from boring SB-4 (4 to 5 feet bgs) for laboratory analysis of VOCs (including petroleum and chlorinated VOCs), VPH and EPH fractions, target PAHs, arsenic and lead (metals), and PCBs.

The groundwater sample collected from temporary monitoring well MW-3 was also submitted for laboratory analysis of VOCs (including petroleum and chlorinated VOCs), VPH and EPH fractions, target PAHs, and dissolved arsenic and lead (metals). Ransom also collected soil vapor sample SV-3 adjacent to SB-4/MW-3 and submitted the sample for laboratory analysis of APH compounds and VOCs.

3.5 AOC 4– FORMER 2,000-GALLON GASOLINE UST

AOC 4 encompasses the area of the former 2,000-gallon gasoline UST that was reportedly located in the northeastern portion of the Site. The objective for investigating AOC 4 was to assess current soil and groundwater conditions and evaluate potential exposure risks associated with reported residual contamination in this area. Contaminant sources and exposure pathways associated with AOC 4 are described in Section 2.3.

In order to characterize current soil and groundwater conditions in the area of the former 2,000-gallon gasoline UST, soil boring (SB-5) was advanced in this area and was subsequently converted to temporary monitoring well (MW-4). Based on field screening results and observations, which did not indicate the presence of petroleum-impacted soils in surficial soils (0-2 feet bgs) or subsurface soils (greater than 2 feet bgs) in boring SB-5; Ransom submitted a subsurface soil sample collected within the measured groundwater interface from boring SB-5 (4 to 6 feet bgs) for laboratory analysis of VPH fractions and target petroleum VOCs, lead scavenger VOCs, and lead. The groundwater sample collected from temporary monitoring well MW-4 was also submitted for laboratory analysis of VPH fractions and target petroleum VOCs, lead scavenger VOCs, and dissolved lead. At the suggestion of the MEDEP, soil vapor sample SV-2 was relocated to assess potential vapor-phase contaminants from this AOC as well as AOC 2. Soil vapor sample SV-2 was submitted for laboratory analysis of APH and VOCs.

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 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 (Petroleum Remediation Guidelines). 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 currently utilized as a park and is proposed to be redeveloped for residential and/or commercial reuse, the "Park User", "Residential", and "Outdoor Commercial Worker" exposure scenarios appear to be the most applicable guidance standards. In addition, potential exposure risks to Site workers during building renovation and/or future utility work (i.e., subsurface water and sewer lines) exists at the Site; and therefore, "Excavation/Construction Worker" scenarios also apply to areas at the Site in the vicinity of subsurface utilities in order to evaluate potentially unacceptable risks to excavation or construction workers during proposed Site redevelopment and/or future utility 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

Although, municipal drinking water is provided to the Site and vicinity, Ransom utilized MEDEP BRWM's "*Petroleum Remediation Guidelines*" which includes the Maine Department of Human Services, MEGs to compare analytical results of groundwater samples collected at the Site in order to assess the need for managing contaminated groundwater and potentially unacceptable risks to site construction workers during proposed Site redevelopment and/or future utility work at the Site.

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 proposed to be redeveloped for residential and/or commercial reuse, Ransom calculated applicable Soil Gas Target concentrations for residential and commercial use by multiplying 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 with the exception of soils at the area of the 550-gallon petroleum USTs that were formerly located at the north-central portion of the Site. Shallow soils at the Site contained fill, which consisted of brown, sand and gravel with varying amounts of silt to depths ranging from 0 to 2 feet bgs. Shallow fill soils at the Site appear to be underlain by reworked naturally-deposited soils consisting of brown to gray, silt and sand with varying amounts of gravel. Subsurface soils at the location of the former 550-gallon petroleum USTs consisted of black, petroleum-stained sand and gravelly fill with varying amounts bricks and asphalt to depths ranging from 4 to 5.5 feet bgs. Probe refusal (presumed bedrock) was encountered at depths ranging from 5 to 10 feet bgs. Groundwater was encountered at approximate depths from 4.57 to 6.59 feet bgs at the Site.

No evidence of “petroleum-saturated soils” or “free petroleum product” contamination was observed in soils or groundwater encountered during the soil boring advancements or gauging of temporary groundwater monitoring wells.

Concurrent with the Phase II investigation, Ransom attempted to conduct a groundwater elevation survey in order to evaluate the local groundwater flow direction at the Site. However, groundwater levels measured in the temporary monitoring wells were observed to fluctuate during the field investigation; and therefore, the groundwater levels did not stabilize in the temporary monitoring wells and a groundwater elevation survey was not conducted during our investigation. Based on field observations and Site topography, the localized shallow groundwater flow is presumed to be to the north/northeast.

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) and one background groundwater sample (MW-5) collected during this investigation. Soil sample analytical results are summarized in Table 2. Groundwater sample analytical results are summarized in Table 3. A copy of the laboratory chemical analysis data report is provided as Appendix C.

Soil

Extractable Petroleum Hydrocarbons & Target Polycyclic Aromatic Hydrocarbons

As shown in Table 2, laboratory chemical analysis of the surficial (zero to two feet bgs) background soil sample (BK-1) indicated that target PAHs including; benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, chrysene, fluoranthene, phenanthrene, and pyrene were detected at concentrations ranging from 0.198 to 0.373 milligrams per kilogram (mg/kg). Additionally, two EPH fractions, C₁₉–C₃₆ aliphatics and C₁₁–C₂₂ aromatics, were detected at concentrations of 30.8 and 13.4 mg/kg, respectively, in the surficial background soil sample (BK-1). These target PAHs and EPH fractions are inferred to be characteristic of urban fill material in the area of the Site. For the purposes of this Phase II Investigation, target PAH and EPH concentrations in shallow soil samples collected at the Site are considered elevated if they exceed the site-specific background concentrations.

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 in the vicinity of the Site range from 13 to 17 mg/kg. Elevated levels of naturally occurring arsenic are common in Maine soils. Background concentrations of lead detected in these samples were observed to range from 17 to 726 mg/kg, which are inferred to be characteristic of urban fill material in the area of the Site. For the purposes of this Phase II Investigation, arsenic and lead concentrations in soil samples collected at the Site are considered elevated if they exceed the site-specific background concentrations detected in samples BK-1, BK-2, and BK-3 and/or the draft state-wide background concentrations for these compounds.

Groundwater

Volatile Organic Compounds

As shown in Table 3, laboratory chemical analysis of the background groundwater sample collected from monitoring well MW-5 indicated that groundwater at the southwestern portion of the Site contains low-level concentrations of dissolved phase chlorinated and petroleum-related VOCs. Specifically two chlorinated VOCs [cis-1,2-dichloroethene (cis-1,2-DCE) and trichloroethene (TCE)] were detected at concentrations of 1.6 and 0.5 micrograms per liter (µg/l), respectively. Two petroleum-related VOCs [1,2,4-trimethylbenzene and xylenes (total)] were detected at concentrations of 1.4 and 0.6 µg/l, respectively.

The presence of these chlorinated VOCs may be associated with unknown and/or unreported solvent release(s) from an upgradient property in the Site vicinity and the presence of petroleum-related VOCs in groundwater are inferred to be associated with *de minimis* petroleum residues that are incidental to the normal operation of motor vehicle use in the Site vicinity. For the purposes of this Phase II Investigation, concentrations of these chlorinated and petroleum-related VOCs are considered elevated if they exceed these background concentrations.

Volatile Petroleum Hydrocarbons

As shown on Table 3, one VPH fraction (C₉-C₁₀ aromatics) was detected at a concentration of 15 µg/l in the background groundwater sample collected from MW-5. The presence of this petroleum constituent in groundwater is inferred to be associated with *de minimis* petroleum residues that are incidental to the normal operation of motor vehicle use in the Site vicinity. For the purposes of this Phase II Investigation, concentrations of C₉-C₁₀ aromatics are considered elevated if they exceed this background concentration.

Extractable Petroleum Hydrocarbons & Target Polycyclic Aromatic Hydrocarbons

As shown in Table 3, no EPH fractions or target PAHs were detected in the groundwater sample collected from MW-5 at concentrations above their respective laboratory reporting limits; and therefore, target PAH and EPH fractions detected in groundwater samples collected at the Site at concentrations above their respective laboratory reporting limits would be associated with OHM releases originating at the Site and would not be associated with off-site OHM releases that would be migrating on-site in groundwater.

Dissolved Metals

As shown in Table 3, dissolved arsenic was not detected in the groundwater sample collected from MW-5 at concentrations above its laboratory reporting limits and dissolved lead was detected at an estimated concentration of 4 µg/l, which is below its drinking water guideline and representative of naturally occurring dissolved lead concentrations in groundwater. Based on these results, dissolved arsenic and lead detected in groundwater samples collected at the Site at concentrations above their respective drinking water guidelines would be associated with OHM releases originating at the Site and would not be associated with off-site OHM releases that would be migrating on-site in groundwater.

4.3 AOC 1– FORMER 550-GALLON PETROLEUM USTS

Soil Sample Analytical Results

Volatile Organic Compounds

Field screening indicated elevated organic vapors at a concentration of 959 ppmv in the subsurface soil sample collected from boring SB-1 at a depth of 4 to 5.5 feet bgs. Soils collected from this depth interval exhibited petroleum staining and odors; and therefore, this subsurface soil sample was subsequently submitted for laboratory analysis (refer to Table 2). Laboratory analysis indicated petroleum-related VOCs including, ethylbenzene, naphthalene, and total xylenes were detected in the subsurface soil sample collected from boring SB-1 at concentrations ranging from 0.233 to 0.772 mg/kg, which did not exceed their respective MEDEP RAGs or Petroleum Remediation Guidelines for “Park User”, “Residential”, “Outdoor Commercial Worker”, or “Excavation/Construction Worker” exposure scenarios. No other VOCs were detected in the subsurface soil sample collected from boring SB-1 at concentrations above their respective laboratory detection limits.

Volatile Petroleum Hydrocarbons

All three VPH fractions (C₅–C₈ aliphatics, C₉–C₁₂ aliphatics, and C₉–C₁₀ aromatics) were detected in the subsurface soil sample collected from boring SB-1 at concentrations ranging from 13.2 to 47.1 mg/kg, which did not exceed their respective MEDEP RAGs or Petroleum Remediation Guidelines for “Park User”, “Residential”, “Outdoor Commercial Worker”, or “Excavation/Construction Worker” exposure scenarios.

Extractable Petroleum Hydrocarbons

Two EPH fractions (C₉–C₁₈ aliphatics and C₁₁–C₂₂ aromatics) were detected in the subsurface soil sample collected from boring SB-1 at concentrations of 920 and 134 mg/kg, respectively, which did not exceed their respective MEDEP RAGs or Petroleum Remediation Guidelines for “Park User”, “Residential”, “Outdoor Commercial Worker”, or “Excavation/Construction Worker” exposure scenarios. C₁₉–C₃₆ aliphatics was not detected in the subsurface soil sample collected from boring SB-1 at a concentration above its laboratory detection limit.

Target Polycyclic Aromatic Hydrocarbons

The following target PAHs; benzo(b)fluoranthene, fluoranthene, fluorene, 2-methylnaphthalene, naphthalene, phenanthrene, and pyrene were detected at concentrations ranging from 0.17 to 3.36 mg/kg, which did not exceed their respective MEDEP RAGs or Petroleum Remediation Guidelines for “Park User”, “Residential”, “Outdoor Commercial Worker”, or “Excavation/Construction Worker” exposure scenarios. No other PAHs were detected in the subsurface soil sample collected from boring SB-1 at concentrations above their respective laboratory detection limits.

Metals

Lead was detected in the subsurface soil sample collected from boring SB-1 at a concentration of 41 mg/kg, which did not exceed its MEDEP RAGs or Petroleum Remediation Guidelines for “Park User”, “Residential”, “Outdoor Commercial Worker”, or “Excavation/Construction Worker” exposure scenarios or its highest site-specific background concentration.

Groundwater Sample Analytical Results

Volatile Organic Compounds

As shown in Table 3, petroleum-related VOCs including, benzene, ethylbenzene, methyl tert-butyl ether (MTBE), naphthalene, toluene, and total xylenes were detected in the groundwater sample collected from monitoring well MW-1 at concentrations ranging from 15 to 159 µg/l. The concentrations of benzene, ethylbenzene, and naphthalene detected in this groundwater sample exceed their respective background concentrations, as well as the MEGs for drinking water and MEDEP’s State-wide Groundwater and Drinking Water Petroleum Remediation Guidelines. No other VOCs were detected in the groundwater sample collected from MW-1 at concentrations above their respective laboratory detection limits.

Volatile Petroleum Hydrocarbons

All three VPH fractions (C₅–C₈ aliphatics, C₉–C₁₂ aliphatics, and C₉–C₁₀ aromatics) were detected in the groundwater sample collected from MW-1 at concentrations ranging from 3,480 to 4,380 µg/l, which exceeded their respective background concentrations, MEGs for drinking water, and MEDEP's State-wide Groundwater and Drinking Water Petroleum Remediation Guidelines.

Extractable Petroleum Hydrocarbons

Two EPH fractions (C₉–C₁₈ aliphatics and C₁₁–C₂₂ aromatics) were detected in the groundwater sample collected from MW-1 at concentrations of 2,530 and 378 µg/l, respectively, which exceeded their respective background concentrations, MEGs for drinking water, and MEDEP's State-wide Groundwater and Drinking Water Petroleum Remediation Guidelines. C₁₉–C₃₆ aliphatics was not detected in the groundwater sample collected from MW-1 at a concentration above its laboratory detection limit.

Target Polycyclic Aromatic Hydrocarbons

Two target PAHs (2-methylnaphthalene and naphthalene) were detected at concentrations of 24 and 11 µg/l, respectively. The concentration of naphthalene exceeded its background concentration, MEG for drinking water, and MEDEP's State-wide Groundwater and Drinking Water Petroleum Remediation Guideline. No other PAHs were detected in the groundwater sample collected from MW-1 at concentrations above their respective laboratory detection limits.

Dissolved Metals

Dissolved lead was detected in the groundwater sample collected from MW-1 at a concentration of 7 µg/l, which did not exceed its MEG for drinking water or MEDEP's State-wide Groundwater and Drinking Water Petroleum Remediation Guideline and was generally consistent with its site-specific background concentration.

Soil Vapor Sample Analytical Results

Air Petroleum Hydrocarbons

As shown in Table 4, only two APH fractions (C₅–C₈ aliphatics and C₉–C₁₂ aliphatics) were detected in the soil vapor sample collected from SV-1 at concentrations of 330 and 1,400 micrograms per cubic meter (µg/m³), respectively. These concentrations did not exceed their respective current or proposed Soil Gas Targets for residential or commercial use.

Discussion of Key AOC 1 Findings

Laboratory analytical results and field screening activities conducted in AOC 1 during this investigation indicate that low-level concentrations of petroleum constituents are present in subsurface soils and slightly elevated concentrations of petroleum constituents are present in groundwater at the northern portion of the Site. These contaminants are inferred to be representative of residual petroleum contamination associated with the two 550-gallon petroleum USTs formerly located at the Site. The residual petroleum-impacted soils were observed at depths greater than 2 feet bgs and are not anticipated to present a direct contact exposure risk for future Site occupants or visitors since they were detected at

concentrations below their risk-based MEDEP RAGs and Petroleum Remediation Guidelines for current and proposed reuse/exposure scenarios.

Contaminant concentrations detected in the groundwater in the area of the former 550-gallon petroleum USTs at the Site exceeded the MECDC MEGs and/or State-wide Groundwater and Drinking Water Petroleum Remediation Guidelines for several petroleum compounds and fractions. Because municipal water is available to the Site, ingestion of contaminated groundwater is not anticipated to represent an exposure route for these contaminants.

Based on field observations and Site topography, the localized shallow groundwater flow is presumed to be to the north/northeast. Therefore, dissolved-phase contaminants from the Site have the potential to migrate onto the neighboring properties to the north/northeast; specifically the Cross Street right-of-way. However, the closest occupied structure to the north/northeast of the Site is located approximately 50 feet from the UST source area. According to previous research commissioned by the MEDEP (GEI Consultants, Inc. 2012), structures located at distances greater than 30 feet from the source area are not expected to experience vapor intrusion due to attenuation of contaminant concentrations. Considering the distance from the source area (greater than 30 feet), the dissolved-phase contaminants are not anticipated to represent a vapor intrusion risk to occupied structures in the Site vicinity.

The concentrations of volatile petroleum constituents detected in the area of the two 550-gallon petroleum USTs, formerly located at the northern portion of the Site, did not exceed their respective current or proposed Soil Gas Targets for residential or commercial use; and therefore, are not anticipated to pose a threat to indoor air quality to future buildings at the Site.

4.4 AOC 2– FORMER GAS STATION/AUTO REPAIR BUILDING

Soil Sample Analytical Results

Volatile Organic Compounds

Field screening indicated low level organic vapors at a concentration of 5.9 ppmv in the surficial soil sample collected from boring SB-2 at a depth of 0 to 2 feet bgs. Soils collected from this depth contained naturally occurring organic matter (i.e., loam and grass roots) and did not exhibit petroleum contamination. Field screening of metals from this interval indicated concentrations of lead that were below the MEDEP RAGs for residential use, and were non-detect for concentrations of arsenic. Therefore, this surficial soil sample was not submitted for laboratory analysis.

Laboratory analysis did not indicate the presence of VOCs in the subsurface soil sample collected from boring SB-3 at concentrations above their respective laboratory detection limits. However, two petroleum-related VOCs (1,2,4-trimethylbenzene and total xylenes) were detected in the subsurface soil sample collected from boring SB-2 at estimated concentrations of 0.078 and 0.08 mg/kg, respectively, which did not exceed their respective MEDEP RAGs or Petroleum Remediation Guidelines for “Park User”, “Residential”, “Outdoor Commercial Worker”, or “Excavation/Construction Worker” exposure scenarios. No other VOCs were detected in the subsurface soil sample collected from boring SB-2 at concentrations above their respective laboratory detection limits.

Volatile Petroleum Hydrocarbons

All three VPH fractions (C₅–C₈ aliphatics, C₉–C₁₂ aliphatics, and C₉–C₁₀ aromatics) were detected in the subsurface soil sample collected from boring SB-2 at concentrations ranging from 1.88 to 4.35 mg/kg. Only one VPH fraction (C₉–C₁₀ aromatics) was detected in the subsurface soil sample collected from boring SB-3 at a concentration of 1.32 mg/kg. The concentrations of these VPH fractions did not exceed their respective MEDEP RAGs or Petroleum Remediation Guidelines for “Park User”, “Residential”, “Outdoor Commercial Worker”, or “Excavation/Construction Worker” exposure scenarios.

Extractable Petroleum Hydrocarbons

All three EPH fractions (C₉–C₁₈ aliphatics, C₁₉–C₃₆ aliphatics, and C₁₁–C₂₂ aromatics) were detected in the subsurface soil samples collected from boring SB-2 and SB-3 at concentrations ranging from 24.3 to 1,670 mg/kg. The concentration of C₁₁–C₂₂ aromatics detected in SB-3 exceeds the Petroleum Remediation Guidelines for residential and park user scenarios. However, because these concentrations were detected at a depth of 4-5.5 feet below grade, residents and park users are not anticipated to come into contact with these concentrations. The concentrations of EPH fractions detected in soil samples collected from borings SB-2 and SB-3 do not exceed the “Excavation/Construction Worker” guidelines. Therefore, the concentrations of EPH fractions detected in soil borings SB-2 and SB-3 are not expected to represent a direct contact exposure risk.

The concentration of C₁₁–C₂₂ aromatics detected in SB-3 also exceeds the soil remediation guideline based on petroleum potentially leaching to groundwater (460 mg/kg), outlined in the Petroleum Remediation Guidelines. Groundwater was not observed in overburden materials in this AOC; however, based on the contaminant concentrations detected, petroleum contaminants in this area are likely to impact groundwater conditions.

Target Polycyclic Aromatic Hydrocarbons

PAHs were not detected in the subsurface soil samples collected from borings SB-2 and SB-3 at concentrations above their respective laboratory detection limits.

Metals

Arsenic was detected in the subsurface soil samples collected from borings SB-2 and SB-3 at concentrations of 20 and 11 mg/kg, respectively, which exceeded its respective MEDEP RAGs for “Park User”, “Residential”, “Outdoor Commercial Worker”, and “Excavation/Construction Worker” exposure scenarios, but were generally consistent with its site-specific background concentration.

Lead was detected in the subsurface soil samples collected from borings SB-2 and SB-3 at concentrations of 23 and 18 mg/kg, respectively, which did not exceed its respective MEDEP RAGs or Petroleum Remediation Guidelines for “Park User”, “Residential”, “Outdoor Commercial Worker”, and “Excavation/Construction Worker” exposure scenarios.

Polychlorinated Biphenyls

PCBs were not detected in the subsurface soil samples collected from borings SB-2 and SB-3 at concentrations above their respective laboratory detection limits.

Soil Vapor Sample Analytical Results

Volatile Organic Compounds

As shown in Table 4, the following petroleum-related VOCs; benzene, ethylbenzene, MTBE, styrene, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, xylenes (total), and 1,3-butadiene were detected in the soil vapor sample collected from SV-2 at concentrations ranging from 0.072 to 0.806 $\mu\text{g}/\text{m}^3$. Additionally, the following chlorinated VOCs; chloroform, dichlorodifluoromethane, tetrachloroethene (PCE), 1,1,1-trichloroethane (1,1,1-TCA), and trichlorofluoromethane were detected in the soil vapor sample collected from SV-2 at concentrations ranging from 0.109 to 8.2 $\mu\text{g}/\text{m}^3$. These concentrations did not exceed their respective current or proposed Soil Gas Targets for residential or commercial use.

Air Petroleum Hydrocarbons

Only two APH fractions ($\text{C}_5\text{--}\text{C}_8$ aliphatics and $\text{C}_9\text{--}\text{C}_{12}$ aliphatics) were detected in the soil vapor sample collected from SV-2 at concentrations of 110 and 70 $\mu\text{g}/\text{m}^3$, respectively. These concentrations did not exceed their respective current or proposed Soil Gas Targets for residential or commercial use.

Discussion of Key AOC 2 Findings

Laboratory analytical results and field screening activities conducted in AOC 2 during this investigation indicate the presence of low-level petroleum contamination in subsurface soils at the north-central portion of the Site, which is inferred to be associated to former automotive repair operations and/or residual petroleum contamination associated with former gasoline storage and/or dispensing activities at the Site. The residual petroleum-impacted soils were observed at depths greater than 2 feet bgs and are not anticipated to present a direct contact exposure risk for future Site occupants or visitors since they were detected at concentrations below their risk-based MEDEP RAGs and Petroleum Remediation Guidelines for current and proposed reuse/exposure scenarios. However, the petroleum concentrations detected in soils are likely to impact localized groundwater conditions.

PCBs were not detected in subsurface soil samples in AOC 2. No evidence of a gross hydraulic oil release was observed in the area of the former in-ground hydraulic lift within the former building footprint during this investigation.

Soil vapor in the area of the former gas station/auto repair building at the northern portion of the Site contains low-level concentrations of various volatile petroleum constituents and chlorinated VOCs. The source of petroleum contaminants is inferred to be associated to former automotive repair operations and/or residual petroleum contamination associated with former gasoline storage and/or dispensing activities at the Site. The exact source of chlorinated VOCs is unknown, but may be attributable to on-site releases of automotive degreasers during former automotive repair operations at the Site.

Due to the lack of overburden groundwater at the northern portion of the Site, as well as the presence of shallow bedrock encountered during this investigation, it is inferred that soil vapor contaminants, are attributable to off-gassing of dissolved-phase contaminants migrating in groundwater within fractured bedrock beneath this portion of the Site; however, the soil vapor contaminants detected at the northern portion of the Site did not exceed their respective current or proposed Soil Gas Targets for residential or commercial use; and therefore, are not anticipated to pose a threat to indoor air quality to future buildings at the Site.

4.5 AOC 3– FORMER EXTERIOR IN-GROUND HYDRAULIC LIFT

Soil Sample Analytical Results

Volatile Organic Compounds

As shown in Table 2, two petroleum-related VOCs (naphthalene and total xylenes) were detected in the subsurface soil sample collected from boring SB-4 at estimated concentrations of 1.3 and 0.056 mg/kg, respectively, which did not exceed their respective MEDEP RAGs or Petroleum Remediation Guidelines for “Park User”, “Residential”, “Outdoor Commercial Worker”, or “Excavation/Construction Worker” exposure scenarios. No other VOCs were detected in the subsurface soil sample collected from boring SB-4 at concentrations above their respective laboratory detection limits.

Volatile Petroleum Hydrocarbons

Two VPH fractions (C₉–C₁₂ aliphatics and C₉–C₁₀ aromatics) were detected in the subsurface soil sample collected from boring SB-4 at concentrations of 15.4 and 13.4 mg/kg, respectively, which did not exceed their respective MEDEP RAGs or Petroleum Remediation Guidelines for “Park User”, “Residential”, “Outdoor Commercial Worker”, or “Excavation/Construction Worker” exposure scenarios. C₅–C₈ aliphatics were not detected in the subsurface soil sample collected from boring SB-4 at a concentration above its laboratory detection limit.

Extractable Petroleum Hydrocarbons

All three EPH fractions (C₉–C₁₈ aliphatics, C₁₉–C₃₆ aliphatics, and C₁₁–C₂₂ aromatics) were detected in the subsurface soil sample collected from boring SB-4 at concentrations ranging from 59.5 to 194 mg/kg, which exceeded their background concentrations, but did not exceed their respective MEDEP RAGs or Petroleum Remediation Guidelines for “Park User”, “Residential”, “Outdoor Commercial Worker”, or “Excavation/Construction Worker” exposure scenarios.

Target Polycyclic Aromatic Hydrocarbons

The following PAHs; acenaphthene, acenaphthylene, anthracene, benzo(g,h,i)perylene, benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, 2-methylnaphthalene, phenanthrene, and pyrene were detected in the subsurface soil sample collected from boring SB-4 at concentrations ranging from 0.282 to 4.92 mg/kg, which exceeded their background concentrations, as well as their respective MEDEP RAGs and Petroleum Remediation Guidelines for “Residential” and “Park User” scenarios. The concentration of benzo(a)pyrene detected in the soil sample collected from boring SB-4 also exceeds the “Outdoor Commercial Worker” scenario. The soil sample collected for laboratory analysis from boring SB-4 was collected at a depth of 4-6 feet bgs. Because

residents, park users, and outdoor commercial workers are not expected to come into contact with soils at this depth, these contaminants do not represent a direct contact exposure risk. The contaminant concentrations detected in the soil sample collected from SB-4 did not exceed their respective MEDEP RAGs or Petroleum Remediation Guidelines for “Excavation/Construction Worker” exposure scenarios.

Metals

Arsenic was detected in the subsurface soil sample collected from boring SB-4 at a concentration of 15 mg/kg, which exceeded its respective MEDEP RAGs for “Park User”, “Residential”, “Outdoor Commercial Worker”, and “Excavation/Construction Worker” exposure scenarios, but was generally consistent with its site-specific background concentration.

Lead was detected in the subsurface soil sample collected from boring SB-4 at a concentration of 16 mg/kg, which did not exceed its respective MEDEP RAGs or Petroleum Remediation Guidelines for “Park User”, “Residential”, “Outdoor Commercial Worker”, and “Excavation/Construction Worker” exposure scenarios, and was lower than its site-specific background concentration.

Polychlorinated Biphenyls

PCBs were not detected in the subsurface soil sample collected from boring SB-4 at concentrations above their respective laboratory detection limits.

Groundwater Sample Analytical Results

Volatile Organic Compounds

As shown in Table 3, one chlorinated VOC (chloroform) was detected in the groundwater sample collected from monitoring well MW-3 at a concentration of 1.4 µg/l, which did not exceed its MEG for drinking water or MEDEP’s State-wide Groundwater and Drinking Water Petroleum Remediation Guideline. No other VOCs were detected in the groundwater sample collected from MW-3 at concentrations above their respective laboratory detection limits.

Volatile Petroleum Hydrocarbons

Only one VPH fraction (C₉–C₁₀ aromatics) was detected in the groundwater sample collected from MW-3 at an estimated concentration of 6.3 µg/l, which did not exceed its background concentration, MEG for drinking water, or MEDEP’s State-wide Groundwater and Drinking Water Petroleum Remediation Guideline.

Extractable Petroleum Hydrocarbons

EPH fractions were not detected in the groundwater sample collected from MW-3 at concentrations above their respective laboratory detection limits.

Target Polycyclic Aromatic Hydrocarbons

PAHs were not detected in the groundwater sample collected from MW-3 at concentrations above their respective laboratory detection limits.

Dissolved Metals

Dissolved arsenic was not detected in the groundwater sample collected from MW-3 at a concentration above its respective laboratory detection limit. Dissolved lead was detected in the groundwater sample collected from MW-3 at an estimated concentration of 5 µg/l, which did not exceed its MEG for drinking water or MEDEP's State-wide Groundwater and Drinking Water Petroleum Remediation Guideline and was generally consistent with its site-specific background concentration.

Soil Vapor Sample Analytical Results

Volatile Organic Compounds

As shown in Table 4, the following petroleum-related VOCs; benzene, bromomethane, ethylbenzene, MTBE, styrene, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, xylenes (total), and 1,3-butadiene were detected in the soil vapor sample collected from SV-3 at concentrations ranging from 0.105 to 15.1 µg/m³. The concentration of 1,3-butadiene detected in this soil vapor sample exceeded its current and proposed Soil Gas Targets for residential use, but did not exceed its current or proposed Soil Gas Targets for commercial use. No other petroleum-related VOCs detected in this soil vapor sample exceeded their respective current or proposed Soil Gas Targets for residential or commercial use.

Additionally, the following chlorinated VOCs; carbon tetrachloride, chloroethane, chloroform, chloromethane, 1,2-dichloroethane (1,2-DCA), 1,1-dichloroethene (1,1-DCE), 1,2-dichloroethene (1,2-DCE), dichlorodifluoromethane, tetrachloroethene (PCE), 1,1,1-trichloroethane (1,1,1-TCA), 1,1,2-trichloroethane (1,1,2-TCA), trichloroethene (TCE), trichlorofluoromethane, vinyl chloride were detected in the soil vapor sample collected from SV-3 at concentrations ranging from 0.132 to 31.2 µg/m³. The concentration of PCE detected in this soil vapor sample exceeded its current Soil Gas Target for residential use, but was below the current Soil Gas Target for commercial use. No other chlorinated VOCs detected in this soil vapor sample exceeded their respective current or proposed Soil Gas Targets for residential or commercial use.

Air Petroleum Hydrocarbons

All three APH fractions (C₅-C₈ aliphatics, C₉-C₁₂ aliphatics, and C₉-C₁₀ aromatics) and the following petroleum-related VOCs; benzene, ethylbenzene, toluene, naphthalene, xylenes (total), and 1,3-butadiene were detected in the soil vapor sample collected from SV-3 at concentrations ranging from 2.4 to 3,100 µg/m³. The concentrations of 1,3-butadiene and C₉-C₁₂ aliphatics detected in this soil vapor sample exceeded their current and proposed Soil Gas Targets for residential use, but did not exceed their current or proposed Soil Gas Target for commercial use. No other petroleum-related VOCs detected in this soil vapor sample exceeded their respective current or proposed Soil Gas Targets for residential or commercial use.

Discussion of Key AOC 3 Findings

Laboratory analytical results and field screening activities conducted in AOC 3 during this investigation indicate the presence of low-level petroleum contamination in subsurface soils and groundwater at the eastern portion of the Site, which is inferred to be associated to former automotive repair operations and/or residual petroleum contamination associated with former gasoline storage and/or dispensing

activities at the Site. The residual petroleum-impacted soils were observed at depths greater than 2 feet bgs and are not anticipated to present a direct contact exposure risk for future Site occupants or visitors since they were detected at concentrations below their risk-based MEDEP RAGs and Petroleum Remediation Guidelines for current and proposed reuse/exposure scenarios.

PCBs were not detected in the subsurface soil sample and no evidence of a gross hydraulic oil release was observed at this portion of the Site associated with the former exterior in-ground hydraulic lift during this investigation.

Soil vapor at the eastern portion of the Site contains elevated concentrations of various volatile petroleum constituents and chlorinated VOCs, specifically PCE. The source of petroleum contaminants is inferred to be associated to former automotive repair operations and/or residual petroleum contamination associated with former gasoline storage and/or dispensing activities at the Site. The exact source of chlorinated VOCs is unknown, but may be attributable to on-site releases of automotive degreasers during former automotive repair operations at the Site.

The concentration of one chlorinated VOC (PCE) and two petroleum-related VOCs (1,3-butadiene and C₉-C₁₂ aliphatics) detected in the soil vapor sample collected at the eastern portion of the Site exceeded their current Soil Gas Targets for residential use, but did not exceed their current or proposed Soil Gas Target for commercial use; and therefore, these soil vapor contaminants have the potential to pose a threat to indoor air quality if future buildings at the Site are to be used for residential purposes.

Chlorinated solvents such as PCE are more persistent than petroleum compounds and often migrate through preferential pathways, such as underground utility trenches. The concentration of PCE detected in this area suggests the possibility of off-site vapor migration at concentrations which may exceed the Soil Gas Target for residential scenarios. Because the surrounding properties are used for commercial purposes, the contaminant concentrations detected at the Site are not expected to present health risk to surrounding properties.

4.6 AOC 4- FORMER 2,000-GALLON GASOLINE UST

Soil Sample Analytical Results

Volatile Organic Compounds

As shown in Table 2, no VOCs were detected in the subsurface soil sample collected from boring SB-5 at concentrations above their respective laboratory detection limits.

Volatile Petroleum Hydrocarbons

Two VPH fractions (C₉-C₁₂ aliphatics and C₉-C₁₀ aromatics) were detected in the subsurface soil sample collected from boring SB-5 at concentrations of 1.88 and 0.807 mg/kg, respectively, which did not exceed their respective MEDEP RAGs or Petroleum Remediation Guidelines for "Park User", "Residential", "Outdoor Commercial Worker", or "Excavation/Construction Worker" exposure scenarios. C₅-C₈ aliphatics were not detected in the subsurface soil sample collected from boring SB-5 at a concentration above its laboratory detection limit.

Metals

Lead was detected in the subsurface soil sample collected from boring SB-5 at a concentration of 69 mg/kg, which did not exceed its MEDEP RAGs or Petroleum Remediation Guidelines for “Park User”, “Residential”, “Outdoor Commercial Worker”, or “Excavation/Construction Worker” exposure scenarios or its highest site-specific background concentration.

Groundwater Sample Analytical Results

Volatile Organic Compounds

As shown in Table 3, petroleum-related VOCs including, benzene, ethylbenzene, naphthalene, toluene, and total xylenes were detected in the groundwater sample collected from monitoring well MW-4 at concentrations ranging from 0.6 to 3.6 µg/l. The concentrations of these petroleum-related VOCs exceeded their respective background concentrations; however, they did not exceed their respective MEGs for drinking water or MEDEP’s State-wide Groundwater and Drinking Water Petroleum Remediation Guidelines.

Volatile Petroleum Hydrocarbons

Only one VPH fraction (C₉–C₁₀ aromatics) was detected in the groundwater sample collected from MW-4 at a concentration of 17 µg/l, which slightly exceeded its background concentration, but did not exceed its MEG for drinking water or MEDEP’s State-wide Groundwater and Drinking Water Petroleum Remediation Guidelines.

Dissolved Metals

Dissolved lead was detected in the groundwater sample collected from MW-4 at a concentration of 5 µg/l, which did not exceed its MEG for drinking water or MEDEP’s State-wide Groundwater and Drinking Water Petroleum Remediation Guideline and was generally consistent with its site-specific background concentration.

Discussion of Key AOC 4 Findings

Laboratory analytical results and field screening activities conducted in AOC 4 during this investigation indicate the presence of low-level petroleum contamination in subsurface soils and groundwater at the eastern portion of the Site, which is inferred to be associated to former automotive repair operations and/or residual petroleum contamination associated with former gasoline storage and/or dispensing activities at the Site. The residual petroleum-impacted soils were observed at depths greater than 2 feet bgs and are not anticipated to present a direct contact exposure risk for future Site occupants or visitors since they were detected at concentrations below their risk-based MEDEP RAGs and Petroleum Remediation Guidelines for current and proposed reuse/exposure scenarios.

Low level concentrations of petroleum constituents detected in groundwater in the area of the former 2,000-gallon gasoline UST did not exceed their respective MECDC MEGs and/or State-wide Groundwater and Drinking Water Petroleum Remediation Guidelines; and therefore, exposure to low-level petroleum-impacted groundwater at the northeastern portion of the Site is not anticipated to represent a risk to current and future Site occupants, employees, or excavation/construction workers.

5.0 QUALITY ANALYSIS/QUALITY CONTROL

The contracted laboratory, Analytics Environmental Laboratory (Analytics) of Portsmouth, New Hampshire, provided Level II analytical data according to US EPA protocols and 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, and soil vapor sample were collected for laboratory analysis. The duplicate soil sample (SB DUP) was collected from subsurface soil sample SB-3 (4 to 5.5 feet bgs) and was submitted for laboratory analysis of VOCs, VPH, EPH, PAHs, PCBs, and metals (arsenic and lead). The duplicate groundwater sample (MW DUP) was collected from temporary monitoring well MW-1 and was submitted for laboratory analysis of VOCs, VPH, EPH, PAHs, and dissolved metals (arsenic and lead). The duplicate soil vapor sample (SV DUP) was collected from temporary soil vapor point SV-2 and was submitted for laboratory analysis of APH and VOCs by TO-15. A summary of duplicate sample analytical results and calculated RPDs is presented in the attached Table 5.

Subsurface Soil Sample (SB-3)

- VOCs were not detected in the SB-3 soil sample or its duplicate soil sample (SB DUP) above their respective laboratory reporting limits; therefore, no RPD was applicable.
- Target PAH compounds were not detected in the SB-3 soil sample or its duplicate soil sample (SB DUP) above their respective laboratory reporting limits; therefore, no RPD was applicable.
- One VPH fraction (C₉ to C₁₀ aromatics) was detected in the SB-3 soil sample and its duplicate soil sample (SB DUP) at concentrations greater than five times their PQL for the compounds. The RPD for this VPH fraction was above its 35 percent guideline; therefore, the precision of this sample result falls outside the guidance range.
- All three EPH fractions (C₉ to C₁₈ aliphatics, C₁₉ to C₃₆ aliphatics, and C₁₁ to C₂₂ aromatics) were detected in the SB-3 soil sample and its duplicate soil sample (SB DUP) at concentrations greater than five times their PQL for the compounds. The RPDs for these EPH fractions were below their 35 percent guideline; therefore, the precision of these sample results are acceptable.
- Arsenic and lead (metals) were detected in the SB-3 soil sample and its duplicate soil sample (SB DUP) at concentrations greater than five times their PQL for the compounds. The RPDs for these metals were above their 35 percent guideline; therefore, the precision of this sample result falls outside the guidance range.
- PCBs were not detected in the SB-3 soil sample or its duplicate soil sample (SB DUP) above their respective laboratory reporting limits; therefore, no RPD was applicable.

Groundwater Sample (MW-1)

- Six VOCs (benzene, ethylbenzene, MTBE, naphthalene, toluene, and total xylenes) were detected in the MW-1 groundwater sample and its duplicate groundwater sample (MW DUP) at concentrations greater than five times their PQL for the compounds. The RPDs for each of these VOCs were below their 35 percent guideline; therefore, the precision of these sample results are acceptable.
- One target PAH (naphthalene) was detected in the MW-1 groundwater sample and its duplicate groundwater sample (MW DUP) at concentrations greater than five times their PQL for the compounds. The RPD for this target PAH was below its 35 percent guideline; therefore, the precision of these sample results are acceptable.
- All three VPH fractions (C₅ to C₈ aliphatics, C₉ to C₁₂ aliphatics, and C₉ to C₁₀ aromatics) were detected in the MW-1 groundwater sample and its duplicate groundwater sample (MW DUP) at concentrations greater than five times their PQL for the compounds. The RPDs for each of these VPH fractions were below their 35 percent guideline; therefore, the precision of these sample results are acceptable.
- Two EPH fractions (C₉ to C₁₈ aliphatics and C₁₁ to C₂₂ aromatics) were detected in the MW-1 groundwater sample and its duplicate groundwater sample (MW DUP) at concentrations greater than five times their PQL for the compounds. The RPD for C₁₁ to

C₂₂ aromatics was above its 35 percent guideline; however, the RPD for C₉ to C₁₈ aliphatics was below its 35 percent guideline; therefore, the precision of these sample results are acceptable.

- Dissolved lead was detected in the MW-1 groundwater sample and its duplicate groundwater sample (MW DUP) at concentrations greater than five times their PQL for the compounds. The RPD for this metal was below its 35 percent guideline; therefore, the precision of these sample results are acceptable.

Soil Vapor Sample (SV-2)

- Thirteen VOCs (benzene, chloroform, dichlorodifluoromethane, ethylbenzene, MTBE, styrene, PCE, toluene, trichlorofluoromethane, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, total xylenes, and 1,3-butadiene) were detected in the SV-2 soil vapor sample and its duplicate soil vapor sample (SV DUP) at concentrations greater than five times their PQL for the compounds. The RPD for C₁₁ to C₂₂ aromatics was above its 35 percent guideline; however, the RPDs for the remaining 12 VOCs were below their 35 percent guideline; therefore, the precision of these sample results are acceptable.
- Two VPH fractions (C₅ to C₈ aliphatics and C₉ to C₁₂ aliphatics) were detected in the soil vapor sample SV-2 and its duplicate soil vapor sample (SV DUP) at concentrations greater than five times the PQL. The RPD for C₅ to C₈ aliphatics was above its 35 percent guideline; however, the RPD for C₉ to C₁₂ aliphatics was below its 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, 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 soil vapor 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 and groundwater samples collected and analyzed for EPH and PAH compounds.

Metals

There were no bias issues identified by the laboratory in the soil or groundwater 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. Therefore, it 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

Ransom completed a Phase II ESA at the Site in December 2012. The objective of the Phase II ESA was to collect sufficient data to confirm or dismiss the *RECs* identified during the Phase I ESA, to identify potential exposure risks, and to evaluate the suitability of the Site for the proposed residential and/or commercial redevelopment. The Phase II scope of work included the advancement of soil borings, installation of temporary groundwater monitoring wells, installation of temporary soil vapor sample points, and the collection and chemical analysis of soil, groundwater, and soil vapor samples throughout the Site.

The results of the Phase II ESA indicate that low-level concentrations of petroleum constituents are present in subsurface soils and slightly elevated concentrations of petroleum constituents are present in groundwater at the northern portion of the Site. These contaminants are inferred to be representative of residual petroleum contamination associated with two 550-gallon petroleum USTs formerly located at the Site. The presence of low-level petroleum contamination was also identified in subsurface soils and groundwater at the northeastern and eastern portions of the Site, which are inferred to be associated with former automotive repair operations and/or residual petroleum contamination associated with former gasoline storage and/or dispensing activities at the Site. The residual petroleum-impacted soils were observed at depths greater than 2 feet below ground surface (bgs); therefore, they do not represent a significant or chronic health risk to current park users, commercial workers, and/or future Site occupants or employees at this time. However, contaminated soils in the subsurface may represent a direct contact risk to future excavation/construction workers, and may require handling and disposal as a special waste, if these soils are disturbed or excavated during future construction projects at the Site.

The slightly elevated concentrations of petroleum constituents in groundwater at the northern portion of the Site (in the area of the two former 550-gallon petroleum USTs) were detected at concentrations that exceeded their respective drinking water or petroleum remediation guidelines. In addition, low level concentrations of petroleum constituents, which did not exceed their respective drinking water or petroleum remediation guidelines, were detected in groundwater at the area of the former gas station/auto repair building and at the location of the former 2,000-gallon gasoline UST. Furthermore, 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 during the Phase II ESA. Municipal water is available to the Site; therefore, ingestion of contaminated groundwater is not anticipated to represent an exposure route for these contaminants.

Based on field observations and Site topography, the localized shallow groundwater flow is presumed to be to the north/northeast. Therefore, dissolved-phase contaminants from the Site have the potential to migrate onto the neighboring properties to the north/northeast; specifically the Cross Street right-of-way. However, the closest occupied structure to the north/northeast of the Site is located approximately 50 feet from the UST source area. According to previous research commissioned by the MEDEP (GEI Consultants, Inc. 2012), structures located at distances greater than 30 feet from the source area are not expected to experience vapor intrusion due to attenuation of contaminant concentrations. Considering the distance from the source area (greater than 30 feet), the dissolved-phase contaminants are not anticipated to represent a vapor intrusion risk to occupied structures in the Site vicinity.

Soil vapor at the eastern portion of the Site contains slightly elevated concentrations of various volatile petroleum constituents and chlorinated volatile organic compounds (VOCs), specifically tetrachloroethene (PCE). The source of these contaminants is inferred to be associated with former automotive repair operations and gasoline storage and dispensing activities at the Site.

The concentrations of soil vapor contaminants present at the eastern portion of the Site exceeded their current and proposed Soil Gas Targets for residential use, but did not exceed their current or proposed Soil Gas Target for commercial use. The vapor-phase contaminants detected at the Site have the potential to represent a vapor intrusion risk if the Site property is developed for residential use in the future. Due to the commercial use of the surrounding properties, the vapor-phase contaminants associated with the Site are not anticipated to represent an exposure risk to the surrounding properties.

Arsenic was detected in every soil sample collected at the Site at concentrations exceeding its respective MEDEP Remedial Action Guidelines (RAGs) for “Park User”, “Residential”, “Outdoor Commercial Worker”, and “Excavation/Construction Worker” exposure scenarios, but is likely representative of naturally occurring concentrations for this metal in the State of Maine. Lead was only detected in one surficial soil sample at the Site at a concentration exceeding its respective MEDEP RAGs for “Park User”, “Residential”, and “Outdoor Commercial Worker” exposure scenarios. This detection was observed in a background soil sample, which was collected from an area not anticipated to be impacted by historic Site operations. The presence of this elevated concentration of lead does not appear to represent naturally occurring concentrations, but is likely representative of urban fill-impacted soils observed at the Site.

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 Further Action Assurance “ or a “No Action Assurance” letter and a “Certificate of Completion” (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 slightly elevated concentrations of contaminants of concern identified in soil, groundwater, and/or soil vapor at the Site should be mitigated in the form of a Declaration of Environmental Covenant (DEC). As part of the DEC, extraction of groundwater at the Site for drinking water use should be prohibited. Since public water is currently supplied to the Site and vicinity, this institutional control will not impact the current use of the Site as a park or the proposed redevelopment and reuse of the Site for residential and/or commercial use. As part of the DEC, a Soil and Groundwater Management Plan should also be developed in order to insure proper characterization, handling, and management of potentially impacted soils and groundwater, which may be encountered and displaced during redevelopment of the Site property (e.g., displaced and excess soils generated during installation of new foundations may require off-site disposal); and
3. A vapor barrier and/or passive sub-slab depressurization system should also be incorporated into the design of any new proposed Site structures to mitigate potential impacts to indoor air quality from potential vapor intrusion of volatile compounds identified in soil vapor samples collected at the Site. Vapor mitigation systems are similar and/or analogous to radon mitigation systems and are relatively easy to install and incorporate into the design of new building foundations.

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 RAGs for Sites 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. Ransom Consulting Inc.; November 26, 2012; Phase I Environmental Site Assessment, 40 Main Street, Belfast, Maine.
8. Ransom Consulting Inc.; November 26, 2012; Site-Specific Quality Assurance Project Plan Addendum No. 27, Phase II Environmental Site Assessment, 40 Main Street, Belfast, Maine.
9. Ransom Environmental Consultants Inc.; August 27, 2008; State of Maine Brownfields Assessment Projects Generic Quality Assurance Project Plan (QAPP) RFA #08243.
10. GEI Consultants, Inc.; January 2012; Summary Report, State of Maine, Vapor Intrusion Study for Petroleum Sites.

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:



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
40 Main Street
Belfast, Maine

Boring ID	Sample Depth (ft.)	Arsenic	Lead
		mg/kg	
SB-1	0-2	41	207
	4-5.5	ND	75
SB-2	0-2	ND	129
	4-5.5	ND	19
SB-3	0-2	36	156
SB-5	0-2	ND	178
	4-6	ND	34
SB-6	4-6	29	16
BK-1	0-2	16	ND
BK-2	0-2	19	39

NOTES:

mg/kg = milligrams per kilogram

Soil samples screened for metals using a Innov-X XRF in accordance with MEDEP's "Protocol for Collecting Data Using a Field Portable X-Ray Fluorescence Spectrometer For Certain Metals In Solid Media," SOP: DR#015, Rev. 1, July 26, 2001.

ND = Not detected above instrument detection limit

Table 2: Soil Sample Laboratory Analytical Results
Phase II Environmental Site Assessment
40 Main Street
Belfast, Maine

Sample Location	SB-1	SB-2	SB-3	SB-4	SB-5	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 for Sites Contaminated with Hazardous Substances (Jan 11, 2012)					MEDEP Remediation Guidelines for Petroleum Contaminated Sites in Maine (Dec. 1, 2009)				
	SB-1-S3	SB-2-S3	SB-3-S3	SB-4-S3	SB-5-S3	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
Sample Identification																						
Sample Depth (ft bgs)	4.0-5.5	4.0-5.0	4.0-5.5	4.0-6.0	4.0-6.0	0.0-2.0	0.0-2.0	0.0-2.0														
Date Collected	12/5/2012	12/5/2012	12/5/2012	12/5/2012	12/5/2012	12/5/2012	12/5/2012	12/5/2012														
Volatile Organic Compounds (VOCs)	miligrams per kilogram (mg/kg)																					
Benzene	ND	ND	ND	ND	ND	NA	NA	NA	17	28	86	30	85	140	850	150	NE	NE	17	28	86	30
Ethylbenzene	0.772	ND	ND	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
Methyl-tert-butyl ether	ND	ND	ND	ND	ND	NA	NA	NA	780	1,300	2,600	10,000	5,100	8,500	10,000	10,000	NE	NE	780	1,300	2,600	10,000
Naphthalene	0.516	ND	ND	1.3	ND	NA	NA	NA	200	330	200	32	2,500	4,200	10,000	10,000	NE	NE	200	330	200	32
Toluene	ND	ND	ND	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	NA	0.078 J	ND	ND	NA	NA	NA	NA	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Xylenes (total)	0.233 J	0.08 J	ND	0.056 J	ND	NA	NA	NA	6,600 ⁽¹⁾	10,000 ⁽¹⁾	10,000 ⁽¹⁾	7,000 ⁽¹⁾	10,000 ⁽¹⁾	10,000 ⁽¹⁾	10,000 ⁽¹⁾	10,000 ⁽¹⁾	NE	NE	6,600 ⁽¹⁾	10,000 ⁽¹⁾	10,000 ⁽¹⁾	7,000 ⁽¹⁾
All Other VOCs	NA	ND	ND	ND	NA	NA	NA	NA	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various
Target Polycyclic Aromatic Hydrocarbons (PAHs)	miligrams per kilogram (mg/kg)																					
Acenaphthene	ND	ND	ND	0.282	NA	ND	NA	NA	970	1,600	2,000	110	7,500	10,000	10,000	9,800	0.479	0.6072	970	1,600	2,000	110
Acenaphthylene	ND	ND	ND	0.777	NA	ND	NA	NA	1,000	1,700	2,200	130	7,500	10,000	10,000	10,000	0.4937	0.6606	1,000	1,700	2,200	130
Anthracene	ND	ND	ND	0.984	NA	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	ND	ND	1.46	NA	ND	NA	NA	750	1,200	5,500	10,000	3,700	6,200	10,000	10,000	1	2.035	NE	NE	NE	NE
Benzo(a)pyrene	ND	ND	ND	2.69	NA	0.198 J	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	ND	ND	2.6	NA	0.2 J	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	0.170 J	ND	ND	2.13	NA	0.26 J	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	ND	ND	0.714	NA	ND	NA	NA	2.6	4.4	35	430	26	44	350	4300	2	3.225	2.6	4.4	35	430
Chrysene	ND	ND	ND	2.61	NA	0.201 J	NA	NA	26	44	350	4,300	260	440	3,500	10,000	4	4.1	26	44	350	4,300
Dibenz(a,h)anthracene	ND	ND	ND	ND	NA	ND	NA	NA	0.026	0.044	0.35	4.3	0.26	0.44	3.5	43	NE	NE	0.026	0.044	0.35	4.3
Fluoranthene	0.181 J	ND	ND	3.04	NA	0.373	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
Fluorene	0.180 J	ND	ND	0.879	NA	ND	NA	NA	830	1,400	2,700	200	5,000	8,300	10,000	10,000	0	0.708	830	1,400	2,700	200
Indeno(1,2,3-cd)pyrene	ND	ND	ND	1.31	NA	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	1.49	ND	ND	0.303	NA	ND	NA	NA	94	160	480	35	500	830	3,600	600	0.414	0.804	94	160	480	35
Naphthalene	3.36	ND	ND	ND	NA	ND	NA	NA	200	330	200	32	2,500	4,200	10,000	10,000	0.041	0.8368	NE	NE	NE	NE
Phenanthrene	0.238 J	ND	ND	4.92	NA	0.25 J	NA	NA	700	1,200	3,600	470	3,700	6,200	10,000	10,000	1.608	4.064	700	1,200	3,600	470
Pyrene	0.181 J	ND	ND	4.79	NA	0.353	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
Extractable Petroleum Hydrocarbon (EPH) Fractions	miligrams per kilogram (mg/kg)																					
C9-C18 Aliphatics	920	24.3	631	59.5 J	NA	ND	NA	NA	NE	NE	NE	NE	2,600	4,400	10,000	7,300	NE	NE	2,600	4,400	10,000	7,300
C19-C36 Aliphatics	ND	34.2	1,670	133	NA	30.8	NA	NA	NE	NE	NE	NE	10,000	10,000	10,000	10,000	NE	NE	10,000	10,000	10,000	10,000
C11-C22 Aromatics	134	7.72 J	1,300	194	NA	13.4 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	miligrams per kilogram (mg/kg)																					
C5-C8 Aliphatics	13.2	1.88 J	ND	ND	ND	NA	NA	NA	NE	NE	NE	NE	1,400	2,300	10,000	10,000	NE	NE	1,400	2,300	10,000	10,000
C9-C12 Aliphatics	47.1	4.35	ND	15.4	1.88 J	NA	NA	NA	NE	NE	NE	NE	2,600	4,400	10,000	9,800	NE	NE	2,600	4,400	10,000	9,800
C9-C10 Aromatics	37.7	2.87	1.32	13.4	0.807	NA	NA	NA	NE	NE	NE	NE	740	1,200	5,100	5,500	NE	NE	740	1,200	5,100	5,500
Metals	miligrams per kilogram (mg/kg)																					
Arsenic	NA	20	11	15	NA	17	13	14	0.14	0.23	0.42	4.2	1.4	2.3	4.2	42	15	NE	NE	NE	NE	NE
Lead	41	23	18	16	69	17	38	726	170	280	560	950	340	530	1,100	950	NE	NE	170	280	560	950
Polychlorinated Biphenyls (PCBs)	miligrams per kilogram (mg/kg)																					
Total PCBs	NA	ND	ND	ND	NA	NA	NA	NA	0.49 ⁽¹⁾	0.82 ⁽¹⁾	1.2 ⁽¹⁾	1.3 ⁽¹⁾	2.4 ⁽¹⁾	4.1 ⁽¹⁾	12 ⁽¹⁾	6.1 ⁽¹⁾	NE	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.
B = compound detected in laboratory blank
J = estimated concentration detected below laboratory quantitation limit
Values in bold text exceed applicable MEDEP RAGs for current Park User exposure scenario or proposed reuse/exposure scenarios of Residential, Outdoor Commercial Worker, and/or Excavation/Construction Worker
⁽¹⁾ Standard is for total of all isomers (i.e., total PCBs, not individual Arochlors).

**Table 3: Groundwater Sample Analytical Results
Phase II Environmental Site Assessment
40 Main Street
Belfast, Maine**

Sample Identification	MW-1	MW-3	MW-4	MW-5	MECDC Maximum Exposure Guidelines (MEGs)	USEPA Maximum Contaminant Level (MCLs)	MEDEP Remediation Guidelines for Petroleum Contaminated Sites in Maine (Tier 1 Guidelines)
Date Collected	12/5/2012	12/5/2012	12/5/2012	12/5/2012			
Volatile Organic Compounds (VOCs)	micrograms per liter (ug/L)						
Benzene	15	ND	0.6 J	ND	4	5	4
Chloroform	NA	1.40	NA	ND	70	NE	NE
cis-1,2-Dichloroethene	NA	ND	NA	1.6	70	70	NE
Ethylbenzene	159	ND	0.7 J	ND	30	700	30
Methyl-tert-butyl ether (MTBE)	29	ND	ND	ND	35	NE	35
Naphthalene	47	ND	1	ND	10	NE	10
Toluene	32	ND	3.6	ND	600	1,000	600
Trichloroethene	NA	ND	NA	0.5 J	30	5	NE
1,2,4-Trimethylbenzene	NA	ND	NA	1.4	NE	NE	NE
Xylenes (total)	107	ND	2.8 J	0.6 J	1,000 ⁽¹⁾	1,000 ⁽¹⁾	1,000 ⁽¹⁾
All other VOCs	ND	ND	ND	ND	Various	Various	Various
Target Polycyclic Aromatic Hydrocarbons (PAHs)	micrograms per liter (ug/L)						
2-Methylnaphthalene	24	ND	NA	ND	30	NE	30
Naphthalene	11	ND	NA	ND	10	NE	NE
All other PAHs	ND	ND	NA	ND	Various	NE	Various
Extractable Petroleum Hydrocarbon (EPH) Fractions	micrograms per liter (ug/L)						
C9-C18 Aliphatics	2,530	ND	NA	ND	700	NE	700
C19-C36 Aliphatics	ND	ND	NA	ND	10,000	NE	10,000
C11-C22 Aromatics	378	ND	NA	ND	200	NE	200
Volatile Petroleum Hydrocarbon (VPH) Fractions	micrograms per liter (ug/L)						
C5-C8 Aliphatics	4,380	ND	ND	ND	300	NE	300
C9-C12 Aliphatics	3,480	ND	ND	ND	700	NE	700
C9-C10 Aromatics	3,590	6.3 J	17	15	200	NE	200
Metals	micrograms per liter (ug/L)						
Arsenic	NA	ND	NA	ND	10	10	NE
Lead	7	5 J	5 J	4 J	10	15	10

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

Values in **bold** text exceed drinking water and/or cleanup guidelines

⁽¹⁾ Standard is for total of all isomers (i.e., total xylenes).

**Table 4: Soil Vapor Sample Analytical Results
Phase II Environmental Site Assessment
40 Main Street
Belfast, Maine**

Sample Identification	SV-1	SV-2	SV-3	Draft MEDEP Remedial Action Guidelines for Sites Contaminated with Hazardous Substances (Jan 11, 2012) (1)		MEDEP Vapor Intrusion Evaluation Guidance (Jan 14, 2010) Chronic Exposure Scenario (2)	
				Soil Gas Targets Residential	Soil Gas Targets Commercial	Soil Gas Target Residential	Soil Gas Target Commercial
Sample Date	12/5/2012	12/5/2012	12/5/2012	Soil Gas Targets Residential	Soil Gas Targets Commercial	Soil Gas Target Residential	Soil Gas Target Commercial
Volatile Organic Compounds	Micrograms per cubic meter (ug/m3)						
Benzene	NA	0.441	5.94	31	160	15.5	80
Bromomethane	NA	ND	0.105	52	220	50.0	220
Carbon Tetrachloride	NA	ND	0.132	41	200	20.5	100
Chloroethane	NA	ND	0.245	NE	NE	NE	NE
Chloroform	NA	0.181	0.972	11	53	5.5	26.5
Chloromethane	NA	ND	2.33	940	3,900	950	3950
1,2-Dichlorobenzene	NA	ND	0.252	NE	NE	NE	NE
Dichlorodifluoromethane	NA	1.43	3.33	2,100	8,800	2,100	9,000
1,2-Dichloroethane	NA	ND	0.591	9.4	47	4.7	23.5
1,1-Dichloroethene	NA	ND	0.291	2,100	8,800	2,100	9,000
Ethylbenzene	NA	0.148	2.9	97	490	48.5	245
Methyl-tert-butyl ether (MTBE)	NA	0.072	0.173	940	4,700	470	2,350
Styrene	NA	0.183	0.204	3,100	13,000	3,150	13,000
Tetrachloroethene	NA	6.17	31.2	41	210	20.5	105
Toluene	NA	0.565	10	52,000	220,000	50,000	220,000
1,1,1-Trichloroethane	NA	0.109	2.43	52,000	220,000	50,000	220,000
1,1,2-Trichloroethane	NA	ND	0.49	15	77	7.5	38.5
Trichloroethene	NA	ND	0.145	41	210	60	305
Trichlorofluoromethane	NA	8.2	3.69	NE	NE	NE	NE
1,2,4-Trimethylbenzene	NA	0.806	2.55	NE	NE	NE	NE
1,3,5-Trimethylbenzene	NA	0.202	1.97	NE	NE	NE	NE
Vinyl Chloride	NA	ND	0.181	55	280	27.5	140
o-Xylene	NA	0.213	2.39	1,000	4,400	1,050	4,400
m,p-Xylene	NA	0.504	5.12	1,000	4,400	1,050	4,400
1,3-Butadiene	NA	0.365	15.1	8.1	41	4.05	20.5
All other VOCs	NA	ND	ND	Various	Various	Various	Various
Air-Phase Petroleum Hydrocarbons	Micrograms per cubic meter (ug/m3)						
1,3-Butadiene	ND	ND	15	8.1	41	4.05	20.5
Benzene	ND	ND	5.9	31	160	15.5	80.0
Toluene	ND	ND	9.8	52,000	220,000	50,000	220,000
Ethylbenzene	ND	ND	2.8	97	490	48.5	245
p/m-Xylene	ND	ND	4.9	1,000	4,400	1,050	4,400
o-Xylene	ND	ND	2.4	1,000	4,400	1,050	4,400
Napthalene	ND	ND	3.6	7	36	3.6	18
C5-C8 Aliphatics	330	110	1,900	6,300	26,000	6,500	26,500
C9-C12 Aliphatics	1,400	70	3,100	2,100	8,800	2,100	9,000
C9-C10 Aromatics	ND	ND	35	520	2,200	500	2,200

Notes:

MEDEP = Maine Department of Environmental Protection

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

ND = Not Detected above the laboratory detection limit

⁽¹⁾ Soil Gas Targets = 10 times the Indoor Air Target, as discussed in the January 11, 2012 Draft MEDEP Remedial Action Guidelines

⁽²⁾ Soil Gas Targets = 50 times the Indoor Air Target for Chronic exposure scenario for multi-contaminant sites, as discussed in the

MEDEP Vapor Intrusion Evaluation Guidelines (Jan. 14, 2010).

Values in **bold** text exceed MEDEP Soil Gas Targets for Residential or Commercial Use

TABLE 5: SUMMARY OF DUPLICATE SAMPLE ANALYTICAL RESULTS

Phase II Environmental Site Assessment
 40 Main Street
 Belfast, Maine

Sample Location	SB-3-S3	SB-DUP	Relative Percent Difference	MW-1	MW-DUP	Relative Percent Difference	SV-2	SV-DUP	Relative Percent Difference
Sample Depth (ft bgs)	4.0-5.5	4.0-5.5		1-5.5 feet	1-5.5 feet		2.5-3	2.5-3	
Sample Date	12/5/2012	12/5/2012		12/5/2012	12/5/2012		12/5/2012	12/5/2012	
Volatile Organic Compounds (VOCs)	Concentrations in mg/kg		%	Concentrations in µg/l		%	Concentrations in µg/m3		%
Benzene	ND	ND		15	16	-6	0.441	0.447	-1
Chloroform	ND	ND		NA	NA		0.181	0.186	-3
Dichlorodifluoromethane	ND	ND		NA	NA		1.43	1.45	-1
Ethylbenzene	ND	ND		159	189	-17	0.148	0.156	-5
Methyl-tert-butyl ether (MTBE)	ND	ND		29	32	-10	0.072	0.115	-46
Napthalene	ND	ND		47	60	-24	ND	ND	
Styrene	ND	ND		NA	NA		0.183	0.196	-7
Tetrachloroethene	ND	ND		NA	NA		6.17	6.2	0
Toluene	ND	ND		32	35	-9	0.565	0.614	-8
1,1,1-Trichloroethane	ND	ND		NA	NA		0.109	ND	
Trichlorofluoromethane	ND	ND		NA	NA		8.2	8.15	1
1,2,4-Trimethylbenzene	ND	ND		NA	NA		0.806	0.831	-3
1,3,5-Trimethylbenzene	ND	ND		NA	NA		0.202	0.211	-4
Xylenes (total)	ND	ND		107	119	-11	0.717	0.769	-7
1,3-Butadiene	ND	ND		NA	NA		0.365	0.354	3
All other VOCs	ND	ND		ND	ND		ND	ND	
Target PAH Compounds	Concentrations in mg/kg		%	Concentrations in µg/l		%	Concentrations in µg/l		%
2-Methylnapthalene	ND	ND		24	ND		NA	NA	
Napthalene	ND	ND		11	9	20	NA	NA	
All Other Target PAH Compounds	ND	ND		ND	ND		NA	NA	
Volatile Petroleum Hydrocarbon (VPH) Fractions	Concentrations in mg/kg		%	Concentrations in µg/l		%	Concentrations in µg/l		%
C ₅ through C ₈ Aliphatics	ND	ND		4,380	5,450	-22	110	200	-58
C ₉ through C ₁₂ Aliphatics	ND	2.24 J		3,480	4,620	-28	70	100	-35
C ₉ through C ₁₀ Aromatics	1.320	2.200	-50	3,590	4,460	-22	ND	11	
Extractable Petroleum Hydrocarbon (EPH) Fractions	Concentrations in mg/kg		%	Concentrations in µg/l		%	Concentrations in µg/l		%
C ₉ through C ₁₈ Aliphatics	631	496	24	2,530	1,810	33	NA	NA	
C ₁₉ through C ₃₈ Aliphatics	1670	1410	17	ND	ND		NA	NA	
C ₁₁ through C ₂₂ Aromatics	1300	938	32	378	259.0	37	NA	NA	
Metals	Concentrations in mg/kg		%	Concentrations in µg/l		%	Concentrations in µg/l		%
Arsenic	11	7.4	39	NA	NA		NA	NA	
Lead	18.0	8.1	76	7.0	10.0	-35	NA	NA	
Polychlorinated Biphenyls (PCBs)	Concentrations in mg/kg		%	Concentrations in µg/l		%	Concentrations in µg/l		%
All PCBs	ND	ND		NA	NA		NA	NA	

Regional Locator Map



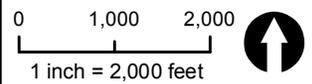
Belfast



Notes

1. Data Source: USGS, National Geographic Society, I-cubed
2. USGS Quad Name: Belfast
3. Latitude: 44° 25' 37.48" N
 Longitude: 69° 0' 20.12" W
 UTM Northing: 4919309.15 mN
 UTM Easting: 499555.95 mE

Scale and Orientation



Prepared For

City of Belfast
 131 Church Street
 Belfast, Maine

Site Address

Vacant Parcel
 40 Main Street
 Belfast Maine

111.06134 **Nov 2012**

Figure 1
 Site Location

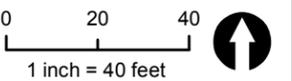
Legend

-  Site Boundary (Assessor's Map)
-  Former Building
-  Former Lift Area
-  Area Of Concern
-  Fence
-  Background Soil Sample
-  Temporary Monitoring Well
-  Soil Boring
-  Temporary Soil Vapor Point

Notes

1. Site Plan based on Bing Orthophotography
2. Some Features are approximate in location and scale
3. Property boundary extracted from the City of Belfast digital parcel composite of Assessor's Maps
4. This plan has been prepared for the City of Belfast, Maine. All other uses are not authorized unless written permission is obtained from Ransom Consulting, Inc.

Scale and Orientation



Prepared For

City of Belfast
131 Church Street
Belfast, Maine

Site Address

Vacant Parcel
40 Main Street
Belfast, Maine

111.06134 Jan 2013

Figure 2
Site Plan



APPENDIX A

Boring Logs

Phase II Environmental Site Assessment
40 Main Street
Belfast, Maine

BORING AND MONITORING WELL LOG: SB-1/MW-1

Reviewed by: <i>Eric Pheasant</i>	Total Depth: 5.5 Feet	Logged By: EPP
Date Reviewed: 1/15/13	Boring Diameter: 2 Inches	Date Drilled: 12/5/12 to 12/5/12
GW Observed at: 4.57 Feet	Well Stickup: 1.53	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') - 8" - Brown, fine to coarse SAND and GRAVEL, some Silt, moist (rock in shoe) (FILL)		S1	-	24/8	1.1		
	S2(2.0'-4.0') - No Recovery		S2	-	24/0	NA		
5	S3(4.0'-5.5') - 9" - Black, fine to coarse SAND and GRAVEL, contains bricks and asphalt with petroleum odor, wet (FILL) Refusal @ 5.5' bgs.		S3	-	24/9	959	5	
10							10	
15							15	

LEGEND:

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

NOTES:

1) Boring advanced using GeoProbe direct-push technology. 2) Sample designated with solid fill submitted for laboratory analysis. 3) Groundwater encountered at 4.57 ft. bgs. 4) NA= Not Applicable; NM = Not Measured; NO = Not Observed.

CLIENT:
City of Belfast

SITE:
40 Main Street
Belfast, ME

BORING AND MONITORING WELL LOG: SB-2/MW-2

Reviewed by: <i>Erik Perry</i>	Total Depth: 5 Feet	Logged By: ARF
Date Reviewed: <i>1/15/13</i>	Boring Diameter: 2 Inches	Date Drilled: 12/5/12 to 12/5/12
GW Observed at: 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 2" - Brown, SILT, some sand with grass roots, moist (FILL). Middle 3" - Crushed asphalt. Bottom 5" - Brown, fine to coarse SAND, moist.		S1	24/10	5.9			
	S2(2.0'-4.0') - No Recovery		S2	24/0	NA			
5	S3(4.0'-5.5') - Top 4" - Dark brown, fine to coarse SAND, some Silt, trace fine to coarse Gravel, moist. Bottom 5" - Gray, fine to coarse SAND, some Silt, moist. Refusal @ 5.0' bgs.		S3	24/9	<1		5	
10							10	
15							15	

LEGEND:

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

NOTES:
 1) Boring advanced using GeoProbe direct-push technology. 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:
40 Main Street
Belfast, ME

Project No.: 111.06134 Page: 1

BORING LOG:

SB-3

Reviewed By: <i>Eric Phelps</i>	Total Depth: 5.5 Feet	Logged By: ARF
Date Reviewed: 11/5/13	Boring Diameter: 2 Inches	Date Drilled: 12/5/12 to 12/5/12
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)	Dexil (ppm)	DEPTH
	S1(0.0'-2.0') - Top 3" - Brown, SILT, some Sand with grass roots, moist. Bottom 17" - Dark brown to light brown, fine to coarse SAND, some Silt and fine to coarse Gravel, moist.		S1	-	24/20	<1		
	S2(2.0'-4.0') - No Recovery		S2	-	24/0	NA		
5	S3(4.0'-5.5') - Top 3" - Brown, SILT, trace fine sand, moist. Bottom 11" - Light brown to gray, fine to coarse SAND, trace silt or fine to coarse Gravel, moist. Refusal @ 5.5' bgs.		S3	-	24/14	<1		5
10								10
15								15

NOTES:
1) Boring advanced using GeoProbe direct-push technology. 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:
40 Main Street
Belfast, ME

BORING AND MONITORING WELL LOG: SB-4/MW-3

Reviewed by: <i>Eric Rheny</i>	Total Depth: 10 Feet	Logged By: ARF
Date Reviewed: <i>1/15/13</i>	Boring Diameter: 2 Inches	Date Drilled: 12/5/12 to 12/5/12
GW Observed at: 6.59 Feet	Well Stickup: 1.21	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') - 7" - Light gray to light brown, fine to coarse SAND, some fine to coarse Gravel, moist.		S1	-	24/7	<1		
	S2(2.0'-4.0') - No Recovery		S2	-	24/0	NA		
5	S3(4.0'-6.0') - 8" - Brown, fine to coarse SAND, moist.		S3	-	24/8	<1	5	
	S4(6.0'-8.0') - No Recovery		S4	-	24/0	NA		
	S5(8.0'-10.0') - 8" - Brown to gray, fine SAND, some Silt, wet.		S5	-	24/8	<1		
10	Refusal @ 10.0' bgs						10	
15							15	

LEGEND:

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

NOTES:

1) Boring advanced using GeoProbe direct-push technology. 2) Sample designated with solid fill submitted for laboratory analysis. 3) Groundwater encountered at 6.59 ft. bgs. 4) NA= Not Applicable; NM = Not Measured; NO = Not Observed.

CLIENT:
City of Belfast

SITE:
40 Main Street
Belfast, ME

BORING AND MONITORING WELL LOG: SB-5/MW-4

Reviewed by: <i>Eric Pherry</i>	Total Depth: 8 Feet	Logged By: ARF
Date Reviewed: <i>1/15/13</i>	Boring Diameter: 2 Inches	Date Drilled: 12/5/12 to 12/5/12
GW Observed at: 4.79 Feet	Well Stickup: 2.29	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 1" - Gray, fine to coarse GRAVEL, dry. Bottom 10" - Brown, fine to coarse SAND, some Silt, moist.		S1	-	24/11	<1		
	S2(2.0'-4.0') - No Recovery		S2	-	24/0	NA		
5	S3(4.0'-6.0') - 20" - Brown to gray, fine to coarse SAND, some Silt, trace crushed stone, moist.		S3	-	24/20	<1	5	
	S4(6.0'-8.0') - No Recovery		S4	-	24/0	NA		
	Refusal @ 8.0' bgs							

LEGEND:

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

NOTES:
1) Boring advanced using GeoProbe direct-push technology. 2) Sample designated with solid fill submitted for laboratory analysis. 3) Groundwater encountered at 4.79 ft. bgs. 4) NA= Not Applicable; NM = Not Measured; NO = Not Observed.

CLIENT:
City of Belfast

SITE:
40 Main Street
Belfast, ME

BORING AND MONITORING WELL LOG: SB-6/MW-5

Reviewed by: <i>Eric Phung</i>	Total Depth: 8 Feet	Logged By: ARF
Date Reviewed: <i>1/15/13</i>	Boring Diameter: 2 Inches	Date Drilled: 12/5/12 to 12/5/12
GW Observed at: 4.59 Feet	Well Stickup: 2.41	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') - 12" - Gray to brown, fine to coarse SAND, some Silt, trace fine to coarse Gravel, moist.		S1	-	24/12	<1		
	S2(2.0'-4.0') - No Recovery		S2	-	24/0	NA		
5	S3(4.0'-6.0') - Top 5" - Light brown, SILT, some fine Sand, moist. Bottom 8" - Light gray, crushed stone, moist.		S3	-	24/13	<1	5	
	S4(6.0'-8.0') - No Recovery		S4	-	24/0	NA		
	Refusal @ 8.0' bgs.							
10							10	
15							15	

LEGEND:

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

NOTES:
 1) Boring advanced using GeoProbe direct-push technology. 2) Groundwater encountered at 4.59 ft. bgs. 3) NA= Not Applicable; NM = Not Measured; NO = Not Observed.

CLIENT:
City of Belfast

SITE:
40 Main Street
Belfast, ME

Project No.: 111.06134 Page: 1

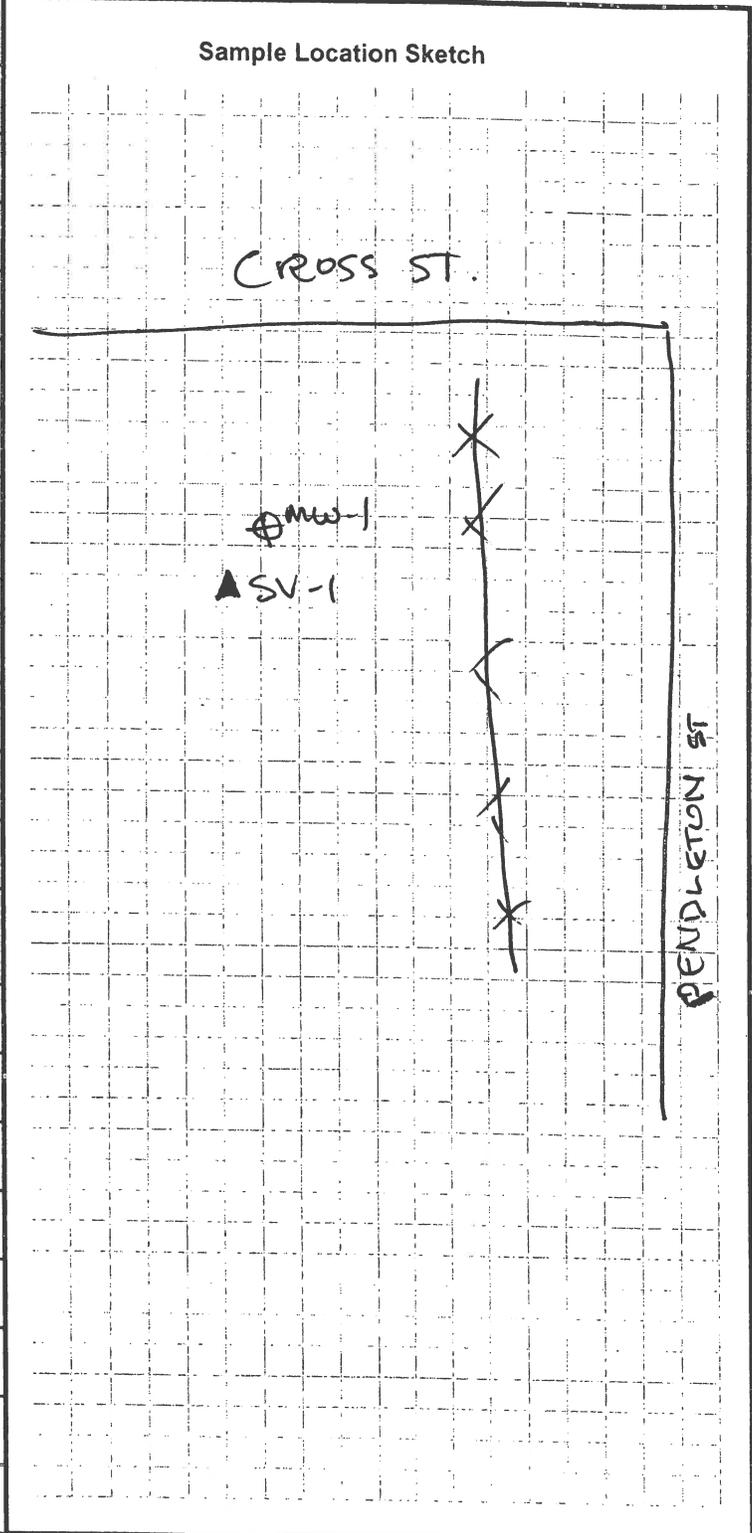
APPENDIX B

Field Data Sheets

Phase II Environmental Site Assessment
40 Main Street
Belfast, Maine

**Soil Gas Sampling Field Sheet
Maine DEP**

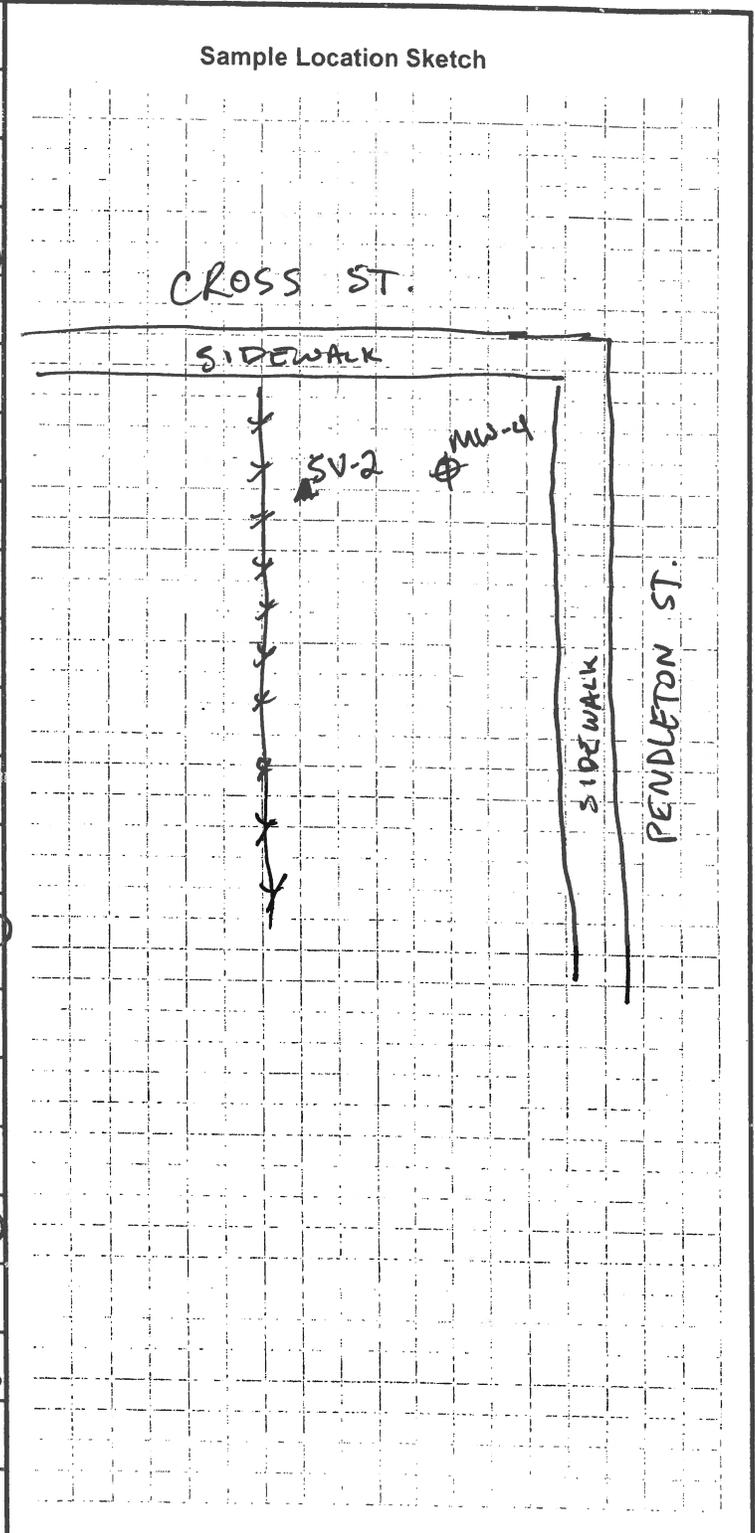
Site Name:	40 Main St.
Location:	Belfast
Date:	12/5/12
Sample I.D.:	SV-1
Sampling Personnel:	ERP
Project Manager:	Pete Sherr
Collection Device:	(Suma Cannister) (Tedlar Bag) (Niosh Tube)
PID:	1.2
O ₂ :	20.9% vol
CO ₂ :	850 ppm
Flow rate:	167 ml/min.
Cannister I.D.:	359
Controller I.D.:	165
Sample Penetration Location:	(Ashphalt) (Concrete) (Soil)
Soil Type:	(Fill) (Till) (Sand & Gravel) (Glacial Marine)
Sample Depth:	2.5-3
Depth to Water:	~6'
Suspected COCs:	(Petroleum) (Solvents)
Sampling Start Time:	1503
Initial Vacuum:	-29.30
Sampling End Time:	1524
Final Vacuum:	-3.53



Notes:

Soil Gas Sampling Field Sheet
Maine DEP

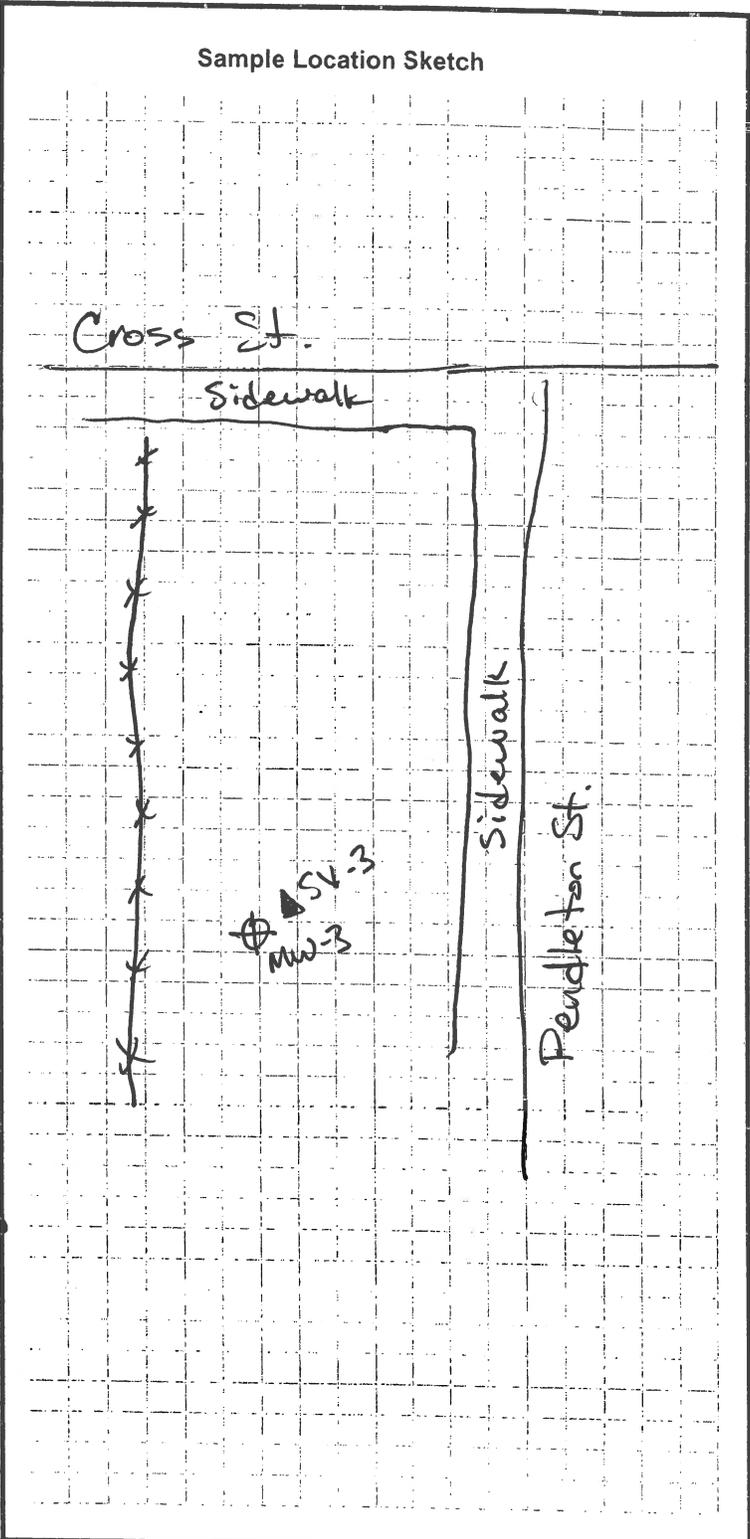
Site Name:	40 Main St.	
Location:	Belfast	
Date:	12/5/12	
Sample I.D.:	SV-2 (DUP)	
Sampling Personnel:	EPP	
Project Manager:	Pete Sherr	
Collection Device:	(Summa Cannister) (Tedlar Bag) (Niosh Tube)	
PID:	0.7 ppm	
O ₂ :	19.7 20.5 % Vol.	
CO ₂ :	5,900 1200 ppm	
Flow rate:	109 ml/min	
Cannister I.D.:	262	DUP 199
Controller I.D.:	236	364
Sample Penetration Location:	(Ashphalt) (Concrete) <u>(Soil)</u>	
Soil Type:	<u>(Fill)</u> (Till) (Sand & Gravel) (Glacial Marine)	
Sample Depth:	2.5 - 3	
Depth to Water:	~6'	
Suspected COCs:	<u>(Petroleum)</u> <u>(Solvents)</u>	
Sampling Start Time:	14:23	
Initial Vacuum:	-28.87	-28.86
Sampling End Time:	-3.58	-3.03
Final Vacuum:	14:42	



Notes:

**Soil Gas Sampling Field Sheet
Maine DEP**

Site Name:	40 Main St.
Location:	Belfast
Date:	12/5/12
Sample I.D.:	SV-3
Sampling Personnel:	EPP
Project Manager:	Pete Sherr
Collection Device:	(Suma Cannister) Tedlar Bag (Niosh Tube)
PID:	18.4 2.8
O ₂ :	18.4 % Vol
CO ₂ :	10,000 ppm
Flow rate:	109 mLs.
Cannister I.D.:	337
Controller I.D.:	230
Sample Penetration Location:	(Ashphalt) (Concrete) (Soil)
Soil Type:	(Fill) (Till) (Sand & Gravel) (Glacial Marine)
Sample Depth:	2.5-3'
Depth to Water:	~6'
Suspected COCs:	(Petroleum) (Solvents)
Sampling Start Time:	1337
Initial Vacuum:	-29.31
Sampling End Time:	1354
Final Vacuum:	-3.91



Notes:

APPENDIX C

Laboratory Reports

Phase II Environmental Site Assessment
40 Main Street
Belfast, Maine

Mr. Erik Phenix
Ransom Environmental Consultants, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

**RE: Analytical Results Case Narrative
40 Main St. Belfast
Project No: 111.06134.026
Analytics #74440**

Dear Mr. Phenix:

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.

Samples 74440-1, 74440-5 and 74440-14 were analyzed at a dilution due to high concentrations of non-target analytes. Results were reported with a comment to this affect.

The continuing calibration standard (file# C84878SC) had %D greater than 20% but less than for Methyl ethyl ketone. Acetone had high recovery in the laboratory control sample (LS121412C). The laboratory control sample duplicate (LS121412C2) was in control for all analytes. Results were reported without qualification.

Volatile Petroleum Hydrocarbons (VPH):

Some samples had only hydrocarbon ranges reported at the client's request.

Samples 74440-1, 74440-10 and 74440-14 required dilution due to concentrations of target analytes that exceeded the calibration range of the instrument.

Extractable Petroleum Hydrocarbons (EPH):

Samples 74440-1, 74440-3, 74440-4, 74440-6, 74440-10 and 74440-14 were analyzed at a dilution due to concentrations of target analytes that exceeded the calibration range of the instrument.

PCBs by EPA 8082:

No results were reported below the Quantitation Limit.

Selected Metals by EPA Method 6010B:

No QC deviations.

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. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

Report Number: 74440

Revision: Rev. 0

Re: 40 Main St. Belfast (Project No: 111.06134.026)

Enclosed are the results of the analyses on your sample(s). Samples were received on 06 December 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: None

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 12/20/2012

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

CLIENT: Ransom Consulting, Inc.

REPORT NUMBER: 74440

REV: Rev. 0

PROJECT: 40 Main St. Belfast (Project No: 111.06134.026)

<u>Lab Number</u>	<u>Sample Date</u>	<u>Station Location</u>	<u>Analysis</u>	<u>Comments</u>
74440-1	12/05/12	SB-1-S3	EPA 8260 Volatile Organics	
	12/05/12	SB-1-S3	MADEP EPH	
	12/05/12	SB-1-S3	Metals	
	12/05/12	SB-1-S3	Volatile Petroleum Hydrocarbons	
74440-2	12/05/12	SB-2-S3	EPA 8082 (PCBs only)	
	12/05/12	SB-2-S3	EPA 8260 Volatile Organics	
	12/05/12	SB-2-S3	MADEP EPH	
	12/05/12	SB-2-S3	Metals	
74440-3	12/05/12	SB-2-S3	Volatile Petroleum Hydrocarbons	
	12/05/12	SB-3-S3	EPA 8082 (PCBs only)	
	12/05/12	SB-3-S3	EPA 8260 Volatile Organics	
	12/05/12	SB-3-S3	MADEP EPH	
74440-4	12/05/12	SB-3-S3	Metals	
	12/05/12	SB-3-S3	Volatile Petroleum Hydrocarbons	
	12/05/12	SB-4-S3	EPA 8082 (PCBs only)	
	12/05/12	SB-4-S3	EPA 8260 Volatile Organics	
74440-5	12/05/12	SB-4-S3	MADEP EPH	
	12/05/12	SB-4-S3	Metals	
	12/05/12	SB-4-S3	Volatile Petroleum Hydrocarbons	
	12/05/12	SB-5-S3	EPA 8260 Volatile Organics	
74440-6	12/05/12	SB-5-S3	Metals	
	12/05/12	SB-5-S3	Volatile Petroleum Hydrocarbons	
	12/05/12	SB-DUP	EPA 8082 (PCBs only)	
	12/05/12	SB-DUP	EPA 8260 Volatile Organics	
74440-7	12/05/12	SB-DUP	MADEP EPH	
	12/05/12	SB-DUP	Metals	
	12/05/12	SB-DUP	Volatile Petroleum Hydrocarbons	
	12/05/12	BK-1	MADEP EPH	
74440-8	12/05/12	BK-1	Metals	
	12/05/12	BK-2	Metals	
74440-9	12/05/12	BK-3	Metals	
74440-10	12/05/12	MW-1	Dissolved Metals	
	12/05/12	MW-1	EPA 8260 Volatile Organics	
	12/05/12	MW-1	MADEP EPH	
	12/05/12	MW-1	Volatile Petroleum Hydrocarbons	
74440-11	12/05/12	MW-3	Dissolved Metals	
	12/05/12	MW-3	EPA 8260 Volatile Organics	

CLIENT: Ransom Consulting, Inc.

REPORT NUMBER: 74440

REV: Rev. 0

PROJECT: 40 Main St. Belfast (Project No: 111.06134.026)

<u>Lab Number</u>	<u>Sample Date</u>	<u>Station Location</u>	<u>Analysis</u>	<u>Comments</u>
	12/05/12	MW-3	MADEP EPH	
	12/05/12	MW-3	Volatile Petroleum Hydrocarbons	
74440-12	12/05/12	MW-4	Dissolved Metals	
	12/05/12	MW-4	EPA 8260 Volatile Organics	
	12/05/12	MW-4	Volatile Petroleum Hydrocarbons	
74440-13	12/05/12	MW-5	Dissolved Metals	
	12/05/12	MW-5	EPA 8260 Volatile Organics	
	12/05/12	MW-5	MADEP EPH	
	12/05/12	MW-5	Volatile Petroleum Hydrocarbons	
74440-14	12/05/12	MW-DUP	Dissolved Metals	
	12/05/12	MW-DUP	EPA 8260 Volatile Organics	
	12/05/12	MW-DUP	MADEP EPH	
	12/05/12	MW-DUP	Volatile Petroleum Hydrocarbons	
74440-15	12/05/12	TRIP BLANK	Electronic Data Deliverable	
	12/05/12	TRIP BLANK	EPA 8260 Volatile Organics	

Surrogate Compound Limits

Matrix: Units:	Aqueous % Recovery	Solid % 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. Erik Phenix
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

December 20, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast

Project Number: 111.06134.026

Field Sample ID: SB-1-S3

Lab Sample ID: 74440-1

Matrix: Solid

Percent Solid: 95

Dilution Factor: 100

Collection Date: 12/05/12

Lab Receipt Date: 12/06/12

Analysis Date: 12/14/12

ANALYTICAL RESULTS VOLATILE ORGANICS			
COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$	
Chlorobenzene	100	U	
1,3-Dichlorobenzene	100	U	
1,4-Dichlorobenzene	100	U	
1,2-Dichlorobenzene	100	U	
1,2-Dibromoethane	75	U	
1,2-Dichloroethane	75	U	
Surrogate Standard Recovery			
d4-1,2-Dichloroethane	99 %	d8-Toluene	82 %
		Bromofluorobenzen	100 %
U=Undetected	J=Estimated	E=Exceeds Calibration Range	B=Detected in

METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test

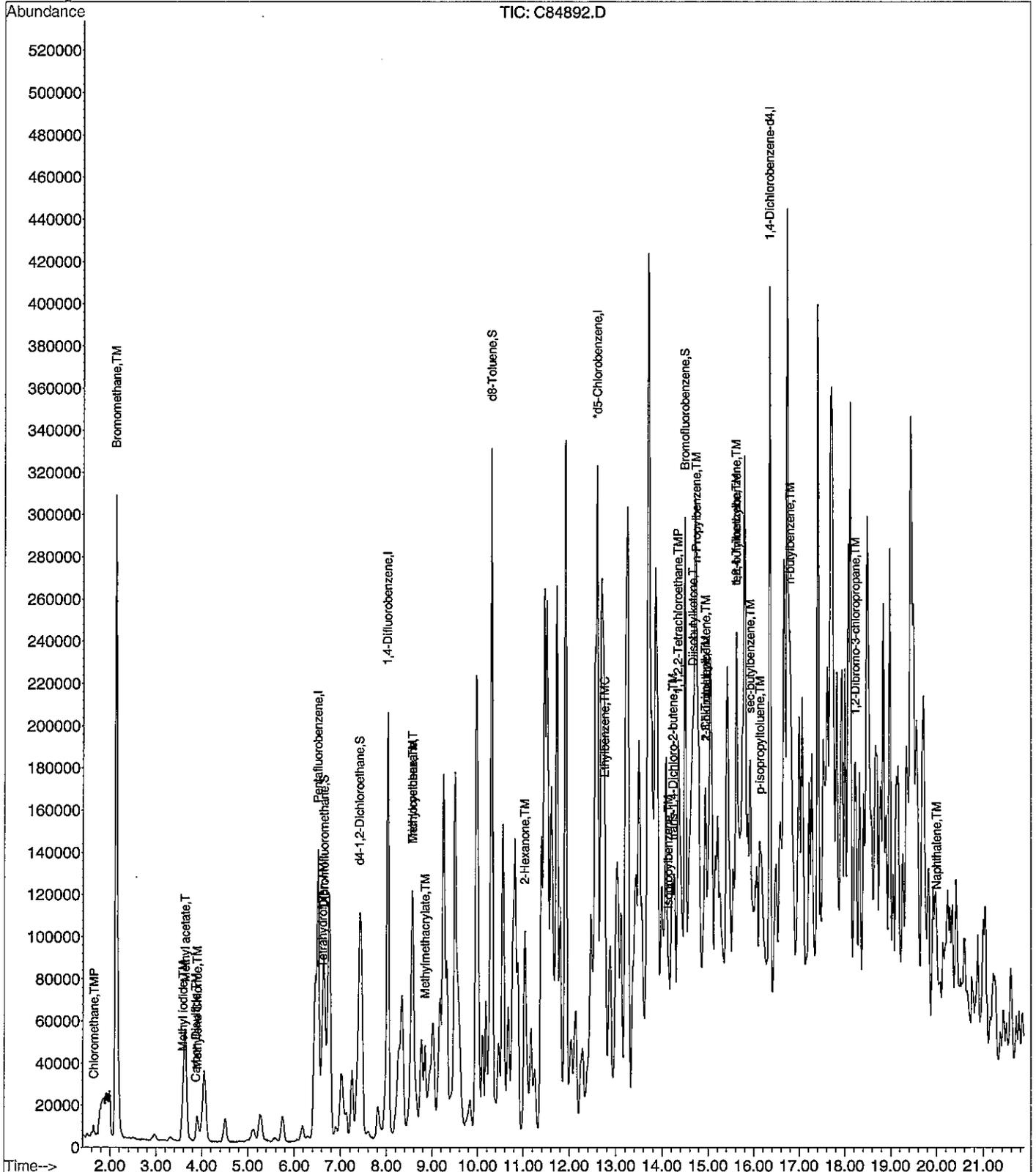
COMMENTS: Results are expressed on a dry weight basis. Quantitation limits increased due to the presence of non-target analytes.

Authorized signature 

Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\121412-C\84892.D Vial: 3
Acq On : 14 Dec 2012 5:29 pm Operator: MT
Sample : 74440-1 Inst: Instr_C
Misc : 50,10.54,SOIL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 17 8:40 2012 Quant Results File: V811122C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V811122C.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Fri Dec 14 10:22:02 2012
Response via : Initial Calibration



Mr. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

December 12, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: SB-2-S3

Lab Sample ID: 74440-2
Matrix: Solid
Percent Solid: 89
Dilution Factor: 98
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/11/12

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	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	73	U	2,2-Dichloropropane	98	U
Bromoform	73	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	488	U
Chlorobenzene	98	U	Methyl-tert-butyl ether (MTBE)	73	U
Chloroethane	98	U	Naphthalene	98	U
Chloroform	73	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	73	U
Dibromochloromethane	73	U	Tetrachloroethene	98	U
1,2-Dibromo-3-chloropropane	98	U	Toluene	98	U
1,2-Dibromoethane	73	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	73	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	73	U	1,2,4-Trimethylbenzene	98	78 J
1,1-Dichloroethene	73	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	73	U	m,p-Xylene	98	80 J
Acetone	975	U	Diethyl ether	98	U
Carbon Disulfide	98	U	2-Hexanone	975	U
Tetrahydrofuran	488	U	Methyl isobutyl ketone	975	U
Methyl ethyl ketone	975	U	Di-isopropyl ether (DIPE)	98	U
t-Butyl alcohol (TBA)	1950	U	Ethyl t-butyl ether (ETBE)	98	U
t-Amyl methyl ether (TAME)	98	U	1,3,5-Trichlorobenzene	98	U
			1,4-Dioxane	2930	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	100 %	d8-Toluene	90 %	Bromofluorobenzene	92 %
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.

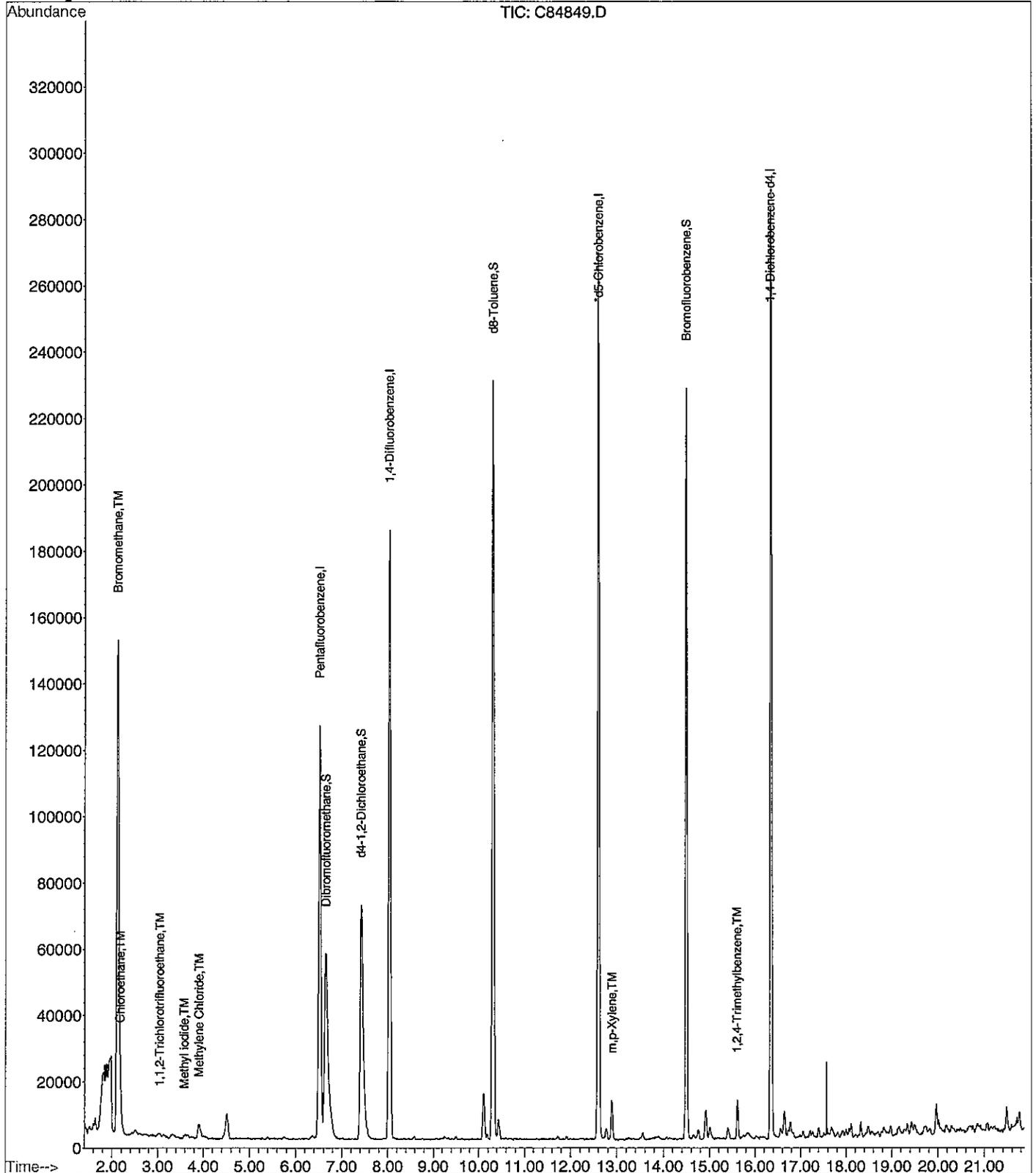
Authorized signature



Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\121112-C\C84849.D Vial: 14
Acq On : 11 Dec 2012 4:52 pm Operator: MT
Sample : 74440-2 Inst : Instr_C
Misc : 50,11.55,SOIL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 12 9:53 2012 Quant Results File: V811122C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V811122C.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Wed Nov 14 07:54:07 2012
Response via : Initial Calibration



Mr. Erik Phenix
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

December 12, 2012
SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: SB-3-S3

Lab Sample ID: 74440-3
Matrix: Solid
Percent Solid: 88
Dilution Factor: 122
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/11/12

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	122	U	1,3-Dichloropropane	122	U
Bromobenzene	122	U	cis-1,3-Dichloropropene	122	U
Bromochloromethane	122	U	trans-1,3-Dichloropropene	122	U
Bromodichloromethane	91	U	2,2-Dichloropropane	122	U
Bromoform	91	U	1,1-Dichloropropene	122	U
Bromomethane	122	U	Ethylbenzene	122	U
n-butylbenzene	122	U	Hexachlorobutadiene	122	U
sec-butylbenzene	122	U	Isopropylbenzene	122	U
tert-butylbenzene	122	U	p-isopropyltoluene	122	U
Carbon Tetrachloride	122	U	Methylene Chloride	609	U
Chlorobenzene	122	U	Methyl-tert-butyl ether (MTBE)	91	U
Chloroethane	122	U	Naphthalene	122	U
Chloroform	91	U	n-Propylbenzene	122	U
Chloromethane	122	U	Styrene	122	U
2-Chlorotoluene	122	U	1,1,1,2-Tetrachloroethane	122	U
4-Chlorotoluene	122	U	1,1,2,2-Tetrachloroethane	91	U
Dibromochloromethane	91	U	Tetrachloroethene	122	U
1,2-Dibromo-3-chloropropane	122	U	Toluene	122	U
1,2-Dibromoethane	91	U	1,2,3-Trichlorobenzene	122	U
Dibromomethane	122	U	1,2,4-Trichlorobenzene	122	U
1,2-Dichlorobenzene	122	U	1,1,1-Trichloroethane	122	U
1,3-Dichlorobenzene	122	U	1,1,2-Trichloroethane	91	U
1,4-Dichlorobenzene	122	U	Trichloroethene	122	U
Dichlorodifluoromethane	122	U	Trichlorofluoromethane	122	U
1,1-Dichloroethane	122	U	1,2,3-Trichloropropane	122	U
1,2-Dichloroethane	91	U	1,2,4-Trimethylbenzene	122	U
1,1-Dichloroethene	91	U	1,3,5-Trimethylbenzene	122	U
cis-1,2-Dichloroethene	122	U	Vinyl Chloride	122	U
trans-1,2-Dichloroethene	122	U	o-Xylene	122	U
1,2-Dichloropropane	91	U	m,p-Xylene	122	U
Acetone	1220	U	Diethyl ether	122	U
Carbon Disulfide	122	U	2-Hexanone	1220	U
Tetrahydrofuran	609	U	Methyl isobutyl ketone	1220	U
Methyl ethyl ketone	1220	U	Di-isopropyl ether (DIPE)	122	U
t-Butyl alcohol (TBA)	2430	U	Ethyl t-butyl ether (ETBE)	122	U
t-Amyl methyl ether (TAME)	122	U	1,3,5-Trichlorobenzene	122	U
			1,4-Dioxane	3650	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	96 %	d8-Toluene	89 %	Bromofluorobenzene	93 %
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.

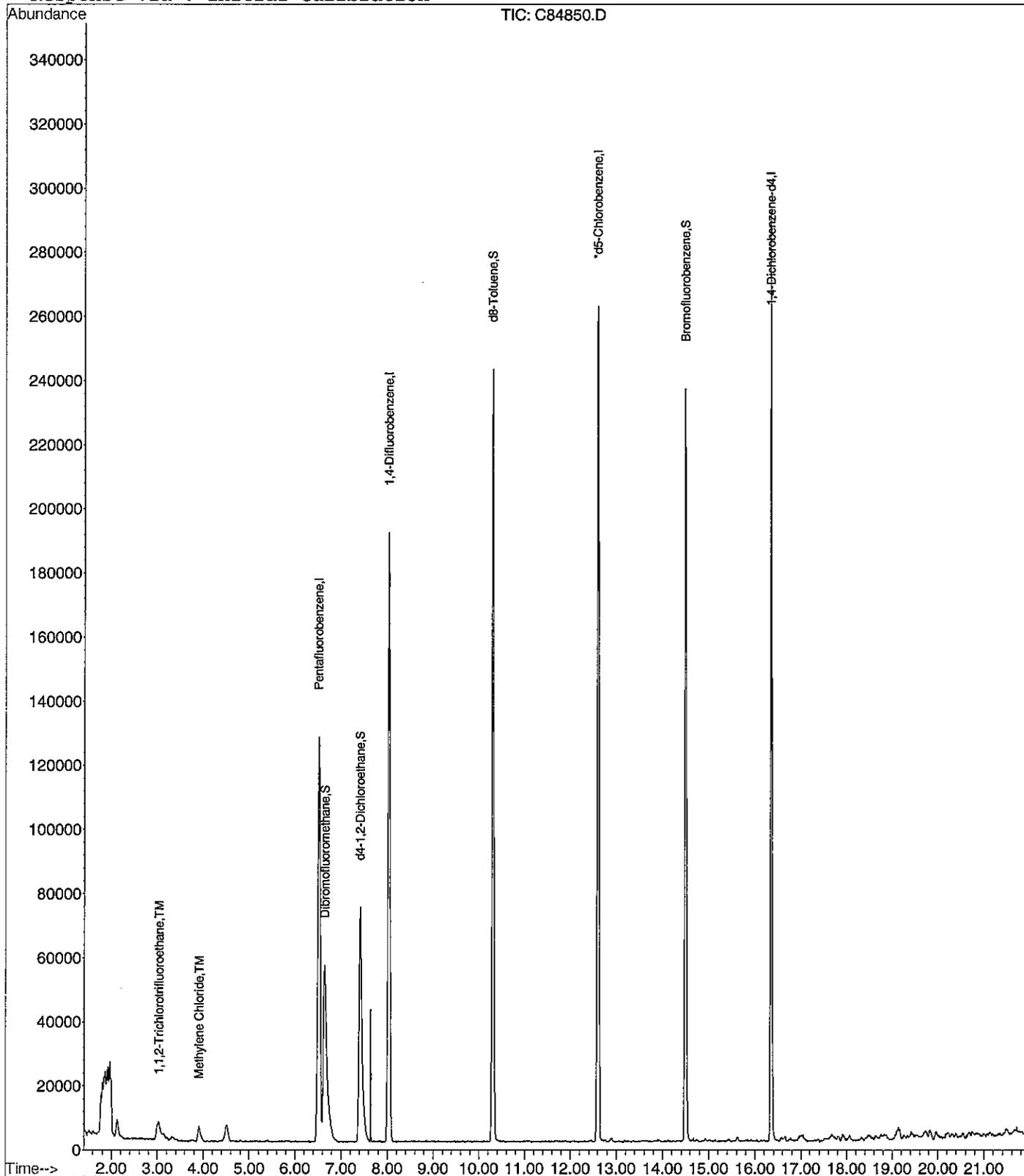
Authorized signature



quantitation report

Data File: C:\HPCHEM\1\DATA\DATA\121112-C\C84850.D Vial: 15
Acq On : 11 Dec 2012 5:01 pm Operator: MT
Sample : 74440-3 Inst : Instr_C
Misc : 50,9.37,SOIL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 12 9:53 2012 Quant Results File: V811122C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V811122C.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Wed Nov 14 07:54:07 2012
Response via : Initial Calibration



Mr. Erik Phenix
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400 Commercial Street Suite 404
Portland, ME 04101

December 17, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: SB-4-S3

Lab Sample ID: 74440-4
Matrix: Solid
Percent Solid: 94
Dilution Factor: 101
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/14/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit µg/kg	Result µg/kg	COMPOUND	Quantitation Limit µg/kg	Result µg/kg
Benzene	101	U	1,3-Dichloropropane	101	U
Bromobenzene	101	U	cis-1,3-Dichloropropene	101	U
Bromochloromethane	101	U	trans-1,3-Dichloropropene	101	U
Bromodichloromethane	75	U	2,2-Dichloropropane	101	U
Bromoform	75	U	1,1-Dichloropropene	101	U
Bromomethane	101	U	Ethylbenzene	101	U
n-butylbenzene	101	U	Hexachlorobutadiene	101	U
sec-butylbenzene	101	U	Isopropylbenzene	101	U
tert-butylbenzene	101	U	p-isopropyltoluene	101	U
Carbon Tetrachloride	101	U	Methylene Chloride	503	U
Chlorobenzene	101	U	Methyl-tert-butyl ether (MTBE)	75	U
Chloroethane	101	U	Naphthalene	101	1300
Chloroform	75	U	n-Propylbenzene	101	U
Chloromethane	101	U	Styrene	101	U
2-Chlorotoluene	101	U	1,1,1,2-Tetrachloroethane	101	U
4-Chlorotoluene	101	U	1,1,2,2-Tetrachloroethane	75	U
Dibromochloromethane	75	U	Tetrachloroethene	101	U
1,2-Dibromo-3-chloropropane	101	U	Toluene	101	U
1,2-Dibromoethane	75	U	1,2,3-Trichlorobenzene	101	U
Dibromomethane	101	U	1,2,4-Trichlorobenzene	101	U
1,2-Dichlorobenzene	101	U	1,1,1-Trichloroethane	101	U
1,3-Dichlorobenzene	101	U	1,1,2-Trichloroethane	75	U
1,4-Dichlorobenzene	101	U	Trichloroethene	101	U
Dichlorodifluoromethane	101	U	Trichlorofluoromethane	101	U
1,1-Dichloroethane	101	U	1,2,3-Trichloropropane	101	U
1,2-Dichloroethane	75	U	1,2,4-Trimethylbenzene	101	U
1,1-Dichloroethene	75	U	1,3,5-Trimethylbenzene	101	U
cis-1,2-Dichloroethene	101	U	Vinyl Chloride	101	U
trans-1,2-Dichloroethene	101	U	o-Xylene	101	U
1,2-Dichloropropane	75	U	m,p-Xylene	101	56 J
Acetone	1010	U	Diethyl ether	101	U
Carbon Disulfide	101	U	2-Hexanone	1010	U
Tetrahydrofuran	503	U	Methyl isobutyl ketone	1010	U
Methyl ethyl ketone	1010	U	Di-isopropyl ether (DIPE)	101	U
t-Butyl alcohol (TBA)	2010	U	Ethyl t-butyl ether (ETBE)	101	U
t-Amyl methyl ether (TAME)	101	U	1,3,5-Trichlorobenzene	101	U
			1,4-Dioxane	3020	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	100 %		d8-Toluene	93 %	
			Bromofluorobenzene	94 %	
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.

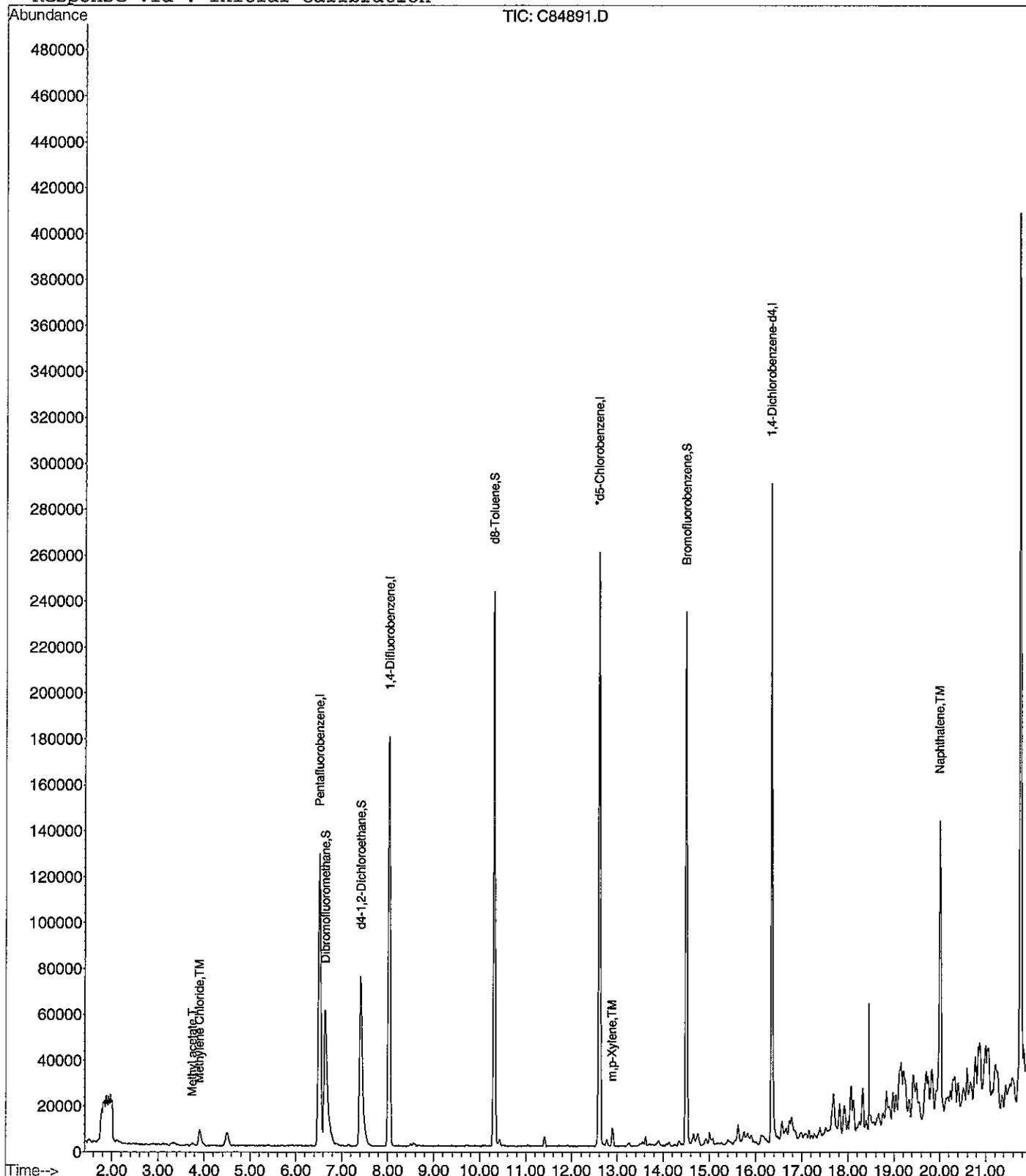
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Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\121412-C\C84891.D Vial: 2
Acq On : 14 Dec 2012 4:54 pm Operator: MT
Sample : 74440-4 Inst : Instr_C
Misc : 50,10.55,SOIL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 17 8:40 2012 Quant Results File: V811122C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V811122C.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Fri Dec 14 10:22:02 2012
Response via : Initial Calibration



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400 Commercial Street Suite 404
Portland, ME 04101

December 12, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast

Project Number: 111.06134.026

Field Sample ID: SB-5-S3

Lab Sample ID: 74440-5

Matrix: Solid

Percent Solid: 89

Dilution Factor: 117

Collection Date: 12/05/12

Lab Receipt Date: 12/06/12

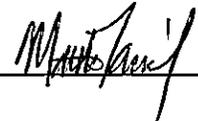
Analysis Date: 12/11/12

ANALYTICAL RESULTS VOLATILE ORGANICS			
COMPOUND	Quantitation Limit $\mu\text{g}/\text{kg}$	Result $\mu\text{g}/\text{kg}$	
Chlorobenzene	117	U	
1,3-Dichlorobenzene	117	U	
1,4-Dichlorobenzene	117	U	
1,2-Dichlorobenzene	117	U	
1,2-Dibromoethane	88	U	
1,2-Dichloroethane	88	U	
Surrogate Standard Recovery			
d4-1,2-Dichloroethane	102 %	d8-Toluene	91 %
		Bromofluorobenzen	91 %
U=Undetected		J=Estimated	
E=Exceeds Calibration Range		B=Detected in	

METHODOLOGY: Sample collection in accordance with SW-846 method 5035A. Sample analysis was conducted according to: Test

COMMENTS: Results are expressed on a dry weight basis.

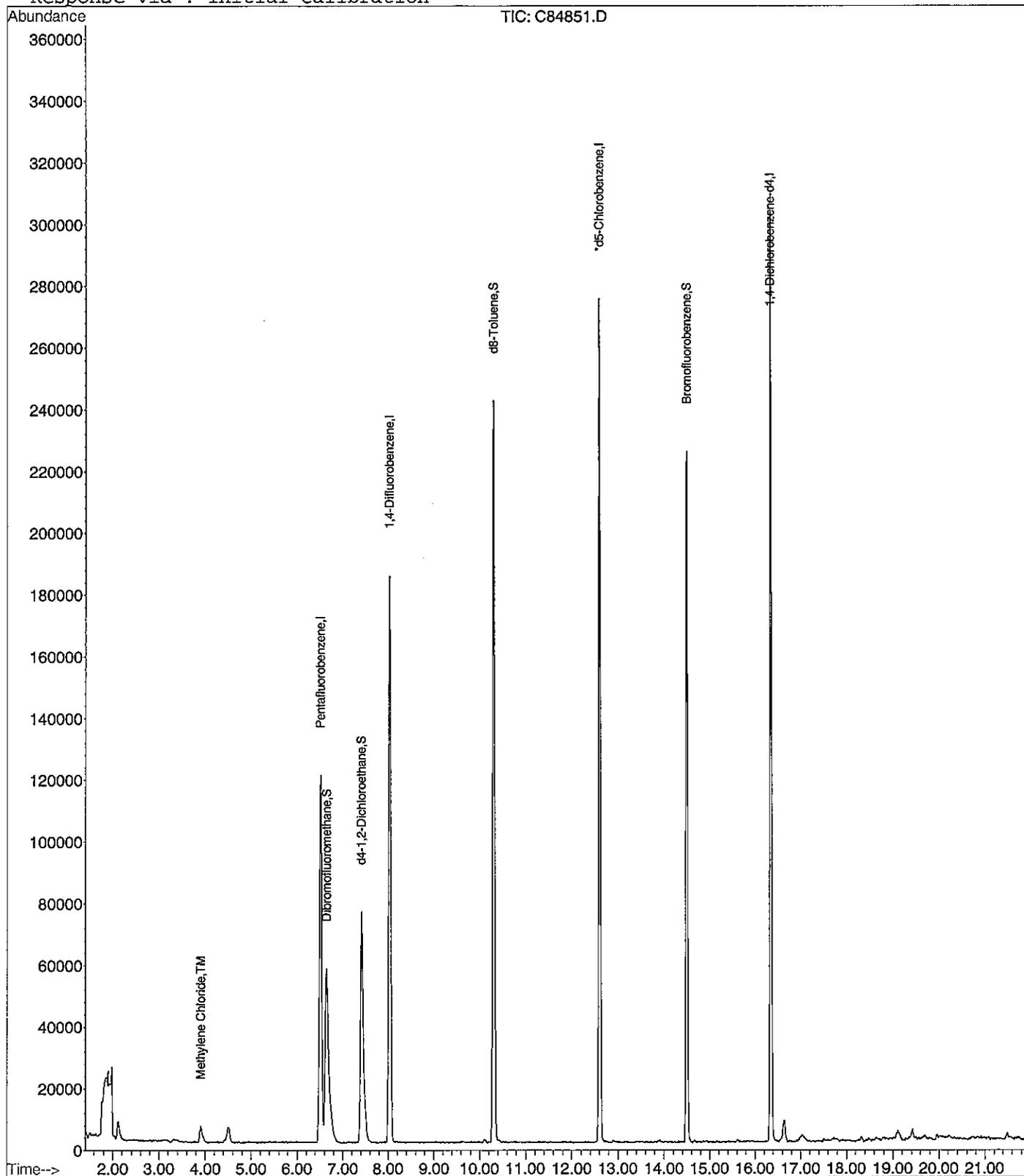
Authorized signature



quantitation report

Data File : C:\HPCHEM\1\DATA\DATA\121112-C\C84851.D Vial: 16
Acq On : 11 Dec 2012 5:34 pm Operator: MT
Sample : 74440-5 Inst : Instr_C
Misc : 50,9.59,SOIL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 12 9:54 2012 Quant Results File: V811122C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V811122C.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Wed Nov 14 07:54:07 2012
Response via : Initial Calibration



Mr. Erik Phenix
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 400 Commercial Street Suite 404
 Portland, ME 04101

December 12, 2012
SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: SB-DUP

Lab Sample ID: 74440-6
Matrix: Solid
Percent Solid: 88
Dilution Factor: 128
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/11/12

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	128	U	1,3-Dichloropropane	128	U
Bromobenzene	128	U	cis-1,3-Dichloropropene	128	U
Bromochloromethane	128	U	trans-1,3-Dichloropropene	128	U
Bromodichloromethane	96	U	2,2-Dichloropropane	128	U
Bromoform	96	U	1,1-Dichloropropene	128	U
Bromomethane	128	U	Ethylbenzene	128	U
n-butylbenzene	128	U	Hexachlorobutadiene	128	U
sec-butylbenzene	128	U	Isopropylbenzene	128	U
tert-butylbenzene	128	U	p-isopropyltoluene	128	U
Carbon Tetrachloride	128	U	Methylene Chloride	638	U
Chlorobenzene	128	U	Methyl-tert-butyl ether (MTBE)	96	U
Chloroethane	128	U	Naphthalene	128	U
Chloroform	96	U	n-Propylbenzene	128	U
Chloromethane	128	U	Styrene	128	U
2-Chlorotoluene	128	U	1,1,1,2-Tetrachloroethane	128	U
4-Chlorotoluene	128	U	1,1,2,2-Tetrachloroethane	96	U
Dibromochloromethane	96	U	Tetrachloroethene	128	U
1,2-Dibromo-3-chloropropane	128	U	Toluene	128	U
1,2-Dibromoethane	96	U	1,2,3-Trichlorobenzene	128	U
Dibromomethane	128	U	1,2,4-Trichlorobenzene	128	U
1,2-Dichlorobenzene	128	U	1,1,1-Trichloroethane	128	U
1,3-Dichlorobenzene	128	U	1,1,2-Trichloroethane	96	U
1,4-Dichlorobenzene	128	U	Trichloroethene	128	U
Dichlorodifluoromethane	128	U	Trichlorofluoromethane	128	U
1,1-Dichloroethane	128	U	1,2,3-Trichloropropane	128	U
1,2-Dichloroethane	96	U	1,2,4-Trimethylbenzene	128	U
1,1-Dichloroethene	96	U	1,3,5-Trimethylbenzene	128	U
cis-1,2-Dichloroethene	128	U	Vinyl Chloride	128	U
trans-1,2-Dichloroethene	128	U	o-Xylene	128	U
1,2-Dichloropropane	96	U	m,p-Xylene	128	U
Acetone	1280	U	Diethyl ether	128	U
Carbon Disulfide	128	U	2-Hexanone	1280	U
Tetrahydrofuran	638	U	Methyl isobutyl ketone	1280	U
Methyl ethyl ketone	1280	U	Di-isopropyl ether (DIPE)	128	U
t-Butyl alcohol (TBA)	2550	U	Ethyl t-butyl ether (ETBE)	128	U
t-Amyl methyl ether (TAME)	128	U	1,3,5-Trichlorobenzene	128	U
			1,4-Dioxane	3830	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	97 %		d8-Toluene	84 %	
			Bromofluorobenzene	88 %	
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.

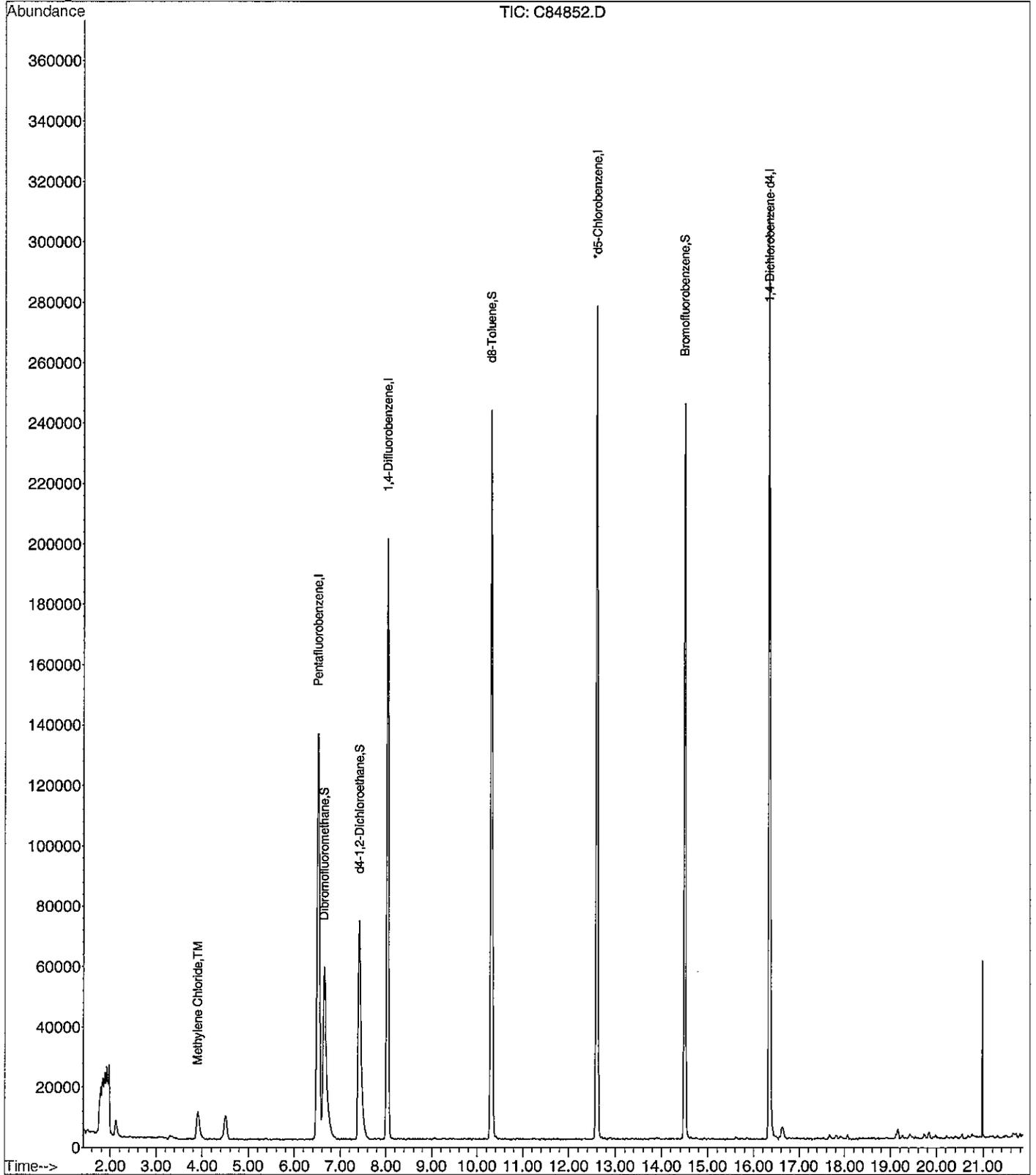
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quantitation report

Data File : C:\HPCHEM\1\DATA\DATA\121112-C\C84852.D Vial: 1
Acq On : 11 Dec 2012 6:18 pm Operator: MT
Sample : 74440-6 Inst : Instr_C
Misc : 50,8.92,SOIL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 12 9:54 2012 Quant Results File: V811122C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V811122C.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Wed Nov 14 07:54:07 2012
Response via : Initial Calibration



Mr. Erik Phenix
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400 Commercial Street Suite 404
Portland, ME 04101

December 17, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: MW-1

Lab Sample ID: 74440-10
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 5
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/14/12

ANALYTICAL RESULTS VOLATILE ORGANICS			
COMPOUND	Quantitation Limit µg/L	Result µg/L	
Chlorobenzene	5	U	
1,3-Dichlorobenzene	5	U	
1,4-Dichlorobenzene	5	U	
1,2-Dichlorobenzene	5	U	
1,2-Dibromoethane	5	U	
1,2-Dichloroethane	5	U	
Surrogate Standard Recovery			
d4-1,2-Dichloroethane	89 %	d8-Toluene	91 %
		Bromofluorobenzen	91 %
U=Undetected		J=Estimated	
E=Exceeds Calibration Range		B=Detected in	

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

COMMENTS: Quantitation limits increased due to the presence of non-target analytes.

Authorized signature



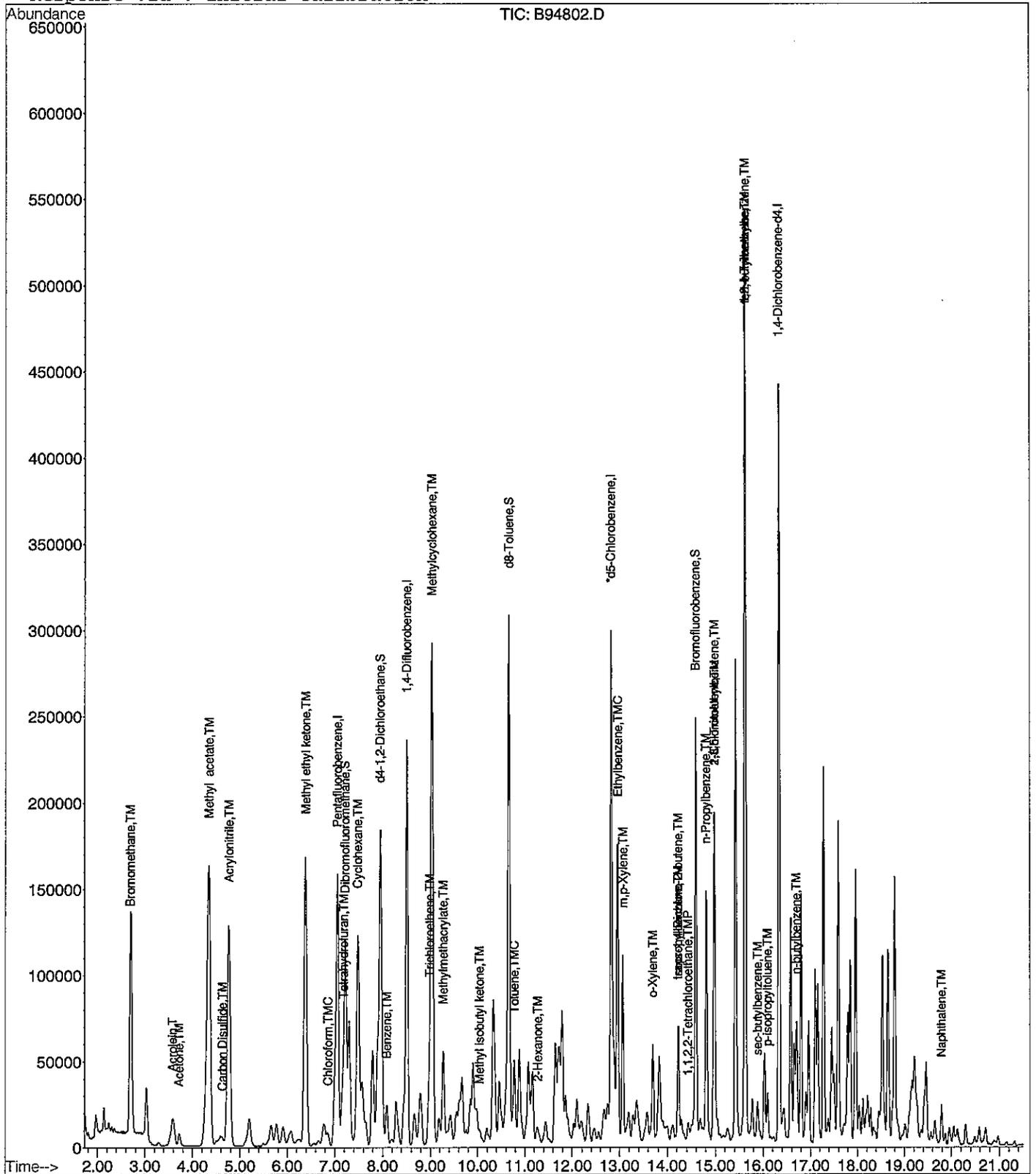
quantitation report

Data File : C:\HPCHEM\1\DATA\121412-B\B94802.D
 Acq On : 14 Dec 2012 8:57 pm
 Sample : 74440-10,,5X
 Misc : 1000
 MS Integration Params: rteint.p
 Quant Time: Dec 17 11:00 2012

Vial: 21
 Operator: MT
 Inst : Instrumen
 Multiplr: 1.00

Quant Results File: V812072B.RES

Method : C:\HPCHEM\1\METHODS\V812072B.M (RTE Integrator)
 Title : 8260 Purgable Organics
 Last Update : Mon Dec 17 11:01:02 2012
 Response via : Initial Calibration



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December 18, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: MW-3

Lab Sample ID: 74440-11
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/17/12

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	1.4	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	99 %	d8-Toluene	97 %	Bromofluorobenzene	101 %
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

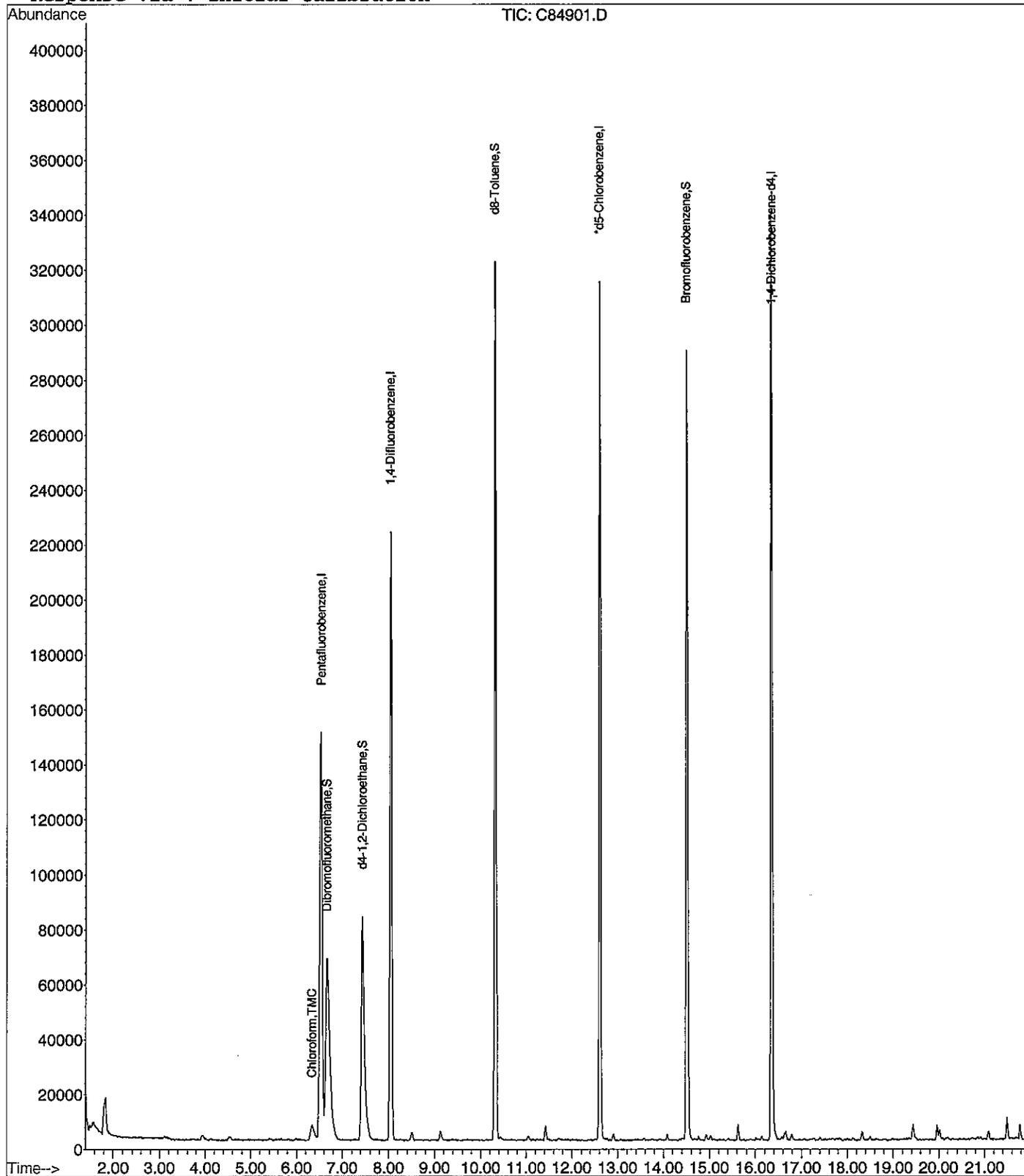
METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS:

Authorized signature

Data File : C:\HPCHEM\1\DATA\DATA\121712-C\84901.D Vial: 8
Acq On : 17 Dec 2012 2:25 pm Operator: MT
Sample : 74440-11 Inst : Instr_C
Misc : 5000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 18 7:48 2012 Quant Results File: V811122C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V811122C.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Mon Dec 17 11:31:11 2012
Response via : Initial Calibration



Mr. Erik Phenix
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

December 17, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: MW-4

Lab Sample ID: 74440-12
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/14/12

ANALYTICAL RESULTS VOLATILE ORGANICS			
COMPOUND	Quantitation Limit $\mu\text{g/L}$	Result $\mu\text{g/L}$	
Chlorobenzene	1	U	
1,3-Dichlorobenzene	1	U	
1,4-Dichlorobenzene	1	U	
1,2-Dichlorobenzene	1	U	
1,2-Dibromoethane	1	U	
1,2-Dichloroethane	1	U	
Surrogate Standard Recovery			
d4-1,2-Dichloroethane	85 %	d8-Toluene	86 %
		Bromofluorobenzen	87 %
U=Undetected	J=Estimated	E=Exceeds Calibration Range	B=Detected in

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

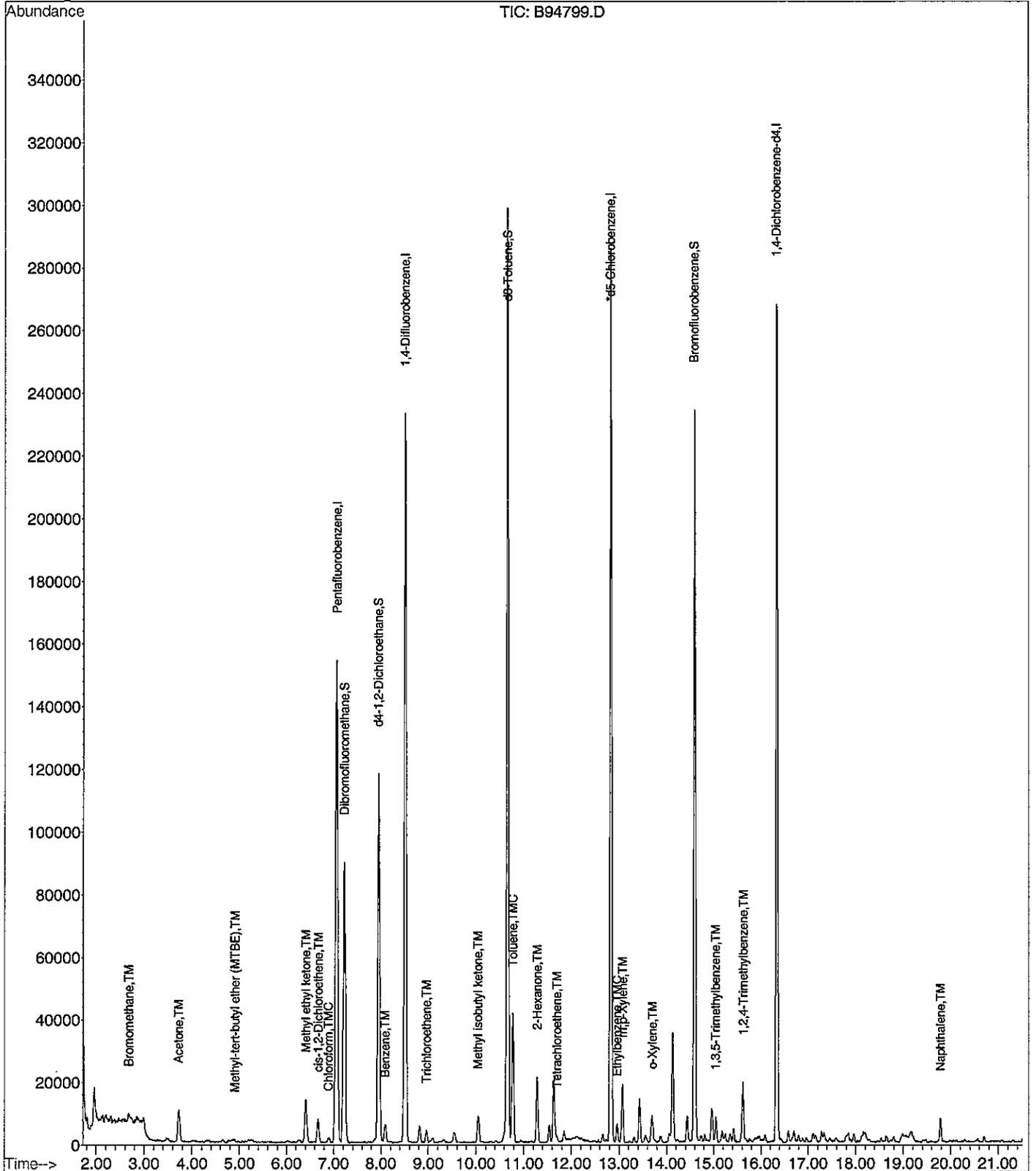
COMMENTS:

Authorized signature 

quantitation report

Data File : C:\HPCHEM\1\DATA\121412-B\B94799.D Vial: 18
 Acq On : 14 Dec 2012 7:29 pm Operator: MF
 Sample : 74440-12 Inst : Instrumen
 Misc : 5000 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 17 11:00 2012 Quant Results File: V812072B.RES

Method : C:\HPCHEM\1\METHODS\V812072B.M (RTE Integrator)
 Title : 8260 Purgable Organics
 Last Update : Mon Dec 17 11:01:02 2012
 Response via : Initial Calibration



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

December 17, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast

Project Number: 111.06134.026

Field Sample ID: MW-5

Lab Sample ID: 74440-13

Matrix: Aqueous

Percent Solid: N/A

Dilution Factor: 1

Collection Date: 12/05/12

Lab Receipt Date: 12/06/12

Analysis Date: 12/14/12

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	1.2
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	0.5 J
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	1.4
1,1-Dichloroethene	1	U	1,3,5-Trimethylbenzene	1	U
cis-1,2-Dichloroethene	1	1.6	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	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	88 %		d8-Toluene	87 %	
			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:

Authorized signature



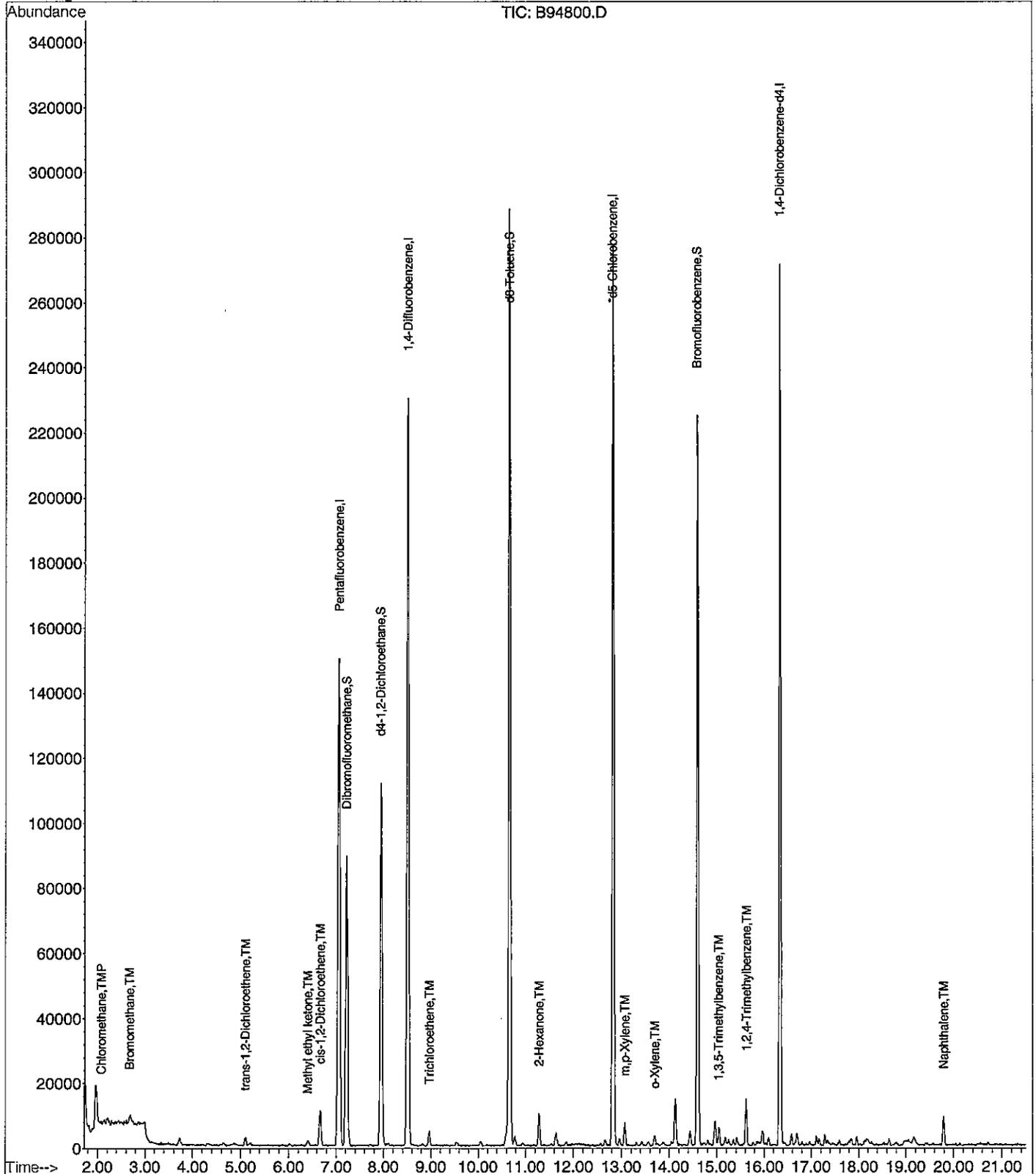
Quantitation Report

Data File : C:\HPCHEM\1\DATA\121412-B\B94800.D
Acq On : 14 Dec 2012 7:58 pm
Sample : 74440-13
Misc : 5000
MS Integration Params: rteint.p
Quant Time: Dec 17 11:00 2012

Vial: 19
Operator: MT
Inst : Instrumen
Multiplr: 1.00

Quant Results File: V812072B.RES

Method : C:\HPCHEM\1\METHODS\V812072B.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Mon Dec 17 11:01:02 2012
Response via : Initial Calibration



Mr. Erik Phenix
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400 Commercial Street Suite 404
Portland, ME 04101

December 17, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: MW-DUP

Lab Sample ID: 74440-14
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 5
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/14/12

ANALYTICAL RESULTS VOLATILE ORGANICS			
COMPOUND	Quantitation Limit $\mu\text{g/L}$	Result $\mu\text{g/L}$	
Chlorobenzene	5	U	
1,3-Dichlorobenzene	5	U	
1,4-Dichlorobenzene	5	U	
1,2-Dichlorobenzene	5	U	
1,2-Dibromoethane	5	U	
1,2-Dichloroethane	5	U	
Surrogate Standard Recovery			
d4-1,2-Dichloroethane	89 %	d8-Toluene	90 %
		Bromofluorobenzen	89 %
U=Undetected	J=Estimated	E=Exceeds Calibration Range	B=Detected in

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

COMMENTS: Quantitation limits increased due to the presence of non-target analytes.

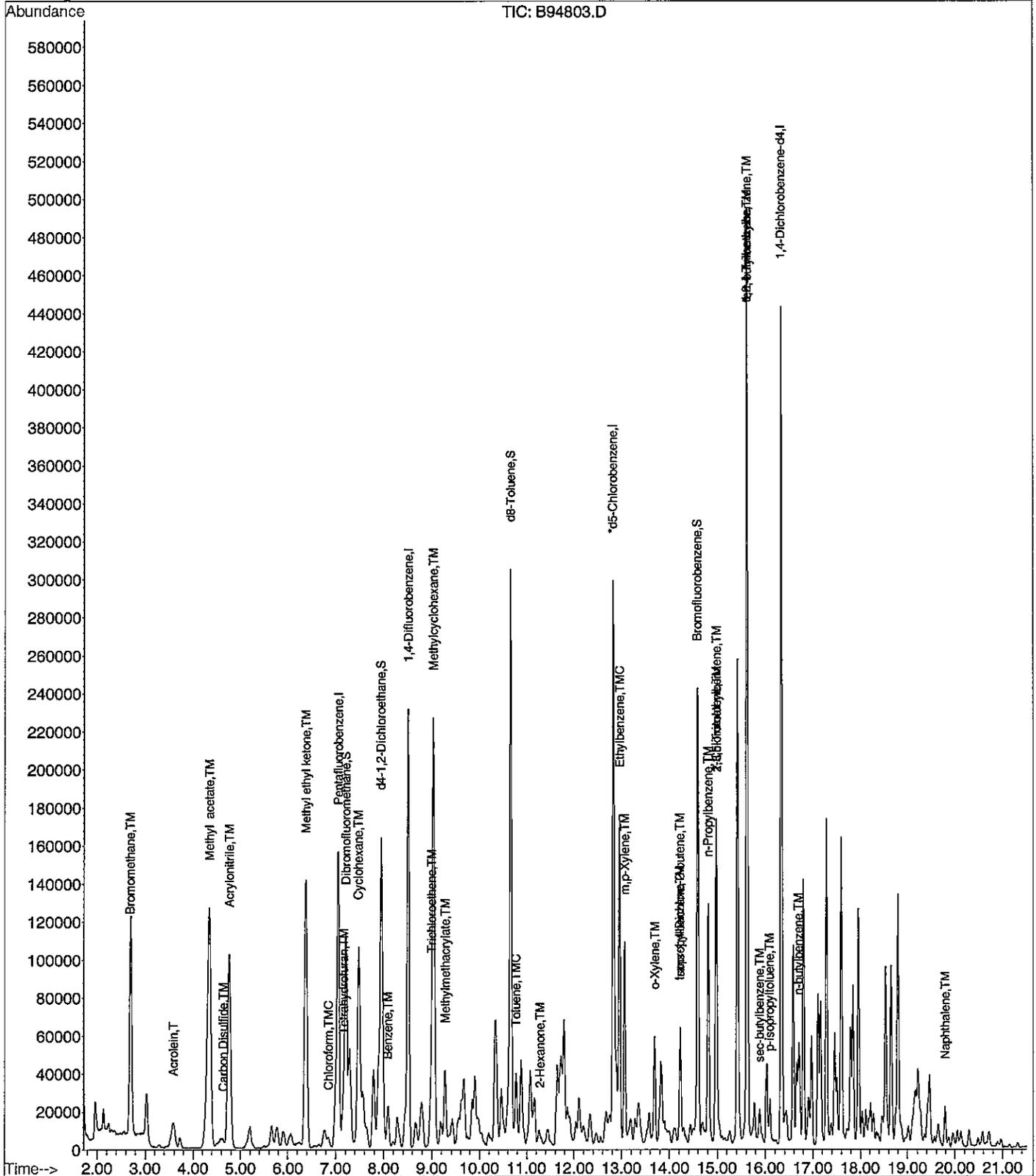
Authorized signature



Quantitation Report

Data File : C:\HPCHEM\1\DATA\121412-B\B94803.D Vial: 22
 Acq On : 14 Dec 2012 9:26 pm Operator: MT
 Sample : 74440-14, 5X Inst : Instrumen
 Misc : 1000 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 17 11:00 2012 Quant Results File: V812072B.RES

Method : C:\HPCHEM\1\METHODS\V812072B.M (RTE Integrator)
 Title : 8260 Purgable Organics
 Last Update : Mon Dec 17 11:01:02 2012
 Response via : Initial Calibration



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 400 Commercial Street Suite 404
 Portland, ME 04101

December 14, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: TRIP BLANK

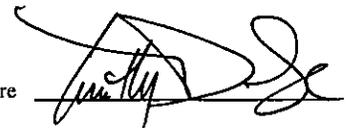
Lab Sample ID: 74440-15
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/13/12

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	98 %	d8-Toluene	102 %	Bromofluorobenzene	97 %
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:

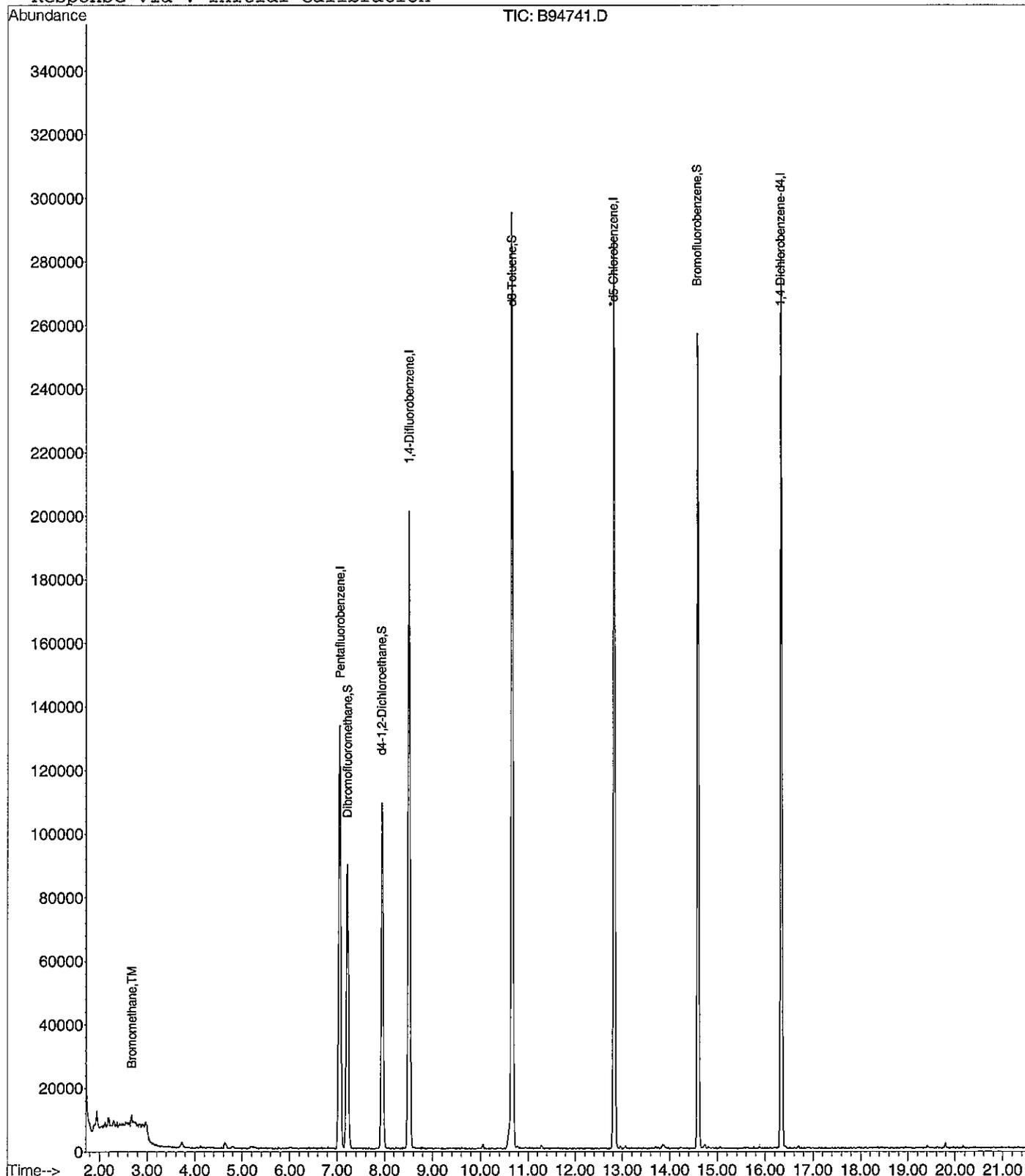
Authorized signature



Quantitation Report

Data File : C:\HPCHEM\1\DATA\121312-B\B94741.D Vial: 10
Acq On : 13 Dec 2012 3:04 pm Operator: MT
Sample : 74440-15 Inst : Instrumen
Misc : 5000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 14 9:32 2012 Quant Results File: V812072B.RES

Method : C:\HPCHEM\1\METHODS\V812072B.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Tue Dec 11 10:08:21 2012
Response via : Initial Calibration



VOLATILE
QC FORMS

Mr. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

December 12, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: LAB QC

Lab Sample ID: MB12112C
Matrix: Solid
Percent Solid: 100
Dilution Factor: 100
Collection Date: N/A
Lab Receipt Date: N/A
Analysis Date: 12/11/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit µg/kg	Result µg/kg	COMPOUND	Quantitation Limit µg/kg	Result µg/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	107 %		d8-Toluene	91 %	
			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

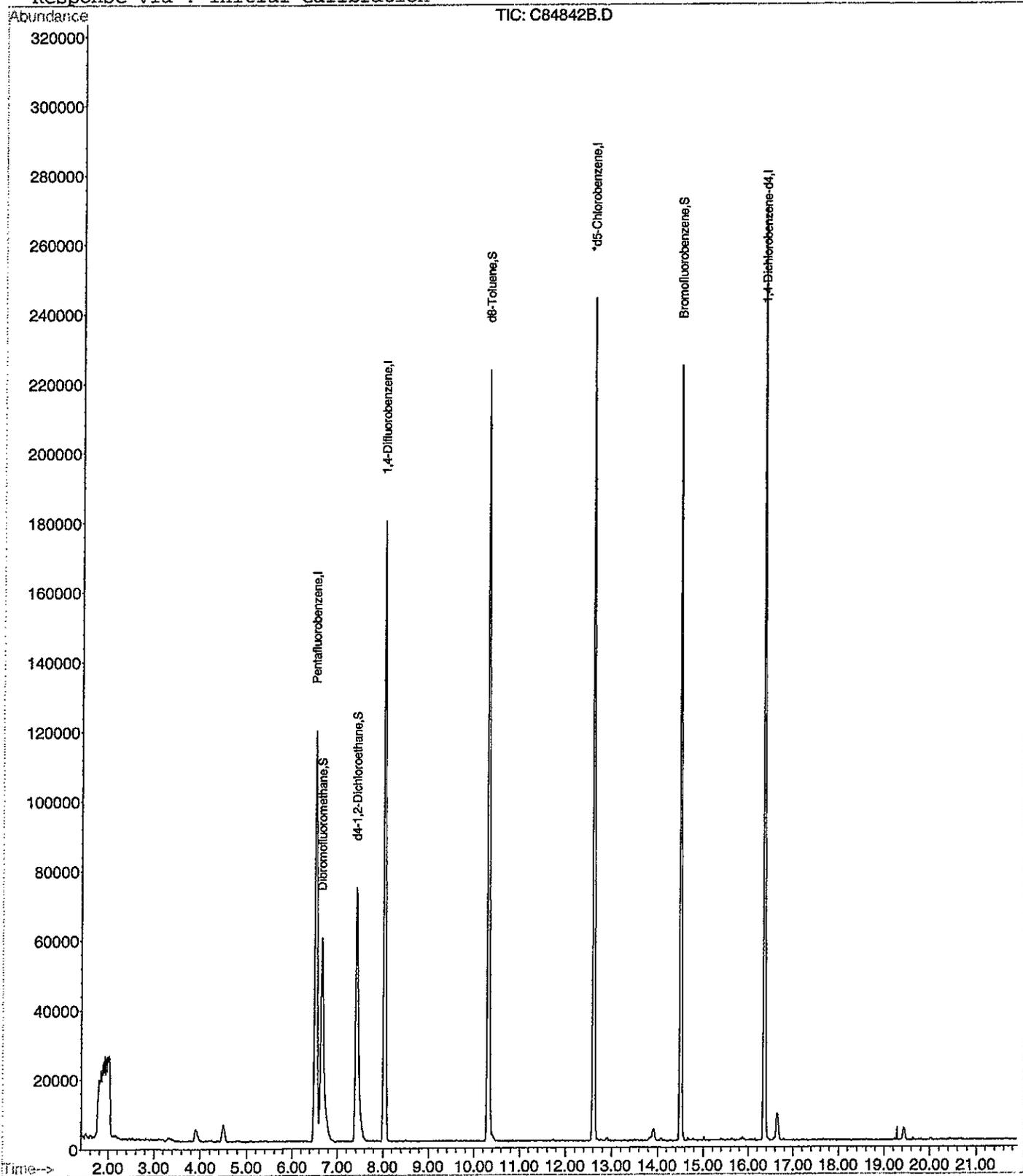


Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\121112-C\C84842B.D Vial: 6
Acq On : 11 Dec 2012 12:51 pm Operator: MT
Sample : MB12112C Inst : Instr_C
Misc : 50,10.00,SOIL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 12 9:53 2012

Quant Results File: V811122C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V811122C.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Wed Nov 14 07:54:07 2012
Response via : Initial Calibration



Mr. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

December 14, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast

Project Number: 111.06134.026

Field Sample ID: LAB QC

Lab Sample ID: B812132B

Matrix: Aqueous

Percent Solid: N/A

Dilution Factor: 1

Collection Date: N/A

Lab Receipt Date: N/A

Analysis Date: 12/13/12

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	15 J
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	100 %	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.

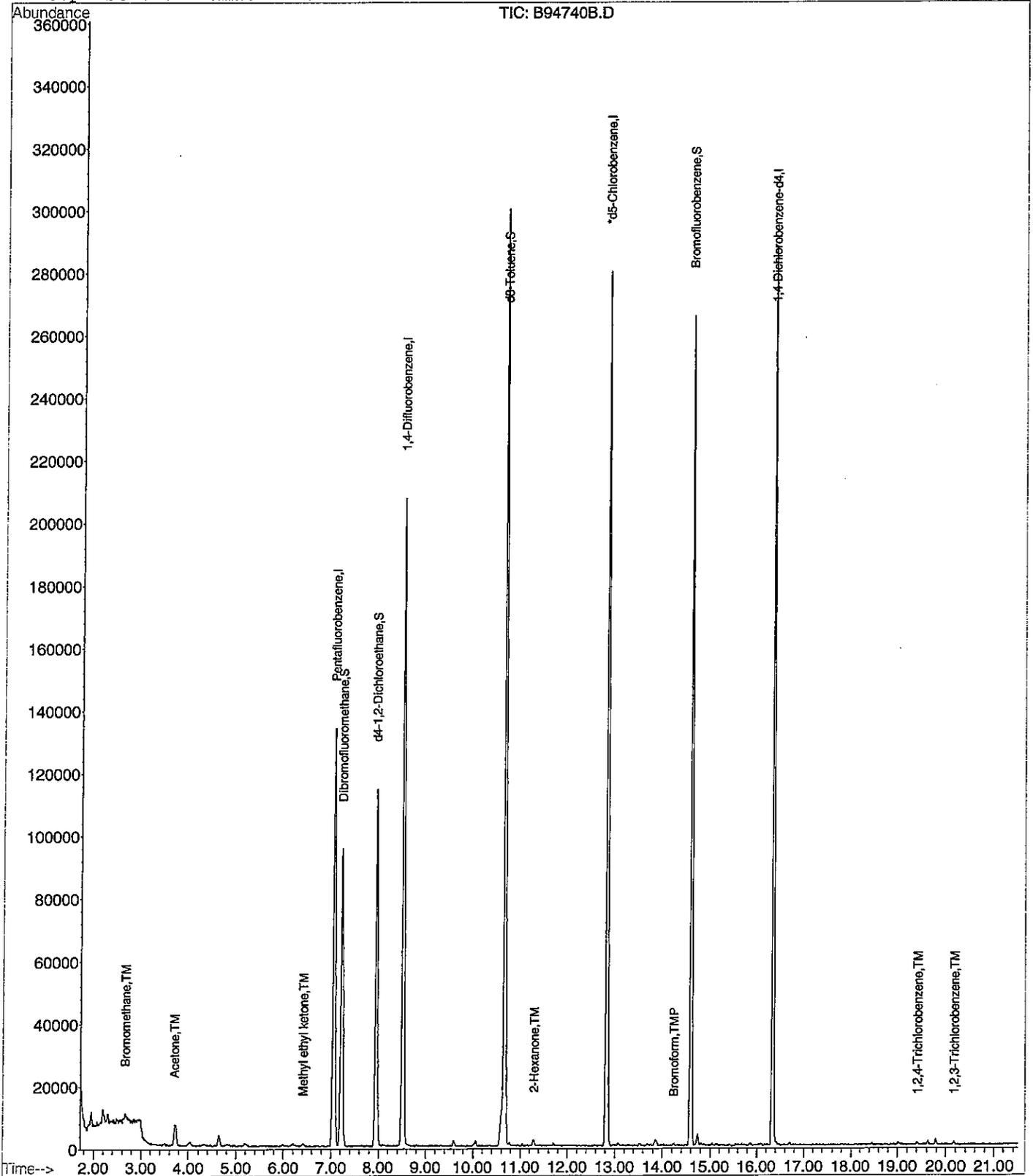
COMMENTS:

Authorized signature

Quantitation Report

Data File : C:\HPCHEM\1\DATA\121312-B\B94740B.D Vial: 9
Acq On : 13 Dec 2012 2:24 pm Operator: MT
Sample : B812132B Inst : Instrumen
Misc : 5000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 14 9:32 2012 Quant Results File: V812072B.RES

Method : C:\HPCHEM\1\METHODS\V812072B.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Tue Dec 11 10:08:21 2012
Response via : Initial Calibration



Mr. Erik Phenix
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

December 17, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: LAB QC

Lab Sample ID: B812142B
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: N/A
Lab Receipt Date: N/A
Analysis Date: 12/14/12

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	85 %		d8-Toluene	88 %	
			Bromofluorobenzene	88 %	
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.

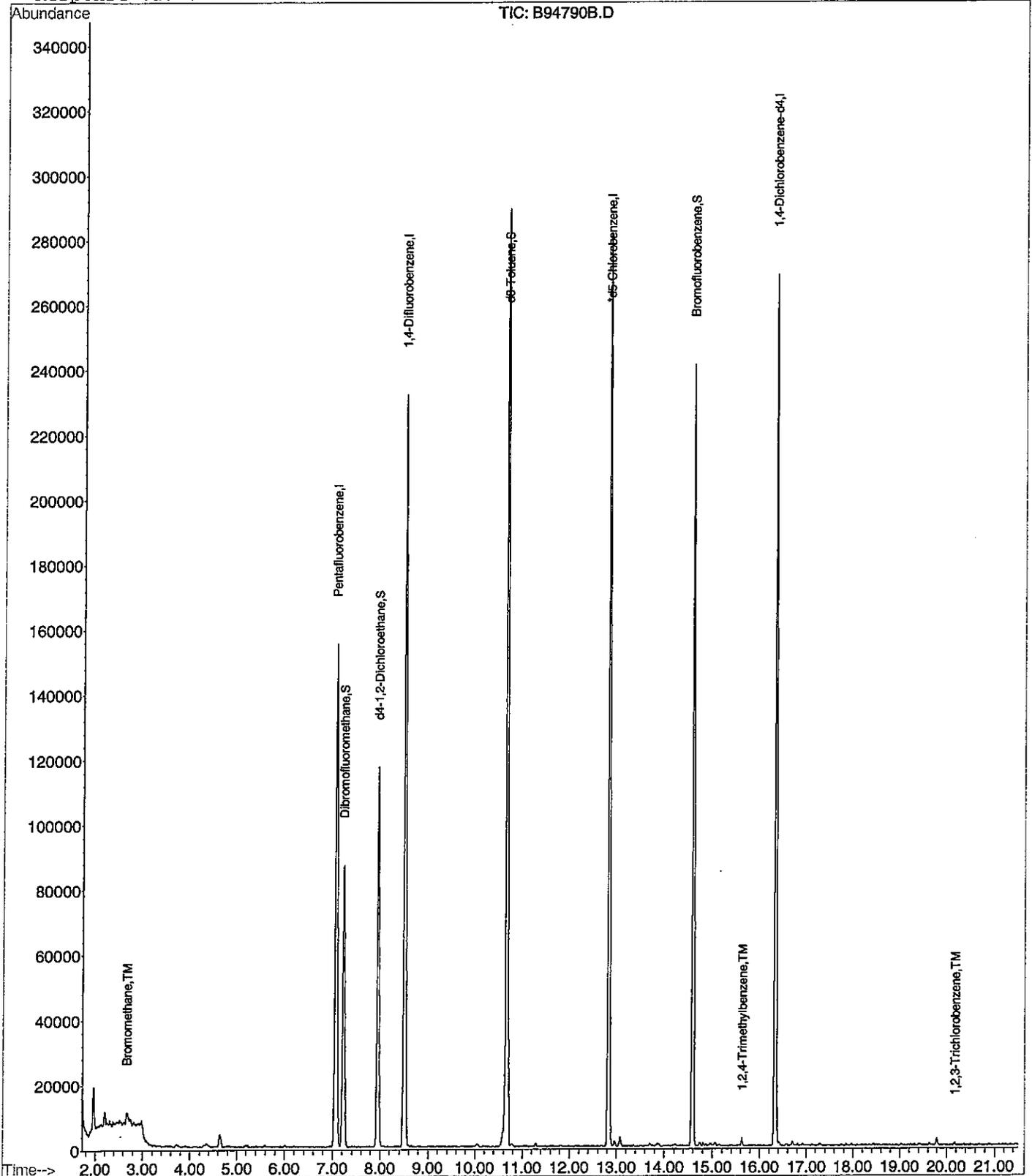
COMMENTS:

Authorized signature 

Quantitation Report

Data File : C:\HPCHEM\1\DATA\121412-B\B94790B.D Vial: 9
Acq On : 14 Dec 2012 3:05 pm Operator: MT
Sample : B812142B Inst : Instrumen
Misc : 5000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 17 11:00 2012 Quant Results File: V812072B.RES

Method : C:\HPCHEM\1\METHODS\V812072B.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Mon Dec 17 11:01:02 2012
Response via : Initial Calibration



Mr. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

December 17, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: LAB QC

Lab Sample ID: MB12142B
Matrix: Solid
Percent Solid: 100
Dilution Factor: 100
Collection Date: N/A
Lab Receipt Date: N/A
Analysis Date: 12/14/12

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit µg/kg	Result µg/kg	COMPOUND	Quantitation Limit µg/kg	Result µg/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	105 %	d8-Toluene	99 %	Bromofluorobenzene	103 %
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.

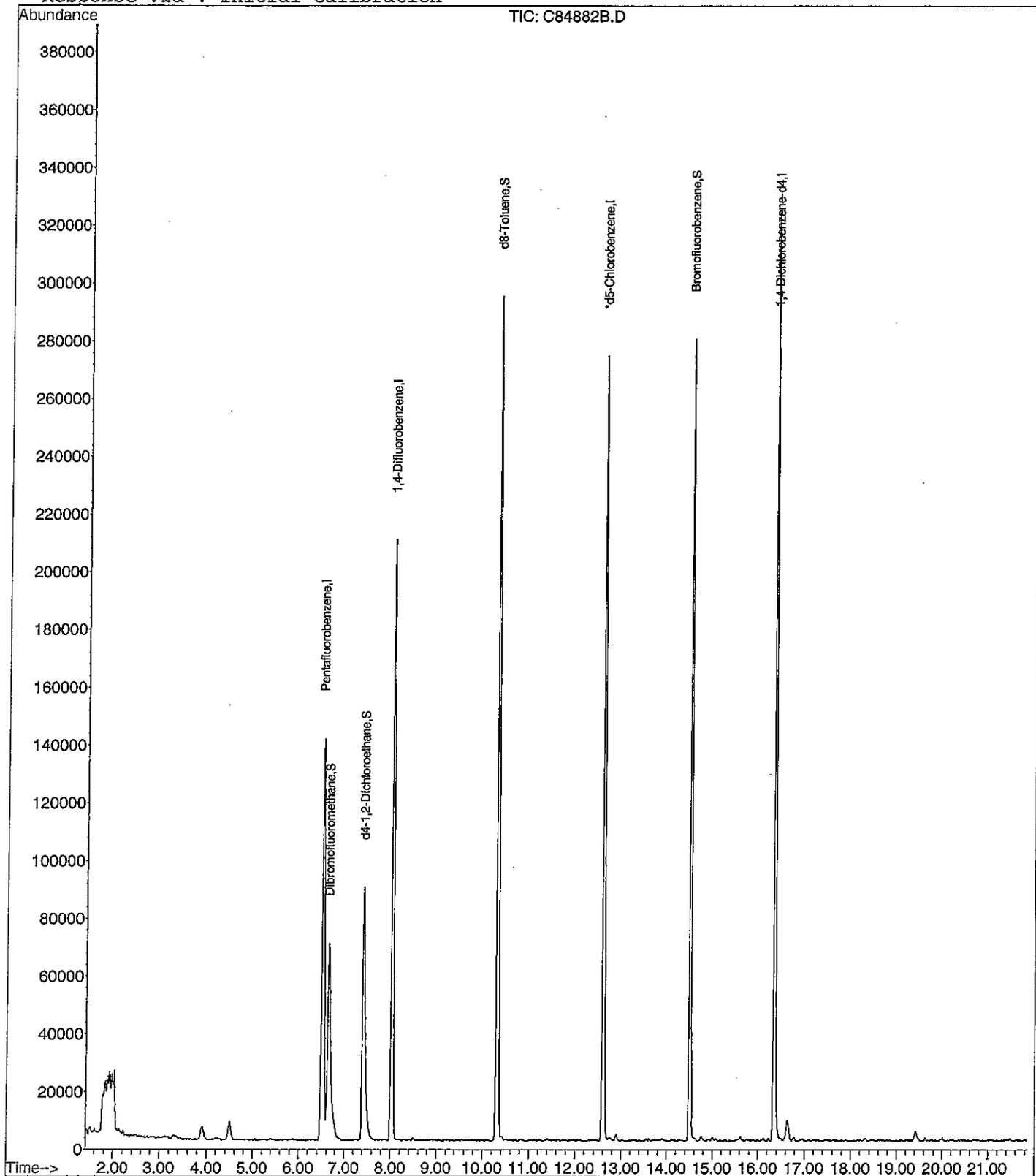
COMMENTS: Results are expressed on a dry weight basis.

Authorized signature



Data File : C:\HPCHEM\1\DATA\DATA\121412-C\C84882B.D Vial: 7
Acq On : 14 Dec 2012 11:55 am Operator: MT
Sample : MB12142B Inst : Instr_C
Misc : 50,10.00,SOIL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 17 8:40 2012 Quant Results File: V811122C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V811122C.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Fri Dec 14 10:22:02 2012
Response via : Initial Calibration



Mr. Erik Phenix
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

December 18, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: LAB QC

Lab Sample ID: B812172C
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: N/A
Lab Receipt Date: N/A
Analysis Date: 12/17/12

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	100 %	d8-Toluene	100 %	Bromofluorobenzene	98 %
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:

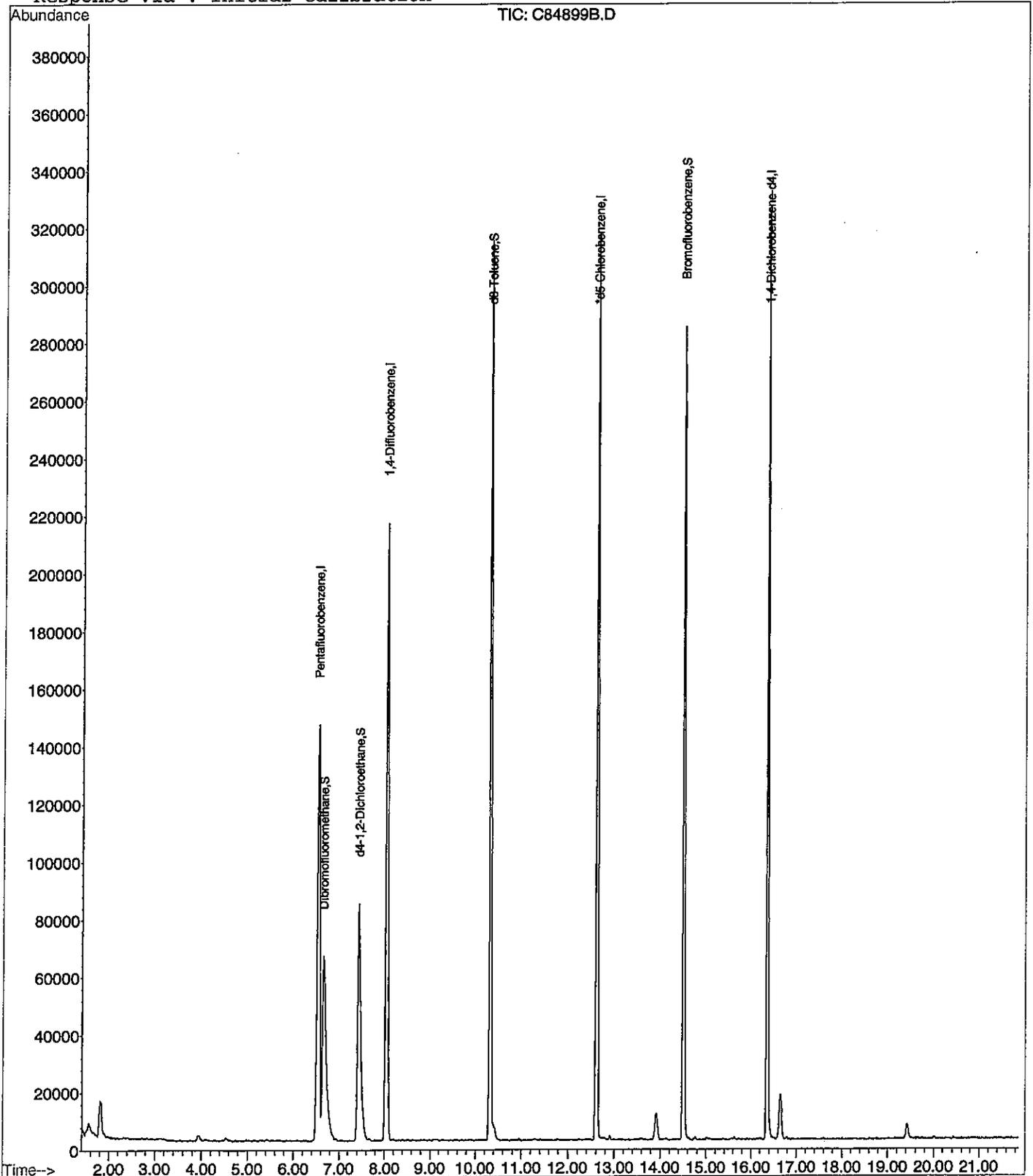
Authorized signature



Quantitation Report

Data File : C:\HPCHEM\1\DATA\DATA\121712-C\C84899B.D Vial: 6
Acq On : 17 Dec 2012 1:07 pm Operator: MT
Sample : B812172C Inst: Instr_C
Misc : 5000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 18 7:48 2012 Quant Results File: V811122C.RES

Method : C:\HPCHEM\1\METHODS\METHODS\METHODS\V811122C.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Mon Dec 17 11:31:11 2012
Response via : Initial Calibration



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: 74440
Non-spiked sample: MB12112C
Spike: LS12112C
Spike duplicate: LS12112C2

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 #	RPD #
Dichlorodifluoromethane	2000	2000	49	82	25	0	1575	79		1614	81		2
Chloromethane	2000	2000	75	125	25	0	1838	92		1902	95		3
Vinyl Chloride	2000	2000	75	125	25	0	1936	97		1932	97		0
Bromomethane	2000	2000	75	125	25	0	1821	91		1927	96		6
Chloroethane	2000	2000	75	125	25	0	1604	80		1772	89		10
t-Butyl alcohol (TBA)	10000	10000	60	140	25	0	9002	90		10851	109		19
Trichlorofluoromethane	2000	2000	75	125	25	0	2057	103		2054	103		0
Diethyl ether	2000	2000	75	125	25	0	1721	86		1796	90		4
1,1,2-Trichlorotrifluoroethane	2000	2000	75	125	25	0	1892	95		1894	95		0
Acetone	5000	5000	75	125	25	0	6112	122		5622	112		8
1,1-Dichloroethene	2000	2000	75	125	25	0	2079	104		2113	106		2
Methyl iodide	2000	2000	75	125	25	0	1784	89		1801	90		1
Di-isopropyl ether (DIPE)	2000	2000	75	125	25	0	1947	97		1872	94		4
Methylene Chloride	2000	2000	75	125	25	0	1879	94		1832	92		3
Carbon Disulfide	2000	2000	75	125	25	0	1950	97		1936	97		1
Acrylonitrile	2000	2000	75	125	25	0	1797	90		2013	101		11
Methyl-tert-butyl ether (MTBE)	2000	2000	75	125	25	0	1993	100		2077	104		4
trans-1,2-Dichloroethene	2000	2000	75	125	25	0	2071	104		2082	104		1
1,1-Dichloroethane	2000	2000	75	125	25	0	1985	99		1974	99		1
Methyl ethyl ketone	5000	5000	60	140	25	0	5223	104		5334	107		2
Ethyl t-butyl ether (ETBE)	2000	2000	75	125	25	0	2031	102		2036	102		0
2,2-Dichloropropane	2000	2000	75	125	25	0	2390	119		2273	114		5
cis-1,2-Dichloroethene	2000	2000	75	125	25	0	2065	103		2068	103		0
t-Amyl methyl ether (TAME)	2000	2000	75	125	25	0	2043	102		2063	103		1
Chloroform	2000	2000	75	125	25	0	2163	108		2135	107		1
Bromochloromethane	2000	2000	75	125	25	0	2037	102		2038	102		0
Tetrahydrofuran	2000	2000	60	140	25	0	1813	91		2007	100		10
1,1,1-Trichloroethane	2000	2000	75	125	25	0	2242	112		2174	109		3
1,1-Dichloropropene	2000	2000	75	125	25	0	2049	102		2055	103		0
Carbon Tetrachloride	2000	2000	75	125	25	0	2128	106		2091	105		2
1,2-Dichloroethane	2000	2000	75	125	25	0	2079	104		2098	105		1
Benzene	2000	2000	75	125	25	0	1987	99		1928	96		3
Trichloroethene	2000	2000	75	125	25	0	1980	99		1973	99		0
1,2-Dichloropropane	2000	2000	75	125	25	0	1884	94		1849	92		2
Methylmethacrylate	2000	2000	75	125	25	0	1772	89		1855	93		5
Bromodichloromethane	2000	2000	75	125	25	0	2028	101		1877	94		8
Dibromomethane	2000	2000	75	125	25	0	2023	101		2013	101		0
1,4-Dioxane	25000	25000	60	140	25	0	18623	74		25903	104		33 *
2-Hexanone	5000	5000	75	125	25	0	4860	97		5185	104		6
Methyl isobutyl ketone	5000	5000	75	125	25	0	4614	92		4971	99		7
cis-1,3-Dichloropropene	2000	2000	75	125	25	0	2091	105		1988	99		5
Toluene	2000	2000	75	125	25	0	1980	99		1899	95		4
trans-1,3-Dichloropropene	2000	2000	75	125	25	0	1763	88		1791	90		2
1,1,2-Trichloroethane	2000	2000	75	125	25	0	1965	98		1959	98		0
1,3-Dichloropropane	2000	2000	75	125	25	0	1942	97		1918	96		1
Tetrachloroethene	2000	2000	75	125	25	0	1901	95		1898	95		0
Dibromochloromethane	2000	2000	75	125	25	0	1991	100		1953	98		2
1,2-Dibromoethane	2000	2000	75	125	25	0	1970	99		2004	100		2
Chlorobenzene	2000	2000	75	125	25	0	2071	104		2006	100		3
1,1,1,2-Tetrachloroethane	2000	2000	75	125	25	0	2106	105		2048	102		3

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: 74440
Non-spiked sample: MBI2112C
Spike: LS12112C
Spike duplicate: LS12112C2

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	#
Ethylbenzene	2000	2000	75	125	25	0	2101	105		2043	102		3	
m,p-Xylene	4000	4000	75	125	25	0	4119	103		4055	101		2	
o-Xylene	2000	2000	75	125	25	0	2213	111		2046	102		8	
Styrene	2000	2000	75	125	25	0	2131	107		2062	103		3	
Bromoform	2000	2000	75	125	25	0	1837	92		1849	92		1	
Isopropylbenzene	2000	2000	75	125	25	0	2239	112		2106	105		6	
1,1,2,2-Tetrachloroethane	2000	2000	75	125	25	0	1922	96		1932	97		0	
1,2,3-Trichloropropane	2000	2000	75	125	25	0	1829	91		1930	96		5	
trans-1,4-Dichloro-2-butene	2000	2000	75	125	25	0	1522	76		1662	83		9	
n-Propylbenzene	2000	2000	75	125	25	0	2050	103		1977	99		4	
Bromobenzene	2000	2000	75	125	25	0	2019	101		1977	99		2	
1,3,5-Trimethylbenzene	2000	2000	75	125	25	0	2153	108		2101	105		2	
2-Chlorotoluene	2000	2000	75	125	25	0	2159	108		2086	104		3	
4-Chlorotoluene	2000	2000	75	125	25	0	2098	105		2041	102		3	
tert-butylbenzene	2000	2000	75	125	25	0	2157	108		2080	104		4	
1,2,4-Trimethylbenzene	2000	2000	75	125	25	0	2118	106		2082	104		2	
sec-butylbenzene	2000	2000	75	125	25	0	2142	107		2131	107		1	
p-isopropyltoluene	2000	2000	75	125	25	0	2197	110		2125	106		3	
1,3-Dichlorobenzene	2000	2000	75	125	25	0	2110	106		2045	102		3	
1,4-Dichlorobenzene	2000	2000	75	125	25	0	1999	100		1953	98		2	
n-butylbenzene	2000	2000	75	125	25	0	2183	109		2049	102		6	
1,2-Dichlorobenzene	2000	2000	75	125	25	0	2064	103		1953	98		6	
1,2-Dibromo-3-chloropropane	2000	2000	75	125	25	0	1963	98		2152	108		9	
1,2,4-Trichlorobenzene	2000	2000	75	125	25	0	1984	99		1986	99		0	
Hexachlorobutadiene	2000	2000	75	125	25	0	2143	107		2081	104		3	
Naphthalene	2000	2000	75	125	25	0	1943	97		2096	105		8	
1,2,3-Trichlorobenzene	2000	2000	75	125	25	0	2115	106		2087	104		1	

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: _____

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: 74440
Non-spiked sample: B812132B
Spike: L812132B
Spike duplicate: L812132B2

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	22	110		23	117		6	
Chloromethane	20	40	125	15	0.0	21	105		20	98		7	
Vinyl Chloride	20	70	130	15	0.1	21	103		20	100		3	
Bromomethane	20	40	145	15	-0.3	29	144		28	141		2	
Chloroethane	20	70	130	15	0.1	20	102		20	99		2	
t-Butyl alcohol (TBA)	100	70	130	15	5.3	106	101		103	98		3	
Trichlorofluoromethane	20	70	130	15	0.0	21	103		22	111		7	
Diethyl ether	20	70	130	15	0.0	21	104		20	99		5	
1,1,2-Trichlorotrifluoroethane	20	70	130	15	0.0	17	85		18	91		7	
Acetone	100	40	140	15	-4.0	102	106		102	106		0	
1,1-Dichloroethene	20	75	125	15	0.0	19	95		19	94		1	
Methyl iodide	20	70	130	15	0.9	21	100		20	96		3	
Di-isopropyl ether (DIPE)	20	70	130	15	0.0	22	112		20	102		9	
Methylene Chloride	20	70	130	15	-0.3	21	106		20	103		3	
Carbon Disulfide	20	70	130	15	0.1	17	87		17	86		1	
Acrylonitrile	20	70	130	15	0.0	21	103		21	107		4	
Methyl-tert-butyl ether (MTBE)	40	70	130	15	0.0	44	109		40	100		9	
trans-1,2-Dichloroethene	20	75	125	15	0.0	19	95		18	92		3	
1,1-Dichloroethane	20	70	130	15	0.0	19	97		19	95		2	
Vinyl acetate	20	70	130	15	0.0	27	137	*	25	125		9	
Methyl ethyl ketone	100	40	150	15	0.0	98	98		93	93		5	
Ethyl t-butyl ether (ETBE)	20	70	130	15	0.0	23	116		21	106		9	
2,2-Dichloropropane	20	70	130	15	0.0	19	97		19	95		2	
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	23	115		21	105		9	
Chloroform	20	70	130	15	0.0	20	100		19	97		4	
Bromochloromethane	20	70	130	15	0.0	21	107		21	103		4	
Tetrahydrofuran	20	70	130	15	0.0	21	105		20	102		3	
1,1,1-Trichloroethane	20	75	125	15	0.0	20	101		20	99		2	
1,1-Dichloropropene	20	75	130	15	0.0	20	99		19	95		5	
Carbon Tetrachloride	20	75	125	15	0.0	21	103		20	100		3	
1,2-Dichloroethane	20	70	130	15	0.0	20	101		19	97		4	
Benzene	20	80	120	15	0.0	20	102		19	94		8	
Trichloroethene	20	75	125	15	0.0	20	100		19	93		6	
1,2-Dichloropropane	20	75	125	15	0.0	21	103		19	94		9	
Methylmethacrylate	20	70	130	15	0.0	22	109		20	100		8	
Bromodichloromethane	20	75	120	15	0.0	21	105		19	97		7	
Dibromomethane	20	75	125	15	0.0	19	93		18	91		3	
1,4-Dioxane	500	40	160	15	15.4	551	107		533	104		3	
2-Hexanone	100	55	130	15	0.0	97	97		94	94		4	
Methyl isobutyl ketone	100	60	135	15	0.3	102	102		98	98		4	
cis-1,3-Dichloropropene	20	70	130	15	0.0	22	108		20	102		6	
Toluene	20	75	120	15	0.0	20	101		19	95		7	
trans-1,3-Dichloropropene	20	70	130	15	0.0	21	107		20	102		5	
1,1,2-Trichloroethane	20	75	125	15	0.0	21	106		20	98		8	
1,3-Dichloropropane	20	75	125	15	0.0	21	105		20	99		5	
Tetrachloroethene	20	75	125	15	0.1	21	104		20	99		5	
Dibromochloromethane	20	70	130	15	0.0	22	108		20	102		6	

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: 74440
Non-spiked sample: B812132B
Spike: L812132B
Spike duplicate: L812132B2

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	#
1,2-Dibromoethane	20	80	120	15	0.0	22	110		21	105		5	
Chlorobenzene	20	80	120	15	0.0	20	100		18	92		9	
1,1,1,2-Tetrachloroethane	20	80	130	15	0.0	21	106		20	100		7	
Ethylbenzene	20	75	125	15	0.0	19	93		17	86		8	
m,p-Xylene	40	75	125	15	0.1	40	99		37	91		9	
o-Xylene	20	80	120	15	0.0	20	99		18	90		9	
Styrene	20	70	130	15	0.0	20	100		19	93		7	
Bromoform	20	70	130	15	0.0	21	103		20	98		5	
Isopropylbenzene	20	75	125	15	0.0	20	99		18	92		7	
1,1,2,2-Tetrachloroethane	20	70	130	15	0.0	19	94		18	91		3	
1,2,3-Trichloropropane	20	75	125	15	0.0	18	89		17	86		3	
n-Propylbenzene	20	70	130	15	0.1	19	97		18	90		7	
Bromobenzene	20	75	125	15	0.0	19	94		18	88		7	
1,3,5-Trimethylbenzene	20	75	130	15	0.0	19	96		18	91		5	
2-Chlorotoluene	20	75	125	15	0.0	20	98		18	91		8	
4-Chlorotoluene	20	75	130	15	0.0	20	98		18	89		9	
tert-butylbenzene	20	70	130	15	0.0	20	99		19	93		7	
1,2,4-Trimethylbenzene	20	75	130	15	0.0	19	94		17	85		9	
sec-butylbenzene	20	70	125	15	0.1	19	95		18	90		6	
p-isopropyltoluene	20	75	130	15	0.1	19	95		18	90		6	
1,3-Dichlorobenzene	20	75	125	15	0.0	19	93		17	87		7	
1,4-Dichlorobenzene	20	75	125	15	0.1	21	103		19	96		8	
n-butylbenzene	20	70	130	15	0.1	20	99		19	94		5	
1,2-Dichlorobenzene	20	70	120	15	0.0	20	100		19	94		6	
1,2-Dibromo-3-chloropropane	20	70	130	15	0.0	18	90		18	90		0	
1,2,4-Trichlorobenzene	20	70	130	15	0.0	19	96		18	89		7	
Hexachlorobutadiene	20	70	130	15	0.4	21	103		19	95		8	
Naphthalene	20	70	130	15	0.3	17	84		16	81		4	
1,2,3-Trichlorobenzene	20	70	130	15	0.0	20	100		19	93		7	
1,3,5-Trichlorobenzene	20	70	130	15	0.2	20	97		18	90		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 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: 74440
Non-spiked sample: B812142B
Spike: L812142B
Spike duplicate: L812142B2

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	20	99		18	90		9	
Chloromethane	20	40	125	15	-0.1	18	91		18	89		3	
Vinyl Chloride	20	70	130	15	0.0	18	90		17	85		6	
Bromomethane	20	40	145	15	1.8	23	104		23	107		3	
Chloroethane	20	70	130	15	0.0	19	95		20	102		7	
t-Butyl alcohol (TBA)	100	70	130	15	0.0	107	107		108	108		1	
Trichlorofluoromethane	20	70	130	15	0.0	19	95		18	90		5	
Diethyl ether	20	70	130	15	0.0	20	100		20	98		2	
1,1,2-Trichlorotrifluoroethane	20	70	130	15	0.0	16	82		15	77		6	
Acetone	100	40	140	15	-3.1	101	104		98	101		2	
1,1-Dichloroethene	20	75	125	15	0.0	19	93		17	86		7	
Methyl iodide	20	70	130	15	1.1	19	89		18	83		6	
Di-isopropyl ether (DIPE)	20	70	130	15	0.0	20	101		20	100		2	
Methylene Chloride	20	70	130	15	-0.3	21	104		20	104		1	
Carbon Disulfide	20	70	130	15	0.0	17	87		17	83		5	
Acrylonitrile	20	70	130	15	0.0	20	99		20	101		3	
Methyl-tert-butyl ether (MTBE)	40	70	130	15	0.0	39	97		39	96		1	
trans-1,2-Dichloroethene	20	75	125	15	0.0	19	96		18	89		8	
1,1-Dichloroethane	20	70	130	15	0.0	19	94		18	90		5	
Vinyl acetate	20	70	130	15	0.0	29	145	*	29	147	*	2	
Methyl ethyl ketone	100	40	150	15	0.2	91	91		95	95		4	
Ethyl t-butyl ether (ETBE)	20	70	130	15	0.0	21	103		20	102		1	
2,2-Dichloropropane	20	70	130	15	0.0	20	99		18	90		9	
cis-1,2-Dichloroethene	20	75	125	15	0.0	20	101		19	95		6	
t-Amyl methyl ether (TAME)	20	70	130	15	0.0	20	102		20	102		0	
Chloroform	20	70	130	15	0.0	19	96		18	91		5	
Bromochloromethane	20	70	130	15	0.0	20	102		20	99		3	
Tetrahydrofuran	20	70	130	15	0.0	20	101		20	102		1	
1,1,1-Trichloroethane	20	75	125	15	0.0	19	97		18	91		7	
1,1-Dichloropropene	20	75	130	15	0.0	19	94		18	92		2	
Carbon Tetrachloride	20	75	125	15	0.0	19	95		19	93		3	
1,2-Dichloroethane	20	70	130	15	0.0	19	96		19	95		1	
Benzene	20	80	120	15	0.0	19	94		18	91		4	
Trichloroethene	20	75	125	15	0.0	20	100		19	95		5	
1,2-Dichloropropane	20	75	125	15	0.0	20	98		19	96		2	
Methylmethacrylate	20	70	130	15	0.0	21	105		21	106		1	
Bromodichloromethane	20	75	120	15	0.0	20	102		19	97		5	
Dibromomethane	20	75	125	15	0.0	19	96		19	93		3	
1,4-Dioxane	500	40	160	15	0.0	584	117		584	117		0	
2-Hexanone	100	55	130	15	0.2	98	97		100	100		3	
Methyl isobutyl ketone	100	60	135	15	0.1	102	102		103	103		1	
cis-1,3-Dichloropropene	20	70	130	15	0.0	21	105		21	103		2	
Toluene	20	75	120	15	0.1	20	101		20	98		4	
trans-1,3-Dichloropropene	20	70	130	15	0.0	21	103		20	102		2	
1,1,2-Trichloroethane	20	75	125	15	0.0	20	102		20	102		1	
1,3-Dichloropropane	20	75	125	15	0.0	20	101		20	100		1	
Tetrachloroethene	20	75	125	15	0.0	20	102		20	98		3	
Dibromochloromethane	20	70	130	15	0.0	21	103		20	101		2	

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: 74440
Non-spiked sample: B812142B
Spike: L812142B
Spike duplicate: L812142B2

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	#
1,2-Dibromoethane	20	80	120	15	0.0	22	108		21	106		2	
Chlorobenzene	20	80	120	15	0.0	22	108		21	105		3	
1,1,1,2-Tetrachloroethane	20	80	130	15	0.0	22	110		22	110		0	
Ethylbenzene	20	75	125	15	0.1	20	100		20	98		2	
m,p-Xylene	40	75	125	15	0.2	44	108		42	105		3	
o-Xylene	20	80	120	15	0.0	21	105		20	102		3	
Styrene	20	70	130	15	0.0	21	107		21	104		3	
Bromoform	20	70	130	15	0.1	21	106		22	107		1	
Isopropylbenzene	20	75	125	15	0.1	22	108		21	106		2	
1,1,2,2-Tetrachloroethane	20	70	130	15	0.0	20	100		21	103		3	
1,2,3-Trichloropropane	20	75	125	15	0.0	19	97		20	98		1	
n-Propylbenzene	20	70	130	15	0.1	21	106		21	103		3	
Bromobenzene	20	75	125	15	0.0	20	102		20	101		0	
1,3,5-Trimethylbenzene	20	75	130	15	0.1	21	106		21	103		3	
2-Chlorotoluene	20	75	125	15	0.0	21	106		21	105		1	
4-Chlorotoluene	20	75	130	15	0.0	21	104		20	99		5	
tert-butylbenzene	20	70	130	15	0.0	21	107		20	100		7	
1,2,4-Trimethylbenzene	20	75	130	15	0.2	21	102		20	98		5	
sec-butylbenzene	20	70	125	15	0.1	21	105		20	100		5	
p-isopropyltoluene	20	75	130	15	0.1	21	104		20	99		4	
1,3-Dichlorobenzene	20	75	125	15	0.0	20	102		20	100		2	
1,4-Dichlorobenzene	20	75	125	15	0.0	22	110		22	108		1	
n-butylbenzene	20	70	130	15	0.1	22	109		21	106		3	
1,2-Dichlorobenzene	20	70	120	15	0.0	22	109		22	108		1	
1,2-Dibromo-3-chloropropane	20	70	130	15	0.0	19	97		21	104		7	
1,2,4-Trichlorobenzene	20	70	130	15	0.1	21	105		21	104		1	
Hexachlorobutadiene	20	70	130	15	0.4	23	115		23	113		2	
Naphthalene	20	70	130	15	0.3	20	98		20	101		2	
1,2,3-Trichlorobenzene	20	70	130	15	0.2	22	111		23	112		1	
1,3,5-Trichlorobenzene	20	70	130	15	0.1	21	106		21	105		2	

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: 74440
Non-spiked sample: MB12142B
Spike: LS12142C
Spike duplicate: LS12142C2

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 #	SPIKE DUP RESULT (ug/kg)	SPIKE DUP % REC	SPIKE #	RPD #
Dichlorodifluoromethane	2000	2000	49	82	25	0	1552	78		1654	83	*	6
Chloromethane	2000	2000	75	125	25	0	1855	93		1831	92		1
Vinyl Chloride	2000	2000	75	125	25	0	1658	83		1729	86		4
Bromomethane	2000	2000	75	125	25	0	1918	96		2006	100		4
Chloroethane	2000	2000	75	125	25	0	1911	96		1915	96		0
t-Butyl alcohol (TBA)	10000	10000	60	140	25	0	8248	82		10269	103		22
Trichlorofluoromethane	2000	2000	75	125	25	0	1928	96		2024	101		5
Diethyl ether	2000	2000	75	125	25	0	1873	94		1977	99		5
1,1,2-Trichlorotrifluoroethane	2000	2000	75	125	25	0	1906	95		1977	99		4
Acetone	5000	5000	75	125	25	0	6752	135	*	5378	108		23
1,1-Dichloroethene	2000	2000	75	125	25	0	2130	107		2126	106		0
Methyl iodide	2000	2000	75	125	25	0	1834	92		1941	97		6
Di-isopropyl ether (DIPE)	2000	2000	75	125	25	0	2128	106		2171	109		2
Methylene Chloride	2000	2000	75	125	25	0	2059	103		2089	104		1
Carbon Disulfide	2000	2000	75	125	25	0	2117	106		2185	109		3
Acrylonitrile	2000	2000	75	125	25	0	1940	97		2212	111		13
Methyl-tert-butyl ether (MTBE)	2000	2000	75	125	25	0	1951	98		2135	107		9
trans-1,2-Dichloroethene	2000	2000	75	125	25	0	2180	109		2284	114		5
1,1-Dichloroethane	2000	2000	75	125	25	0	2103	105		2190	110		4
Methyl ethyl ketone	5000	5000	60	140	25	0	5545	111		5679	114		2
Ethyl t-butyl ether (ETBE)	2000	2000	75	125	25	0	2028	101		2172	109		7
2,2-Dichloropropane	2000	2000	75	125	25	0	2241	112		2361	118		5
cis-1,2-Dichloroethene	2000	2000	75	125	25	0	2163	108		2312	116		7
t-Amyl methyl ether (TAME)	2000	2000	75	125	25	0	2011	101		2144	107		6
Chloroform	2000	2000	75	125	25	0	2161	108		2279	114		5
Bromochloromethane	2000	2000	75	125	25	0	2075	104		2185	109		5
Tetrahydrofuran	2000	2000	60	140	25	0	1872	94		2150	107		14
1,1,1-Trichloroethane	2000	2000	75	125	25	0	2112	106		2255	113		7
1,1-Dichloropropene	2000	2000	75	125	25	0	2173	109		2283	114		5
Carbon Tetrachloride	2000	2000	75	125	25	0	2112	106		2151	108		2
1,2-Dichloroethane	2000	2000	75	125	25	0	1986	99		2077	104		4
Benzene	2000	2000	75	125	25	0	2059	103		2145	107		4
Trichloroethene	2000	2000	75	125	25	0	1987	99		2054	103		3
1,2-Dichloropropane	2000	2000	75	125	25	0	2182	109		2154	108		1
Methylmethacrylate	2000	2000	75	125	25	0	1819	91		2025	101		11
Bromodichloromethane	2000	2000	75	125	25	0	1982	99		2049	102		3
Dibromomethane	2000	2000	75	125	25	0	2031	102		2148	107		6
1,4-Dioxane	25000	25000	60	140	25	0	21561	86		27356	109		24
2-Hexanone	5000	5000	75	125	25	0	5387	108		5685	114		5
Methyl isobutyl ketone	5000	5000	75	125	25	0	4948	99		5349	107		8
cis-1,3-Dichloropropene	2000	2000	75	125	25	0	2125	106		2256	113		6
Toluene	2000	2000	75	125	25	0	2047	102		2082	104		2
trans-1,3-Dichloropropene	2000	2000	75	125	25	0	1879	94		1875	94		0
1,1,2-Trichloroethane	2000	2000	75	125	25	0	2037	102		2159	108		6
1,3-Dichloropropane	2000	2000	75	125	25	0	1985	99		2142	107		8
Tetrachloroethene	2000	2000	75	125	25	0	1874	94		1914	96		2
Dibromochloromethane	2000	2000	75	125	25	0	1991	100		2100	105		5
1,2-Dibromoethane	2000	2000	75	125	25	0	1979	99		2160	108		9
Chlorobenzene	2000	2000	75	125	25	0	2132	107		2083	104		2
1,1,1,2-Tetrachloroethane	2000	2000	75	125	25	0	2082	104		2071	104		1

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: 74440
Non-spiked sample: MB12142B
Spike: LS12142C
Spike duplicate: LS12142C2

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	#	RPD	#
Ethylbenzene	2000	2000	75	125	25	0	2133	107		2110	106		1	
m,p-Xylene	4000	4000	75	125	25	0	4079	102		4182	105		3	
o-Xylene	2000	2000	75	125	25	0	2176	109		2172	109		0	
Styrene	2000	2000	75	125	25	0	2150	108		2165	108		1	
Bromoform	2000	2000	75	125	25	0	1852	93		1846	92		0	
Isopropylbenzene	2000	2000	75	125	25	0	2200	110		2207	110		0	
1,1,2,2-Tetrachloroethane	2000	2000	75	125	25	0	2030	101		2141	107		5	
1,2,3-Trichloropropane	2000	2000	75	125	25	0	1874	94		1936	97		3	
trans-1,4-Dichloro-2-butene	2000	2000	75	125	25	0	1709	85		1713	86		0	
n-Propylbenzene	2000	2000	75	125	25	0	2061	103		2080	104		1	
Bromobenzene	2000	2000	75	125	25	0	2028	101		2037	102		0	
1,3,5-Trimethylbenzene	2000	2000	75	125	25	0	2052	103		2115	106		3	
2-Chlorotoluene	2000	2000	75	125	25	0	2103	105		2100	105		0	
4-Chlorotoluene	2000	2000	75	125	25	0	2077	104		2153	108		4	
tert-butylbenzene	2000	2000	75	125	25	0	2115	106		2200	110		4	
1,2,4-Trimethylbenzene	2000	2000	75	125	25	0	2112	106		2070	104		2	
sec-butylbenzene	2000	2000	75	125	25	0	2275	114		2183	109		4	
p-isopropyltoluene	2000	2000	75	125	25	0	2159	108		2142	107		1	
1,3-Dichlorobenzene	2000	2000	75	125	25	0	2127	106		2061	103		3	
1,4-Dichlorobenzene	2000	2000	75	125	25	0	1948	97		2081	104		7	
n-butylbenzene	2000	2000	75	125	25	0	2082	104		2287	114		9	
1,2-Dichlorobenzene	2000	2000	75	125	25	0	2048	102		2172	109		6	
1,2-Dibromo-3-chloropropane	2000	2000	75	125	25	0	1833	92		2058	103		12	
1,2,4-Trichlorobenzene	2000	2000	75	125	25	0	1942	97		2017	101		4	
Hexachlorobutadiene	2000	2000	75	125	25	0	2029	101		2135	107		5	
Naphthalene	2000	2000	75	125	25	0	1892	95		2181	109		14	
1,2,3-Trichlorobenzene	2000	2000	75	125	25	0	1985	99		2137	107		7	

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 AQUEOUS
LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
PERCENT RECOVERY

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

SDG: 74440
Non-spiked sample: B812172C
Spike: L812172C
Spike duplicate: L812172C2

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	20	102		19	96		6	
Chloromethane	20	40	125	15	0.0	20	99		17	86		14	
Vinyl Chloride	20	70	130	15	0.0	18	91		17	87		4	
Bromomethane	20	40	145	15	0.0	19	94		19	95		1	
Chloroethane	20	70	130	15	0.0	17	84		16	80		5	
t-Butyl alcohol (TBA)	100	70	130	15	0.0	92	92		112	112		19	*
Trichlorofluoromethane	20	70	130	15	0.0	19	93		19	93		0	
Diethyl ether	20	70	130	15	0.0	19	93		19	93		0	
1,1,2-Trichlorotrifluoroethane	20	70	130	15	0.0	17	86		17	84		2	
Acetone	100	40	140	15	0.0	105	105		113	113		7	
1,1-Dichloroethene	20	70	130	15	0.0	20	101		20	99		2	
Methyl iodide	20	70	130	15	0.0	19	96		18	92		4	
Di-isopropyl ether (DIPE)	20	70	130	15	0.0	21	105		22	108		3	
Methylene Chloride	20	70	130	15	0.0	19	96		19	95		1	
Carbon Disulfide	20	70	130	15	0.0	19	97		19	96		1	
Acrylonitrile	20	70	130	15	0.0	20	101		23	114		12	
Methyl-tert-butyl ether (MTBE)	40	70	130	15	0.0	41	103		42	104		1	
trans-1,2-Dichloroethene	20	70	130	15	0.0	21	103		21	103		0	
1,1-Dichloroethane	20	70	130	15	0.0	20	99		20	101		2	
Vinyl acetate	20	70	130	15	0.0	23	115		25	126		9	
Methyl ethyl ketone	100	40	150	15	0.0	98	98		110	110		12	
Ethyl t-butyl ether (ETBE)	20	70	130	15	0.0	22	110		22	108		2	
2,2-Dichloropropane	20	70	130	15	0.0	21	107		22	111		4	
cis-1,2-Dichloroethene	20	70	125	15	0.0	21	103		21	107		3	
t-Amyl methyl ether (TAME)	20	70	130	15	0.0	21	106		22	108		2	
Chloroform	20	70	130	15	0.0	22	108		22	110		2	
Bromochloromethane	20	70	130	15	0.0	21	103		21	106		3	
Tetrahydrofuran	20	70	130	15	0.0	19	95		21	107		11	
1,1,1-Trichloroethane	20	70	130	15	0.0	22	109		21	107		1	
1,1-Dichloropropene	20	75	130	15	0.0	21	106		21	105		1	
Carbon Tetrachloride	20	70	130	15	0.0	21	107		20	100		8	
1,2-Dichloroethane	20	70	130	15	0.0	20	102		21	103		0	
Benzene	20	80	120	15	0.0	20	98		20	99		1	
Trichloroethene	20	70	125	15	0.0	21	104		20	100		4	
1,2-Dichloropropane	20	75	125	15	0.0	21	104		21	104		0	
Methylmethacrylate	20	70	130	15	0.0	20	99		21	106		7	
Bromodichloromethane	20	75	120	15	0.0	21	107		21	103		5	
Dibromomethane	20	75	125	15	0.0	21	106		21	106		0	
1,4-Dioxane	500	40	160	15	0.0	416	83		488	98		16	*
2-Chloroethylvinyl ether	40	70	130	15	0.0	29	73		28	70		4	
2-Hexanone	100	55	130	15	0.0	101	101		115	115		13	
Methyl isobutyl ketone	100	60	135	15	0.0	95	95		108	108		13	
cis-1,3-Dichloropropene	20	70	130	15	0.0	22	108		22	109		1	
Toluene	20	70	120	15	0.0	20	99		20	100		0	
trans-1,3-Dichloropropene	20	70	130	15	0.0	19	96		19	95		2	
1,1,2-Trichloroethane	20	75	125	15	0.0	21	107		21	106		2	
1,3-Dichloropropane	20	75	125	15	0.0	21	103		20	102		1	
Tetrachloroethene	20	70	130	15	0.0	24	120		23	114		4	
Dibromochloromethane	20	70	130	15	0.0	22	109		21	107		2	
1,2-Dibromoethane	20	80	120	15	0.0	22	109		21	106		2	
Chlorobenzene	20	80	120	15	0.0	22	108		21	105		3	

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

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

SDG: 74440
Non-spiked sample: B812172C
Spike: L812172C
Spike duplicate: L812172C2

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	#
1,1,1,2-Tetrachloroethane	20	80	130	15	0.0	21	107		21	107		0	
Ethylbenzene	20	75	125	15	0.0	21	104		21	103		1	
m,p-Xylene	40	75	130	15	0.0	42	105		40	100		4	
o-Xylene	20	80	120	15	0.0	22	112		22	108		3	
Styrene	20	70	130	15	0.0	22	111		22	109		2	
Bromoform	20	70	130	15	0.0	19	96		20	102		6	
Isopropylbenzene	20	75	125	15	0.0	23	113		23	114		1	
1,1,2,2-Tetrachloroethane	20	70	130	15	0.0	21	103		23	116		11	
1,2,3-Trichloropropane	20	75	125	15	0.0	19	96		21	105		9	
trans-1,4-Dichloro-2-butene	20	70	130	15	0.0	14	70		14	71		1	
n-Propylbenzene	20	70	130	15	0.0	22	108		21	106		2	
Bromobenzene	20	75	125	15	0.0	20	99		20	98		1	
1,3,5-Trimethylbenzene	20	75	130	15	0.0	21	107		21	105		2	
2-Chlorotoluene	20	75	125	15	0.0	22	111		22	109		2	
4-Chlorotoluene	20	75	130	15	0.0	21	106		21	106		1	
tert-butylbenzene	20	70	130	15	0.0	22	112		21	107		5	
1,2,4-Trimethylbenzene	20	75	130	15	0.0	21	107		20	102		4	
sec-butylbenzene	20	70	125	15	0.0	22	110		22	110		0	
p-isopropyltoluene	20	75	130	15	0.0	22	109		22	108		1	
1,3-Dichlorobenzene	20	75	125	15	0.0	22	109		21	105		4	
1,4-Dichlorobenzene	20	75	125	15	0.0	21	105		21	105		0	
n-butylbenzene	20	70	130	15	0.0	22	112		22	108		3	
1,2-Dichlorobenzene	20	70	120	15	0.0	21	105		21	107		2	
1,2-Dibromo-3-chloropropane	20	70	130	15	0.0	20	100		23	115		14	
1,2,4-Trichlorobenzene	20	70	130	15	0.0	20	98		20	98		0	
Hexachlorobutadiene	20	70	130	15	0.0	21	105		21	107		2	
Naphthalene	20	70	130	15	0.0	19	95		22	109		13	
1,2,3-Trichlorobenzene	20	70	130	15	0.0	20	98		21	106		8	
1,3,5-Trichlorobenzene	20	70	130	15	0.0	20	100		20	102		2	

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 AQUEOUS
MATRIX SPIKE/DUPLICATE
PERCENT RECOVERY

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

SDG: 74440
Non-spiked sample: 74440-11
Spike: 74440-11,MS
Spike duplicate: 74440-11,MSD

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	22	111		22	111		0	
Chloromethane	20	40	125	15	0.0	21	103		22	108		5	
Vinyl Chloride	20	70	130	15	0.0	18	88		17	84		5	
Bromomethane	20	40	145	15	0.0	20	98		19	95		4	
Chloroethane	20	70	130	15	0.0	21	106		20	102		4	
t-Butyl alcohol (TBA)	100	70	130	25	0.0	108	108		97	97		10	
Trichlorofluoromethane	20	70	130	15	0.0	19	93		18	89		5	
Diethyl ether	20	70	130	15	0.0	22	110		22	108		3	
1,1,2-Trichlorotrifluoroethane	20	70	130	15	0.0	20	99		15	76		26	*
Acetone	100	40	140	25	0.0	103	103		104	104		1	
1,1-Dichloroethene	20	70	130	15	0.0	24	121		22	110		9	
Methyl iodide	20	70	130	25	0.0	22	109		17	84		26	*
Di-isopropyl ether (DIPE)	20	70	130	15	0.0	24	122		23	114		6	
Methylene Chloride	20	70	130	15	0.0	22	112		22	108		3	
Carbon Disulfide	20	70	130	25	0.0	25	125		23	116		8	
Acrylonitrile	20	70	130	25	0.0	27	135	*	25	125		7	
Methyl-tert-butyl ether (MTBE)	40	70	130	15	0.0	44	111		41	102		8	
trans-1,2-Dichloroethene	20	70	130	15	0.0	25	125		23	117		7	
1,1-Dichloroethane	20	70	130	15	0.0	23	117		22	111		5	
Vinyl acetate	20	70	130	25	0.0	35	177	*	10	50	*	113	*
Methyl ethyl ketone	100	40	150	25	0.0	124	124		122	122		1	
Ethyl t-butyl ether (ETBE)	20	70	130	15	0.0	23	115		22	110		5	
2,2-Dichloropropane	20	70	130	15	0.0	19	97		18	89		8	
cis-1,2-Dichloroethene	20	70	125	15	0.0	24	119		23	114		4	
t-Amyl methyl ether (TAME)	20	70	130	15	0.0	22	110		21	106		4	
Chloroform	20	70	130	15	1.4	24	115		23	106		7	
Bromochloromethane	20	70	130	15	0.0	24	120		22	109		9	
Tetrahydrofuran	20	70	130	25	0.0	24	120		23	113		6	
1,1,1-Trichloroethane	20	70	130	15	0.0	21	103		20	98		5	
1,1-Dichloropropene	20	75	130	15	0.0	24	120		23	114		5	
Carbon Tetrachloride	20	70	130	15	0.0	19	95		19	93		2	
1,2-Dichloroethane	20	70	130	15	0.0	20	102		20	99		3	
Benzene	20	80	120	15	0.0	24	118		22	111		7	
Trichloroethene	20	70	125	15	0.0	21	104		20	100		4	
1,2-Dichloropropane	20	75	125	15	0.0	24	120		24	118		2	
Bromodichloromethane	20	75	120	15	0.0	20	102		20	99		4	
Dibromomethane	20	75	125	15	0.0	21	105		20	100		6	
1,4-Dioxane	500	40	160	30	0.0	495	99		490	98		1	
2-Hexanone	100	55	130	25	0.0	121	121		117	117		3	
Methyl isobutyl ketone	100	60	135	25	0.0	117	117		116	116		1	
cis-1,3-Dichloropropene	20	70	130	15	0.0	22	111		22	109		2	
Toluene	20	70	120	15	0.0	21	103		21	104		1	
trans-1,3-Dichloropropene	20	70	130	15	0.0	18	89		17	87		2	
1,1,2-Trichloroethane	20	75	125	15	0.0	22	111		23	113		1	
1,3-Dichloropropane	20	75	125	15	0.0	22	110		22	112		2	
Tetrachloroethene	20	70	130	15	0.0	22	110		21	104		6	
Dibromochloromethane	20	70	130	15	0.0	22	108		21	107		1	
1,2-Dibromoethane	20	80	120	15	0.0	21	105		21	103		2	

VOLATILE ORGANIC AQUEOUS
MATRIX SPIKE/DUPLICATE
PERCENT RECOVERY

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

SDG: 74440
Non-spiked sample: 74440-11
Spike: 74440-11,MS
Spike duplicate: 74440-11,MSD

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	#
Chlorobenzene	20	80	120	15	0.0	22	108		21	106		2	
1,1,1,2-Tetrachloroethane	20	80	130	15	0.0	21	107		21	107		1	
Ethylbenzene	20	75	125	15	0.0	21	107		21	106		1	
m,p-Xylene	40	75	130	15	0.0	42	105		42	105		0	
o-Xylene	20	80	120	15	0.0	22	110		22	111		1	
Styrene	20	70	130	15	0.0	22	110		22	109		0	
Bromoform	20	70	130	15	0.0	20	100		21	103		3	
Isopropylbenzene	20	75	125	15	0.0	21	107		22	109		1	
1,1,2,2-Tetrachloroethane	20	70	130	15	0.0	24	118		24	120		2	
1,2,3-Trichloropropane	20	75	125	15	0.0	21	106		22	109		2	
n-Propylbenzene	20	70	130	15	0.0	21	106		22	108		2	
Bromobenzene	20	75	125	15	0.0	20	102		21	103		1	
1,3,5-Trimethylbenzene	20	75	130	15	0.0	20	102		20	99		3	
2-Chlorotoluene	20	75	125	15	0.0	21	105		20	102		3	
4-Chlorotoluene	20	75	130	15	0.0	20	99		20	101		2	
tert-butylbenzene	20	70	130	15	0.0	20	101		22	108		7	
1,2,4-Trimethylbenzene	20	75	130	15	0.0	20	101		20	101		0	
sec-butylbenzene	20	70	125	15	0.0	21	105		22	108		3	
p-isopropyltoluene	20	75	130	15	0.0	20	101		21	103		3	
1,3-Dichlorobenzene	20	75	125	15	0.0	21	103		21	103		1	
1,4-Dichlorobenzene	20	75	125	15	0.0	21	106		21	103		3	
n-butylbenzene	20	70	130	15	0.0	21	105		20	101		3	
1,2-Dichlorobenzene	20	70	120	15	0.0	22	111		21	106		5	
1,2-Dibromo-3-chloropropane	20	70	130	15	0.0	22	112		21	107		5	
1,2,4-Trichlorobenzene	20	70	130	15	0.0	18	92		17	87		5	
Hexachlorobutadiene	20	70	130	15	0.0	18	90		17	87		3	
Naphthalene	20	70	130	15	0.0	21	107		20	98		9	
1,2,3-Trichlorobenzene	20	70	130	15	0.0	20	98		19	93		6	
1,3,5-Trichlorobenzene	20	70	130	15	0.0	20	98		19	94		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: _____

VPH
DATA SUMMARIES

Mr. Erik Phenix
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

December 18, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: SB-1-S3

Lab Sample ID: 74440-1
Matrix: Solid
Percent Solid: 95
Dilution Factor: 131
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/17/12

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	6540	µg/kg	13200
Unadjusted C9-C12 Aliphatics ¹	N/A	6540	µg/kg	85800
Benzene	C5-C8	262	µg/kg	U
Ethylbenzene	C9-C12	262	µg/kg	772
Methyl-tert-butyl ether	C5-C8	131	µg/kg	U
Naphthalene	N/A	262	µg/kg	516
Toluene	C5-C8	262	µg/kg	U
m- & p-Xylenes	C9-C12	524	µg/kg	U
o-Xylene	C9-C12	262	µg/kg	233 J
C5-C8 Aliphatic Hydrocarbons ^{1,2}	N/A	6540	µg/kg	13200
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	6540	µg/kg	47100
C9-C10 Aromatic Hydrocarbons ¹	N/A	1310	µg/kg	37700
Surrogate % Recovery (2,5-Dibromotoluene) PID				103
Surrogate % Recovery (2,5-Dibromotoluene) FID				91
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.
 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.

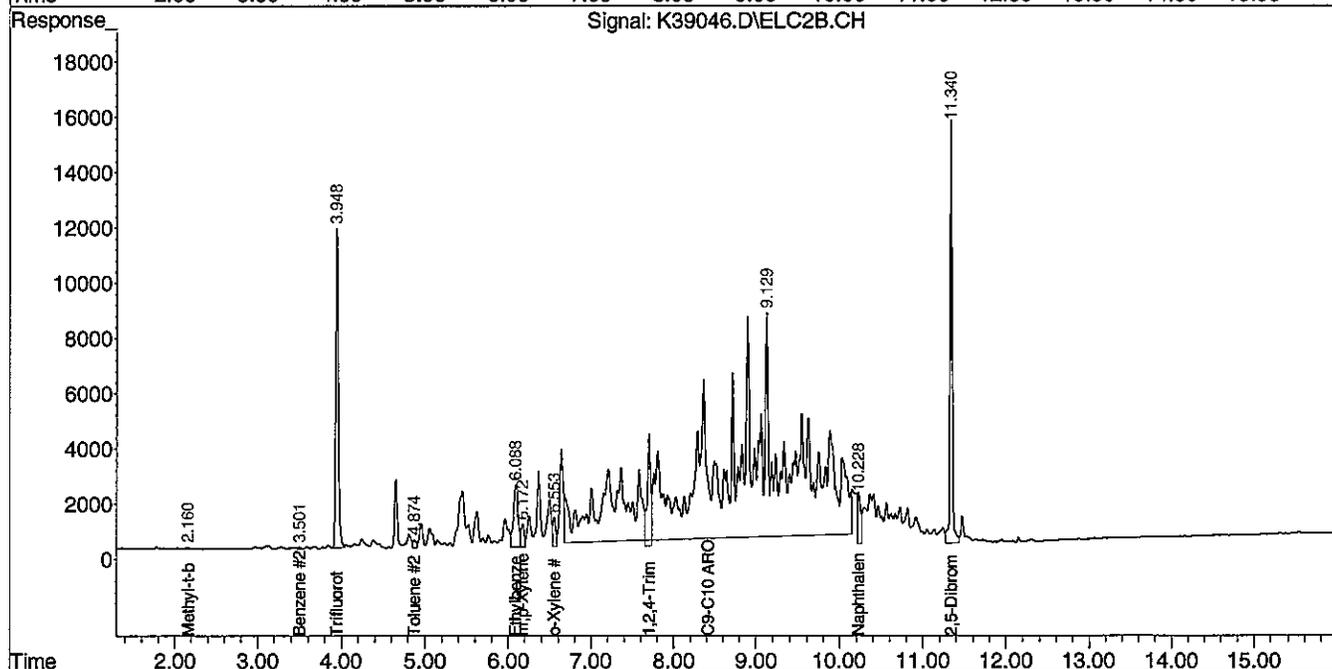
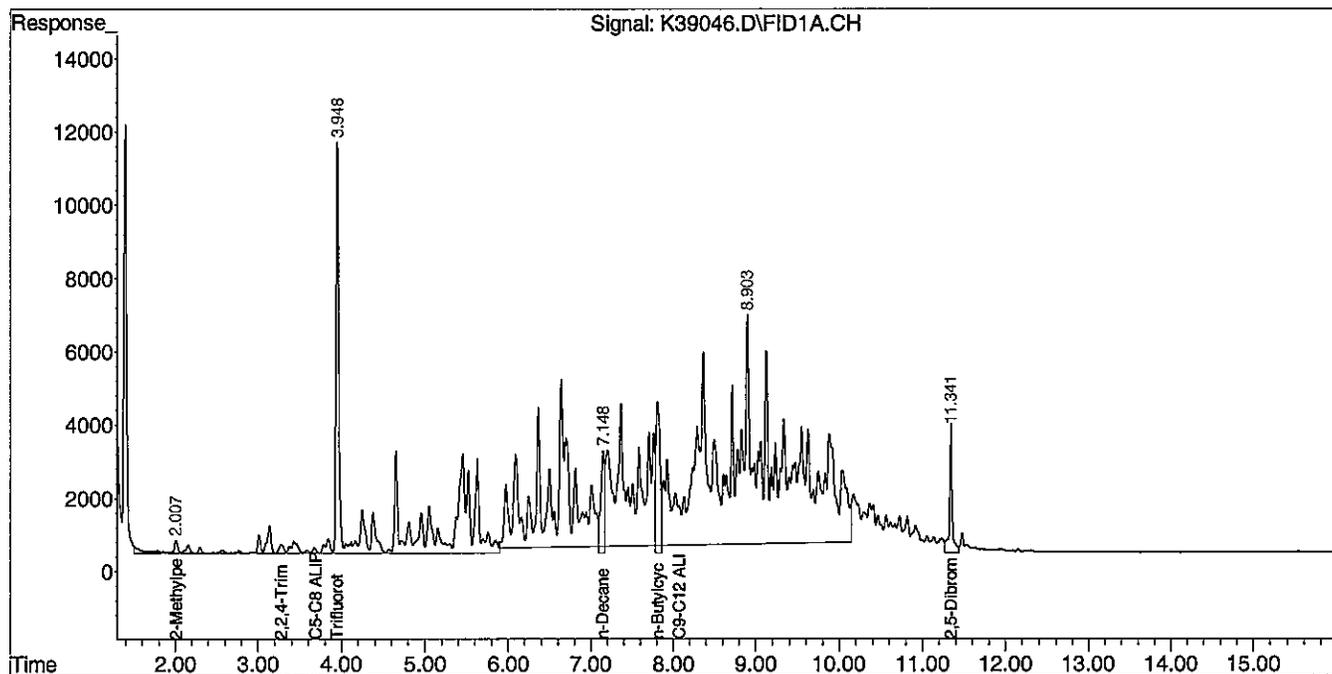
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\121712-K\
 Data File : K39046.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 17 Dec 2012 6:51 pm
 Operator : JK
 Sample : 74440-1,,2.5X
 Misc : 40,10.64,SOIL
 ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 18 09:30:08 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT121112.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Tue Dec 11 15:13:00 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. Erik Phenix
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December 13, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: SB-2-S3

Lab Sample ID: 74440-2
Matrix: Solid
Percent Solid: 89
Dilution Factor: 54
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/12/12

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	2680	µg/kg	1950 J
Unadjusted C9-C12 Aliphatics	N/A	2680	µg/kg	7410
C5-C8 Aliphatic Hydrocarbons ^{1,2}	N/A	2680	µg/kg	1880 J
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	2680	µg/kg	4350
C9-C10 Aromatic Hydrocarbons ¹	N/A	536	µg/kg	2870
Surrogate % Recovery (Trifluorotoluene) PID				95
Surrogate % Recovery (Trifluorotoluene) FID				91
Surrogate Acceptance Range				70-130%
¹ Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that 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.

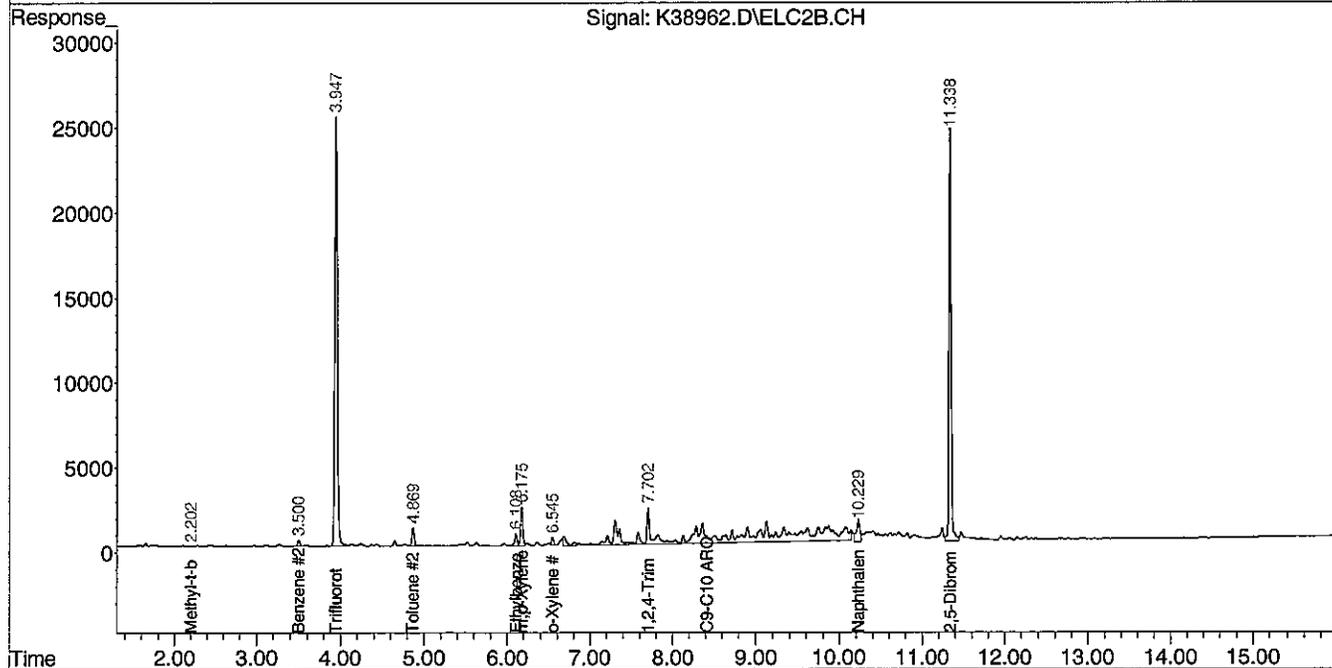
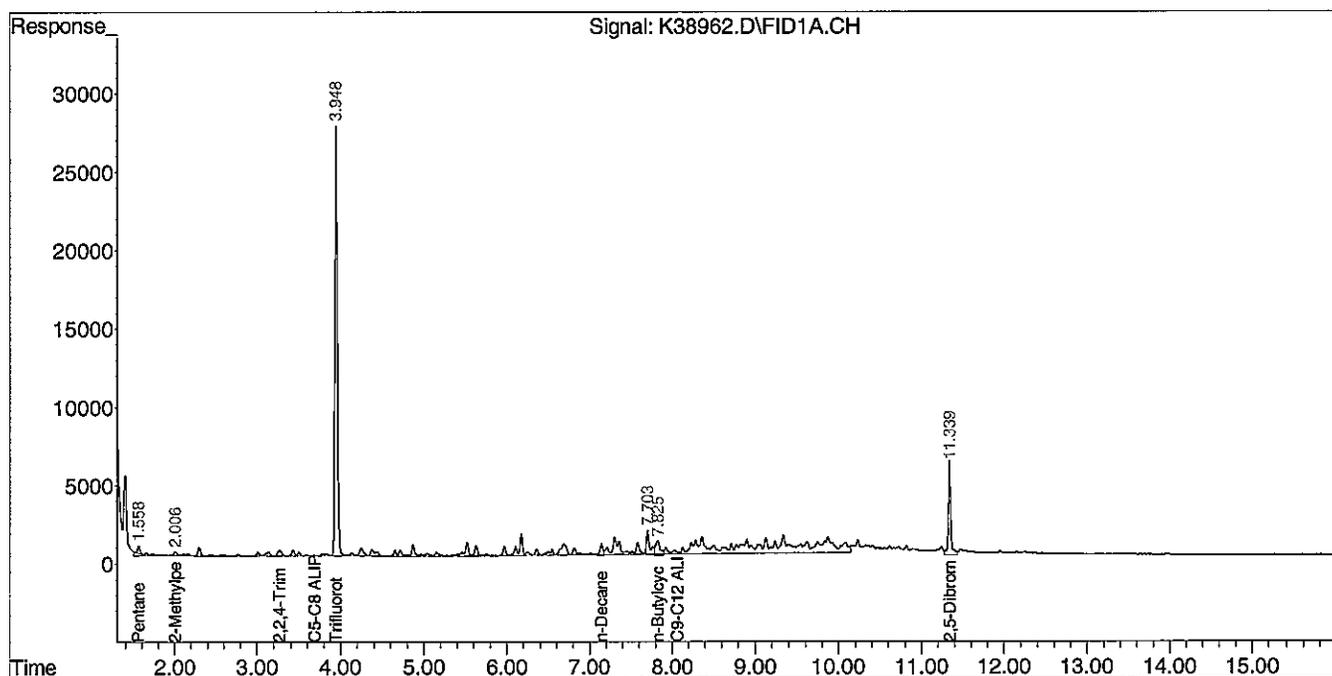
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\121212-K\
 Data File : K38962.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 12 Dec 2012 7:52 pm
 Operator : JK
 Sample : 74440-2
 Misc : 100,11.91,SOIL
 ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 13 09:33:36 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT121112.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Tue Dec 11 15:13:00 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 :



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December 13, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast

Project Number: 111.06134.026

Client Sample ID: SB-3-S3

Lab Sample ID: 74440-3

Matrix: Solid

Percent Solid: 88

Dilution Factor: 74

Collection Date: 12/05/12

Lab Receipt Date: 12/06/12

Analysis Date: 12/12/12

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	3720	µg/kg	U
Unadjusted C9-C12 Aliphatics ¹	N/A	3720	µg/kg	2930 J
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	3720	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	3720	µg/kg	U
C9-C10 Aromatic Hydrocarbons ¹	N/A	744	µg/kg	1320
Surrogate % Recovery (Trifluorotoluene) PID				95
Surrogate % Recovery (Trifluorotoluene) FID				91
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.

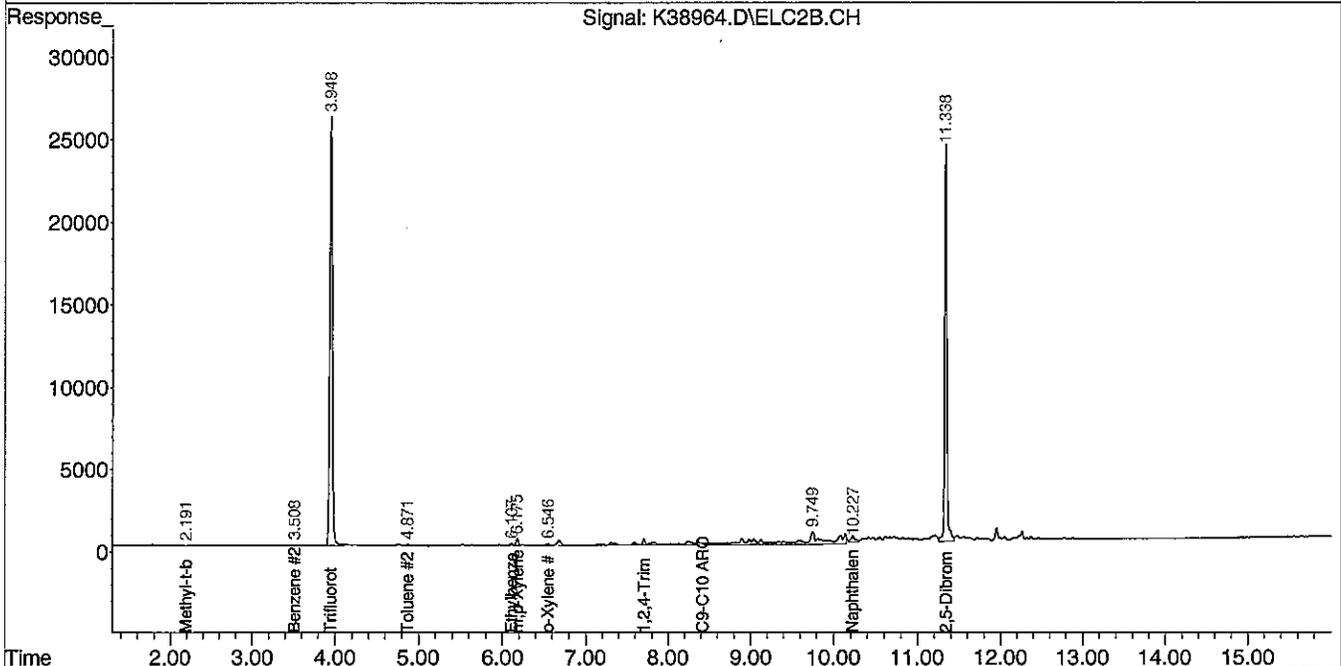
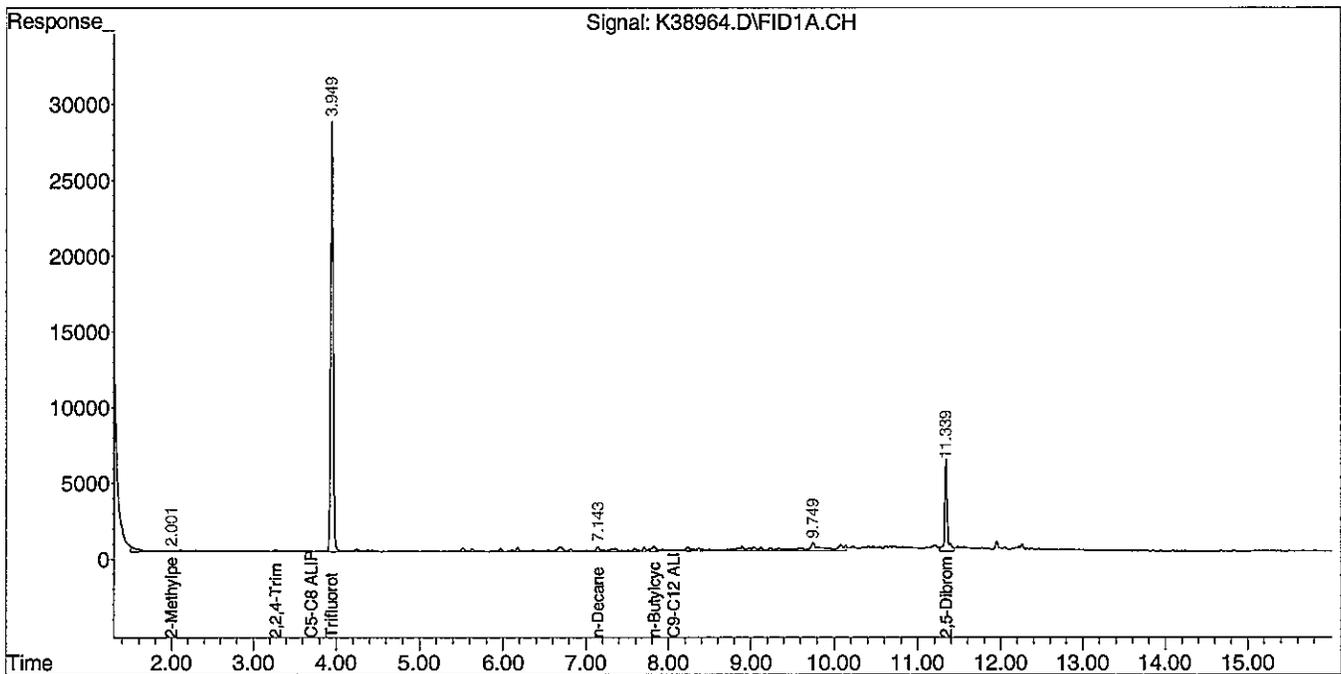
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\121212-K\
 Data File : K38964.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 12 Dec 2012 8:46 pm
 Operator : JK
 Sample : 74440-3
 Misc : 100,8.46,SOIL
 ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 13 09:33:38 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT121112.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Tue Dec 11 15:13:00 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 :



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December 13, 2012

SAMPLE DATA

Lab Sample ID: 74440-4
Matrix: Solid
Percent Solid: 94
Dilution Factor: 52
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/12/12

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: SB-4-S3

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	2590	µg/kg	U
Unadjusted C9-C12 Aliphatics ¹	N/A	2590	µg/kg	28900
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	2590	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	2590	µg/kg	15400
C9-C10 Aromatic Hydrocarbons ¹	N/A	518	µg/kg	13400
Surrogate % Recovery (Trifluorotoluene) PID				99
Surrogate % Recovery (Trifluorotoluene) FID				94
Surrogate Acceptance Range				70-130%
¹ Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that 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.

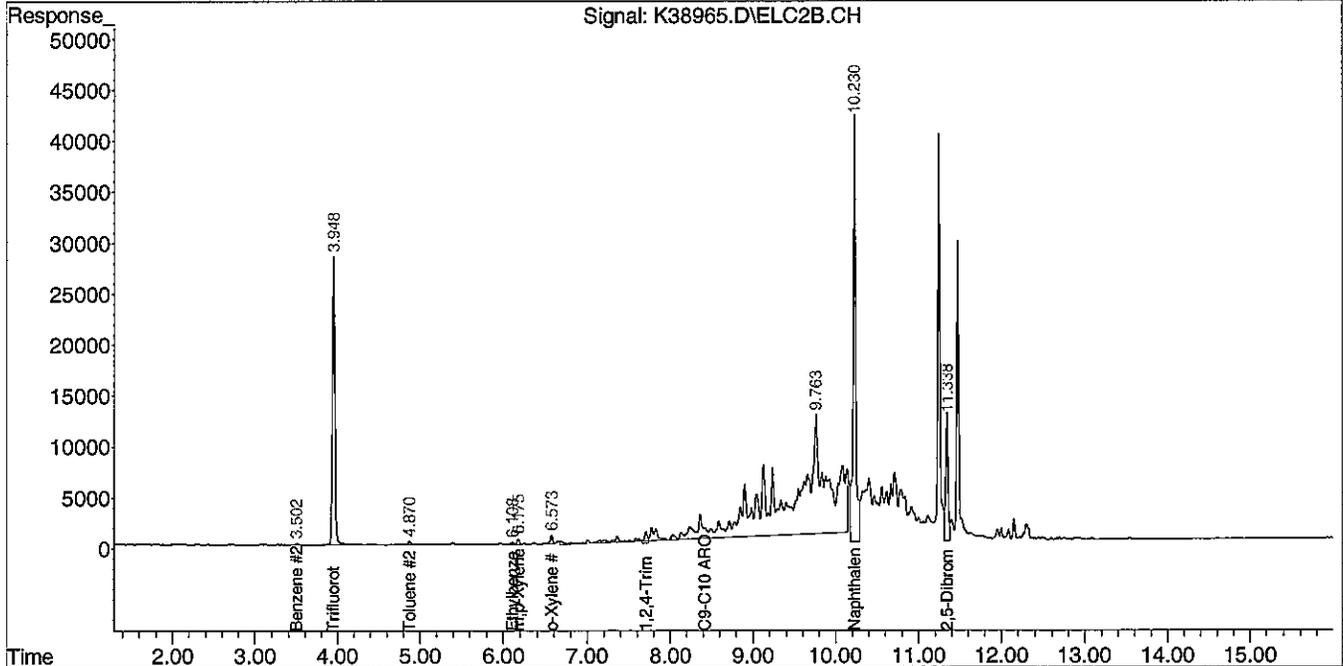
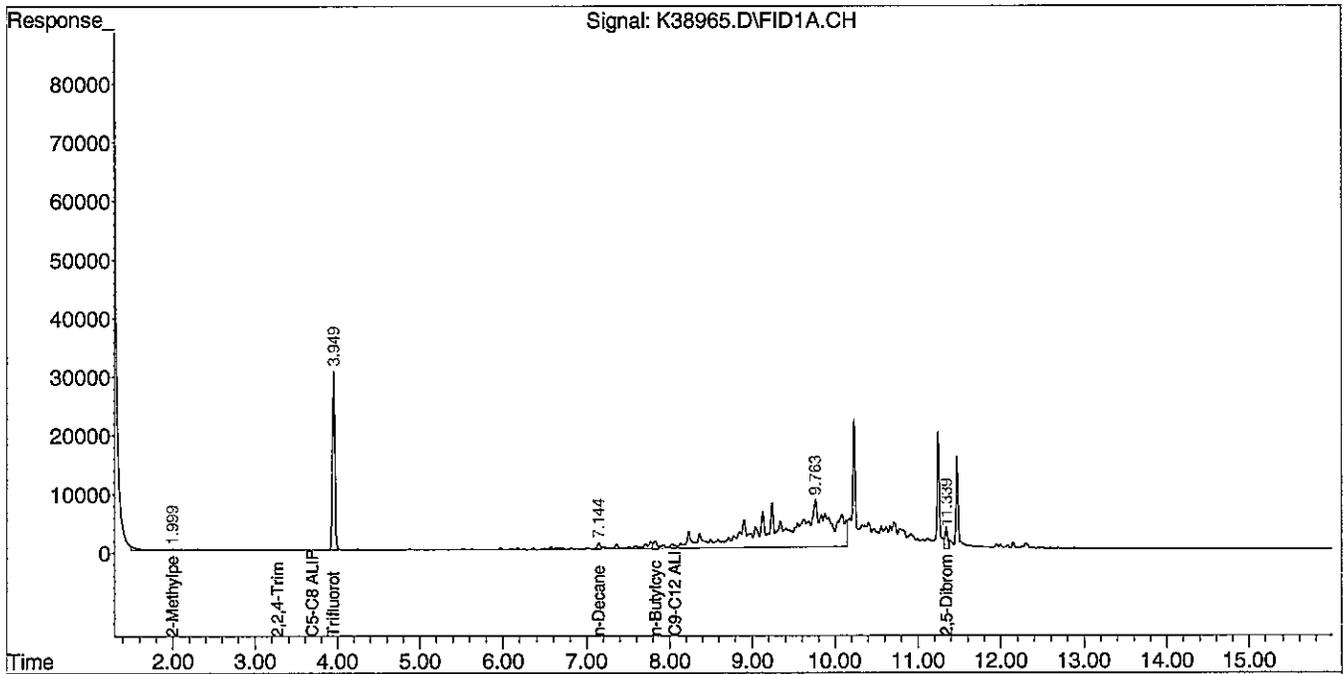
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\121212-K\
 Data File : K38965.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 12 Dec 2012 9:12 pm
 Operator : JK
 Sample : 74440-4
 Misc : 100,10.86,SOIL
 ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 13 09:33:39 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT121112.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Tue Dec 11 15:13:00 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 :



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December 13, 2012

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: SB-5-S3

SAMPLE DATA

Lab Sample ID: 74440-5
Matrix: Solid
Percent Solid: 89
Dilution Factor: 65
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/12/12

VPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	3230	µg/kg	U
Unadjusted C9-C12 Aliphatics ¹	N/A	3230	µg/kg	2680 J
Benzene	C5-C8	129	µg/kg	U
Ethylbenzene	C9-C12	129	µg/kg	U
Methyl-tert-butyl ether	C5-C8	65	µg/kg	U
Naphthalene	N/A	129	µg/kg	U
Toluene	C5-C8	129	µg/kg	U
m- & p-Xylenes	C9-C12	259	µg/kg	U
o-Xylene	C9-C12	129	µg/kg	U
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	3230	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	3230	µg/kg	1880 J
C9-C10 Aromatic Hydrocarbons ¹	N/A	647	µg/kg	807
Surrogate % Recovery (Trifluorotoluene) PID				98
Surrogate % Recovery (Trifluorotoluene) FID				93
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.
 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.

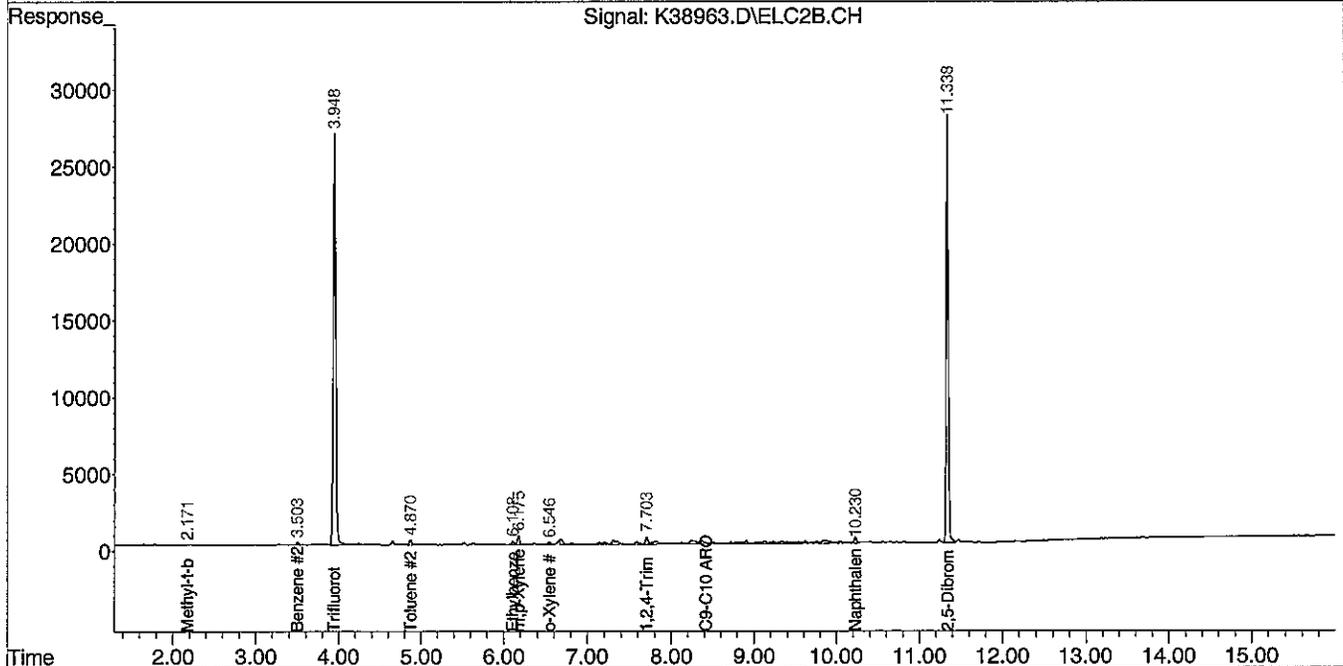
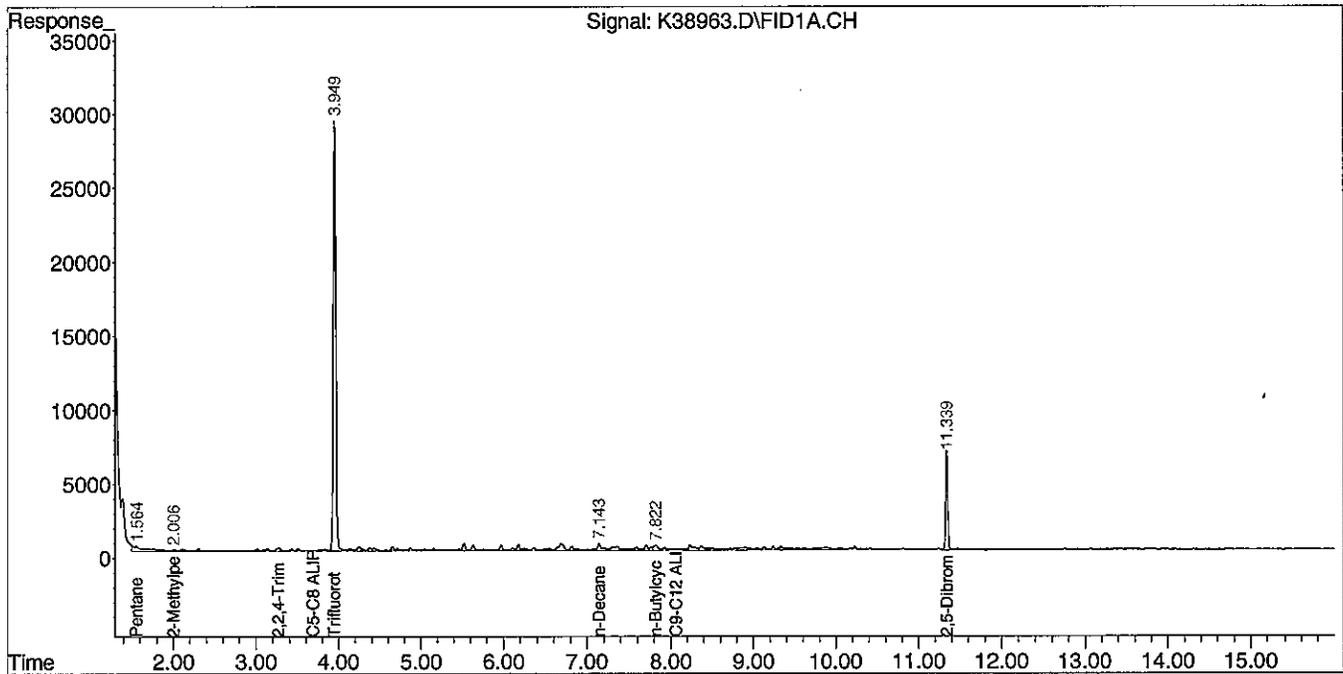
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\121212-K\
 Data File : K38963.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 12 Dec 2012 8:19 pm
 Operator : JK
 Sample : 74440-5
 Misc : 100,9.64,SOIL
 ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 13 09:33:37 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT121112.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Tue Dec 11 15:13:00 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 :



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Portland, ME 04101

December 13, 2012

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: SB-DUP

SAMPLE DATA

Lab Sample ID: 74440-6
Matrix: Solid
Percent Solid: 88
Dilution Factor: 65
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/12/12

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	3260	µg/kg	U
Unadjusted C9-C12 Aliphatics ¹	N/A	3260	µg/kg	4430
C5-C8 Aliphatics Hydrocarbons ^{1,2}	N/A	3260	µg/kg	U
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	3260	µg/kg	2240 J
C9-C10 Aromatic Hydrocarbons ¹	N/A	652	µg/kg	2200
Surrogate % Recovery (Trifluorotoluene) PID				98
Surrogate % Recovery (Trifluorotoluene) FID				93
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.

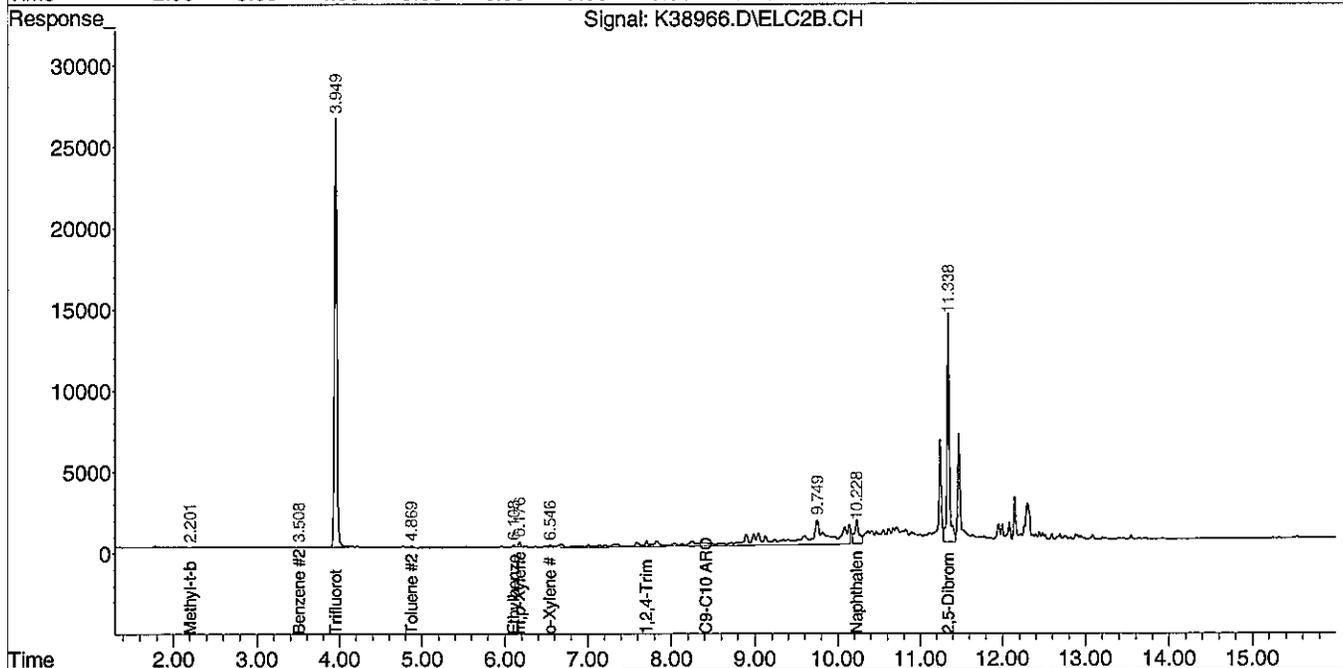
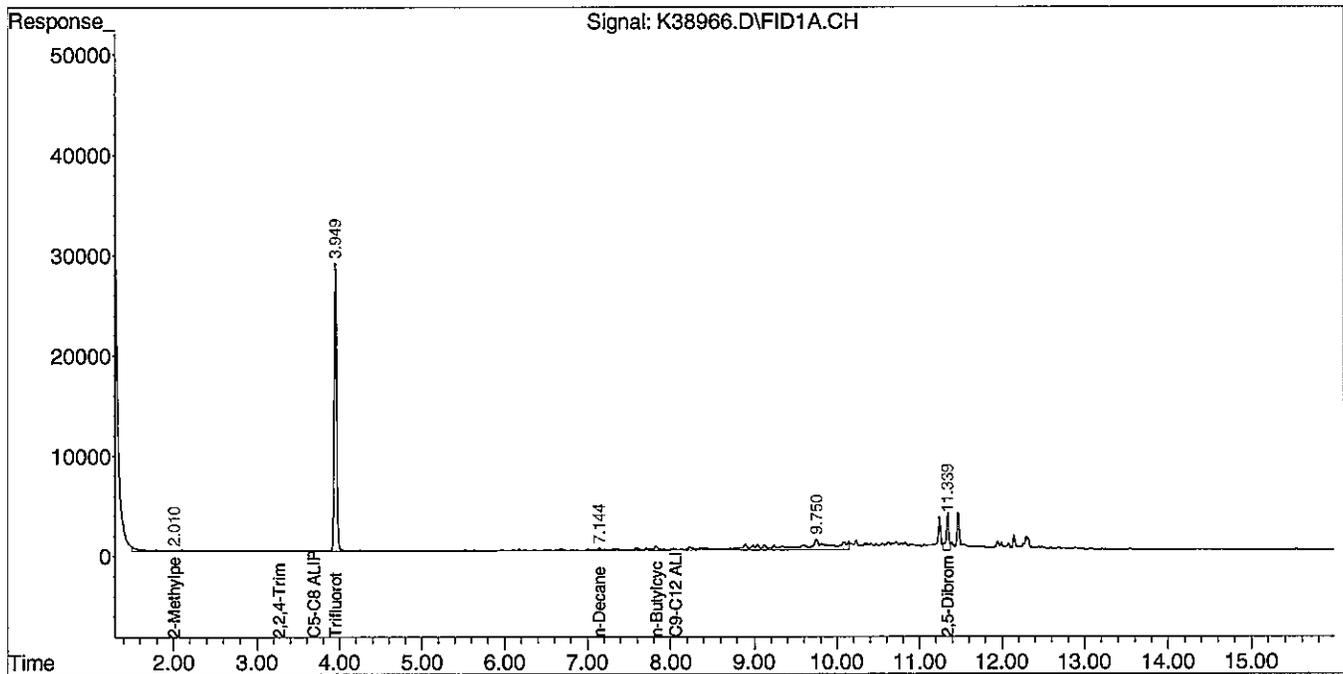
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\121212-K\
 Data File : K38966.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 12 Dec 2012 9:39 pm
 Operator : JK
 Sample : 74440-6
 Misc : 100,9.75,SOIL
 ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 13 09:33:40 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT121112.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Tue Dec 11 15:13:00 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 :



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December 19, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: MW-1

Lab Sample ID: 74440-10
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 10
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/18/12

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	500	µg/L	4450
Unadjusted C9-C12 Aliphatics	N/A	500	µg/L	7330
Benzene	C5-C8	10	µg/L	15
Ethylbenzene	C9-C12	10	µg/L	159
Methyl-tert-butyl ether	C5-C8	10	µg/L	29
Naphthalene	N/A	10	µg/L	47
Toluene	C5-C8	10	µg/L	32
m- & p-Xylenes	C9-C12	20	µg/L	63
o-Xylene	C9-C12	10	µg/L	44
C5-C8 Aliphatic Hydrocarbons ^{1,2}	N/A	500	µg/L	4380
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	500	µg/L	3480
C9-C10 Aromatic Hydrocarbons ¹	N/A	100	µg/L	3590
Surrogate % Recovery (2,5-Dibromotoluene) PID				129
Surrogate % Recovery (2,5-Dibromotoluene) 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.
 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.

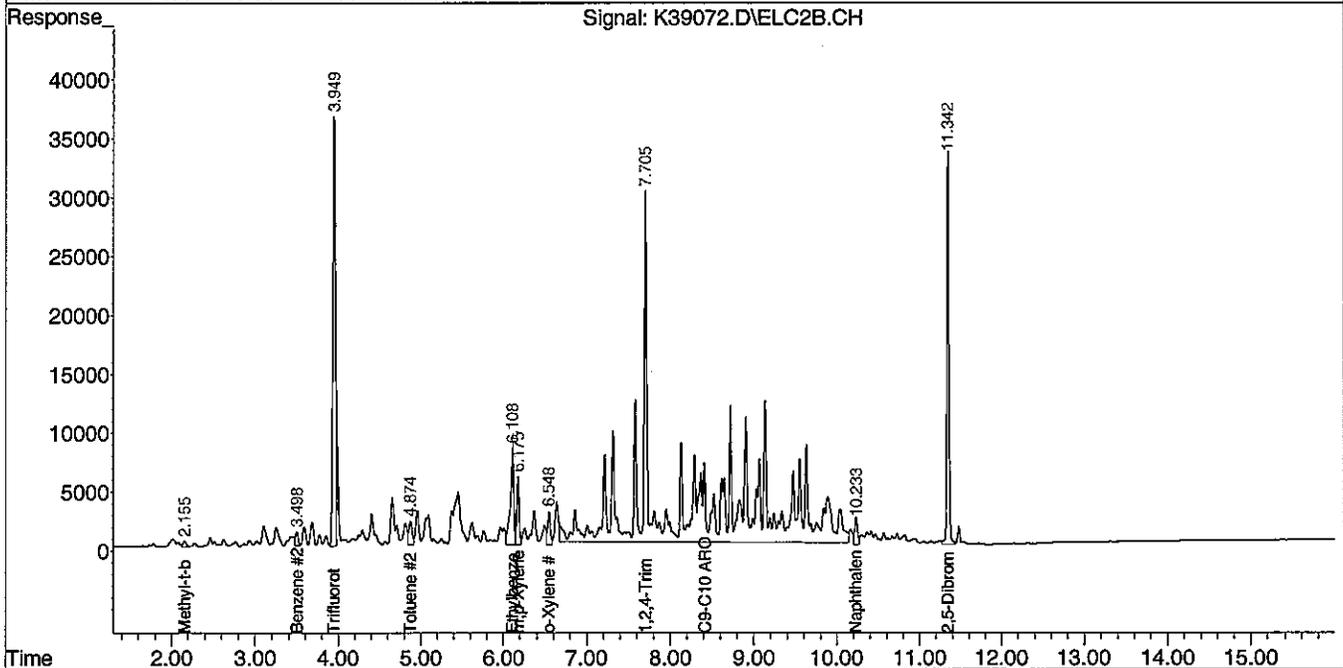
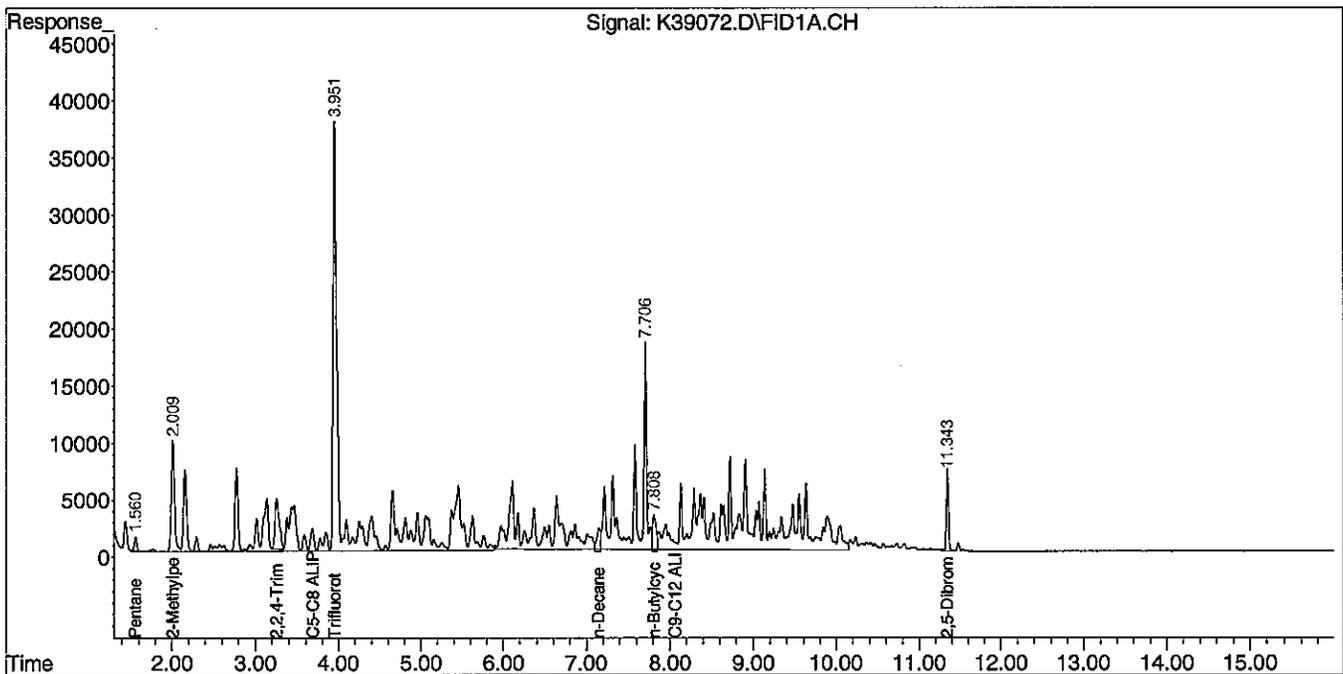
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

Authorized signature: *M. J. Hill*

Data Path : C:\msdchem\1\DATA\121812-K\
 Data File : K39072.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 18 Dec 2012 1:22 pm
 Operator : JK
 Sample : 74440-10,,10X
 Misc : 500
 ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 18 14:00:17 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT121112.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Tue Dec 11 15:13:00 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 :



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December 12, 2012

SAMPLE DATA

Lab Sample ID: 74440-11
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/11/12

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: MW-3

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	N/A	10	µg/L	6.3 J
Surrogate % Recovery (Trifluorotoluene) PID				76
Surrogate % Recovery (Trifluorotoluene) FID				78
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.

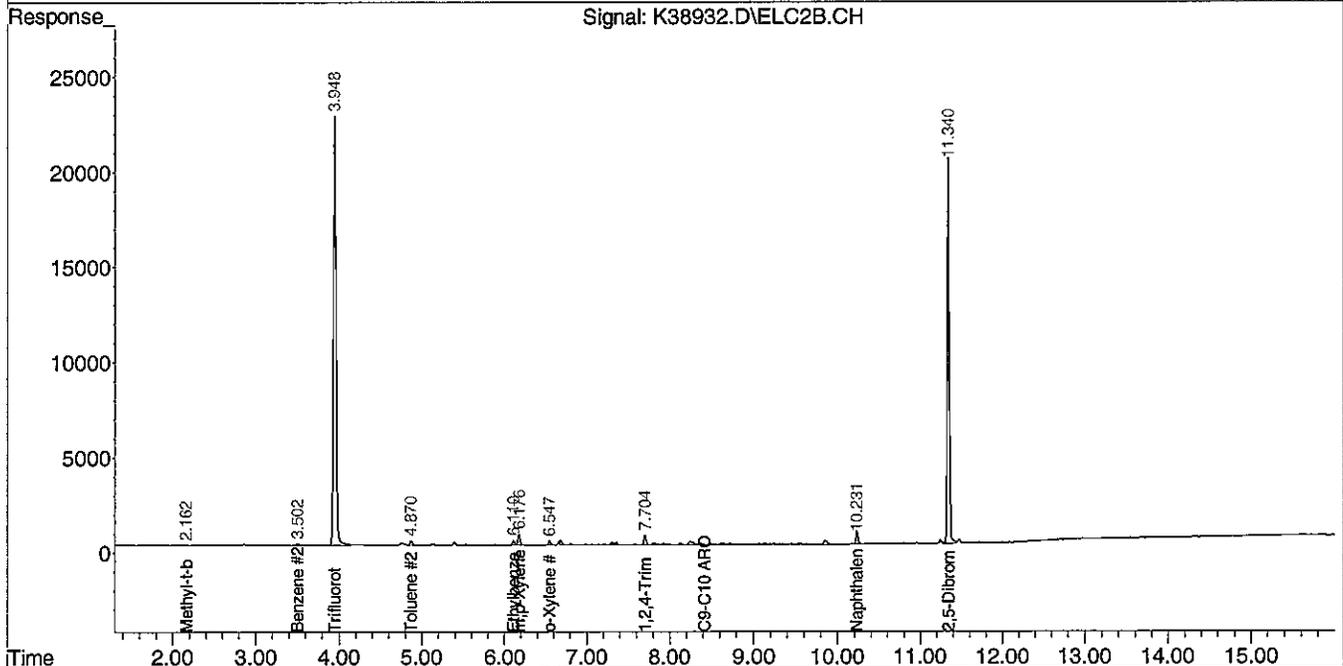
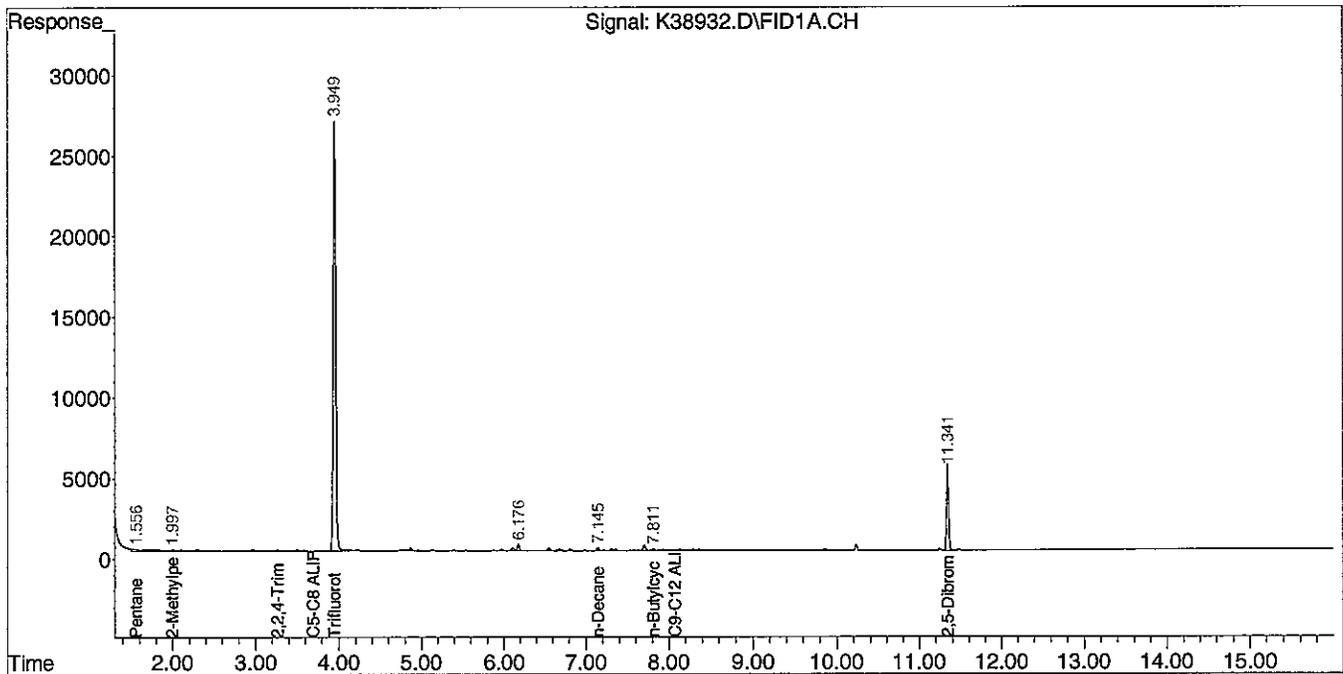
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\121112-K\
 Data File : K38932.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 11 Dec 2012 5:22 pm
 Operator : JK
 Sample : 74440-11
 Misc : 5000
 ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 12 08:57:31 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT121112.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Tue Dec 11 15:13:00 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 :



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December 12, 2012

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: MW-4

SAMPLE DATA

Lab Sample ID: 74440-12
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/11/12

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	37 J
Benzene	C5-C8	1	µg/L	0.6 J
Ethylbenzene	C9-C12	1	µg/L	0.7 J
Methyl-tert-butyl ether	C5-C8	1	µg/L	U
Naphthalene	N/A	1	µg/L	1.0
Toluene	C5-C8	1	µg/L	3.6
m- & p-Xylenes	C9-C12	2	µg/L	1.9 J
o-Xylene	C9-C12	1	µg/L	0.9 J
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	17
Surrogate % Recovery (Trifluorotoluene) PID				102
Surrogate % Recovery (Trifluorotoluene) FID				105
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.
 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.

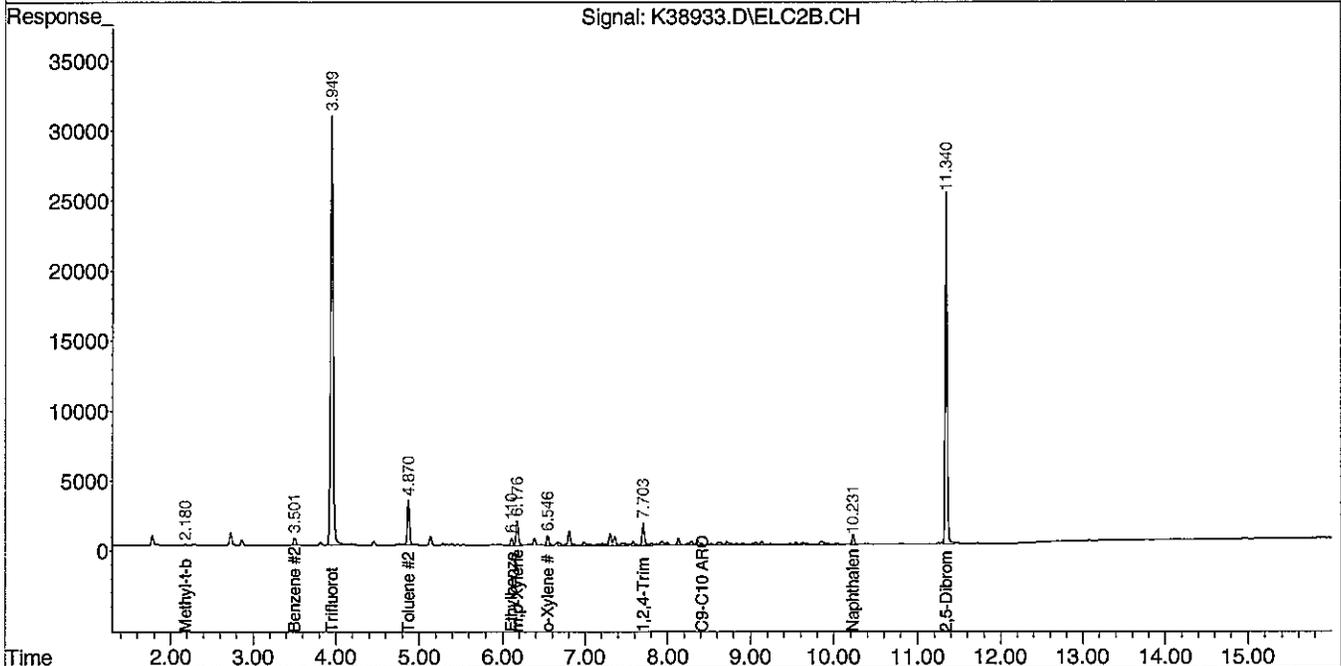
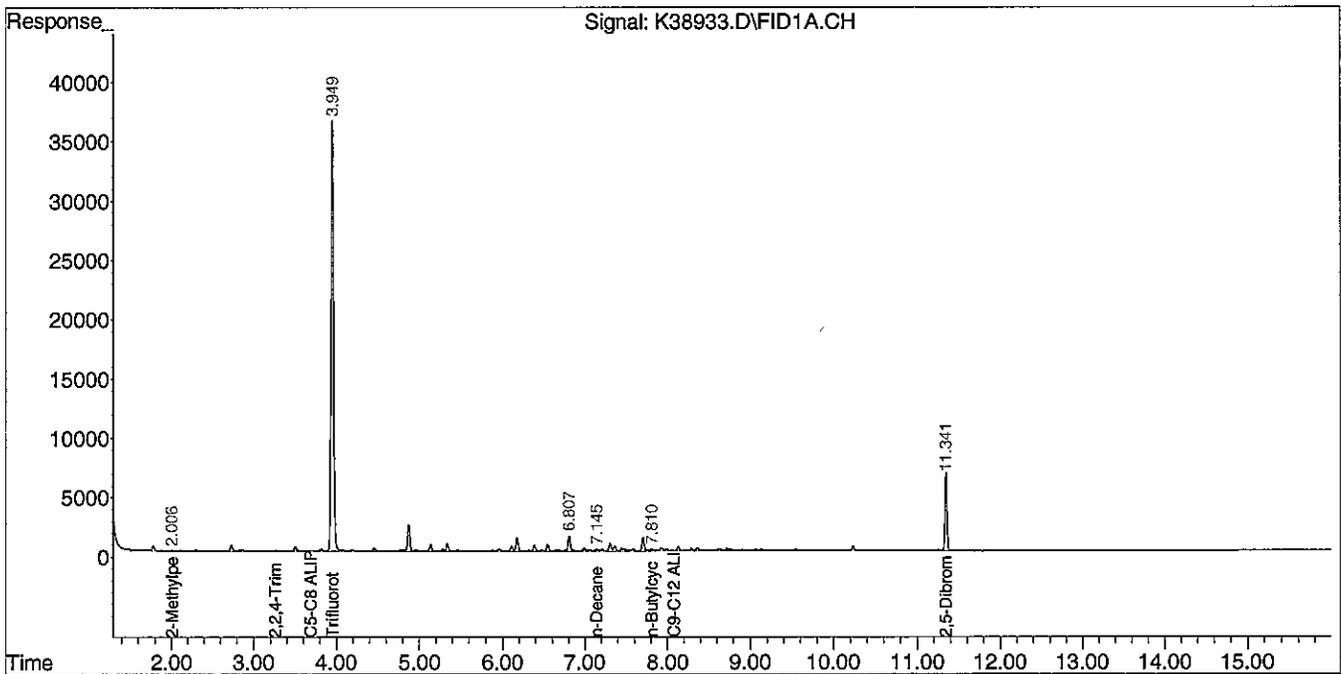
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

Authorized signature: Angelina Richard

Data Path : C:\msdchem\1\DATA\121112-K\
 Data File : K38933.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 11 Dec 2012 5:49 pm
 Operator : JK
 Sample : 74440-12
 Misc : 5000
 ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 12 08:57:32 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT121112.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Tue Dec 11 15:13:00 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 :



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December 12, 2012

SAMPLE DATA

Lab Sample ID: 74440-13
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/11/12

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: MW-5

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	29 J
C5-C8 Aliphatic 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	15
Surrogate % Recovery (Trifluorotoluene) PID				85
Surrogate % Recovery (Trifluorotoluene) FID				86
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.

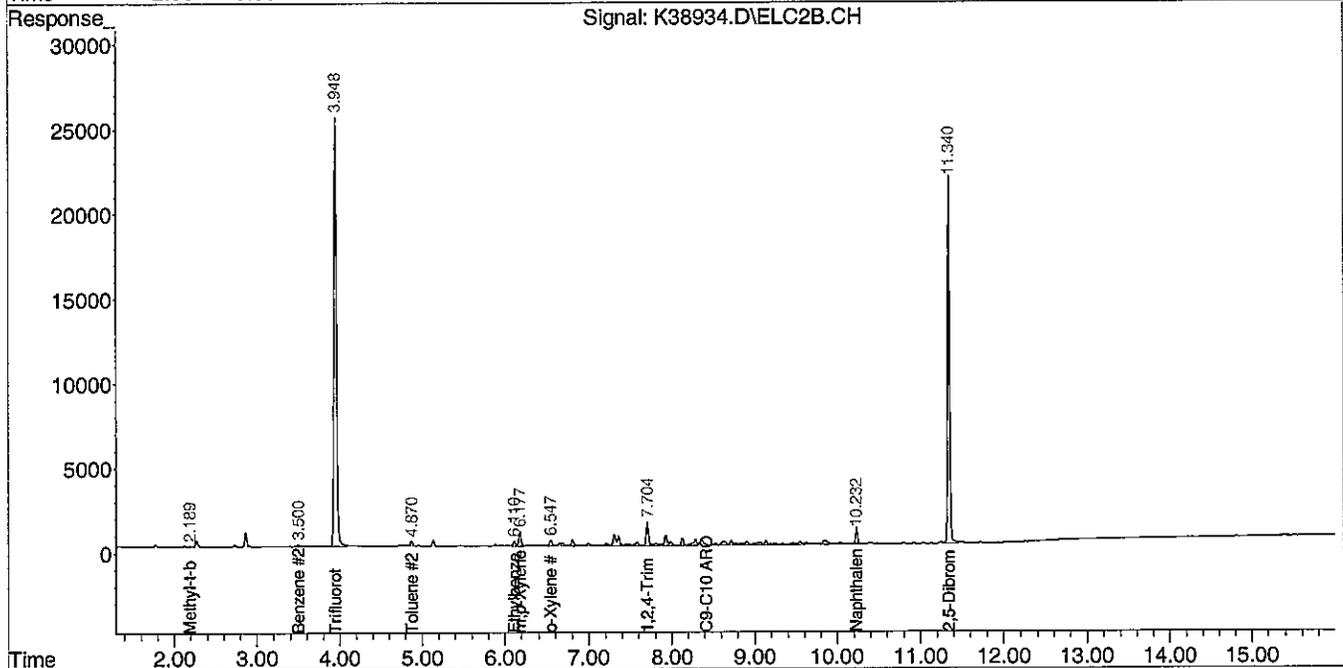
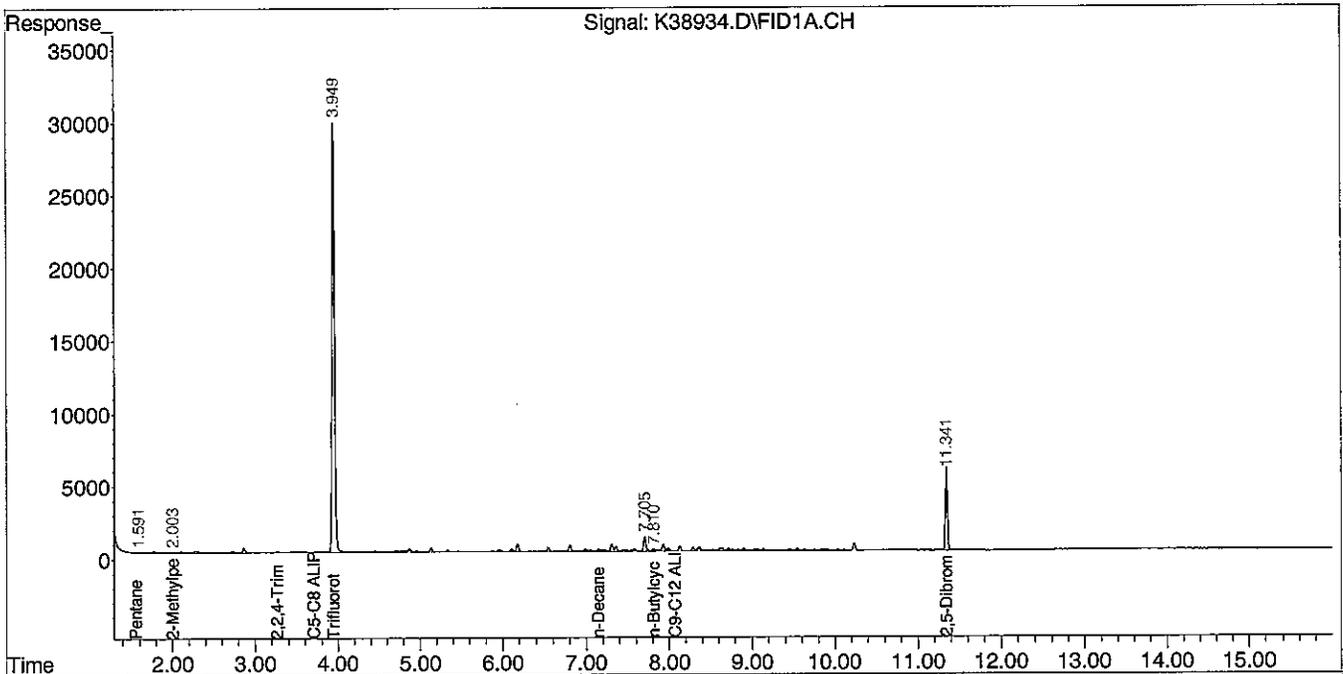
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\121112-K\
 Data File : K38934.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 11 Dec 2012 6:15 pm
 Operator : JK
 Sample : 74440-13
 Misc : 5000
 ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 12 08:57:33 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT121112.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Tue Dec 11 15:13:00 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 :



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December 19, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: MW-DUP

Lab Sample ID: 74440-14
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 10
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Analysis Date: 12/18/12

VPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	Elution Range	RL	Units	Result
Unadjusted C5-C8 Aliphatics ¹	N/A	500	µg/L	5530
Unadjusted C9-C12 Aliphatics	N/A	500	µg/L	9380
Benzene	C5-C8	10	µg/L	16
Ethylbenzene	C9-C12	10	µg/L	189
Methyl-tert-butyl ether	C5-C8	10	µg/L	32
Naphthalene	N/A	10	µg/L	60
Toluene	C5-C8	10	µg/L	35
m- & p-Xylenes	C9-C12	20	µg/L	68
o-Xylene	C9-C12	10	µg/L	51
C5-C8 Aliphatic Hydrocarbons ^{1,2}	N/A	500	µg/L	5450
C9-C12 Aliphatic Hydrocarbons ^{1,3}	N/A	500	µg/L	4620
C9-C10 Aromatic Hydrocarbons ¹	N/A	100	µg/L	4460
Surrogate % Recovery (2,5-Dibromotoluene) PID				122
Surrogate % Recovery (2,5-Dibromotoluene) FID				110
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. 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.

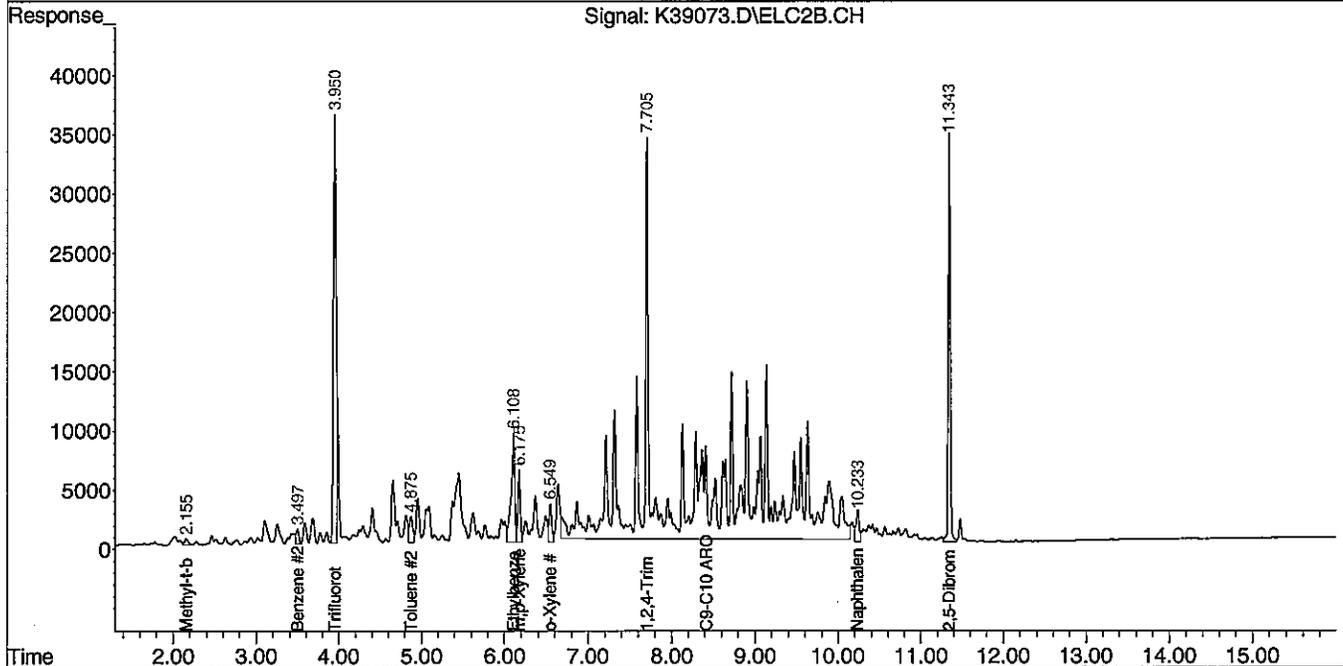
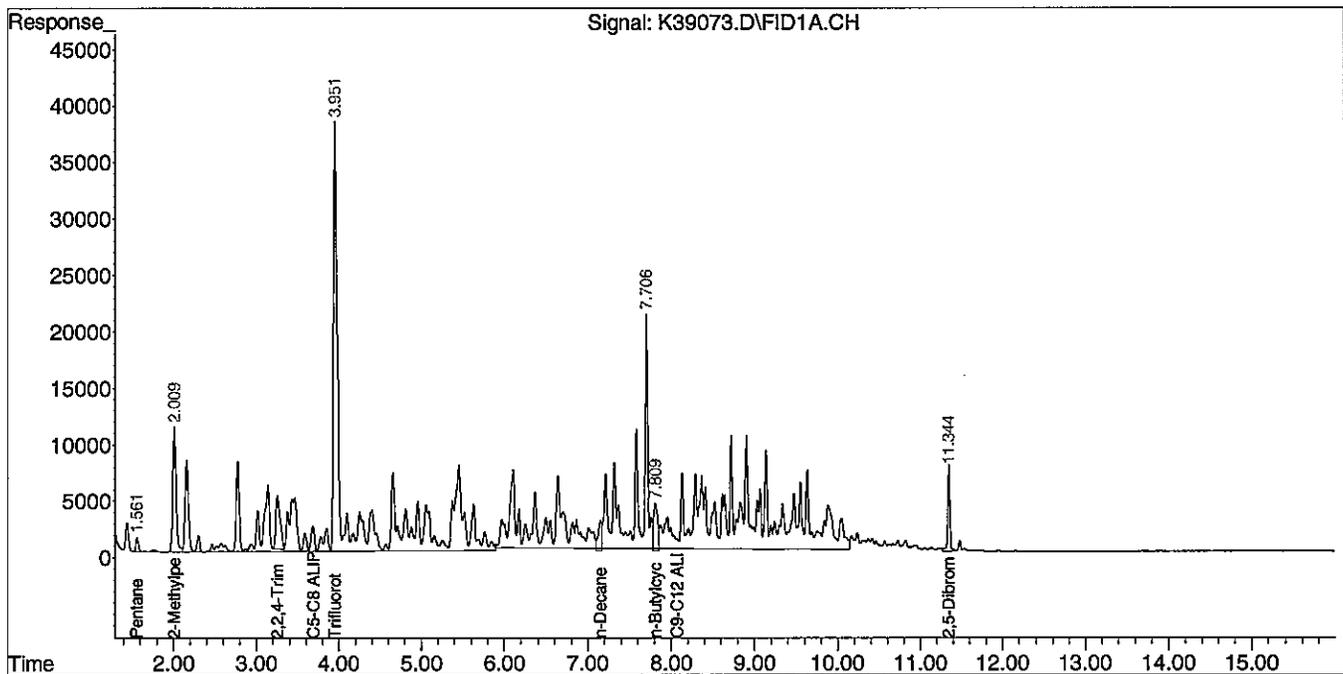
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\121812-K\
Data File : K39073.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 18 Dec 2012 1:49 pm
Operator : JK
Sample : 74440-14,,10X
Misc : 500
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 18 14:38:36 2012
Quant Method : C:\msdchem\1\METHODS\VPHTFT121112.M
Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
QLast Update : Tue Dec 11 15:13:00 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

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December 12, 2012

SAMPLE DATA

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: LabQC

Lab Sample ID: BV121112K
Matrix: Aqueous
Percent Solid: 0
Dilution Factor: 1
Collection Date:
Lab Receipt Date:
Analysis Date: 12/11/12

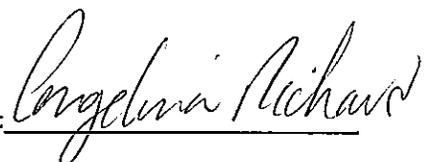
VPH ANALYTICAL RESULTS

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
Benzene	C5-C8	1	µg/L	U
Ethylbenzene	C9-C12	1	µg/L	U
Methyl-tert-butyl ether	C5-C8	1	µg/L	U
Naphthalene	N/A	1	µg/L	U
Toluene	C5-C8	1	µg/L	U
m- & p-Xylenes	C9-C12	2	µg/L	U
o-Xylene	C9-C12	1	µg/L	U
C5-C8 Aliphatic 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				108
Surrogate % Recovery (Trifluorotoluene) FID				112
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.
 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.

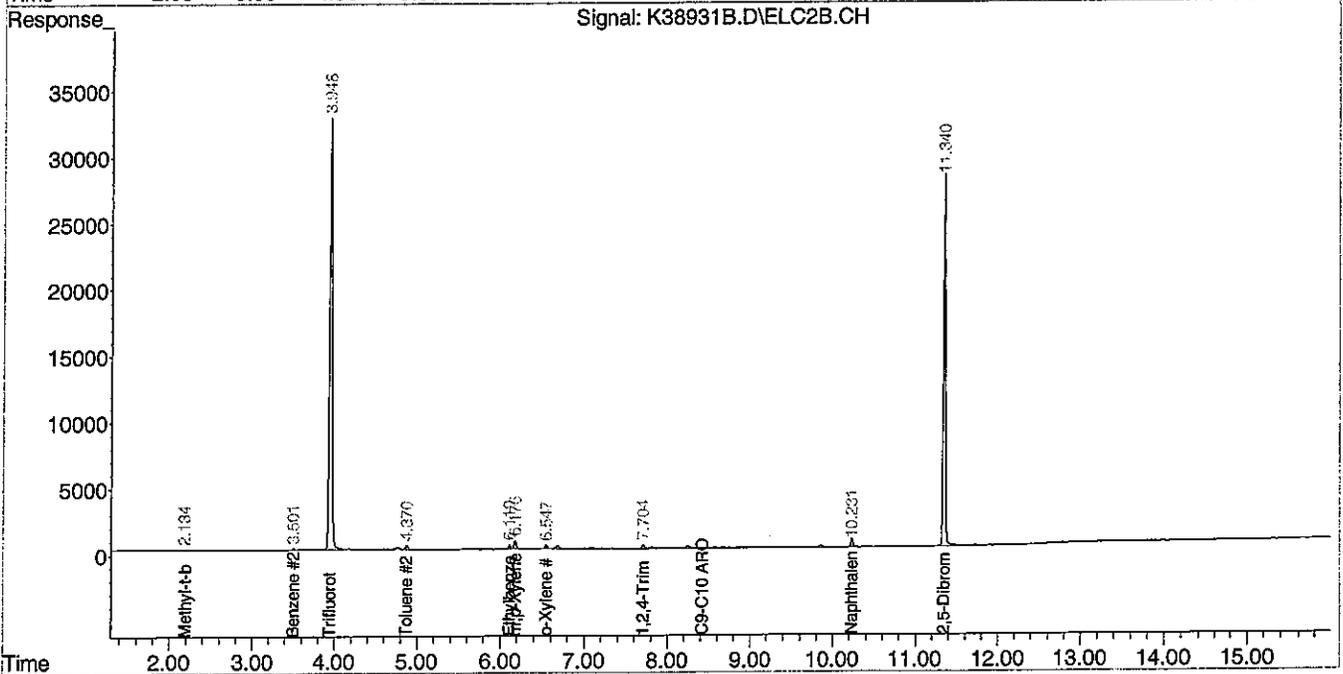
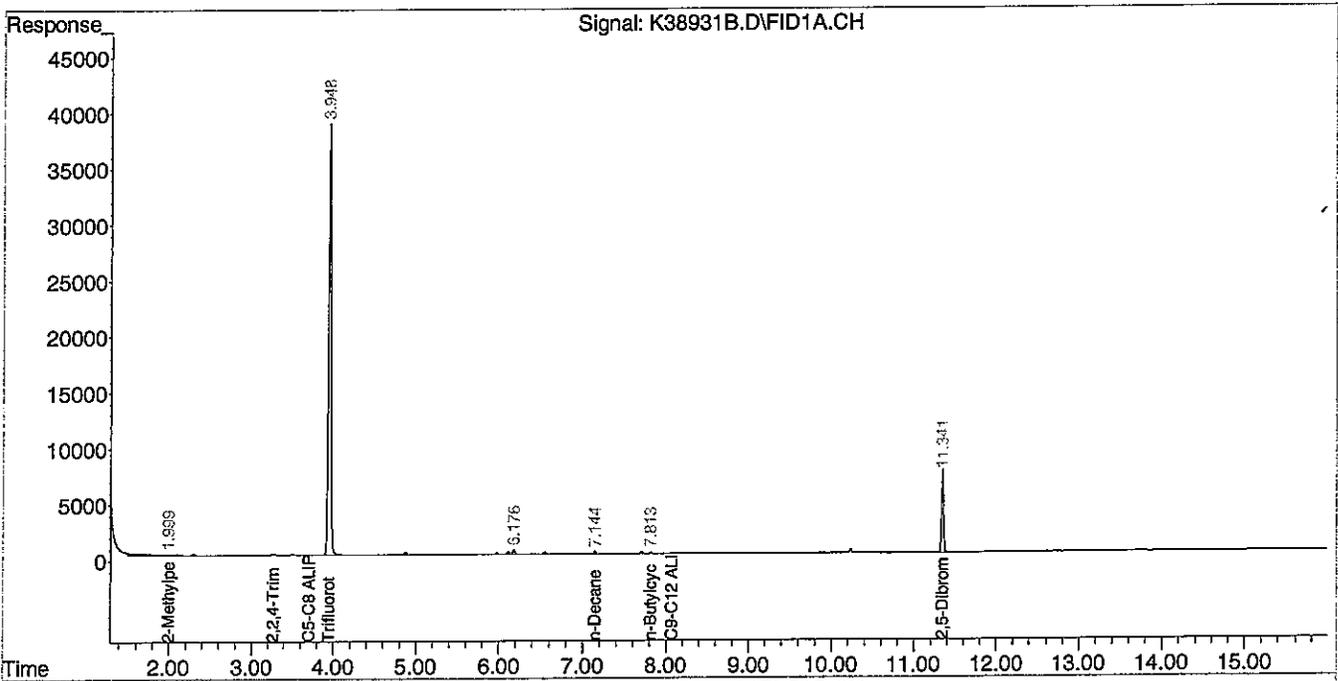
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\121112-K\
Data File : K38931B.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 11 Dec 2012 4:55 pm
Operator : JK
Sample : BV121112K
Misc : 5000
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 08:57:30 2012
Quant Method : C:\msdchem\1\METHODS\VPHTFT121112.M
Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
QLast Update : Tue Dec 11 15:13:00 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 :



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December 13, 2012

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: LabQC

SAMPLE DATA

Lab Sample ID: MBV121212K
Matrix: Soil
Percent Solid: 0
Dilution Factor: 50
Collection Date:
Lab Receipt Date:
Analysis Date: 12/12/12

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
Benzene	C5-C8	100	µg/kg	U
Ethylbenzene	C9-C12	100	µg/kg	U
Methyl-tert-butyl ether	C5-C8	50	µg/kg	U
Naphthalene	N/A	100	µg/kg	U
Toluene	C5-C8	100	µg/kg	U
m- & p-Xylenes	C9-C12	200	µg/kg	U
o-Xylene	C9-C12	100	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 ¹	N/A	500	µg/kg	U
Surrogate % Recovery (2,5-Dibromotoluene) PID				88
Surrogate % Recovery (2,5-Dibromotoluene) FID				85
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.
 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.

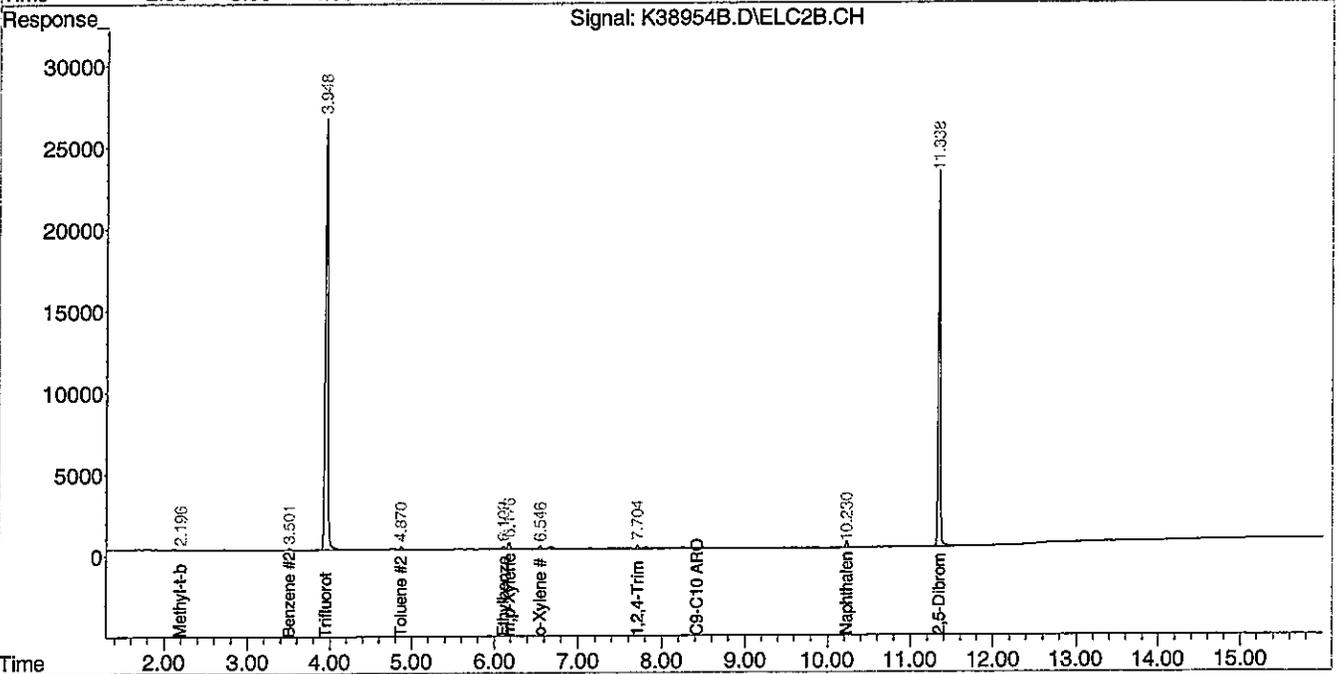
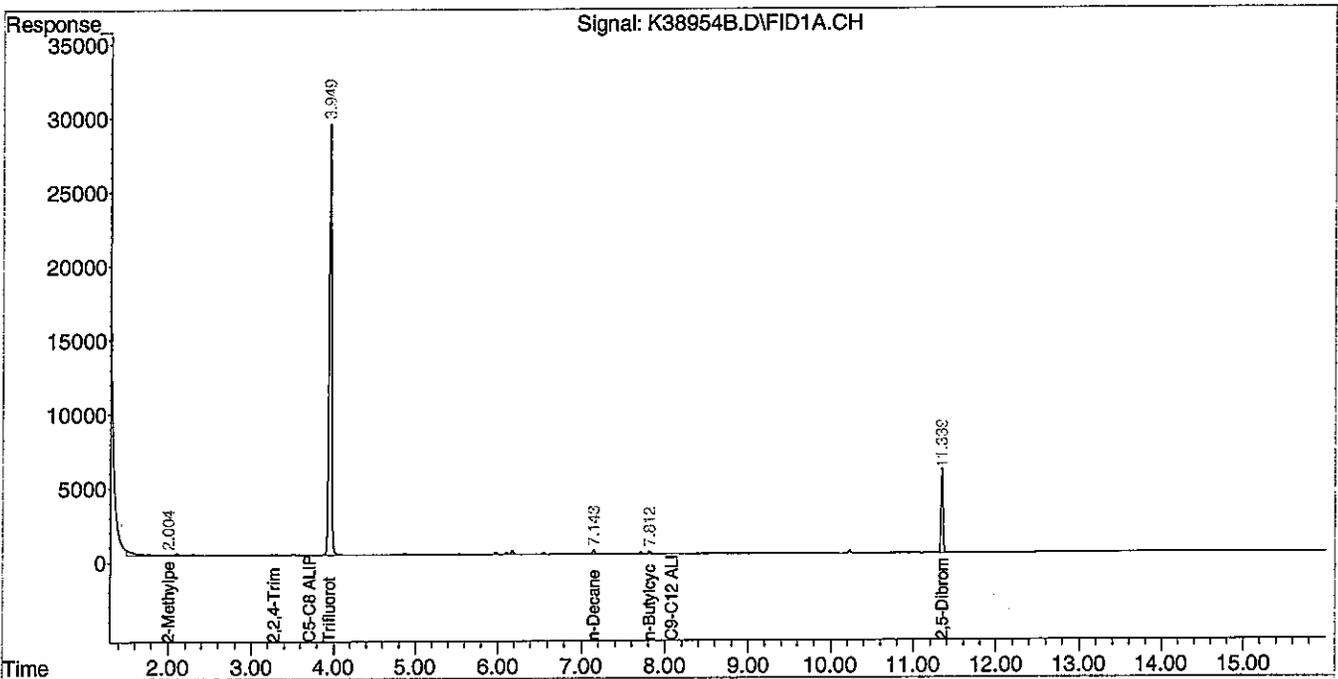
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\121212-K\
 Data File : K38954B.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 12 Dec 2012 4:18 pm
 Operator : JK
 Sample : MBV121212K
 Misc : 100,10.00,SOIL
 ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 12 17:19:16 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT121112.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Tue Dec 11 15:13:00 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 :



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December 18, 2012

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: LabQC

SAMPLE DATA

Lab Sample ID: MBV121712K
Matrix: Soil
Percent Solid: 0
Dilution Factor: 50
Collection Date:
Lab Receipt Date:
Analysis Date: 12/17/12

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
Benzene	C5-C8	100	µg/kg	U
Ethylbenzene	C9-C12	100	µg/kg	U
Methyl-tert-butyl ether	C5-C8	50	µg/kg	U
Naphthalene	N/A	100	µg/kg	U
Toluene	C5-C8	100	µg/kg	U
m- & p-Xylenes	C9-C12	200	µg/kg	U
o-Xylene	C9-C12	100	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				99
Surrogate % Recovery (Trifluorotoluene) FID				83
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.
 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.

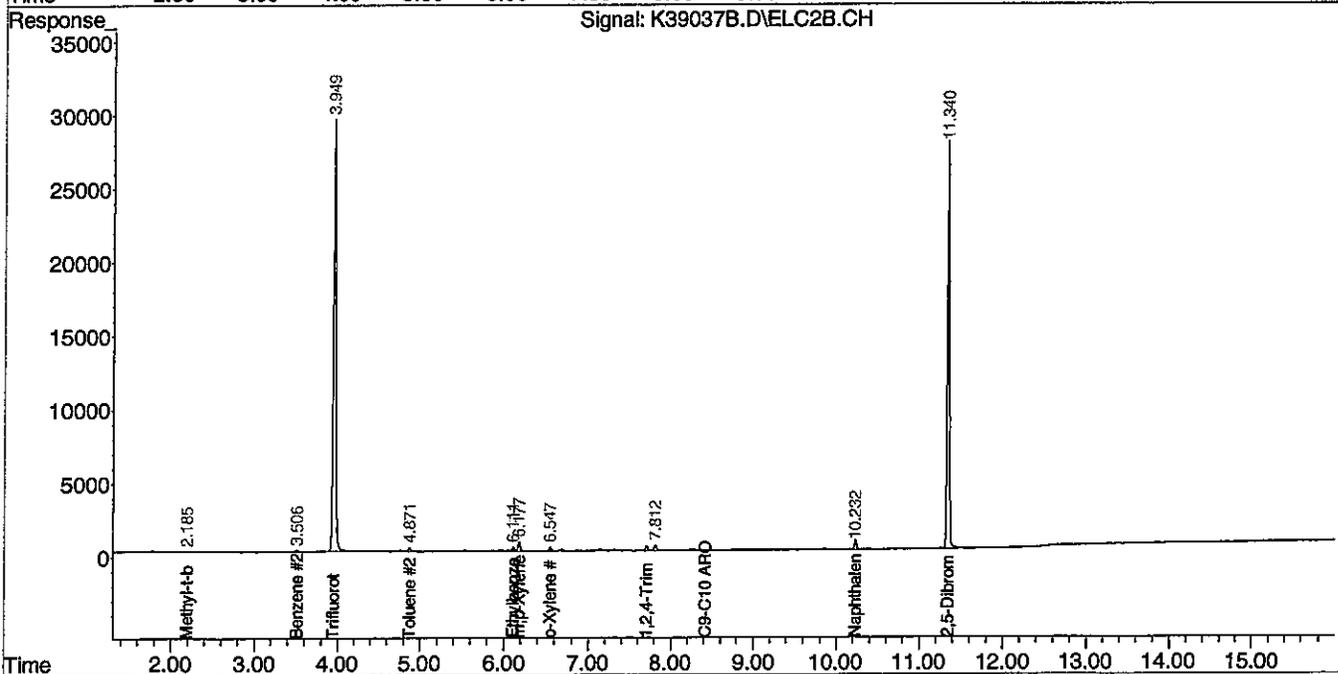
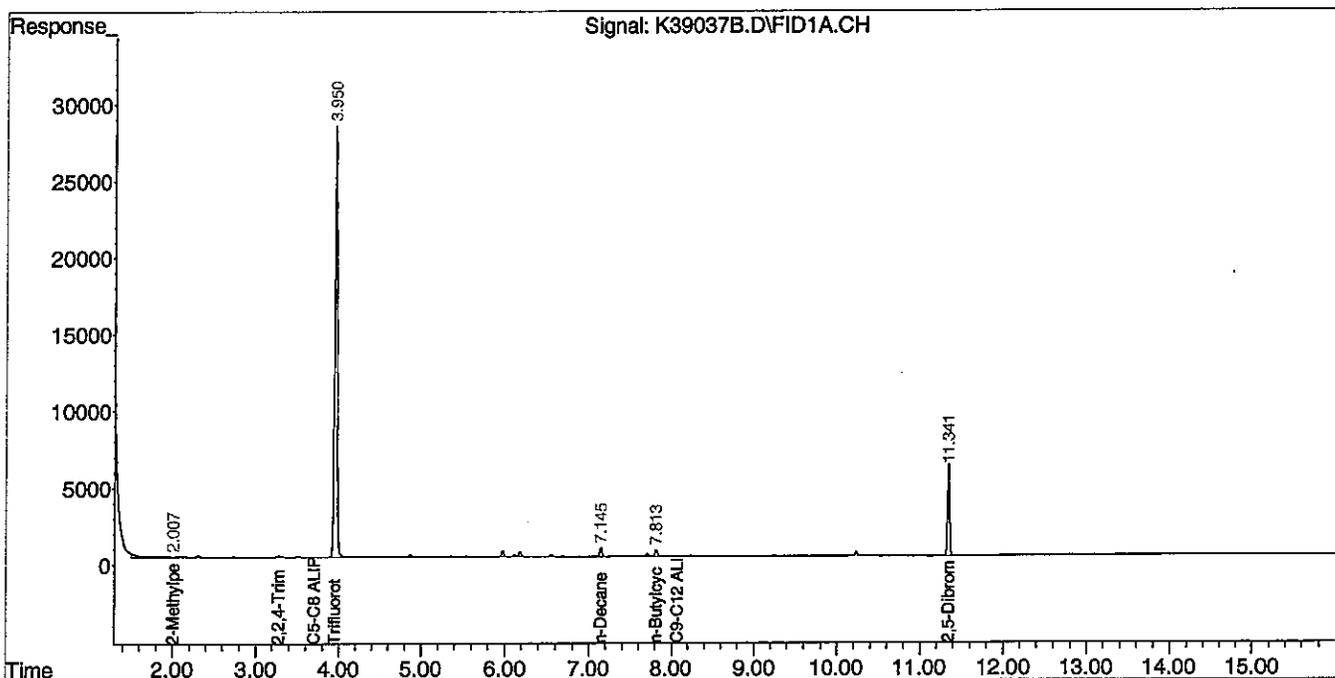
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist. Results are expressed on a moisture corrected and dry weight basis.

Authorized signature: *M. Marshall*

Data Path : C:\msdchem\1\DATA\121712-K\
 Data File : K39037B.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 17 Dec 2012 2:03 pm
 Operator : JK
 Sample : MBV121712K
 Misc : 100,10.00,SOIL
 ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 17 14:19:52 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT121112.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Tue Dec 11 15:13:00 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 :



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December 19, 2012

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: LabQC

SAMPLE DATA

Lab Sample ID: BV121812K
Matrix: Aqueous
Percent Solid: 0
Dilution Factor: 1
Collection Date:
Lab Receipt Date:
Analysis Date: 12/18/12

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
Benzene	C5-C8	1	µg/L	U
Ethylbenzene	C9-C12	1	µg/L	U
Methyl-tert-butyl ether	C5-C8	1	µg/L	U
Naphthalene	N/A	1	µg/L	U
Toluene	C5-C8	1	µg/L	U
m- & p-Xylenes	C9-C12	2	µg/L	U
o-Xylene	C9-C12	1	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 (2,5-Dibromotoluene) PID				123
Surrogate % Recovery (2,5-Dibromotoluene) FID				105
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. 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.

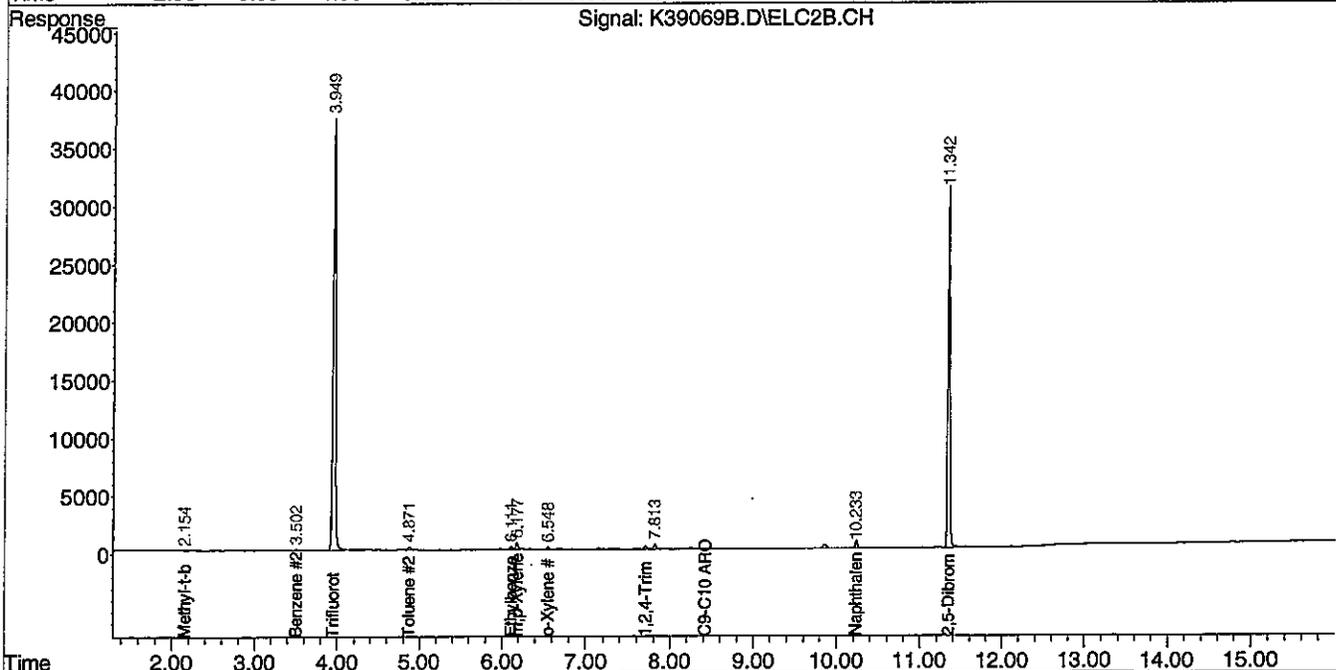
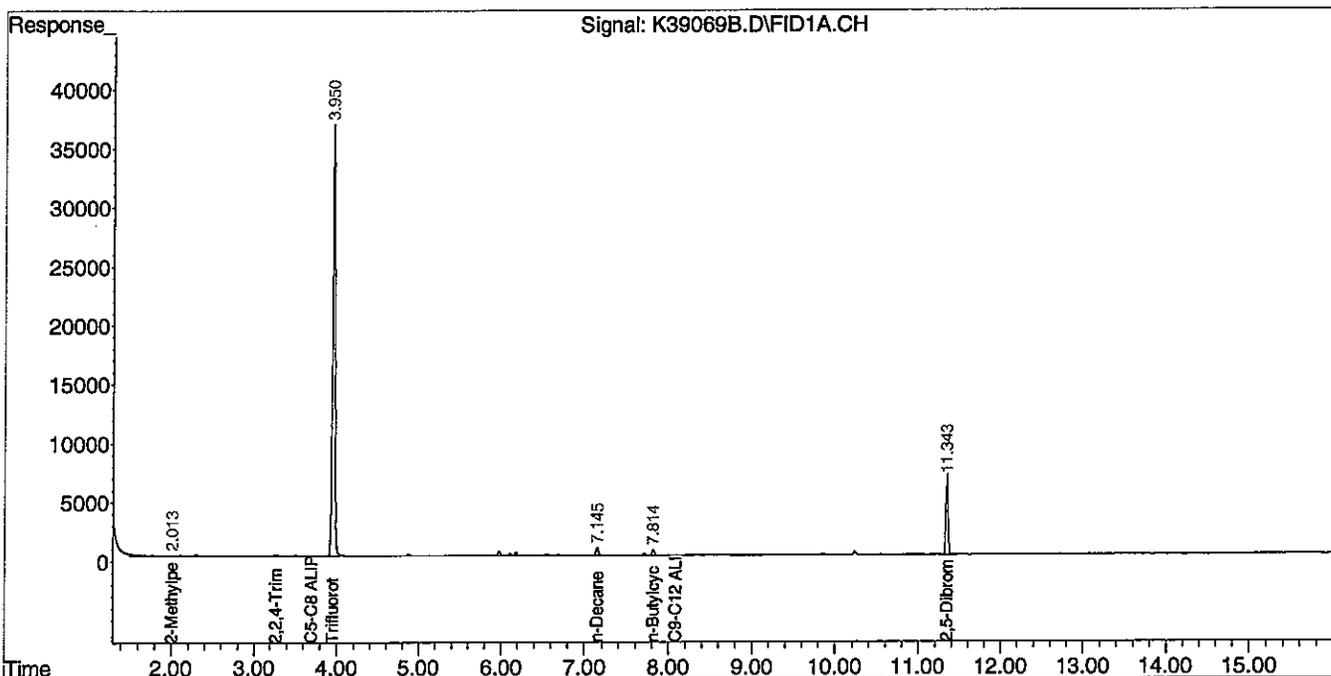
COMMENTS: Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

Authorized signature: 

Data Path : C:\msdchem\1\DATA\121812-K\
 Data File : K39069B.D
 Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
 Acq On : 18 Dec 2012 11:47 am
 Operator : JK
 Sample : BV121812K
 Misc : 5000
 ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 18 12:21:51 2012
 Quant Method : C:\msdchem\1\METHODS\VPHTFT121112.M
 Quant Title : Volatile Petroleum Hydrocarbons (VPH) MA DEP 2004
 QLast Update : Tue Dec 11 15:13:00 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: BV121112K
Spike: LV121112K
Spike duplicate: LV121112K2

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	#
Pentane	100	70	130	25	0.0	117	117		116	116		1	
2-Methylpentane	100	70	130	25	0.0	109	109		108	108		1	
2,2,4-Trimethylpentane	100	70	130	25	0.0	108	108		109	109		1	
n-Decane	100	70	130	25	0.0	114	114		111	111		3	
n-Butylcyclohexane	100	70	130	25	0.0	106	106		104	104		2	
Methyl-t-butylether #2	100	70	130	25	0.0	97	97		93	93		4	
Benzene #2	100	70	130	25	0.0	98	98		97	97		1	
Toluene #2	100	70	130	25	0.0	97	97		96	96		1	
Ethylbenzene #2	100	70	130	25	0.0	100	100		99	99		1	
m,p-Xylene #2	200	70	130	25	0.0	196	98		193	97		1	
o-Xylene #2	100	70	130	25	0.0	97	97		96	96		1	
1,2,4-Trimethylbenzene #2	100	70	130	25	0.0	101	101		100	100		1	
Naphthalene #2	100	70	130	25	0.0	95	95		95	95		0	
C5-C8 Aliphatics	300	70	130	25	0.0	334	111		332	111		1	
C9-C12 Aliphatics	200	70	130	25	0.0	220	110		215	107		2	
C9-C10 Aromatics #2	100	70	130	25	0.0	101	101		100	100		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 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: MBV121212K
 Spike: LSV121212K
 Spike duplicate: LSV121212K2

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	#	RPD	#
Pentane	5000	5000	70	130	25	0	3492	70		3298	66	*	6	
2-Methylpentane	5000	5000	70	130	25	0	3808	76		3593	72		6	
2,2,4-Trimethylpentane	5000	5000	70	130	25	0	4229	85		4054	81		4	
n-Decane	5000	5000	70	130	25	0	5031	101		4710	94		7	
n-Butylcyclohexane	5000	5000	70	130	25	0	4610	92		4348	87		6	
Methyl-t-butylether #2	5000	5000	70	130	25	0	5937	119		5442	109		9	
Benzene #2	5000	5000	70	130	25	0	4818	96		4482	90		7	
Toluene #2	5000	5000	70	130	25	0	4858	97		4530	91		7	
Ethylbenzene #2	5000	5000	70	130	25	0	4995	100		4684	94		6	
m,p-Xylene #2	10000	10000	70	130	25	0	9872	99		9228	92		7	
o-Xylene #2	5000	5000	70	130	25	0	4984	100		4645	93		7	
1,2,4-Trimethylbenzene #2	5000	5000	70	130	25	0	5138	103		4787	96		7	
Naphthalene #2	5000	5000	70	130	25	0	5190	104		4914	98		5	
C5-C8 Aliphatics	15000	15000	70	130	25	0	11529	77		10946	73		5	
C9-C12 Aliphatics	10000	10000	70	130	25	0	9641	96		9058	91		6	
C9-C10 Aromatics #2	5000	5000	70	130	25	0	5138	103		4787	96		7	

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: MBV121712K
Spike: LSV121712K,RR
Spike duplicate: LSV121712K2,RR

COMPOUND	LCS SPIKE	LCSD SPIKE	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/kg)	SPIKE	SPIKE % REC	#	SPIKE DUP	SPIKE DUP % REC	#	RPD	#
	ADDED (ug/kg)	ADDED (ug/kg)					RESULT (ug/kg)			RESULT (ug/kg)				
Pentane	5000	5000	70	130	25	0	4371	87		4189	84		4	
2-Methylpentane	5000	5000	70	130	25	0	4265	85		4083	82		4	
2,2,4-Trimethylpentane	5000	5000	70	130	25	0	4365	87		4244	85		3	
n-Decane	5000	5000	70	130	25	0	4952	99		4733	95		5	
n-Butylcyclohexane	5000	5000	70	130	25	0	4694	94		4530	91		4	
Methyl-t-butylether #2	5000	5000	70	130	25	0	5684	114		5601	112		1	
Benzene #2	5000	5000	70	130	25	0	5469	109		5507	110		1	
Toluene #2	5000	5000	70	130	25	0	5442	109		5466	109		0	
Ethylbenzene #2	5000	5000	70	130	25	0	5628	113		5642	113		0	
m,p-Xylene #2	10000	10000	70	130	25	0	11129	111		11164	112		0	
o-Xylene #2	5000	5000	70	130	25	0	5567	111		5560	111		0	
1,2,4-Trimethylbenzene #2	5000	5000	70	130	25	0	5733	115		5687	114		1	
Naphthalene #2	5000	5000	70	130	25	0	5588	112		5278	106		6	
C5-C8 Aliphatics	15000	15000	70	130	25	0	13001	87		12516	83		4	
C9-C12 Aliphatics	10000	10000	70	130	25	0	9646	96		9263	93		4	
C9-C10 Aromatics #2	5000	5000	70	130	25	0	5733	115		5687	114		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 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: BV121812K
Spike: LV121812K
Spike duplicate: LV121812K2

COMPOUND	SPIKE	LOWER	UPPER	RPD	NON-SPIKE	SPIKE	SPIKE	SPIKE DUP		SPIKE DUP			
	ADDED	LIMIT	LIMIT	LIMIT	RESULT (ug/L)	RESULT (ug/L)	% REC	#	RESULT (ug/L)	% REC	#	RPD	#
Pentane	100	70	130	25	0.0	127	127		122	122		4	
2-Methylpentane	100	70	130	25	0.0	115	115		111	111		4	
2,2,4-Trimethylpentane	100	70	130	25	0.0	114	114		108	108		6	
n-Decane	100	70	130	25	0.0	113	113		113	113		0	
n-Butylcyclohexane	100	70	130	25	0.0	109	109		107	107		2	
Methyl-t-butylether #2	100	70	130	25	0.0	112	112		111	111		1	
Benzene #2	100	70	130	25	0.0	121	121		118	118		2	
Toluene #2	100	70	130	25	0.0	120	120		116	116		3	
Ethylbenzene #2	100	70	130	25	0.0	124	124		121	121		3	
m,p-Xylene #2	200	70	130	25	0.0	243	121		237	118		2	
o-Xylene #2	100	70	130	25	0.0	121	121		118	118		2	
1,2,4-Trimethylbenzene #2	100	70	130	25	0.0	127	127		123	123		3	
Naphthalene #2	100	70	130	25	0.0	121	121		122	122		0	
C5-C8 Aliphatics	300	70	130	25	0.0	356	119		341	114		4	
C9-C12 Aliphatics	200	70	130	25	0.0	221	111		219	110		1	
C9-C10 Aromatics #2	100	70	130	25	0.0	127	127		123	123		3	

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

December 20, 2012

Mr. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 74440-1
Matrix: Solid
Percent Solid: 95
Dilution Factor: 1.0
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Extraction Date: 12/13/12
Analysis Date: 12/19/12

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: SB-1-S3

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	13600	µg/kg	139000
Diesel PAH Analytes	Naphthalene	273	3360
	2-Methylnaphthalene	273	1490
	Phenanthrene	273	238 J
	Acenaphthene	273	U
Other Target PAH Analytes	Acenaphthylene	273	U
	Fluorene	273	180 J
	Anthracene	273	U
	Fluoranthene	273	181 J
	Pyrene	273	181 J
	Benzo[a]anthracene	273	U
	Chrysene	273	U
	Benzo[b]fluoranthene	273	170 J
	Benzo[k]fluoranthene	273	U
	Benzo[a]pyrene	273	U
	Indeno[1,2,3-cd]pyrene	273	U
	Dibenzo[a,h]anthracene	273	U
	Benzo[g,h,i]perylene	273	U
C9-C18 Aliphatic Hydrocarbons ¹	272000	µg/kg	920000
C19-C36 Aliphatic Hydrocarbons ¹	272000	µg/kg	U
C11-C22 Aromatic Hydrocarbons ^{1,2}	13600	µg/kg	134000
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			*
Aromatic Surrogate % Recovery (O-Terphenyl)			85
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			83
#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

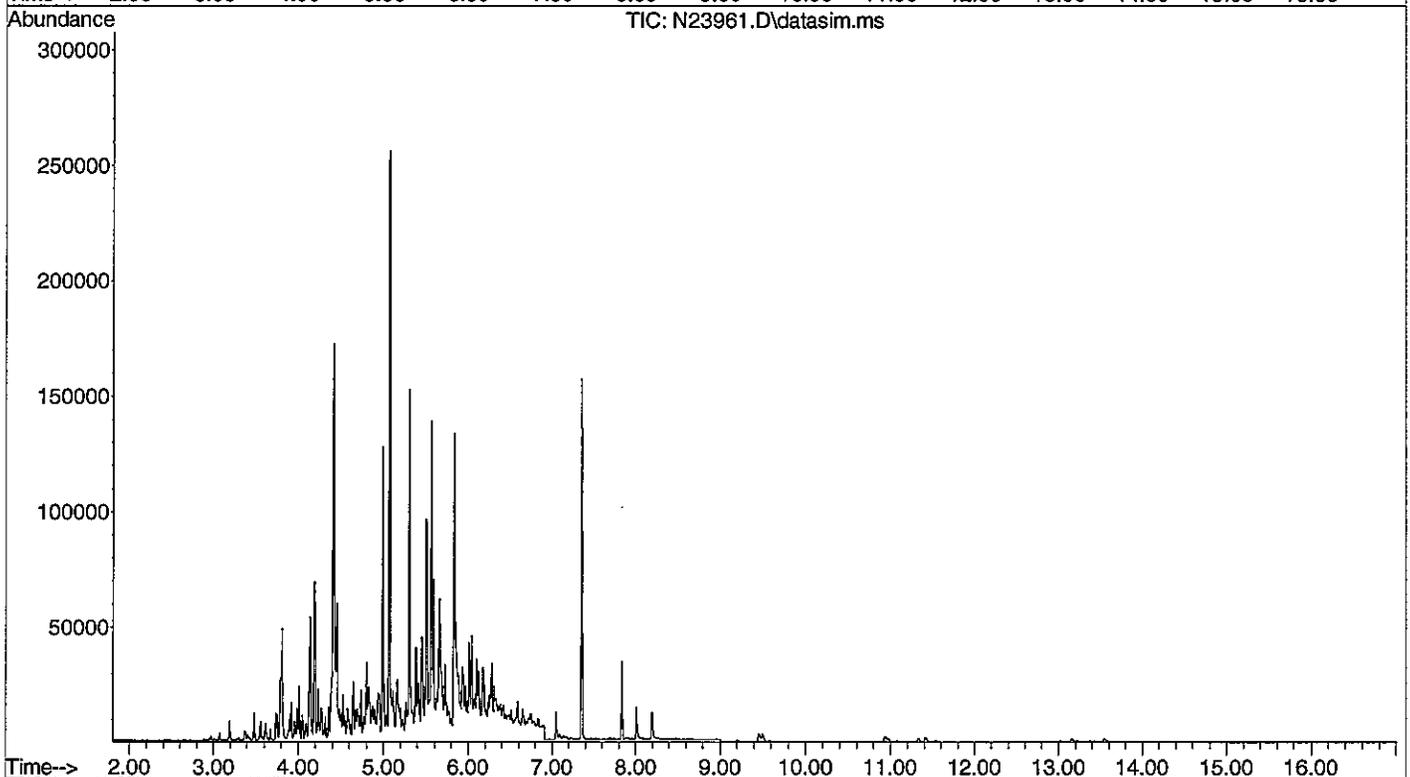
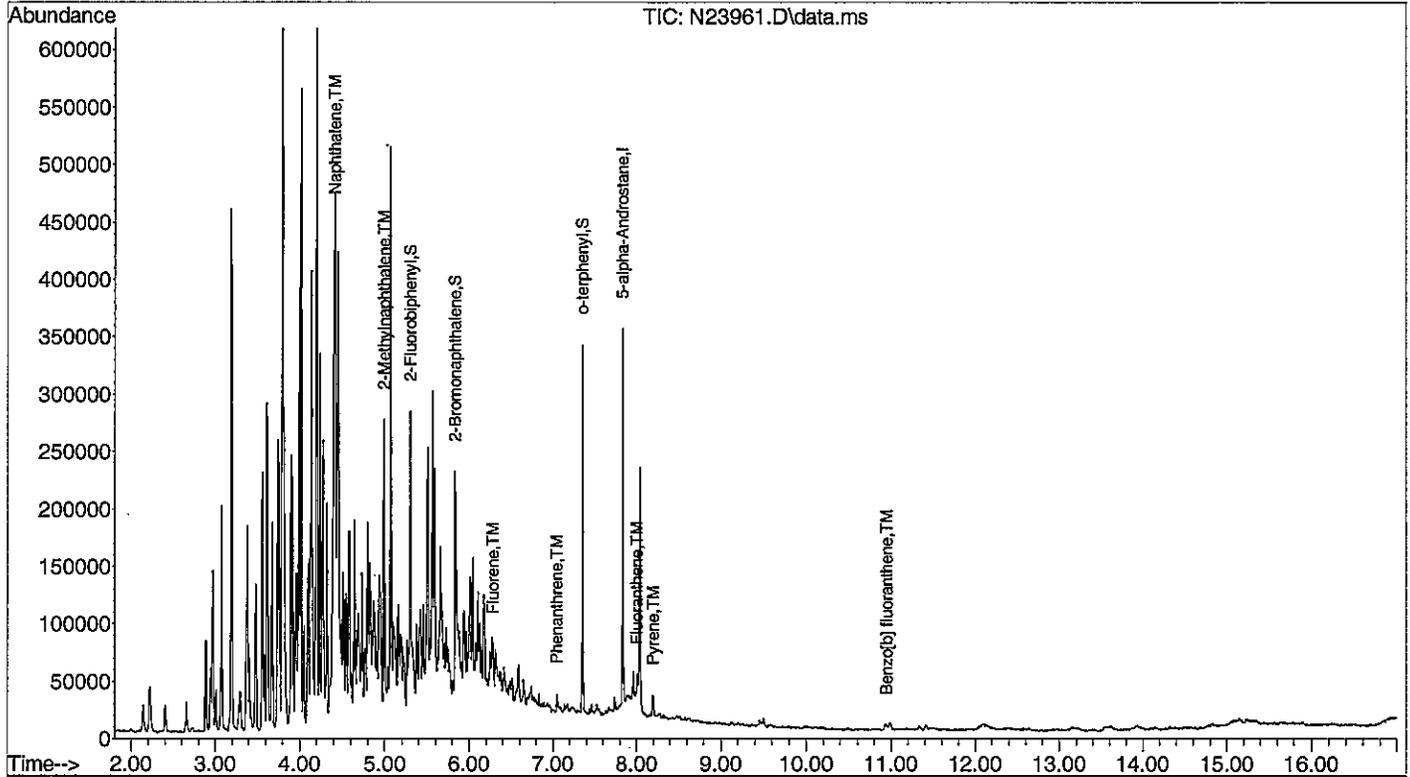
METHODOLOGY MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

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.
 * The surrogate was diluted out.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\121912-N\
 Data File : N23961.D
 Acq On : 19 Dec 2012 8:46 pm
 Operator : MG
 Sample : 74440-1
 Misc : SOIL,ARO
 ALS Vial : 30 Sample Multiplier: 1

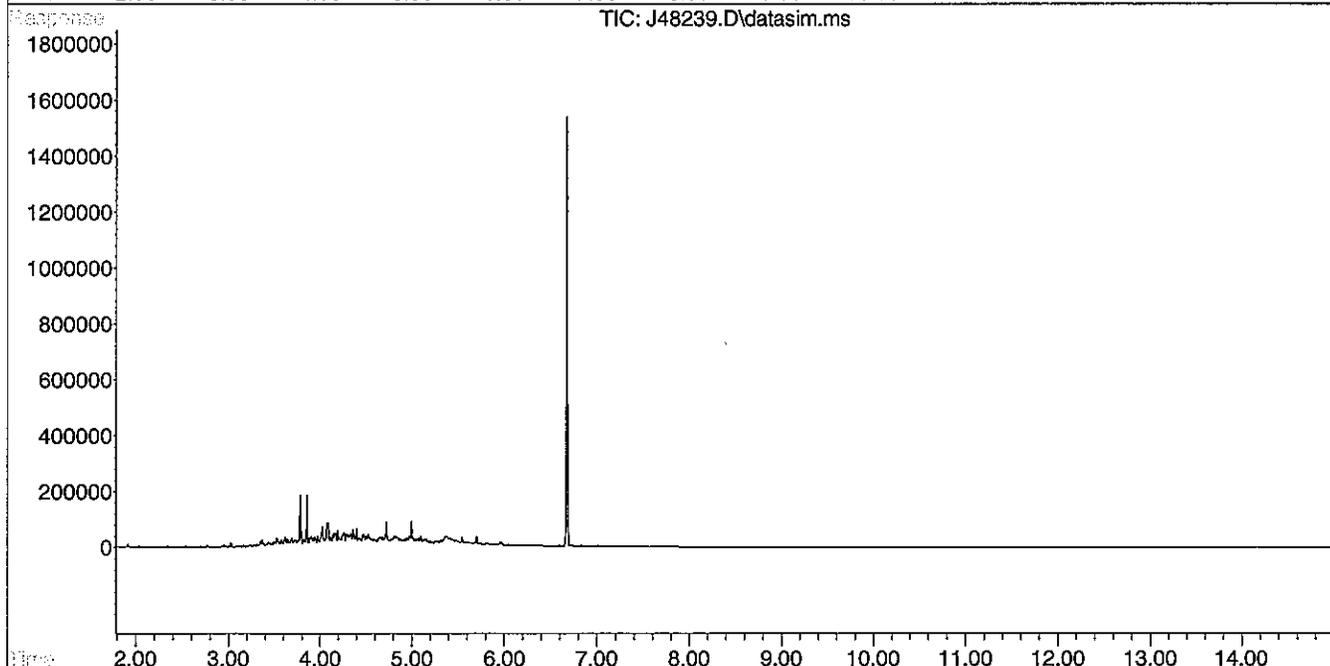
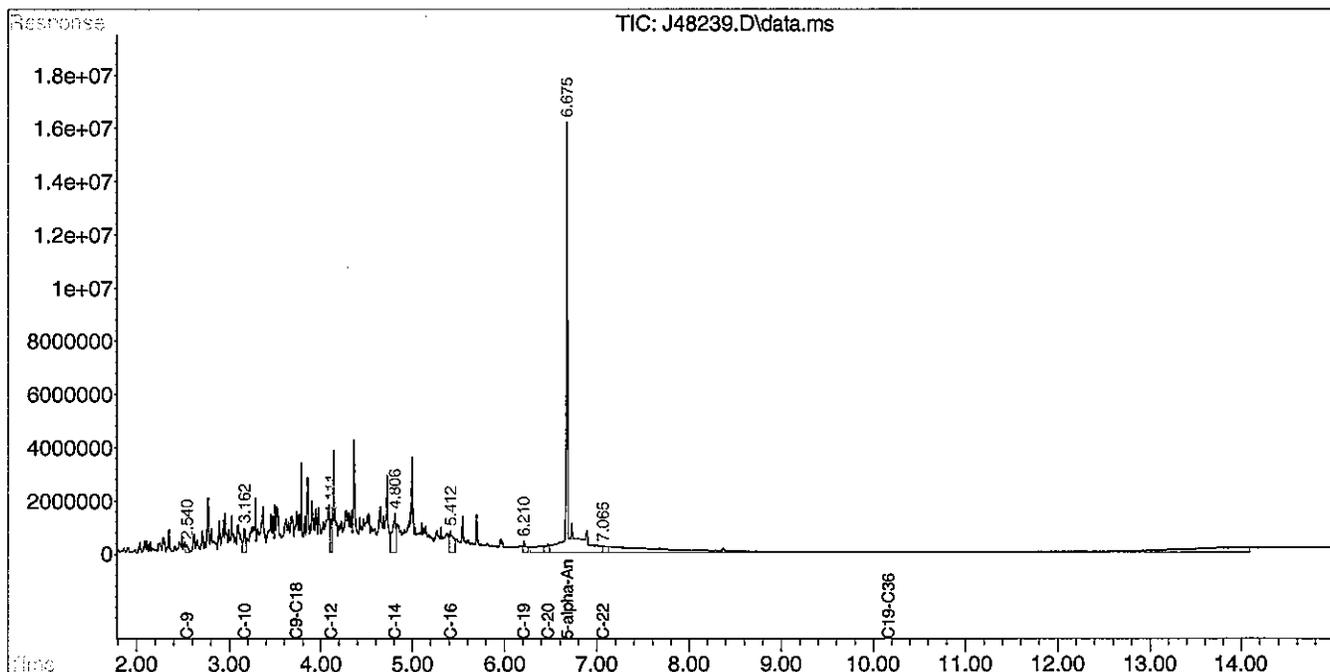
Quant Time: Dec 20 09:06:54 2012
 Quant Method : C:\msdchem\1\METHODS\ARM121912N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Wed Dec 19 15:12:26 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\121912-J\-----
 Data File : J48239.D
 Signal(s) : ~~Signal #1: data.ms~~ Signal #2: datasim.ms
 Acq On : 19 Dec 2012 5:10 pm
 Operator : MG
 Sample : 74440-1,1:20
 Misc : SOIL
 ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 20 11:52:03 2012
 Quant Method : C:\msdchem\1\METHODS\ALG121712.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Thu Dec 20 11:43:36 2012
 Response via : Initial Calibration
 Integrator: ChemStation

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



December 20, 2012

Mr. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 74440-2
Matrix: Solid
Percent Solid: 89
Dilution Factor: 1.1
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Extraction Date: 12/13/12
Analysis Date: 12/19/12

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: SB-2-S3

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	14200	µg/kg	7720 J
Diesel PAH Analytes	Naphthalene	285	µg/kg U
	2-Methylnaphthalene	285	µg/kg U
	Phenanthrene	285	µg/kg U
	Acenaphthene	285	µg/kg U
Other Target PAH Analytes	Acenaphthylene	285	µg/kg U
	Fluorene	285	µg/kg U
	Anthracene	285	µg/kg U
	Fluoranthene	285	µg/kg U
	Pyrene	285	µg/kg U
	Benzo[a]anthracene	285	µg/kg U
	Chrysene	285	µg/kg U
	Benzo[b]fluoranthene	285	µg/kg U
	Benzo[k]fluoranthene	285	µg/kg U
	Benzo[a]pyrene	285	µg/kg U
	Indeno[1,2,3-cd]pyrene	285	µg/kg U
Dibenzo[a,h]anthracene	285	µg/kg U	
Benzo[g,h,i]perylene	285	µg/kg U	
C9-C18 Aliphatic Hydrocarbons ¹	14200	µg/kg	24300
C19-C36 Aliphatic Hydrocarbons ¹	14200	µg/kg	34200
C11-C22 Aromatic Hydrocarbons ^{1,2}	14200	µg/kg	7720 J
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			78
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)			92
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

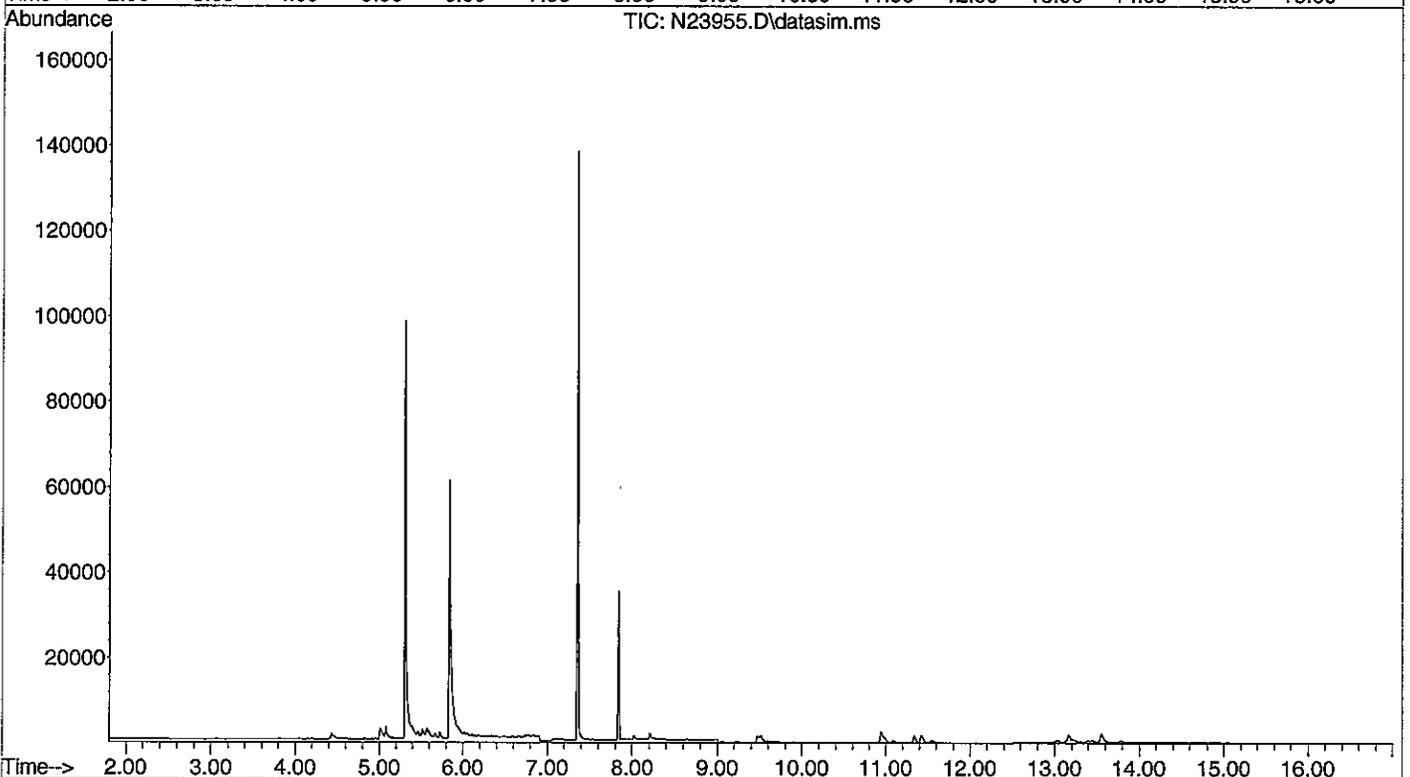
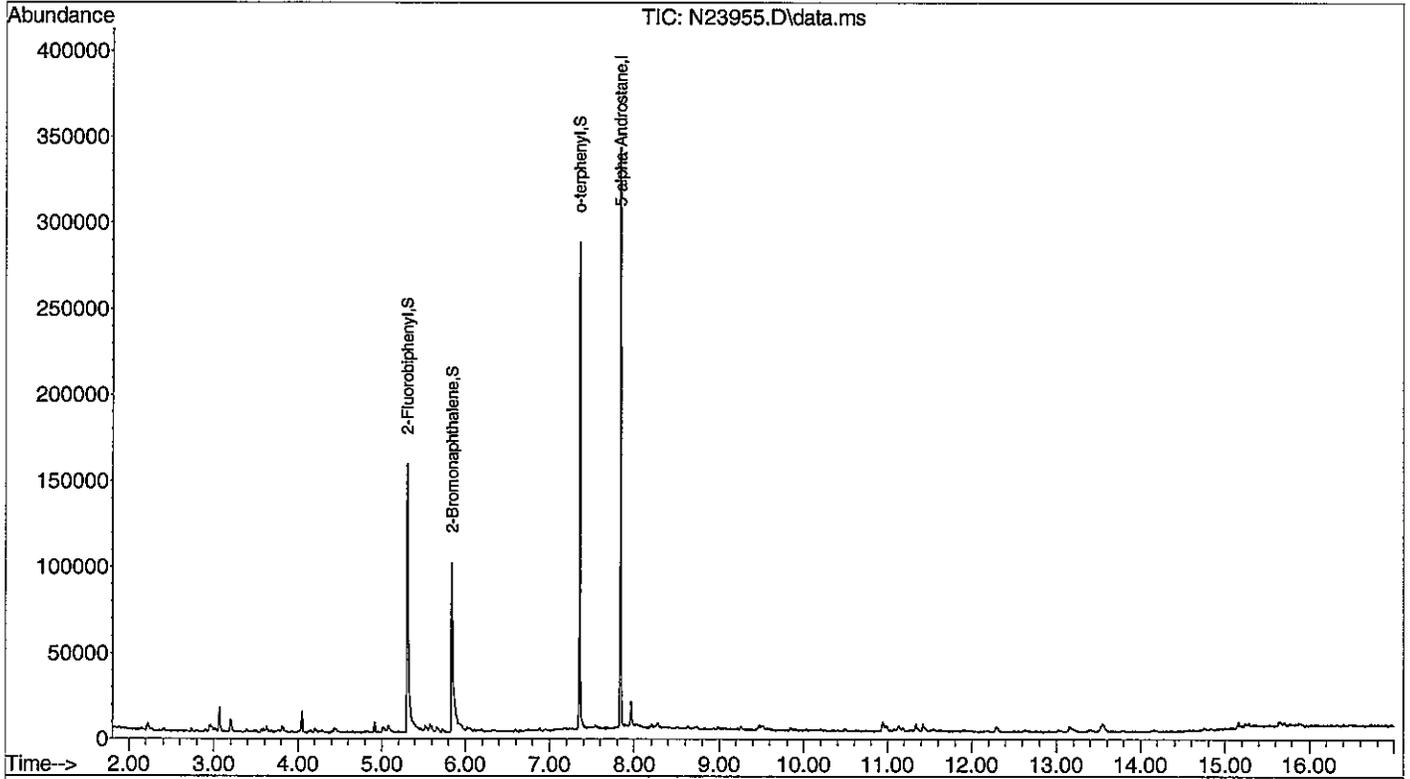
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

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\121912-N\
 Data File : N23955.D
 Acq On : 19 Dec 2012 6:43 pm
 Operator : MG
 Sample : 74440-2
 Misc : SOIL, ARO
 ALS Vial : 24 Sample Multiplier: 1

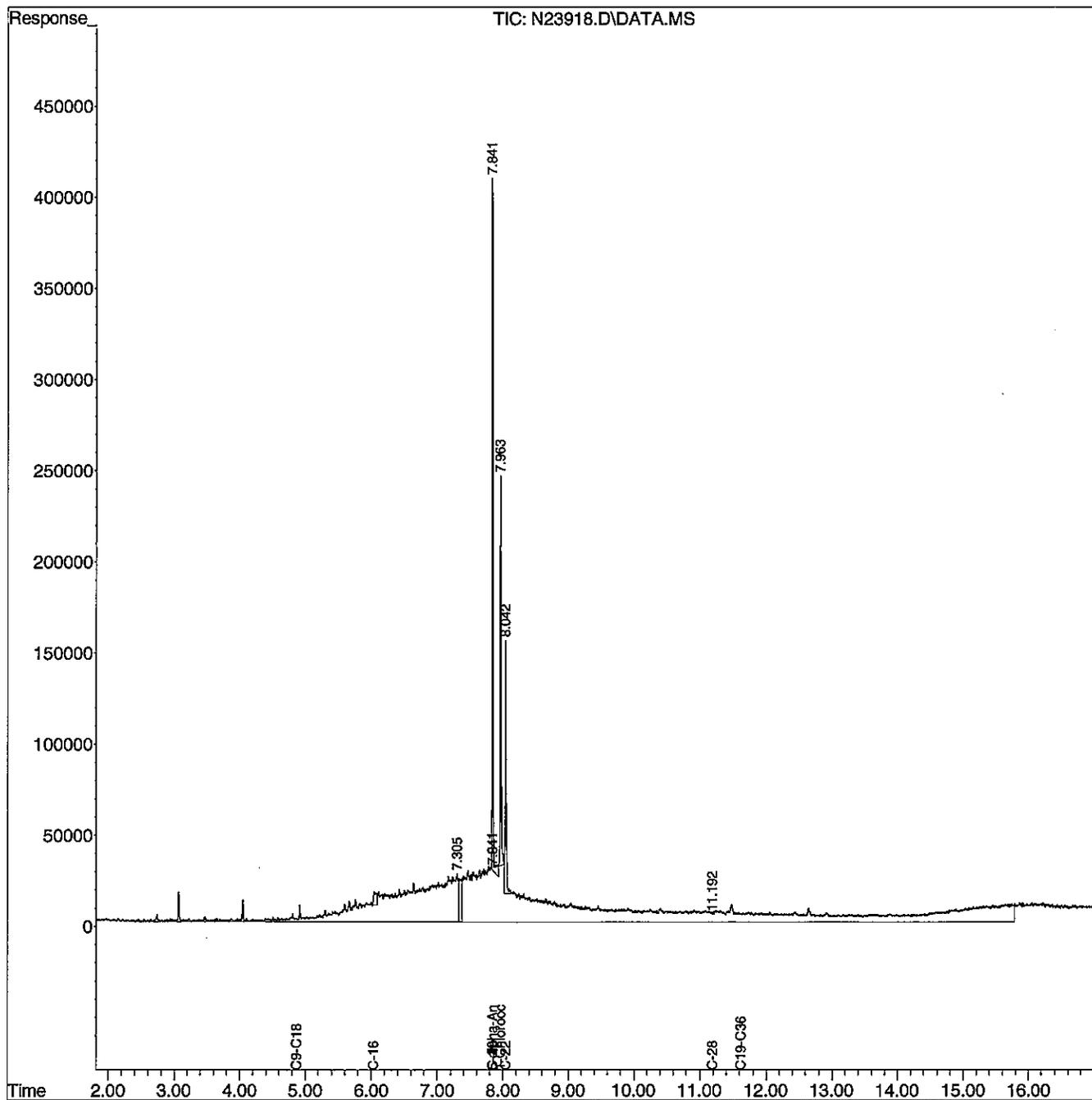
Quant Time: Dec 20 08:33:08 2012
 Quant Method : C:\msdchem\1\METHODS\ARM121912N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Wed Dec 19 15:12:26 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\121812-N\
 Data File : N23918.D
 Signal(s) : DATA.MS
 Acq On : 18 Dec 2012 6:55 pm
 Operator : MG/MT
 Sample : 74440-2,RR
 Misc : SOIL,ALI
 ALS Vial : 28 Sample Multiplier: 1

Integration File: rteint.p
 Quant Time: Dec 18 19:14:14 2012
 Quant Method : C:\msdchem\1\METHODS\ALG121712N.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Dec 17 19:17:43 2012
 Response via : Initial Calibration
 Integrator: RTE

Volume Inj. :
 Signal Phase :
 Signal Info :



December 20, 2012

Mr. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 74440-3
Matrix: Solid
Percent Solid: 88
Dilution Factor: 11
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Extraction Date: 12/13/12
Analysis Date: 12/20/12

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: SB-3-S3

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	152000	µg/kg	1300000
Diesel PAH Analytes	Naphthalene	3040	µg/kg U
	2-Methylnaphthalene	3040	µg/kg U
	Phenanthrene	3040	µg/kg U
	Acenaphthene	3040	µg/kg U
Other Target PAH Analytes	Acenaphthylene	3040	µg/kg U
	Fluorene	3040	µg/kg U
	Anthracene	3040	µg/kg U
	Fluoranthene	3040	µg/kg U
	Pvrene	3040	µg/kg U
	Benzo[a]anthracene	3040	µg/kg U
	Chrysene	3040	µg/kg U
	Benzo[b]fluoranthene	3040	µg/kg U
	Benzo[k]fluoranthene	3040	µg/kg U
	Benzo[a]pyrene	3040	µg/kg U
	Indeno[1,2,3-cd]pyrene	3040	µg/kg U
	Dibenzo[a,h]anthracene	3040	µg/kg U
	Benzo[g,h,i]perylene	3040	µg/kg U
C9-C18 Aliphatic Hydrocarbons ¹	304000	µg/kg	631000
C19-C36 Aliphatic Hydrocarbons ¹	304000	µg/kg	1670000
C11-C22 Aromatic Hydrocarbons ^{1,2}	152000	µg/kg	1300000
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			*
Aromatic Surrogate % Recovery (O-Terphenyl)			75
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			64
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			80
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

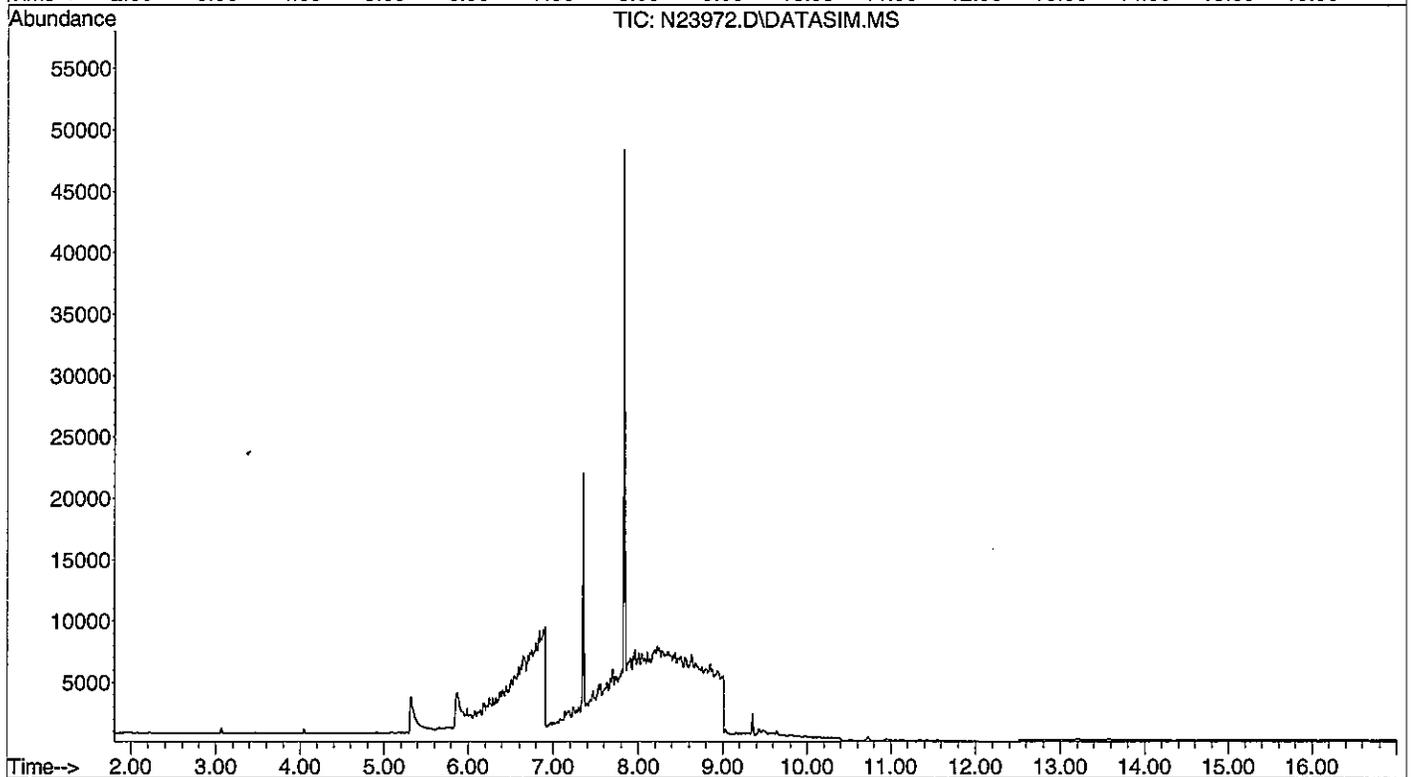
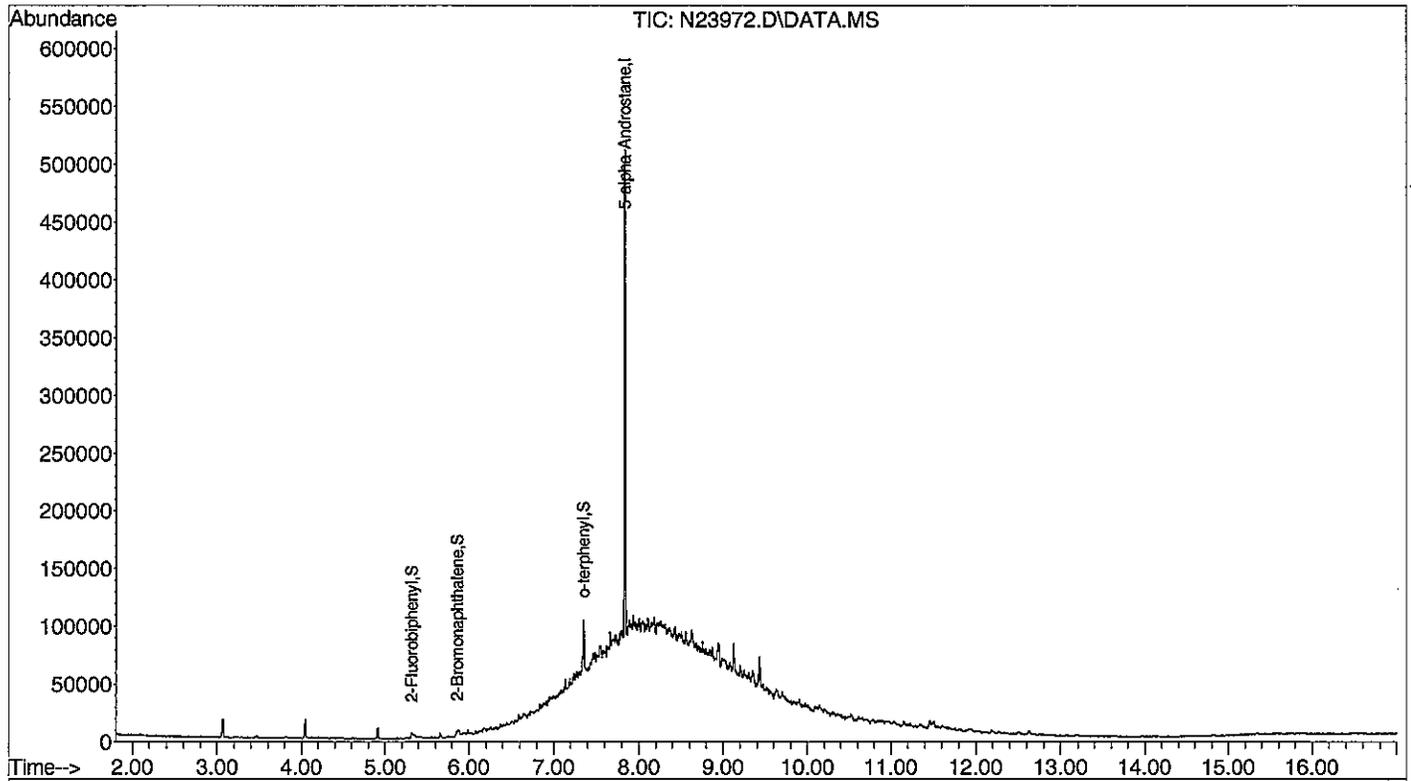
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

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.
* The surrogate was diluted out.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\122012-N\
 Data File : N23972.D
 Acq On : 20 Dec 2012 11:50 am
 Operator : MG
 Sample : 74440-3,1:10
 Misc : ARO
 ALS Vial : 46 Sample Multiplier: 1

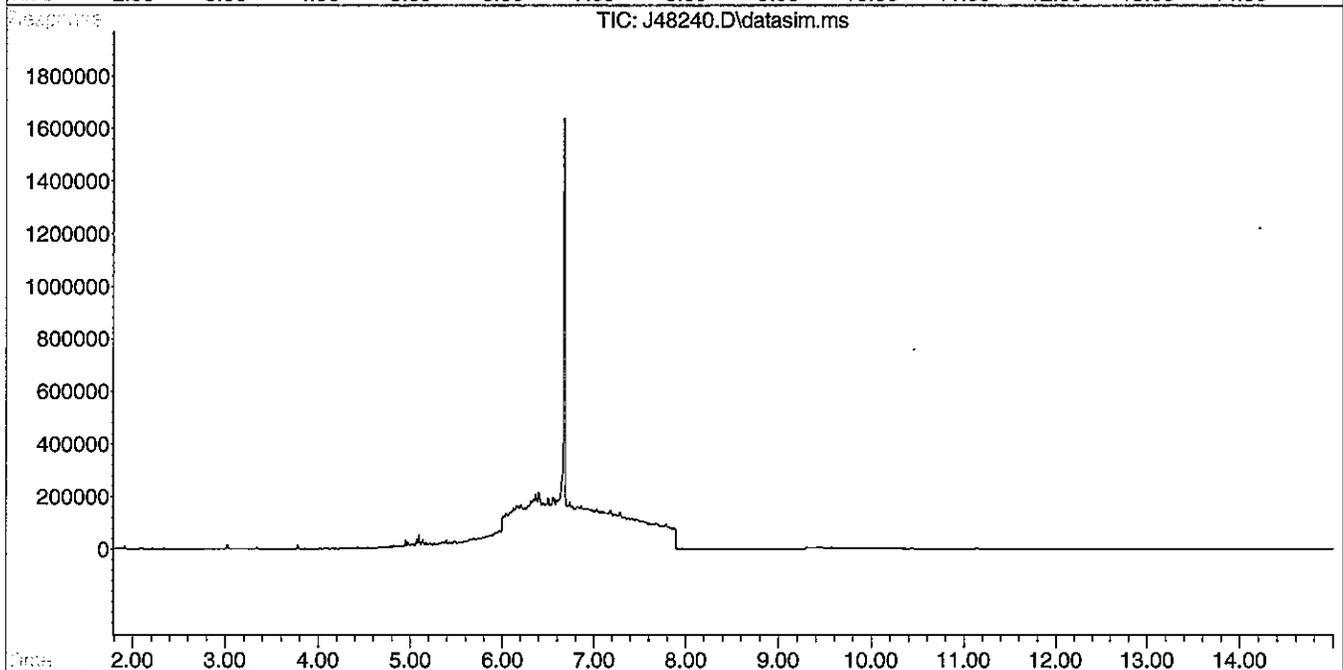
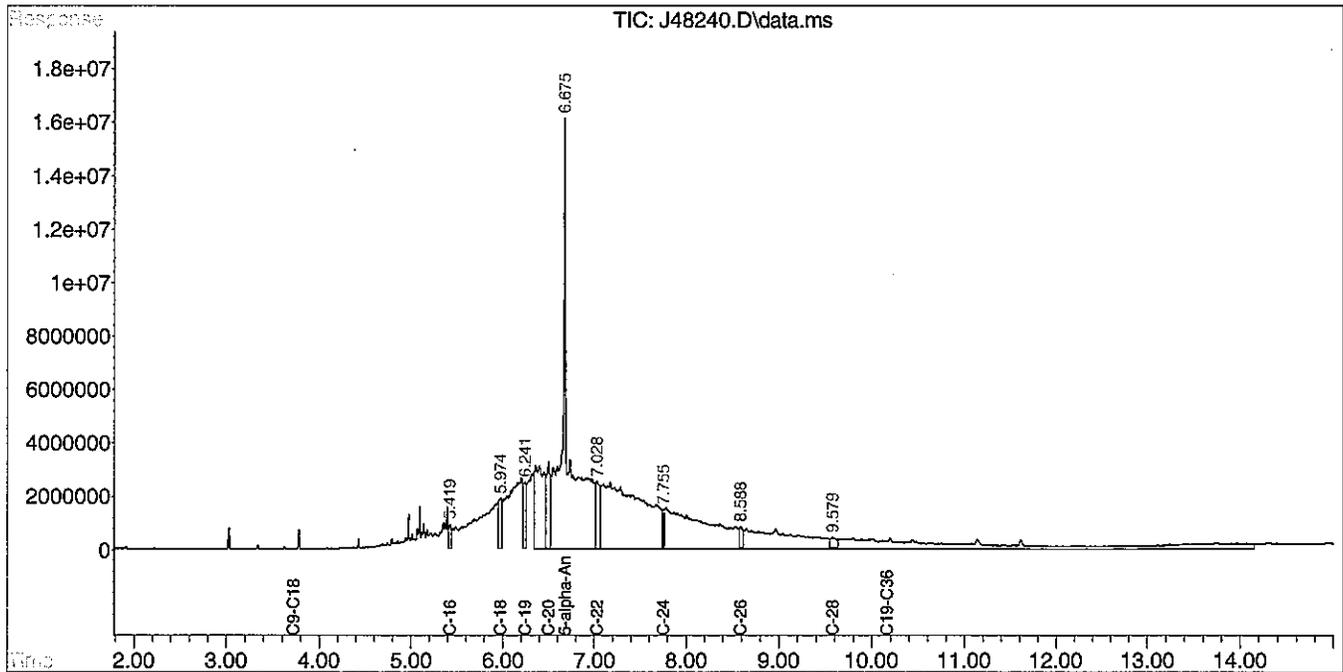
Quant Time: Dec 20 13:42:12 2012
 Quant Method : C:\msdchem\1\METHODS\ARM121912N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Wed Dec 19 14:10:24 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\121912-J\
 Data File : J48240.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 19 Dec 2012 5:30 pm
 Operator : MG
 Sample : 74440-3,1:20
 Misc : SOIL
 ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 20 11:53:13 2012
 Quant Method : C:\msdchem\1\METHODS\ALG121712.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Thu Dec 20 11:43:36 2012
 Response via : Initial Calibration
 Integrator: ChemStation

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



December 20, 2012

Mr. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 74440-4
Matrix: Solid
Percent Solid: 94
Dilution Factor: 1.0
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Extraction Date: 12/13/12
Analysis Date: 12/19/12

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: SB-4-S3

EPH ANALYTICAL RESULTS				
RANGE/TARGET ANALYTE	RL	Units	Result	
Unadjusted C11-C22 Aromatics ¹	13600	µg/kg	223000	
Diesel PAH Analytes	Naphthalene	273	µg/kg	U
	2-Methylnaphthalene	273	µg/kg	303
	Phenanthrene	273	µg/kg	4920
	Acenaphthene	273	µg/kg	282
Other Target PAH Analytes	Acenaphthylene	273	µg/kg	777
	Fluorene	273	µg/kg	879
	Anthracene	273	µg/kg	984
	Fluoranthene	273	µg/kg	3040
	Pyrene	273	µg/kg	4790
	Benzo[a]anthracene	273	µg/kg	2600
	Chrysene	273	µg/kg	2610
	Benzo[b]fluoranthene	273	µg/kg	2130
	Benzo[k]fluoranthene	273	µg/kg	714
	Benzo[a]pyrene	273	µg/kg	2690
	Indeno[1,2,3-cd]pyrene	273	µg/kg	1310
	Dibenzo[a,h]anthracene	273	µg/kg	U
	Benzo[g,h,i]perylene	273	µg/kg	1460
C9-C18 Aliphatic Hydrocarbons ¹	68100	µg/kg	59500 J	
C19-C36 Aliphatic Hydrocarbons ¹	68100	µg/kg	133000	
C11-C22 Aromatic Hydrocarbons ^{1,2}	13600	µg/kg	194000	
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			54	
Aromatic Surrogate % Recovery (O-Terphenyl)			61	
Sample Surrogate Acceptance Range	--	--	40-140%	
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			72	
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			77	
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

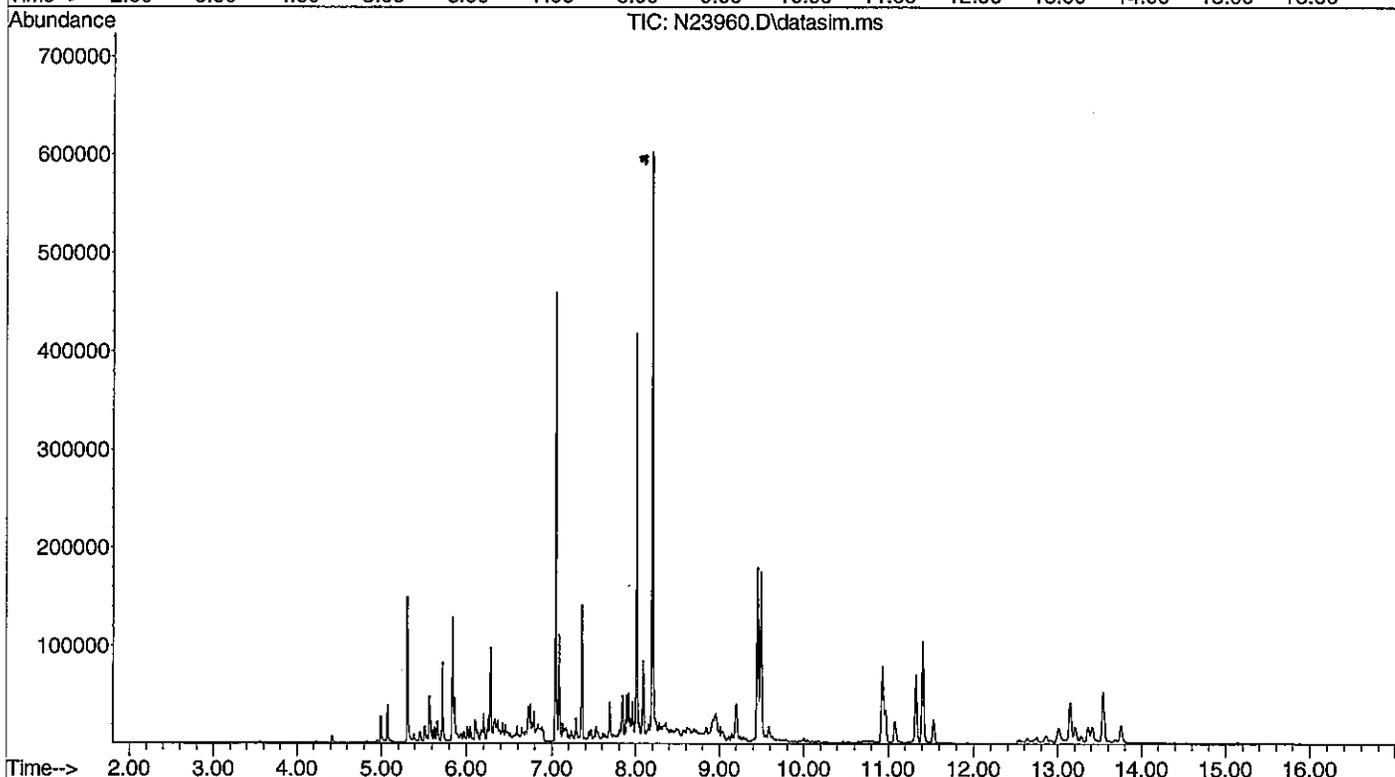
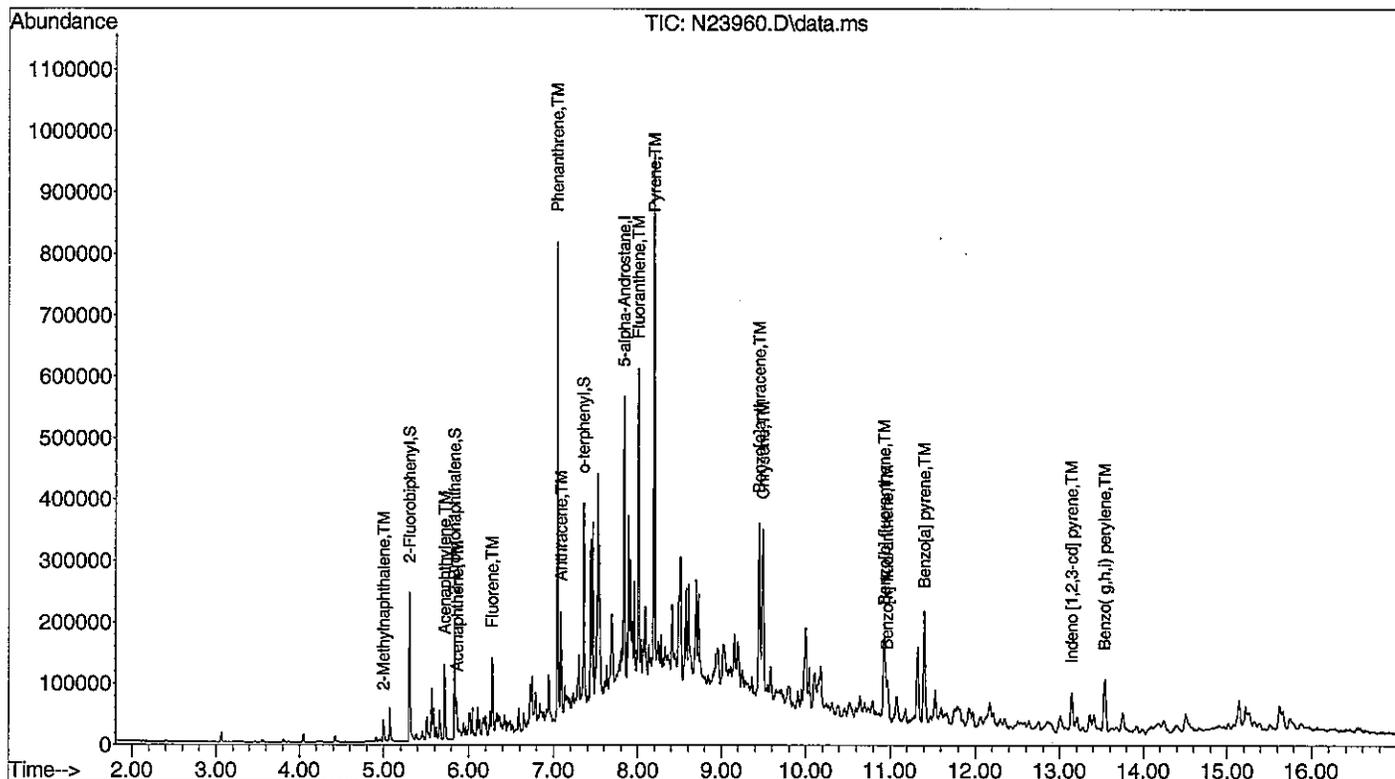
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

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\121912-N\
 Data File : N23960.D
 Acq On : 19 Dec 2012 8:25 pm
 Operator : MG
 Sample : 74440-4
 Misc : SOIL, ARO
 ALS Vial : 29 Sample Multiplier: 1

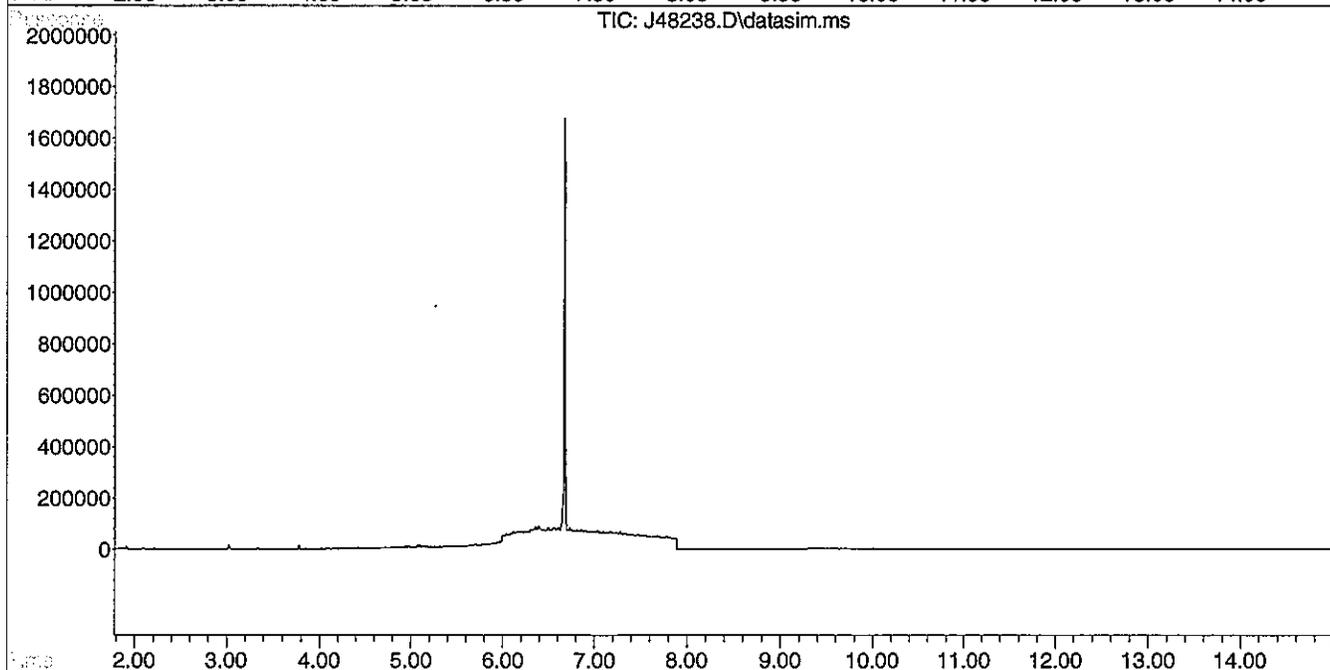
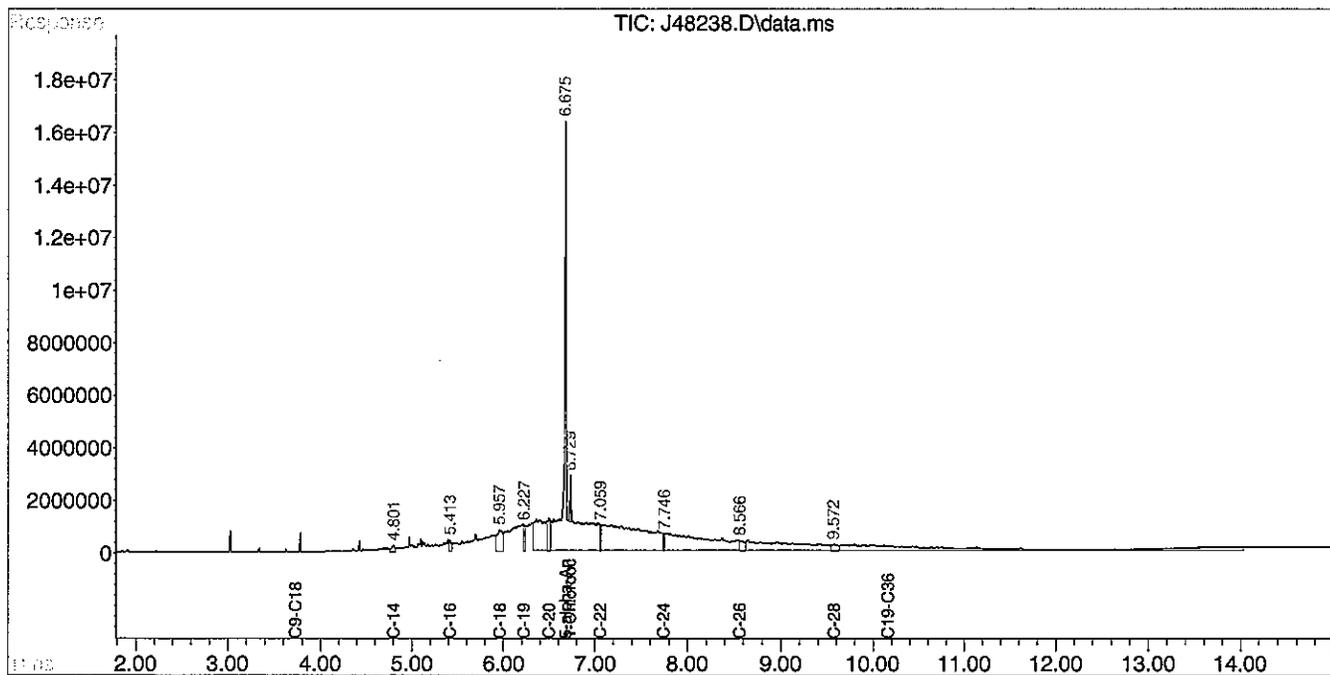
Quant Time: Dec 20 09:03:20 2012
 Quant Method : C:\msdchem\1\METHODS\ARM121912N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Wed Dec 19 15:12:26 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\121912-J\-----
 Data File : J48238.D -----
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms -----
 Acq On : 19 Dec 2012 4:49 pm -----
 Operator : MG -----
 Sample : 74440-4,1:5 -----
 Misc : SOIL -----
 ALS Vial : 6 Sample Multiplier: 1 -----

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 20 11:50:08 2012
 Quant Method : C:\msdchem\1\METHODS\ALG121712.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Thu Dec 20 11:43:36 2012
 Response via : Initial Calibration
 Integrator: ChemStation

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



December 20, 2012

Mr. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 74440-6
Matrix: Solid
Percent Solid: 88
Dilution Factor: 6
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Extraction Date: 12/13/12
Analysis Date: 12/20/12

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: SB-DUP

EPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE		RL	Units	Result
Unadjusted C11-C22 Aromatics ¹		74000	µg/kg	938000
Diesel PAH Analytes	Naphthalene	1480	µg/kg	U
	2-Methylnaphthalene	1480	µg/kg	U
	Phenanthrene	1480	µg/kg	U
	Acenaphthene	1480	µg/kg	U
Other Target PAH Analytes	Acenaphthylene	1480	µg/kg	U
	Fluorene	1480	µg/kg	U
	Anthracene	1480	µg/kg	U
	Fluoranthene	1480	µg/kg	U
	Pyrene	1480	µg/kg	U
	Benzo[a]anthracene	1480	µg/kg	U
	Chrysene	1480	µg/kg	U
	Benzo[b]fluoranthene	1480	µg/kg	U
	Benzo[k]fluoranthene	1480	µg/kg	U
	Benzo[a]pyrene	1480	µg/kg	U
	Indeno[1,2,3-cd]pyrene	1480	µg/kg	U
	Dibenzo[a,h]anthracene	1480	µg/kg	U
Benzo[g,h,i]perylene	1480	µg/kg	U	
C9-C18 Aliphatic Hydrocarbons ¹		296000	µg/kg	496000
C19-C36 Aliphatic Hydrocarbons ¹		296000	µg/kg	1410000
C11-C22 Aromatic Hydrocarbons ^{1,2}		74000	µg/kg	938000
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)				*
Aromatic Surrogate % Recovery (O-Terphenyl)				83
Sample Surrogate Acceptance Range		--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)				82
#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

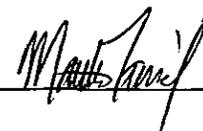
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

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.

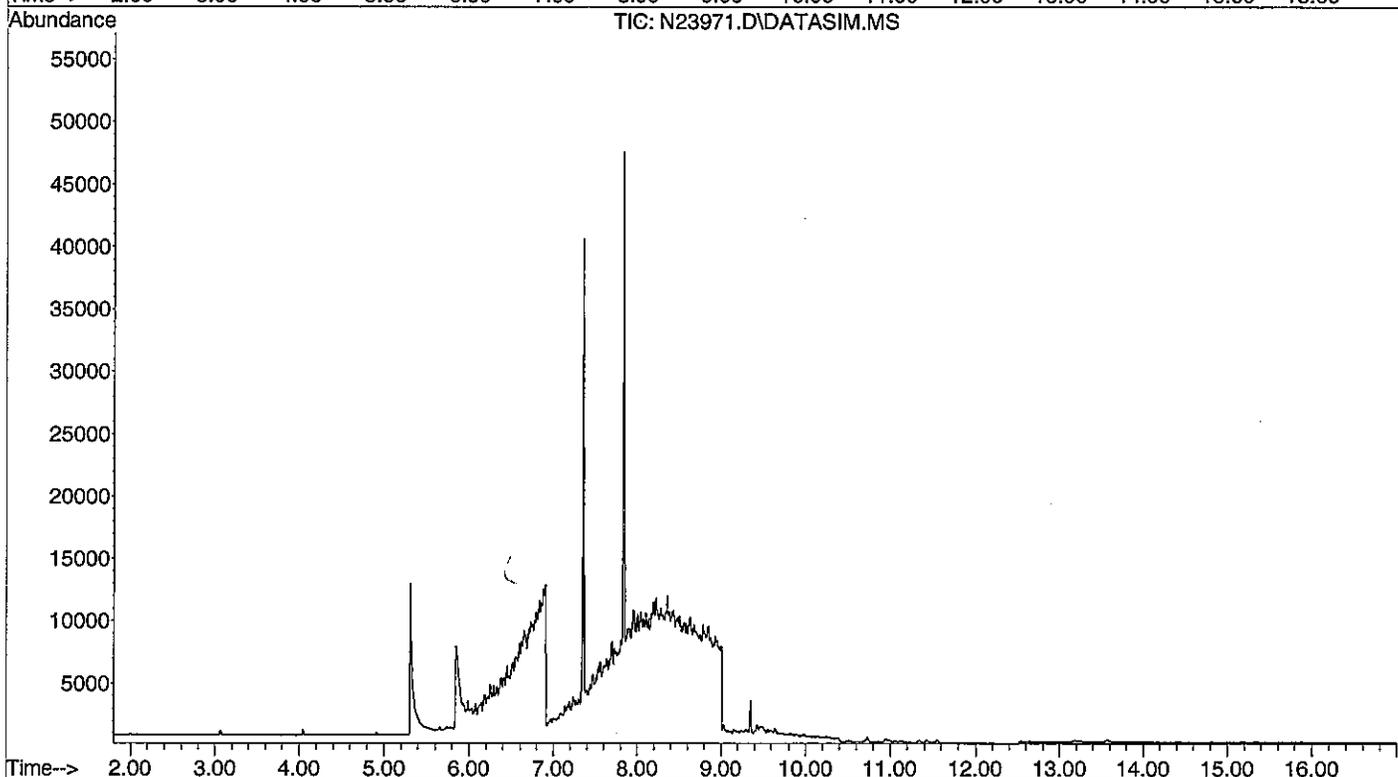
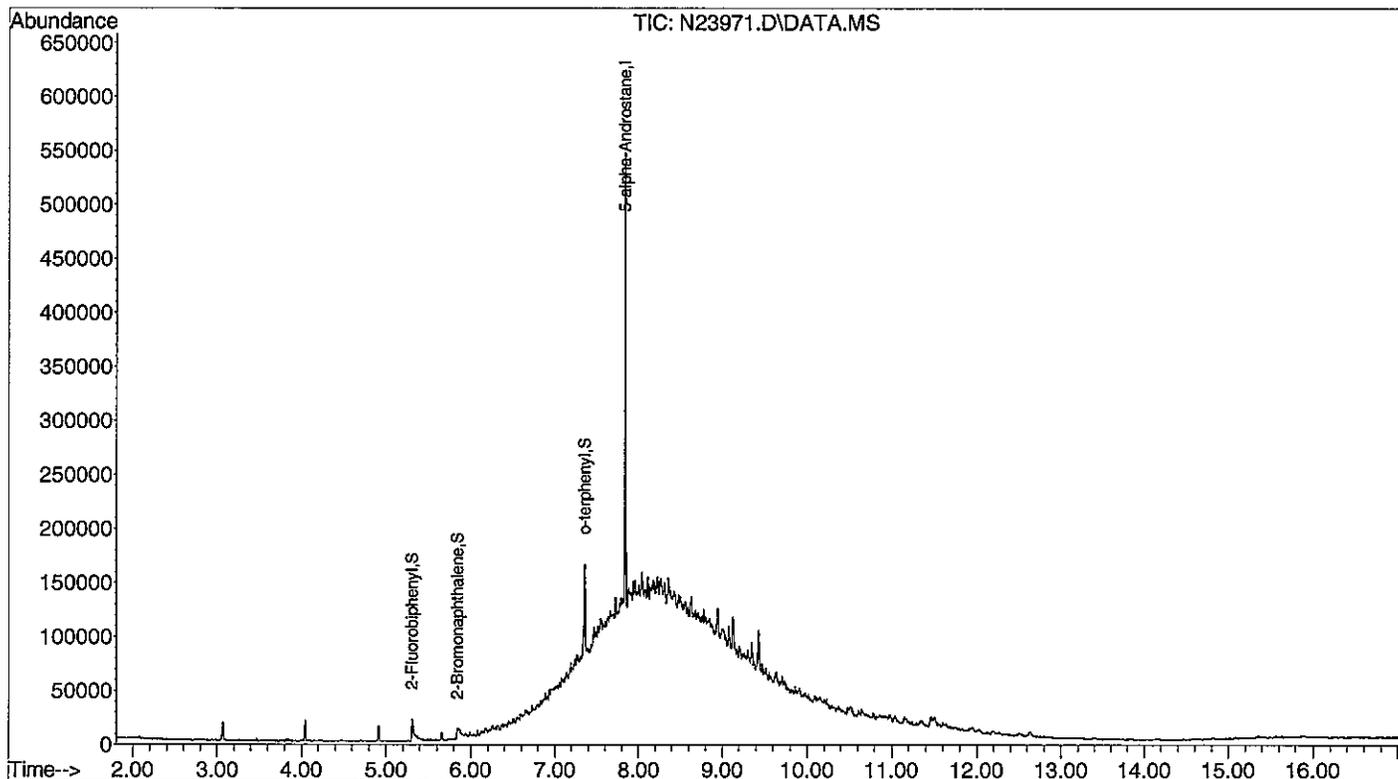
* The surrogate was diluted out.

SIGNATURE: _____



Data Path: C:\msdchem\1\DATA\122012-N\
 Data File : N23971.D
 Acq On : 20 Dec 2012 11:29 am
 Operator : MG
 Sample : 74440-6,1:5
 Misc : ARO
 ALS Vial : 45 Sample Multiplier: 1

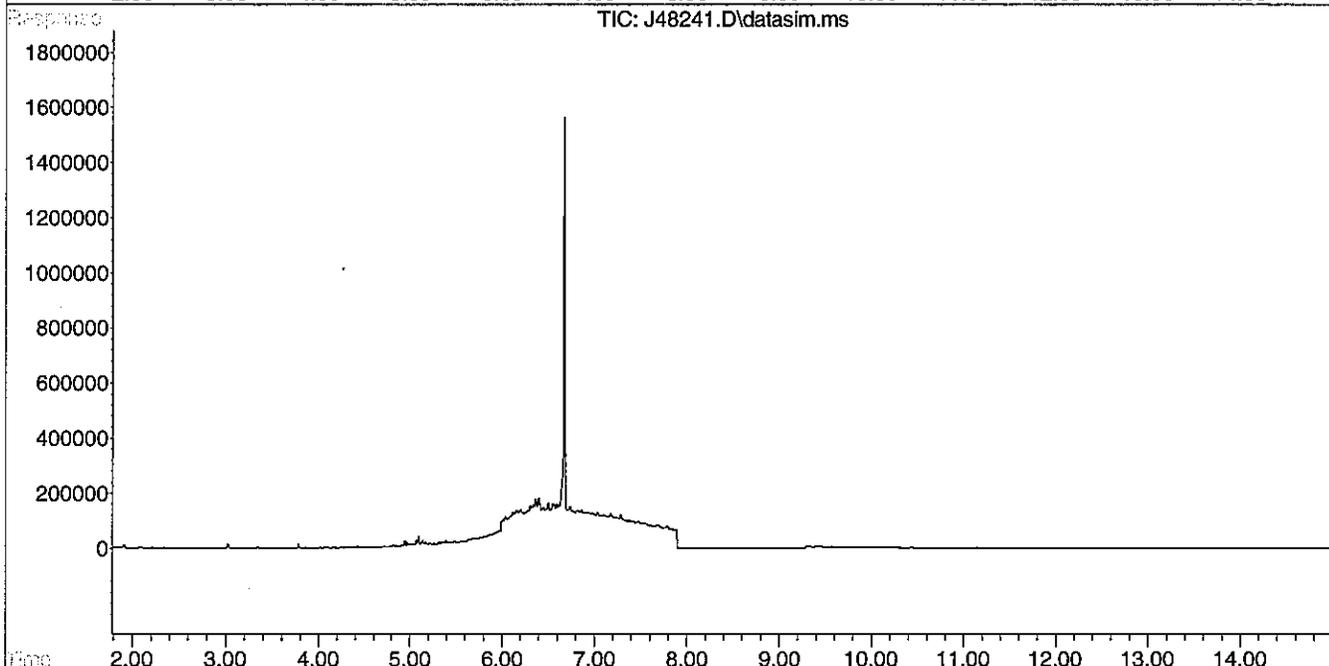
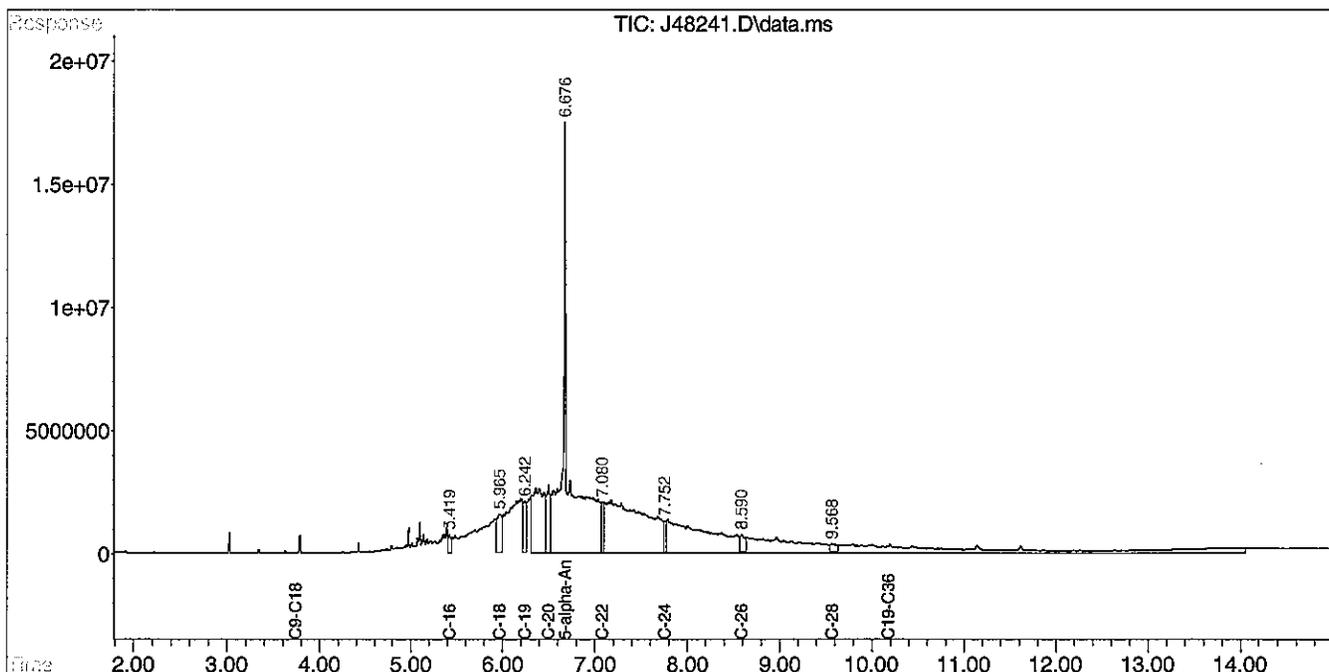
Quant Time: Dec 20 13:40:08 2012
 Quant Method : C:\msdchem\1\METHODS\ARM121912N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Wed Dec 19 15:12:26 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\121912-J\
 Data File : J48241.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 19 Dec 2012 5:51 pm
 Operator : MG
 Sample : 74440-6,1:20
 Misc : SOIL
 ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 20 11:54:32 2012
 Quant Method : C:\msdchem\1\METHODS\ALG121712.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Thu Dec 20 11:43:36 2012
 Response via : Initial Calibration
 Integrator: ChemStation

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



December 20, 2012

 Mr. Erik Phenix
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400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA
Lab Sample ID: 74440-7
Matrix: Solid
Percent Solid: 81
Dilution Factor: 1.2
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Extraction Date: 12/13/12
Analysis Date: 12/19/12

CLIENT SAMPLE ID
Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: BK-1

EPH ANALYTICAL RESULTS

RANGE/TARGET ANALYTE		RL	Units	Result
Unadjusted C11-C22 Aromatics ¹		16100	µg/kg	15200 J
Diesel PAH Analytes	Naphthalene	322	µg/kg	U
	2-Methylnaphthalene	322	µg/kg	U
	Phenanthrene	322	µg/kg	250 J
	Acenaphthene	322	µg/kg	U
Other Target PAH Analytes	Acenaphthylene	322	µg/kg	U
	Fluorene	322	µg/kg	U
	Anthracene	322	µg/kg	U
	Fluoranthene	322	µg/kg	373
	Pyrene	322	µg/kg	353
	Benzo[a]anthracene	322	µg/kg	200 J
	Chrysene	322	µg/kg	201 J
	Benzo[b]fluoranthene	322	µg/kg	260 J
	Benzo[k]fluoranthene	322	µg/kg	U
	Benzo[a]pyrene	322	µg/kg	198 J
	Indeno[1,2,3-cd]pyrene	322	µg/kg	U
	Dibenzo[a,h]anthracene	322	µg/kg	U
Benzo[g,h,i]perylene	322	µg/kg	U	
C9-C18 Aliphatic Hydrocarbons ¹		16100	µg/kg	U
C19-C36 Aliphatic Hydrocarbons ¹		16100	µg/kg	30800
C11-C22 Aromatic Hydrocarbons ^{1,2}		16100	µg/kg	13400 J
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)				78
Aromatic Surrogate % Recovery (O-Terphenyl)				79
Sample Surrogate Acceptance Range		--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)				79
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)				77
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				

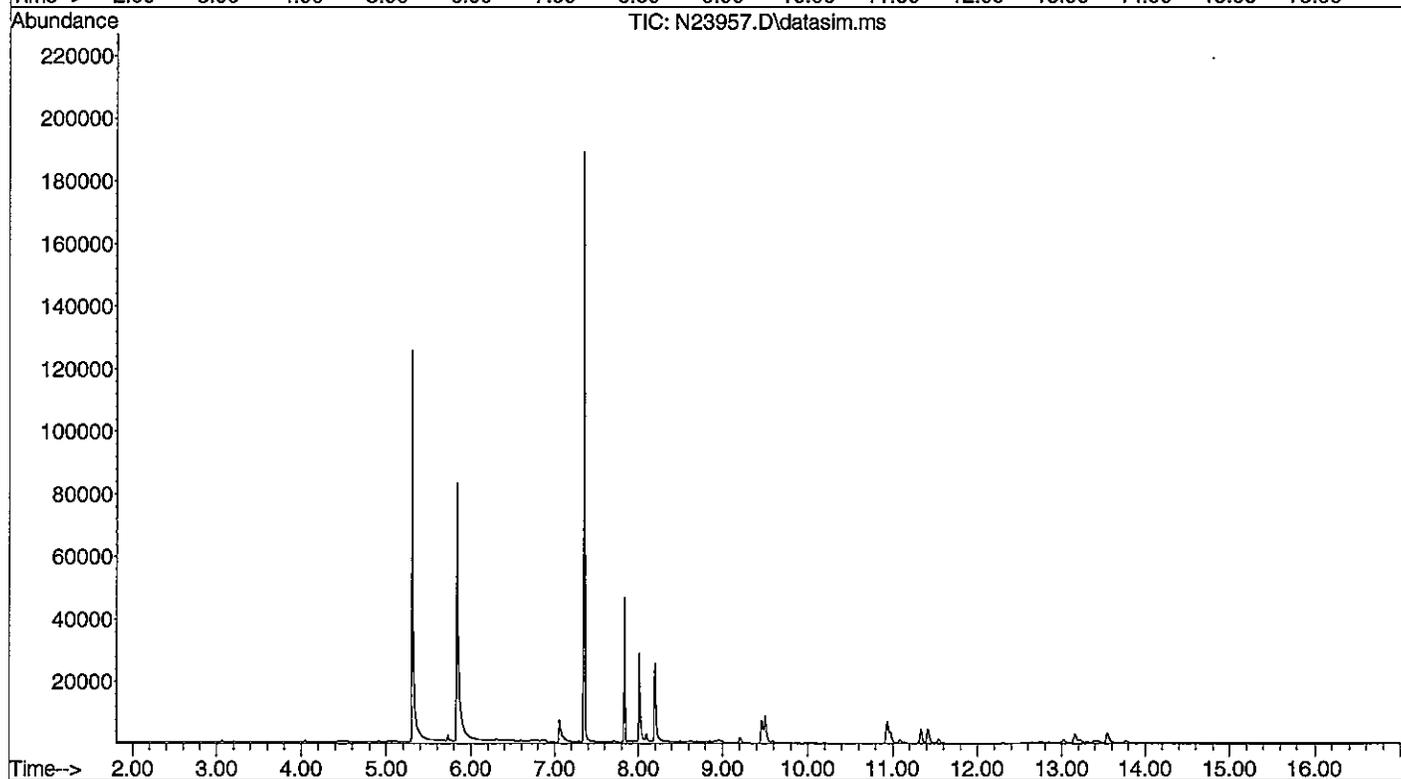
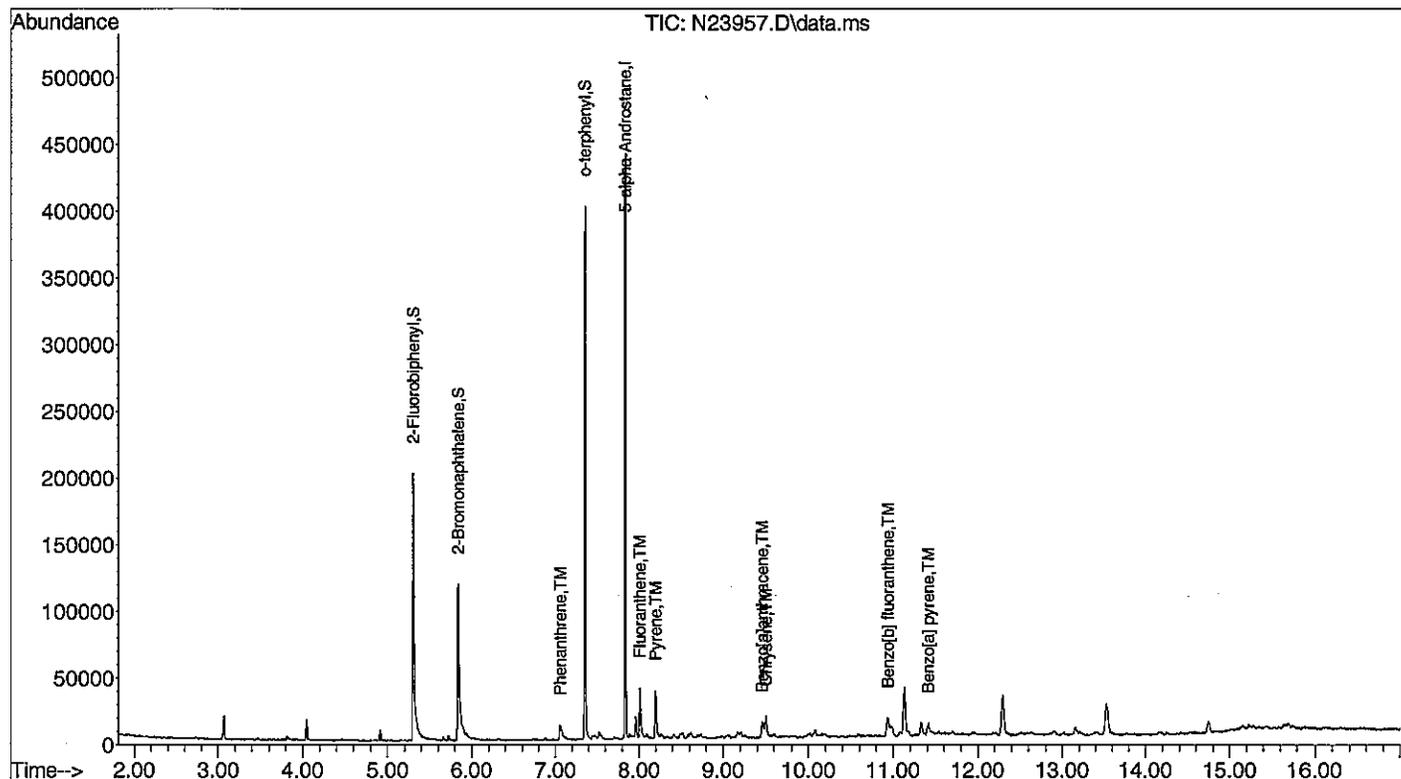
 METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

 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\121912-N\
 Data File : N23957.D
 Acq On : 19 Dec 2012 7:24 pm
 Operator : MG
 Sample : 74440-7
 Misc : SOIL, ARO
 ALS Vial : 26 Sample Multiplier: 1

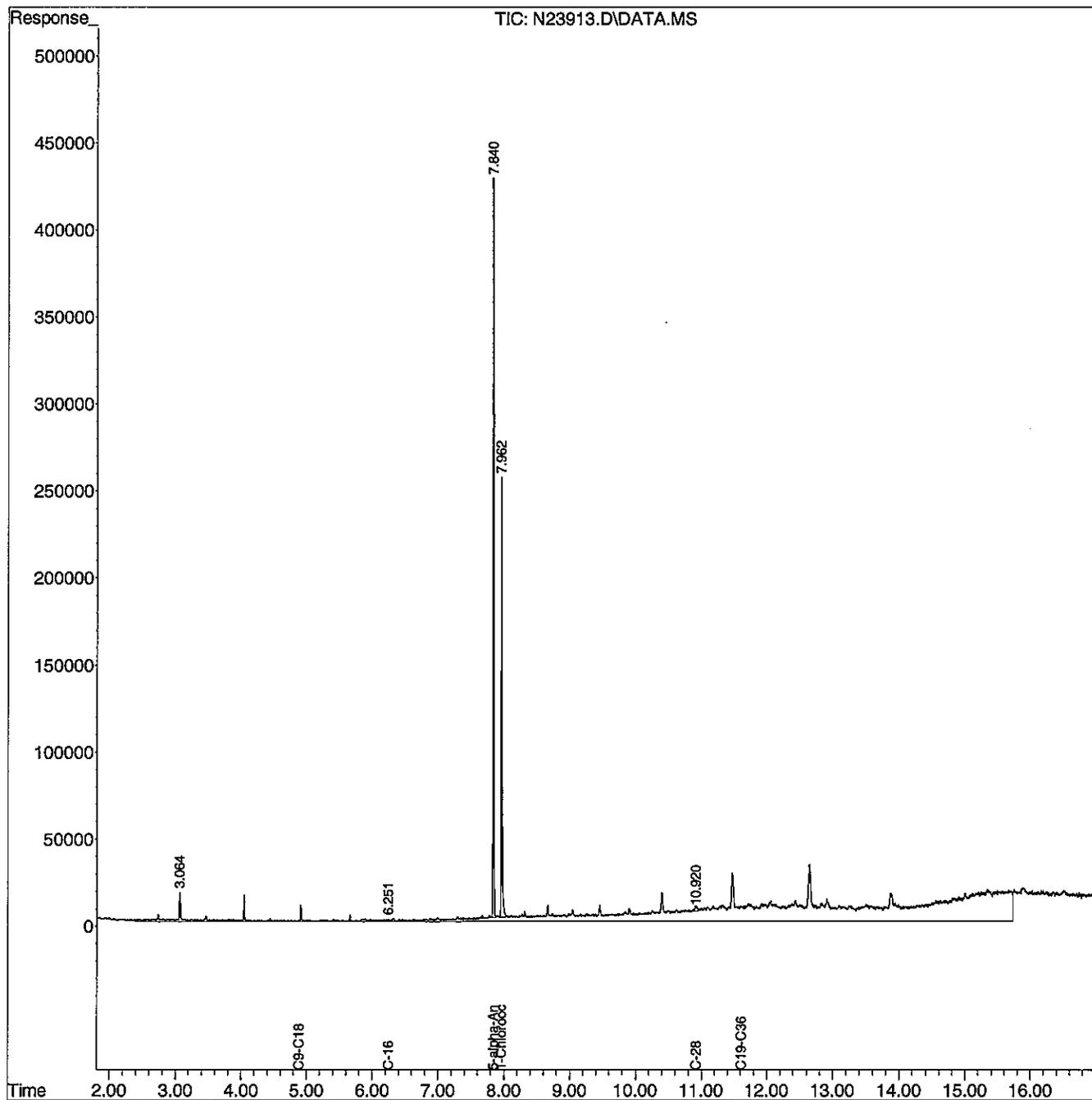
Quant Time: Dec 20 09:00:20 2012
 Quant Method : C:\msdchem\1\METHODS\ARM121912N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Wed Dec 19 15:12:26 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\121812-N\
 Data File : N23913.D
 Signal(s) : DATA.MS
 Acq On : 18 Dec 2012 5:12 pm
 Operator : MG/MT
 Sample : 74440-7
 Misc : SOIL,ALI
 ALS Vial : 33 Sample Multiplier: 1

Integration File: rteint.p
 Quant Time: Dec 18 17:28:22 2012
 Quant Method : C:\msdchem\1\METHODS\ALG121712N.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Dec 17 19:17:43 2012
 Response via : Initial Calibration
 Integrator: RTE

Volume Inj. :
 Signal Phase :
 Signal Info :



December 17, 2012

Mr. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 74440-10
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Extraction Date: 12/07/12
Analysis Date: 12/11/12

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: MW-1

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	100	µg/L	414
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	500	µg/L	2530
C19-C36 Aliphatic Hydrocarbons ¹	500	µg/L	U
C11-C22 Aromatic Hydrocarbons ^{1,2}	100	µg/L	378
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			38*
Aromatic Surrogate % Recovery (O-Terphenyl)			80
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			85
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			91
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.

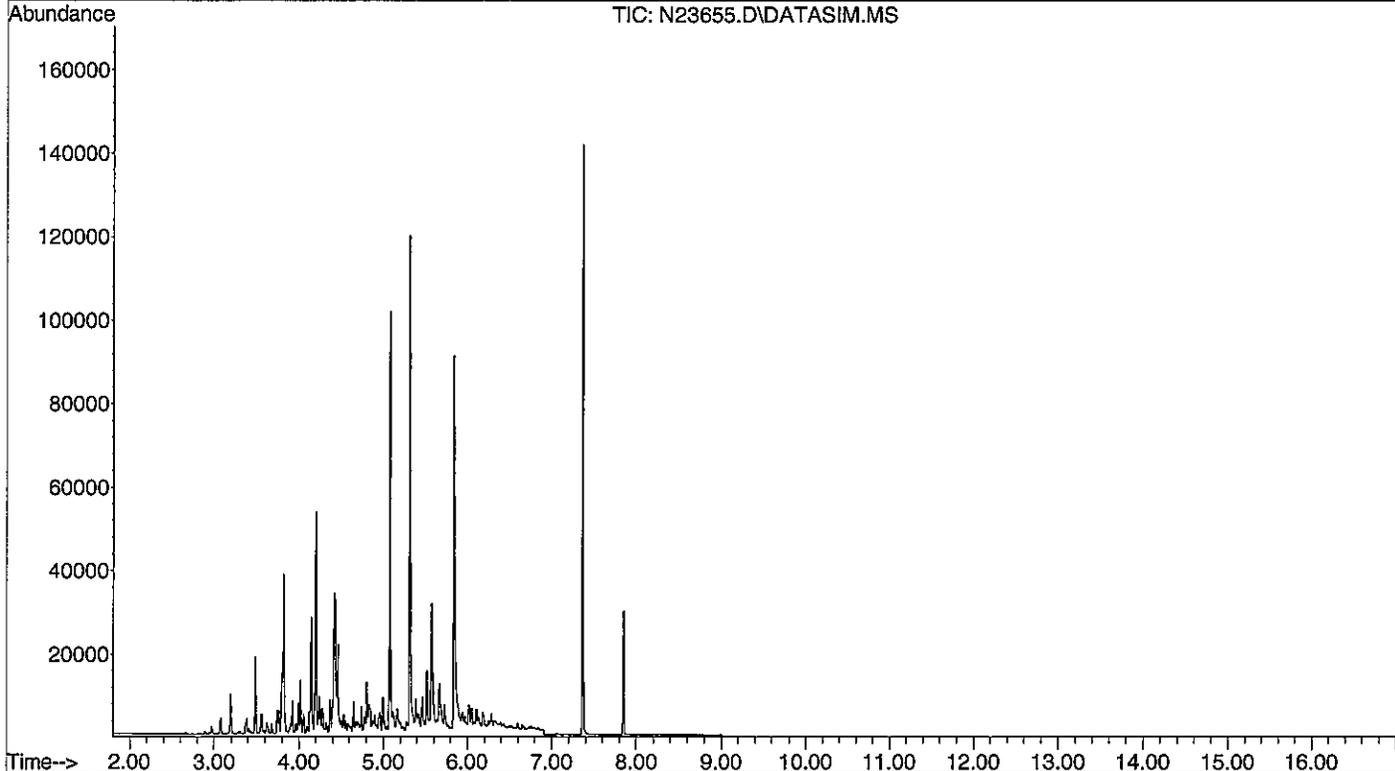
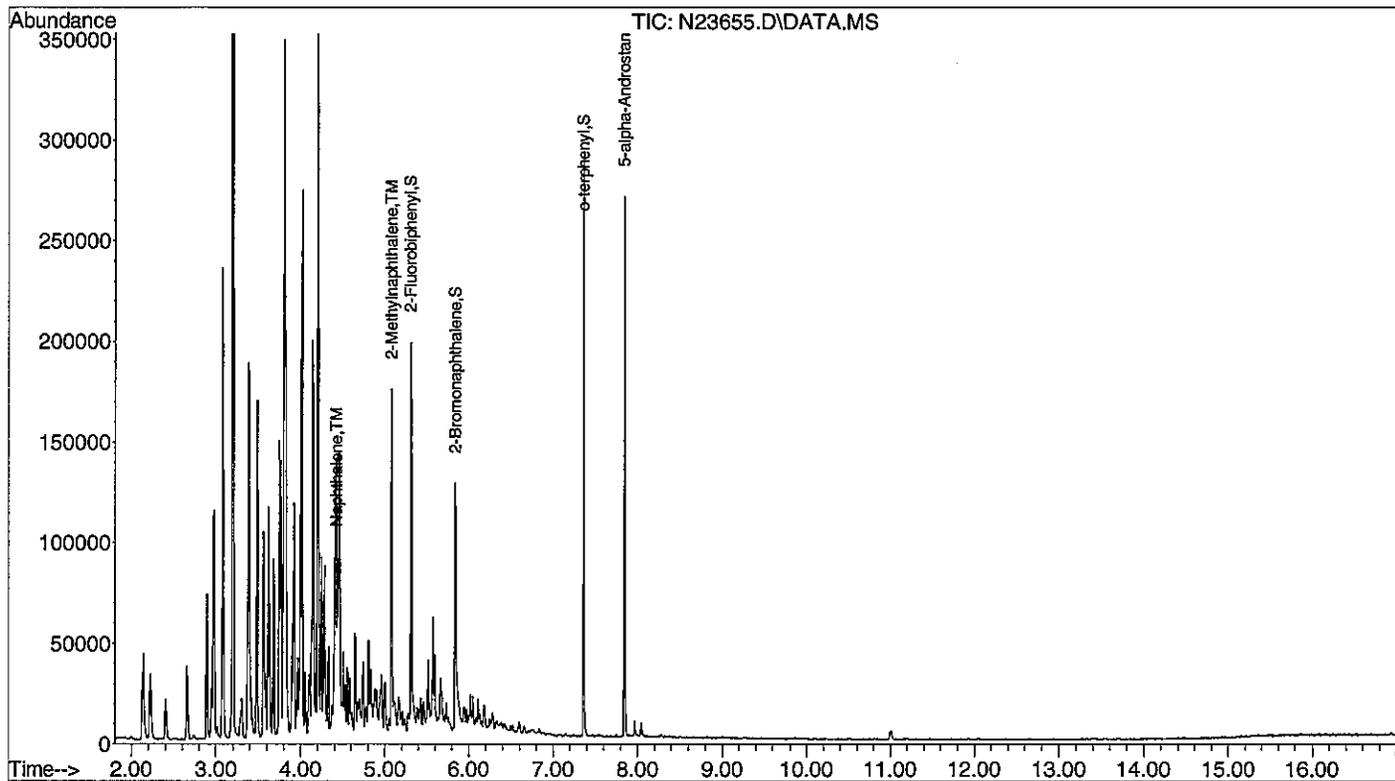
COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

* Surrogate recovery outside of laboratory acceptance criteria. Sample was re-fractionated and reanalyzed with similar results.

SIGNATURE: 

Data Path : C:\msdchem\1\DATA\121112-N\
Data File : N23655.D
Acq On : 11 Dec 2012 5:14 pm
Operator : MG/AR
Sample : 74440-10
Misc : ARO
ALS Vial : 17 Sample Multiplier: 1

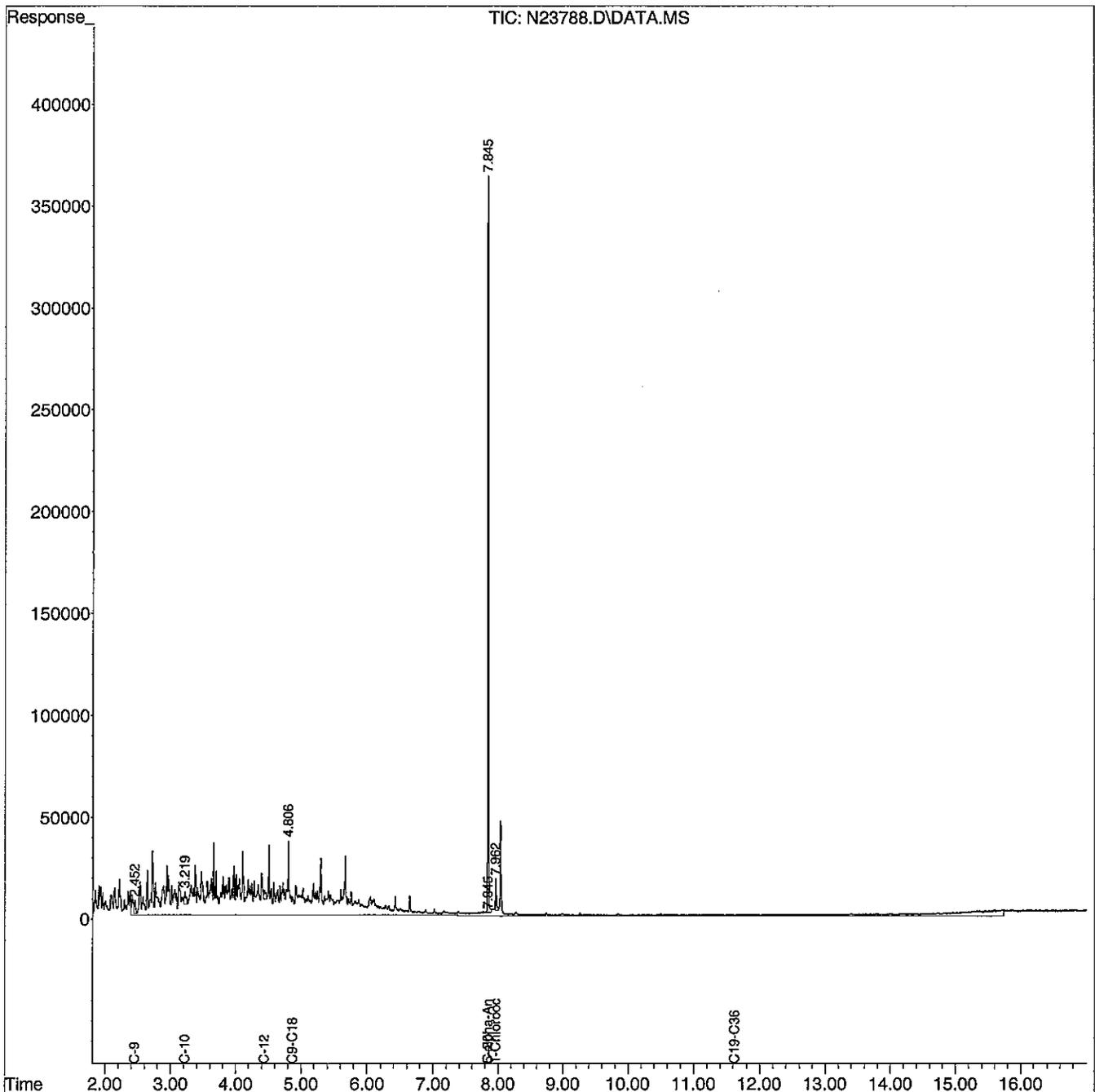
Quant Time: Dec 11 19:10:32 2012
Quant Method : C:\msdchem\1\METHODS\ARM112912N.M
Quant Title : EPH MS AROMATICS
QLast Update : Fri Nov 30 01:32:46 2012
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\121412-N\
 Data File : N23788.D
 Signal(s) : DATA.MS
 Acq On : 15 Dec 2012 12:57 am
 Operator : MG/AR
 Sample : 74440-10,1:5
 Misc :
 ALS Vial : 33 Sample Multiplier: 1

Integration File: rteint.p
 Quant Time: Dec 15 10:59:15 2012
 Quant Method : C:\msdchem\1\METHODS\ALG121412N.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Fri Dec 14 20:19:33 2012
 Response via : Initial Calibration
 Integrator: RTE

Volume Inj. :
 Signal Phase :
 Signal Info :



December 17, 2012

Mr. Erik Phenix
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 400 Commercial Street Suite 404
 Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 74440-11
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Extraction Date: 12/07/12
Analysis Date: 12/11/12

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: MW-3

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)			44
Aromatic Surrogate % Recovery (O-Terphenyl)			90
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			85
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			88
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

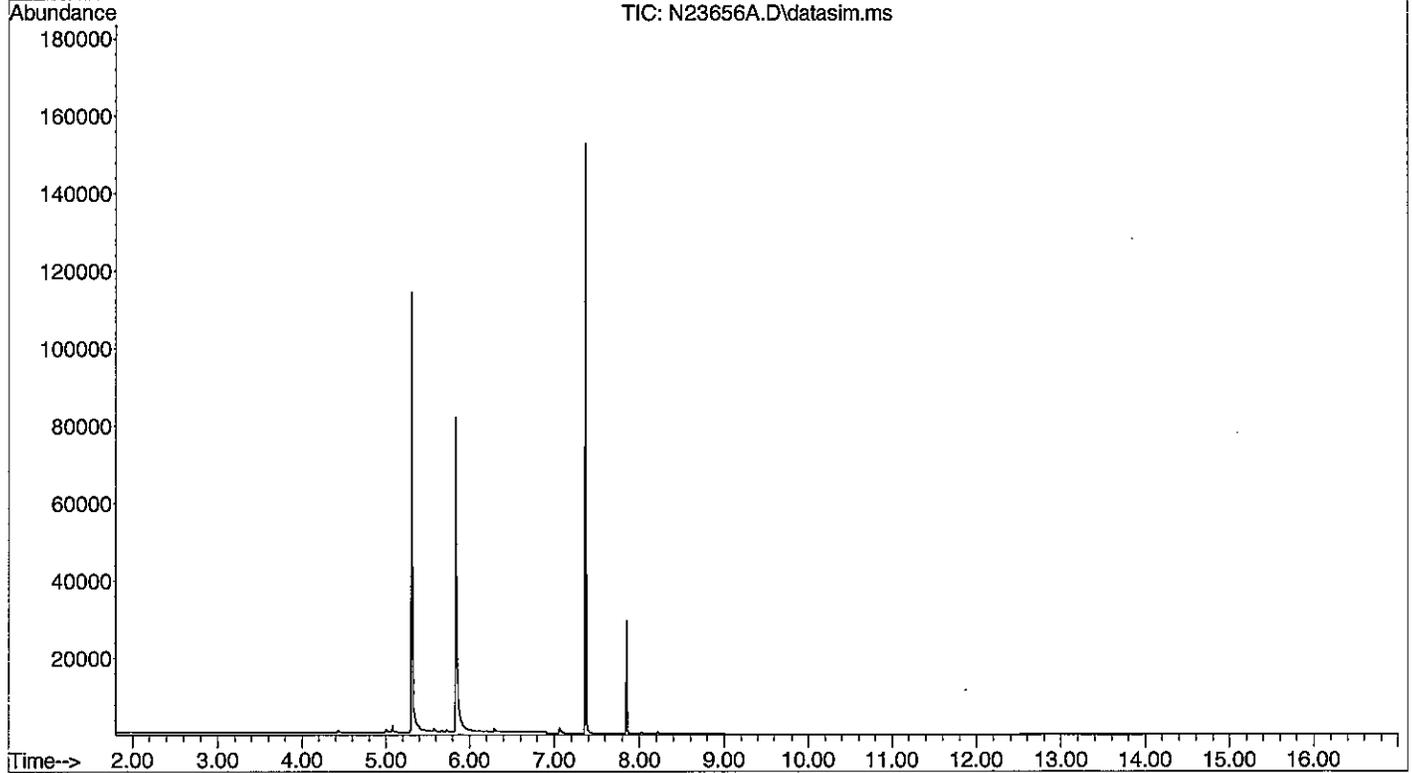
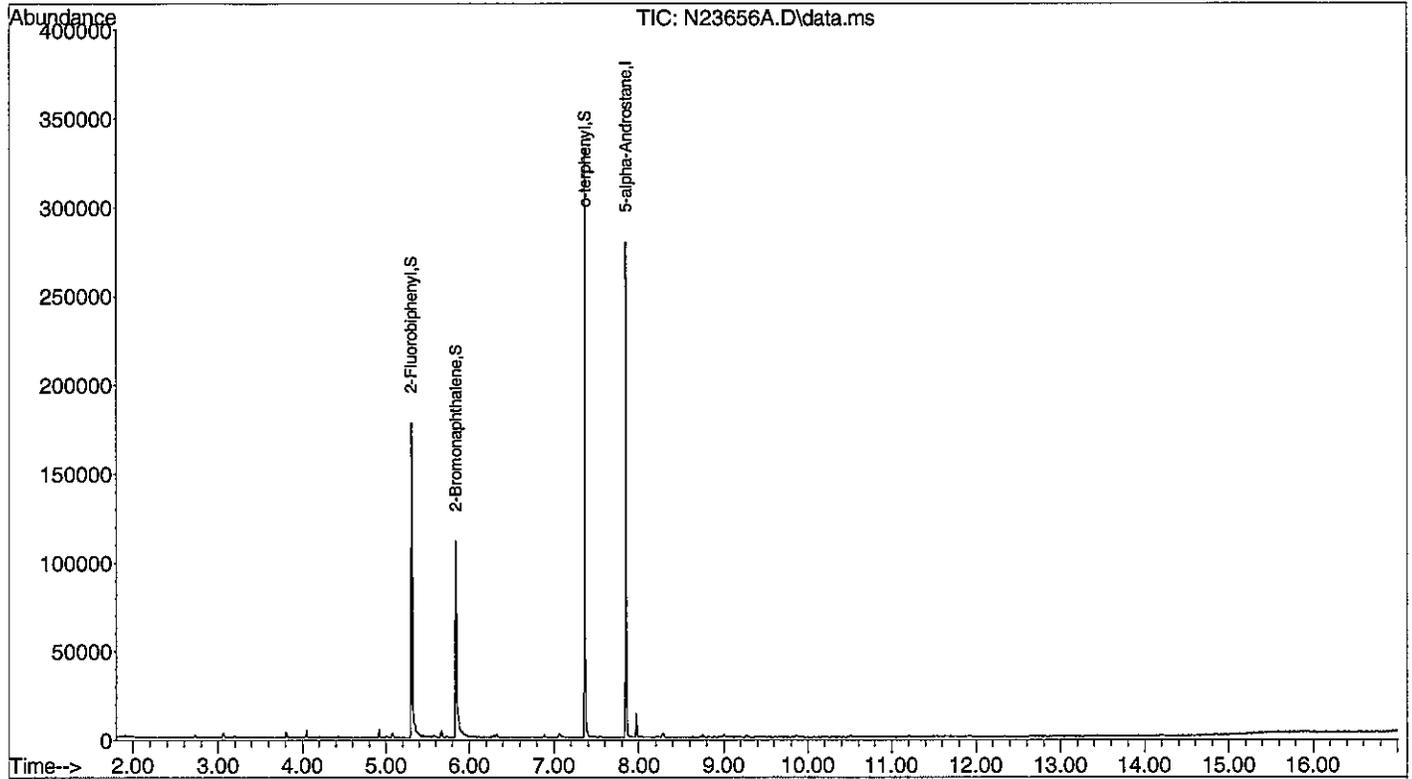
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3510C.

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\121112-N\
Data File : N23656A.D
Acq On : 11 Dec 2012 6:11 pm
Operator : MG/AR
Sample : 74440-11
Misc : ARO
ALS Vial : 18 Sample Multiplier: 1

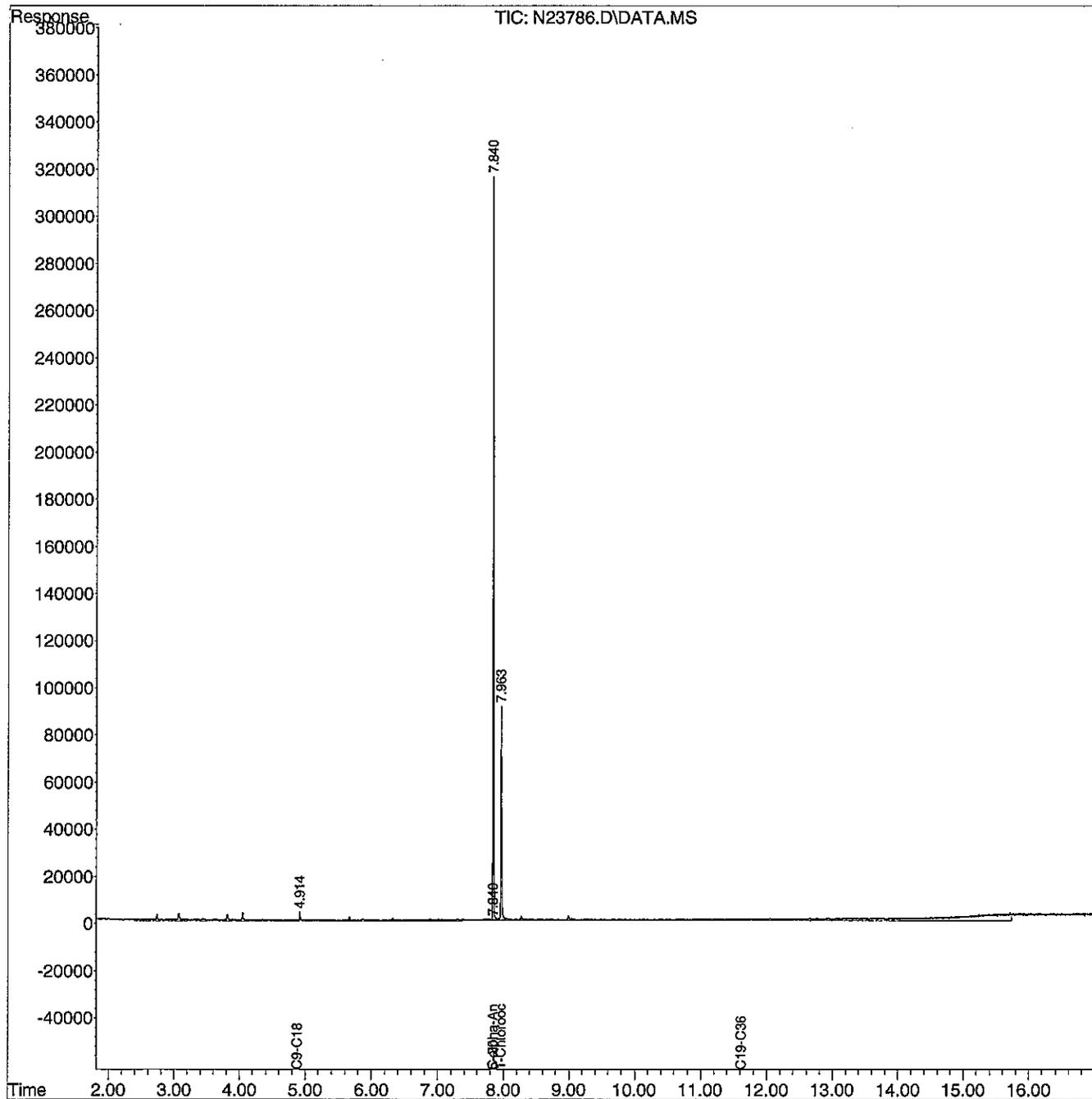
Quant Time: Dec 11 20:45:44 2012
Quant Method : C:\msdchem\1\METHODS\ARM112912N.M
Quant Title : EPH MS AROMATICS
QLast Update : Fri Nov 30 01:32:46 2012
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\121412-N\
Data File : N23786.D
Signal(s) : DATA.MS
Acq On : 15 Dec 2012 12:16 am
Operator : MG/AR
Sample : 74440-11
Misc :
ALS Vial : 31 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 15 10:58:35 2012
Quant Method : C:\msdchem\1\METHODS\ALG121412N.M
Quant Title : EPH GC ALIPHATICS
QLast Update : Fri Dec 14 20:19:33 2012
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



December 17, 2012

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 Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 74440-13
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Extraction Date: 12/07/12
Analysis Date: 12/11/12

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: MW-5

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)			48
Aromatic Surrogate % Recovery (O-Terphenyl)			103
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			88
#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

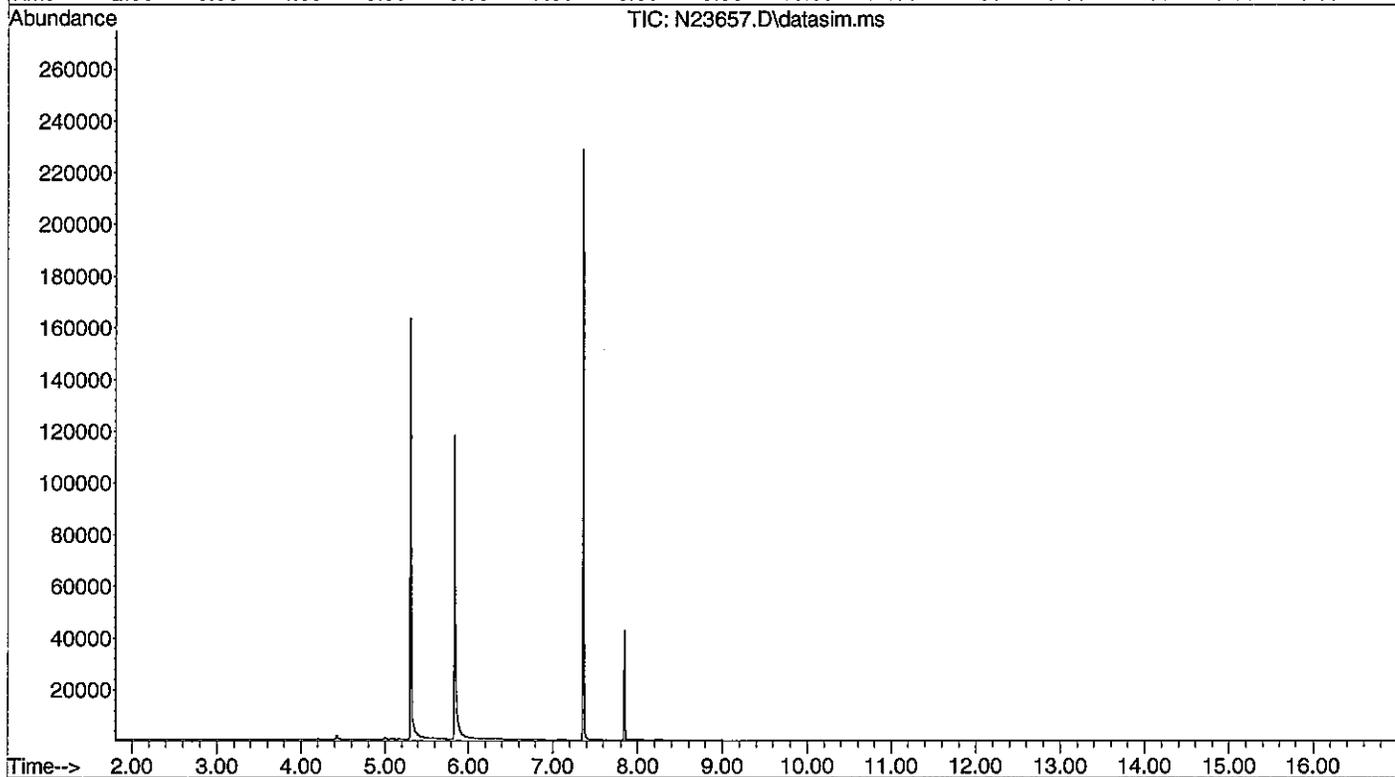
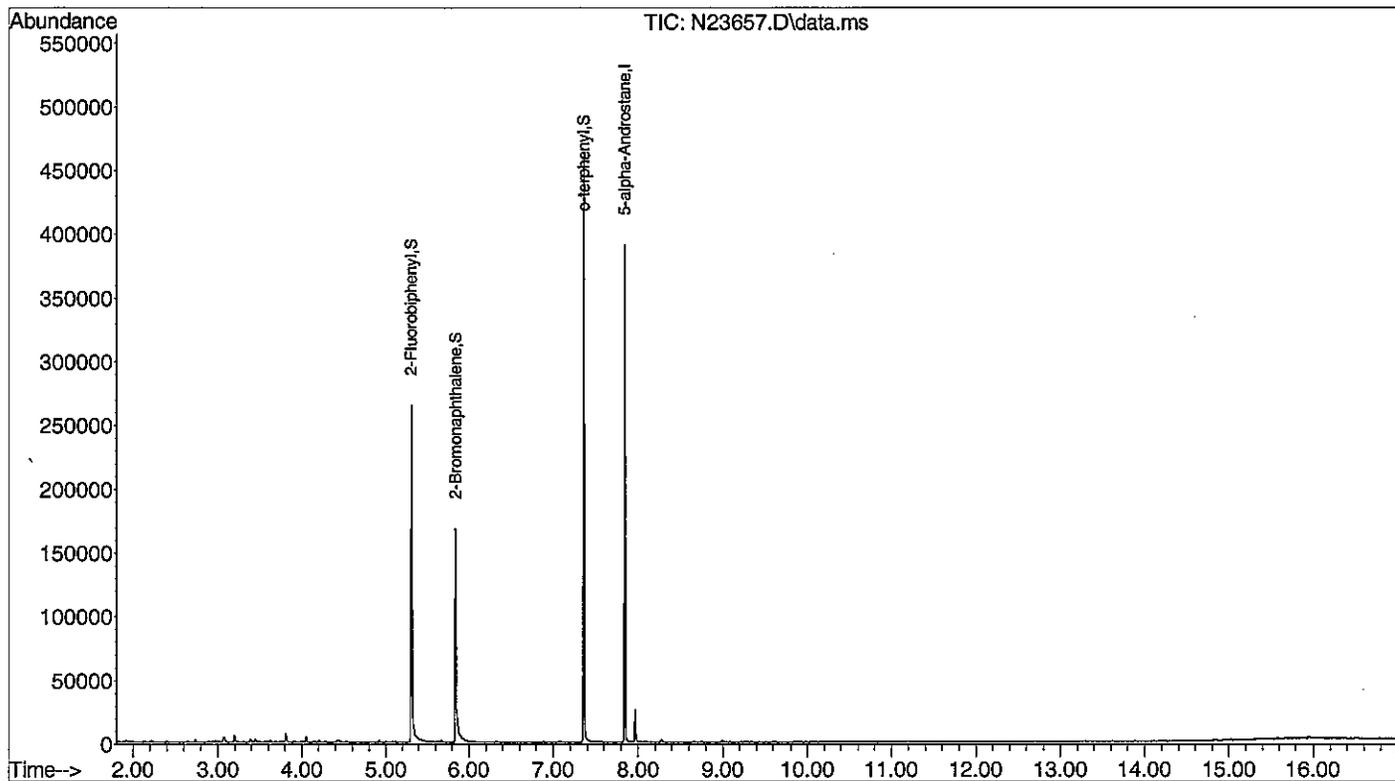
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3510C.

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\121112-N\
Data File : N23657.D
Acq On : 11 Dec 2012 6:32 pm
Operator : MG/AR
Sample : 74440-13
Misc : ARO
ALS Vial : 19 Sample Multiplier: 1

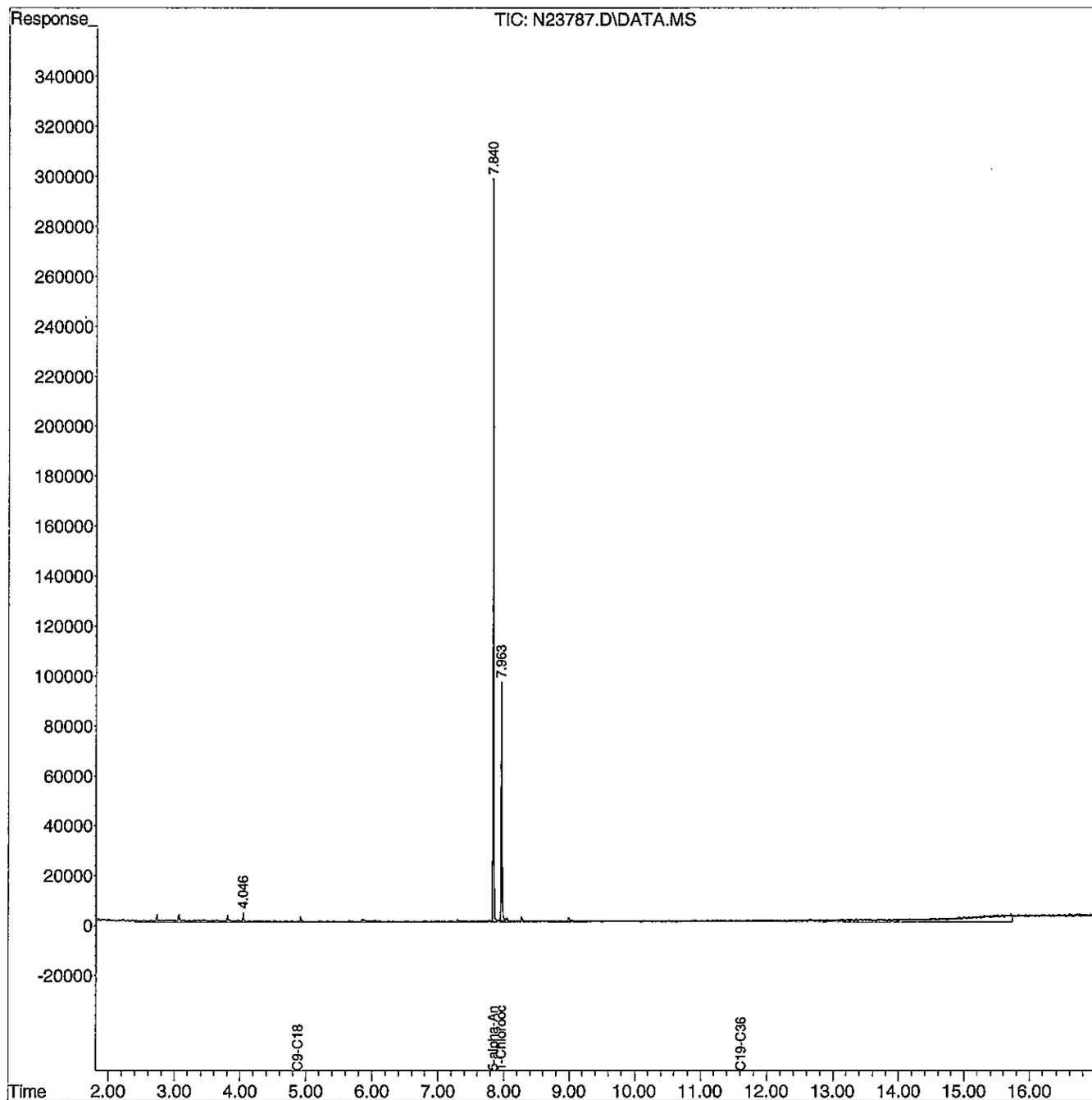
Quant Time: Dec 11 20:46:50 2012
Quant Method : C:\msdchem\1\METHODS\ARM112912N.M
Quant Title : EPH MS AROMATICS
QLast Update : Fri Nov 30 01:32:46 2012
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\121412-N\
Data File : N23787.D
Signal(s) : DATA.MS
Acq On : 15 Dec 2012 12:37 am
Operator : MG/AR
Sample : 74440-13
Misc :
ALS Vial : 32 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 15 10:58:46 2012
Quant Method : C:\msdchem\1\METHODS\ALG121412N.M
Quant Title : EPH GC ALIPHATICS
QLast Update : Fri Dec 14 20:19:33 2012
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



December 17, 2012

Mr. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: 74440-14
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Extraction Date: 12/07/12
Analysis Date: 12/11/12

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: MW-DUP

EPH ANALYTICAL RESULTS			
RANGE/TARGET ANALYTE	RL	Units	Result
Unadjusted C11-C22 Aromatics ¹	100	µg/L	268
Diesel PAH Analytes	Naphthalene	4 µg/L	9
	2-Methylnaphthalene	4 µg/L	U
	Phenanthrene	4 µg/L	U
	Acenaphthene	4 µg/L	U
Other Target PAH Analytes	Acenaphthylene	4 µg/L	U
	Fluorene	4 µg/L	U
	Anthracene	4 µg/L	U
	Fluoranthene	4 µg/L	U
	Pyrene	4 µg/L	U
	Benzoflanthracene	4 µg/L	U
	Chrysene	4 µg/L	U
	Benzofbfluoranthene	4 µg/L	U
	Benzoklfluoranthene	4 µg/L	U
	Benzofalpyrene	4 µg/L	U
	Indeno[1,2,3-cd]pyrene	4 µg/L	U
	Dibenzo[a,h]anthracene	4 µg/L	U
	Benzofg,h,i]perylene	4 µg/L	U
C9-C18 Aliphatic Hydrocarbons ¹	200	µg/L	1810
C19-C36 Aliphatic Hydrocarbons ¹	200	µg/L	U
C11-C22 Aromatic Hydrocarbons ^{1,2}	100	µg/L	259
Aliphatic Surrogate % Recovery (1-Chloro-octadecane)			41
Aromatic Surrogate % Recovery (O-Terphenyl)			69
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			74
#2 Fractionation Surrogate % Recovery (2-Bromonaphthalene)			75
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			

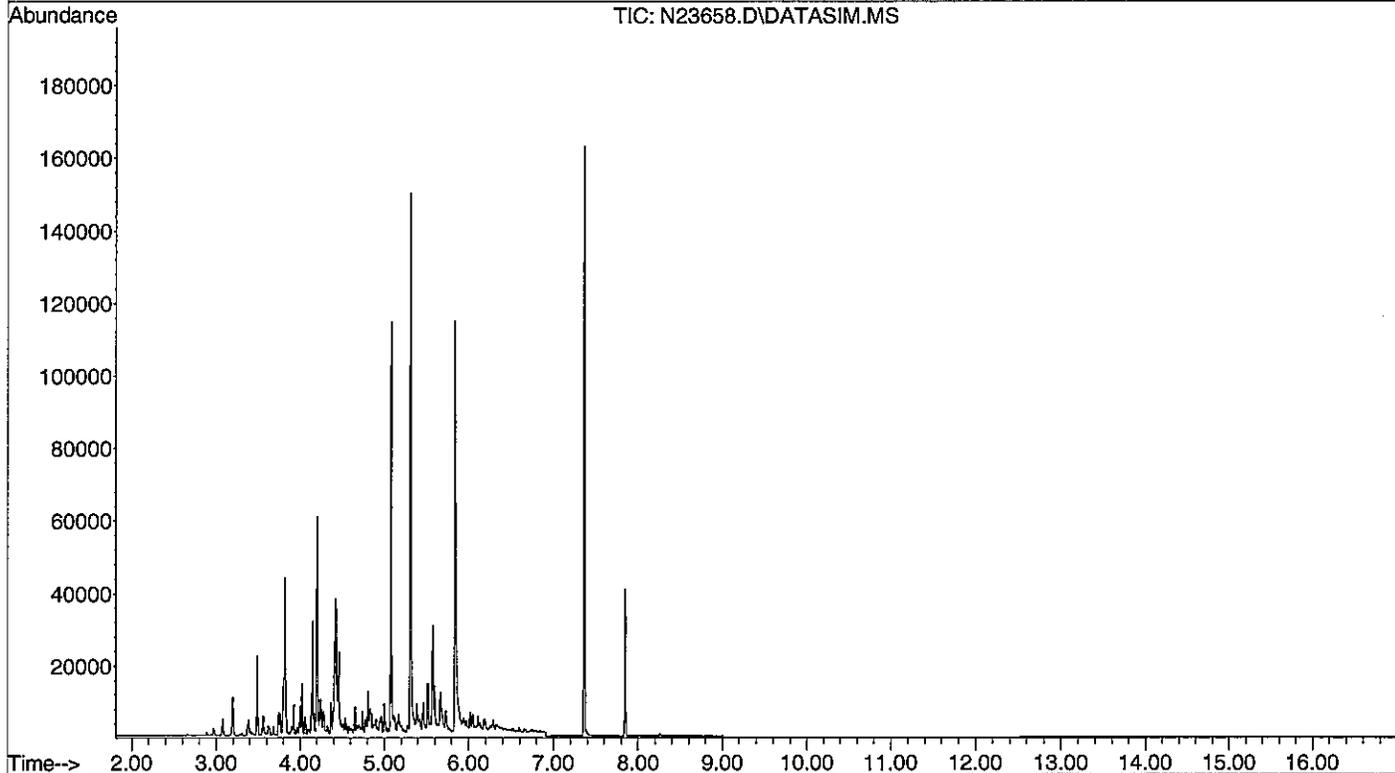
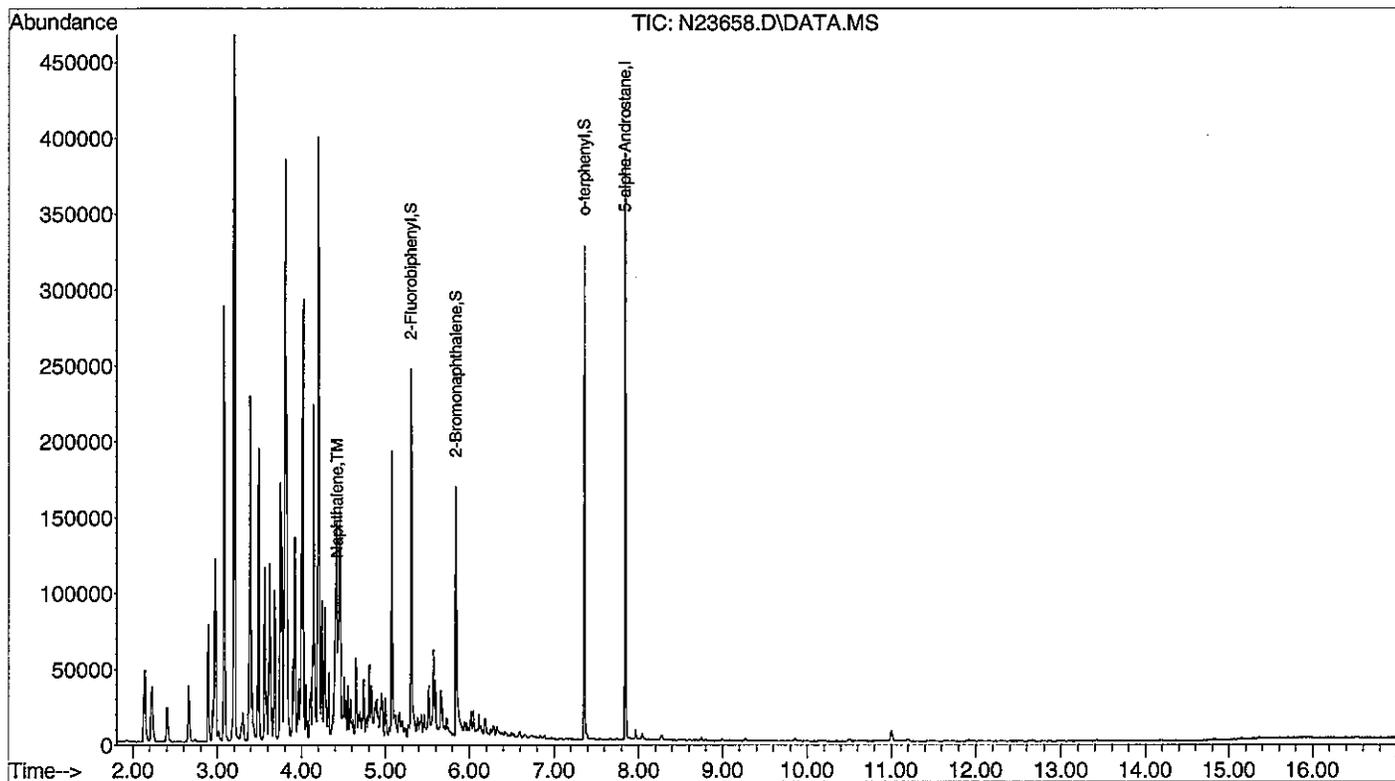
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3510C.

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\121112-N\
Data File : N23658.D
Acq On : 11 Dec 2012 6:52 pm
Operator : MG/AR
Sample : 74440-14
Misc : ARO
ALS Vial : 20 Sample Multiplier: 1

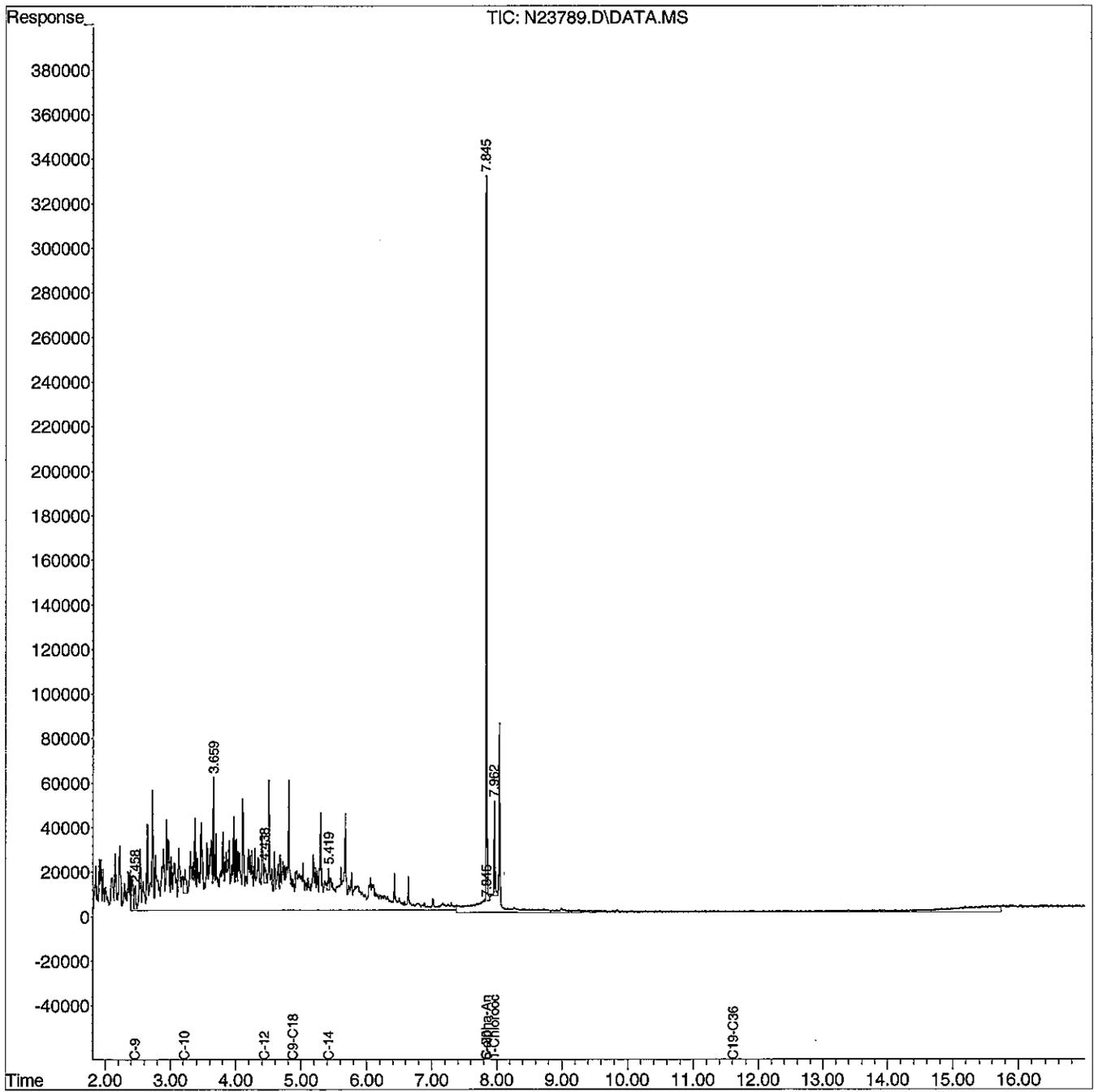
Quant Time: Dec 11 20:48:08 2012
Quant Method : C:\msdchem\1\METHODS\ARM112912N.M
Quant Title : EPH MS AROMATICS
QLast Update : Fri Nov 30 01:32:46 2012
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\121412-N\
 Data File : N23789.D
 Signal(s) : DATA.MS
 Acq On : 15 Dec 2012 1:17 am
 Operator : MG/AR
 Sample : 74440-14,,1:2
 Misc :
 ALS Vial : 34 Sample Multiplier: 1

Integration File: rteint.p
 Quant Time: Dec 15 10:59:53 2012
 Quant Method : C:\msdchem\1\METHODS\ALG121412N.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Fri Dec 14 20:19:33 2012
 Response via : Initial Calibration
 Integrator: RTE

Volume Inj. :
 Signal Phase :
 Signal Info :



EPH
QC FORMS

December 17, 2012

Mr. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: B120712EW RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date:
Lab Receipt Date:
Extraction Date: 12/07/12
Analysis Date: 12/11/12

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Client Sample ID: LabQC

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)			61
Aromatic Surrogate % Recovery (O-Terphenyl)			90
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			82
#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 3510C.

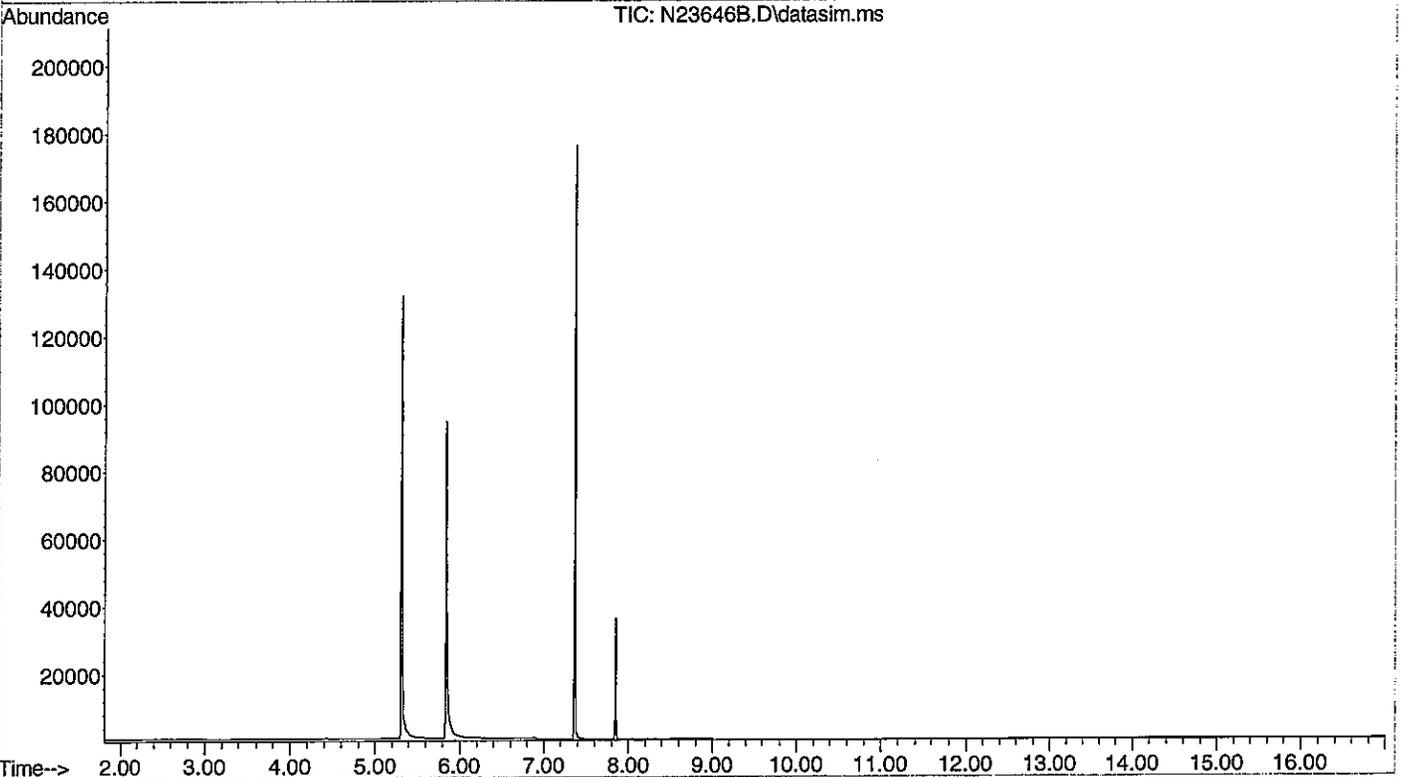
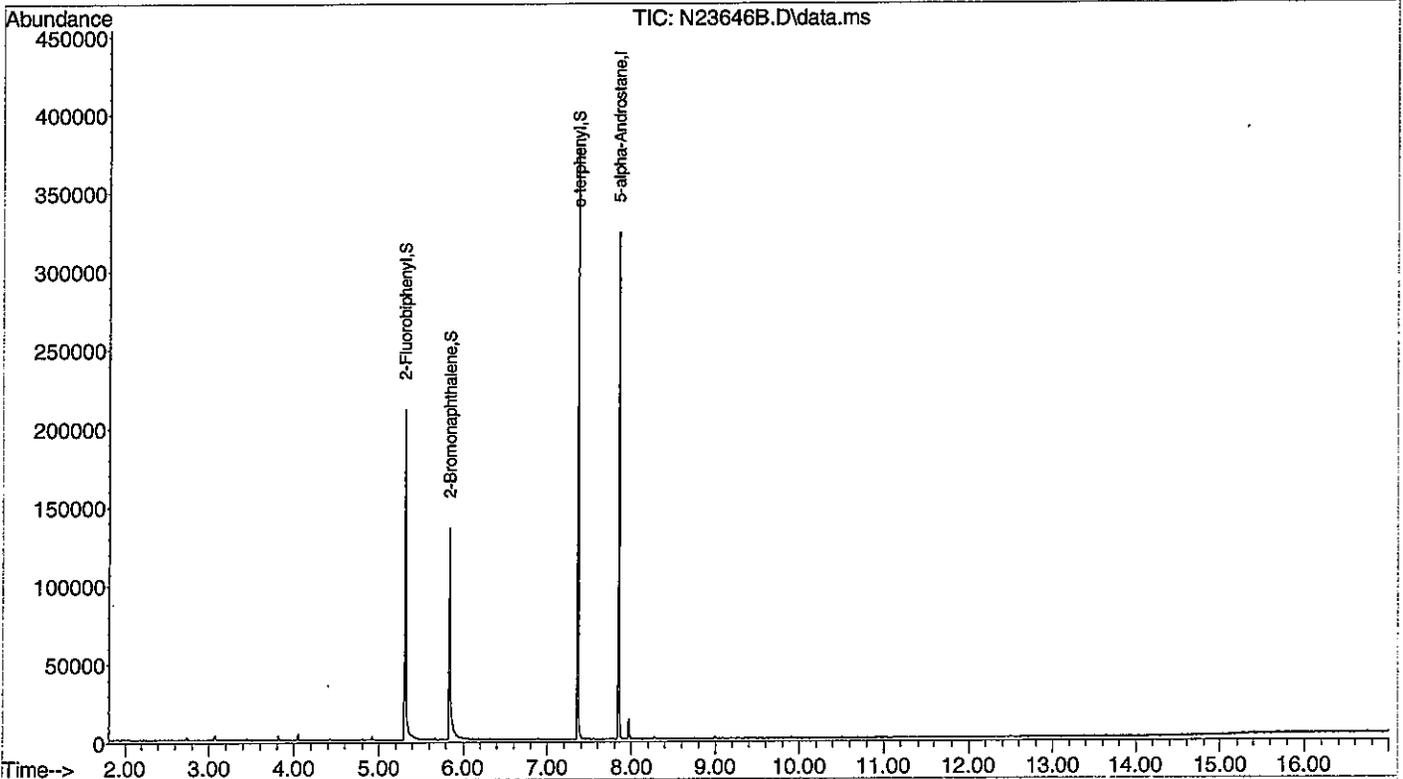
COMMENTS:EPH analyses utilized the use of a GC/MS system to detect and quantify ranges and target analytes. Samples were received in accordance with method criteria unless noted on the sample receipt checklist.

SIGNATURE: _____



Data Path : C:\msdchem\1\DATA\121112-N\
 Data File : N23646B.D
 Acq On : 11 Dec 2012 2:09 pm
 Operator : MG/AR
 Sample : B120712EW,RR
 Misc : ARO
 ALS Vial : 8 Sample Multiplier: 1

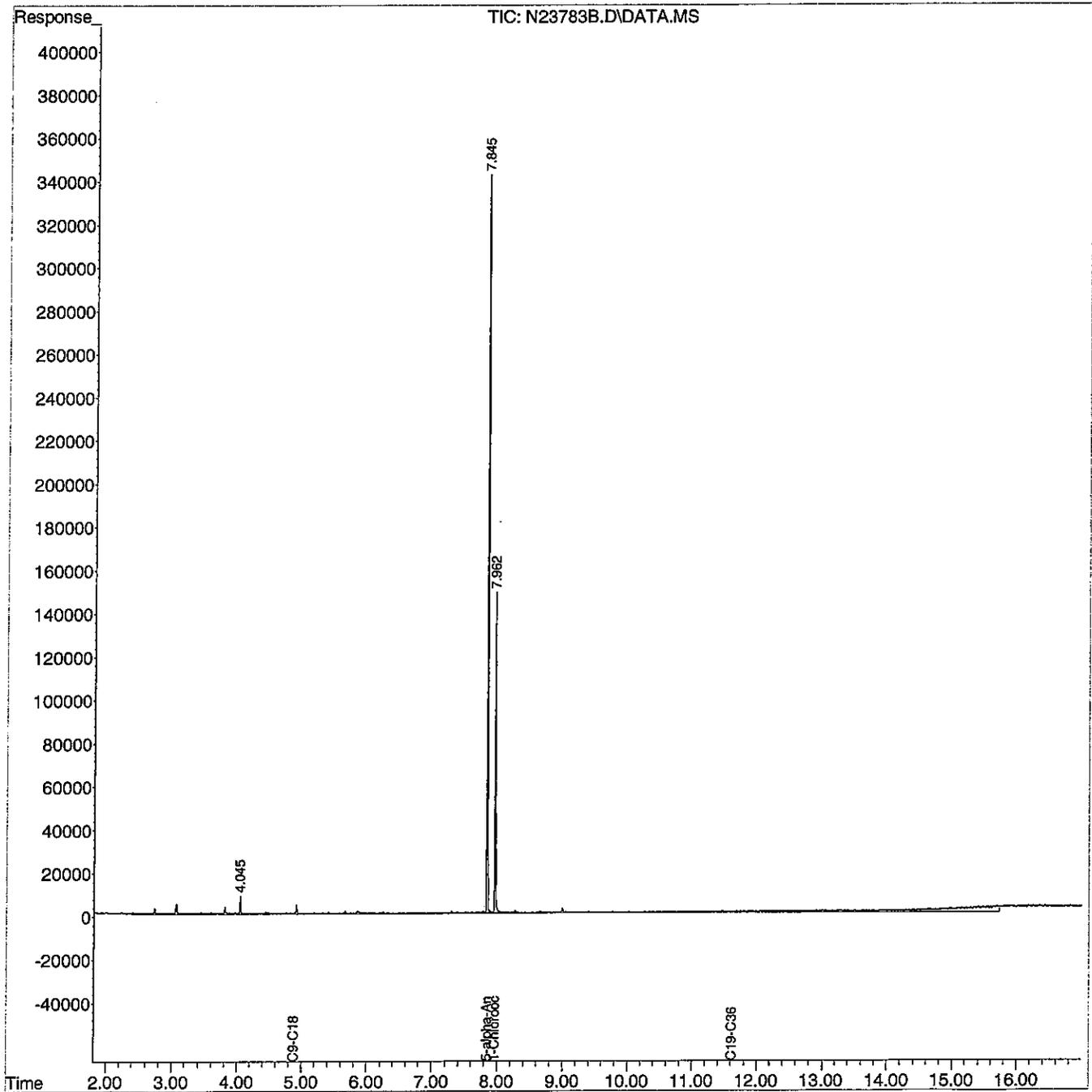
Quant Time: Dec 11 16:49:01 2012
 Quant Method : C:\msdchem\1\METHODS\ARM112912N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Fri Nov 30 01:32:46 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\121412-N\
 Data File : N23783B.D
 Signal(s) : DATA.MS
 Acq On : 14 Dec 2012 11:15 pm
 Operator : MG/AR
 Sample : B120712EW
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

Integration File: rteint.p
 Quant Time: Dec 15 10:58:01 2012
 Quant Method : C:\msdchem\1\METHODS\ALG121412N.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Fri Dec 14 20:19:33 2012
 Response via : Initial Calibration
 Integrator: RTE

Volume Inj. :
 Signal Phase :
 Signal Info :



December 20, 2012

Mr. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: B121312EW.RF
Matrix: Solid
Percent Solid: 100
Dilution Factor: 1.0
Collection Date:
Lab Receipt Date:
Extraction Date: 12/13/12
Analysis Date: 12/19/12

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
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
	Dibenz[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)			65
Aromatic Surrogate % Recovery (O-Terphenyl)			86
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			83
#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			

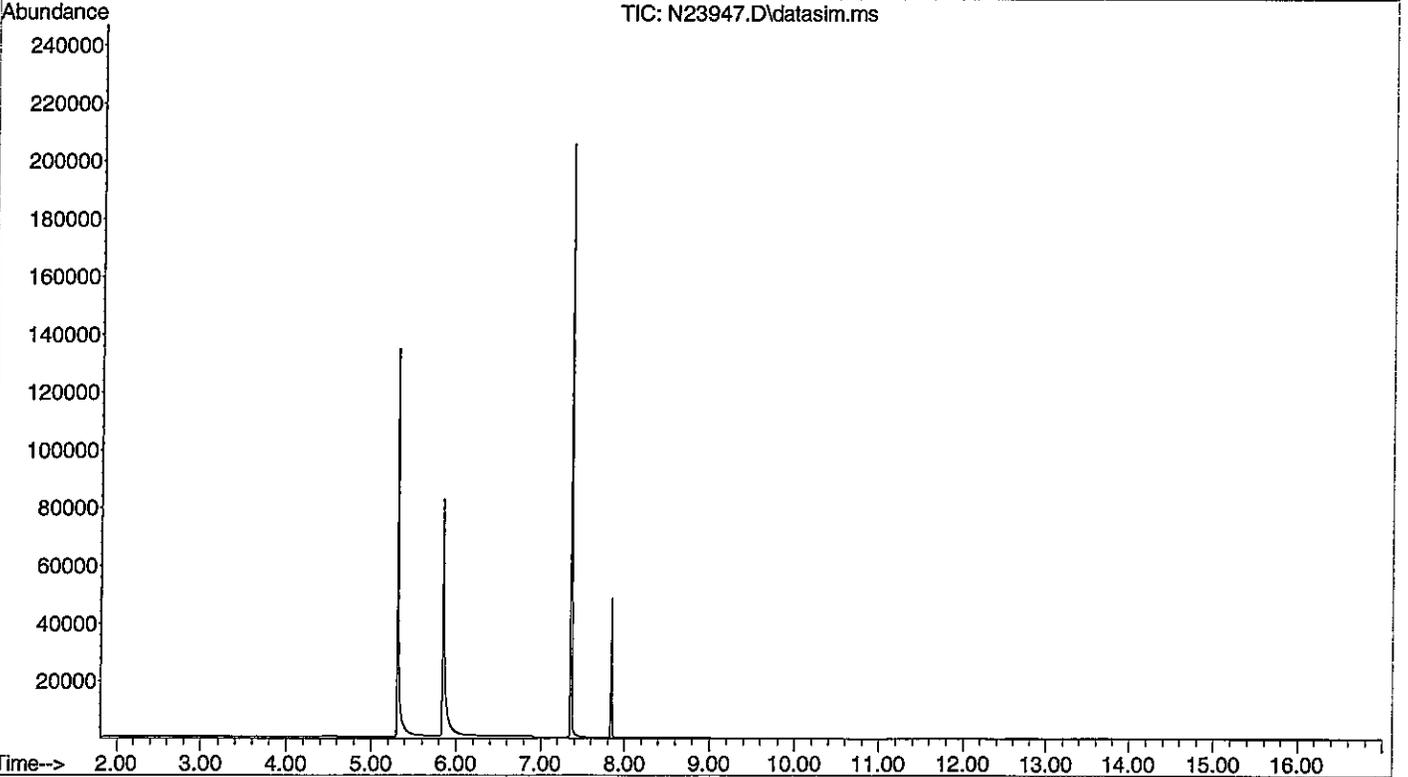
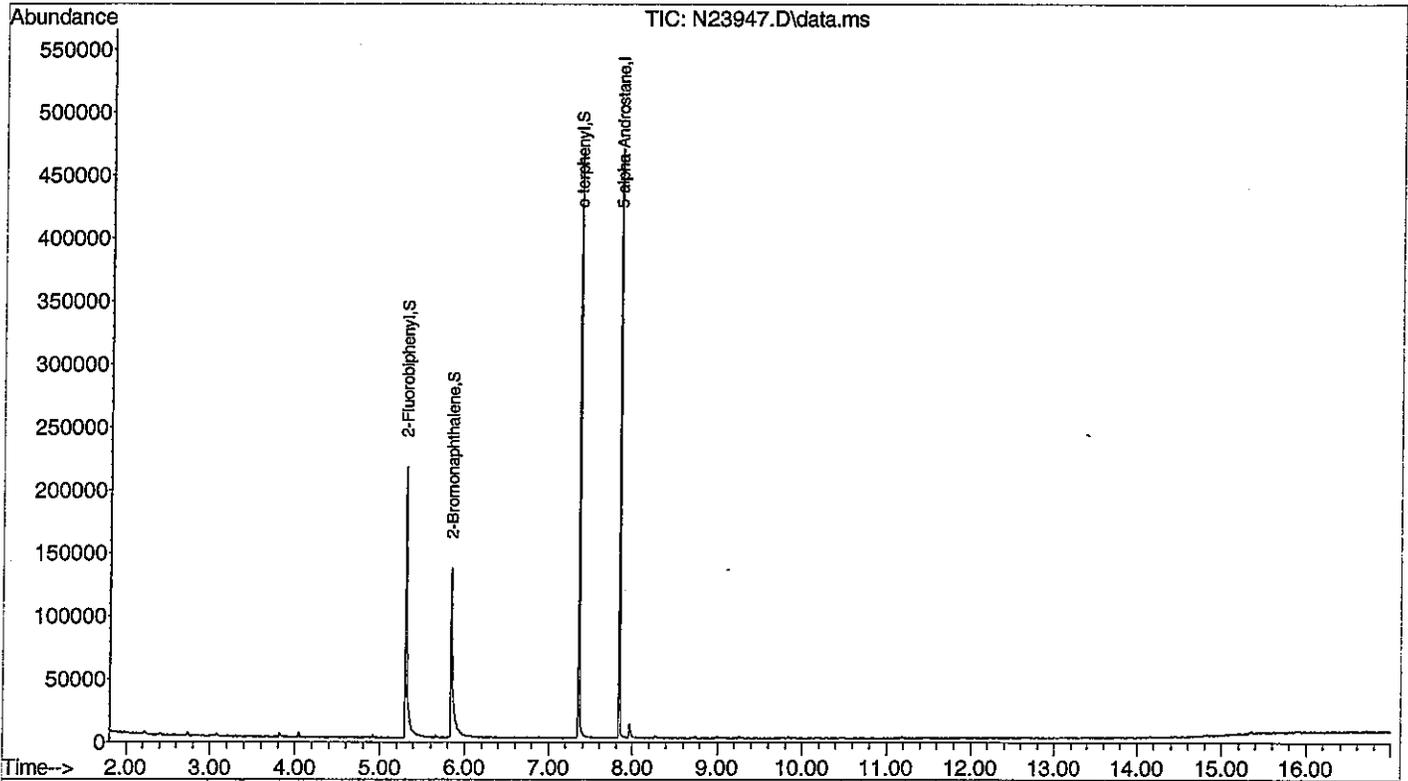
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004
Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

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\121912-N\
 Data File : N23947.D
 Acq On : 19 Dec 2012 3:59 pm
 Operator : MG
 Sample : B121312EW.RF
 Misc : ARO
 ALS Vial : 16 Sample Multiplier: 1

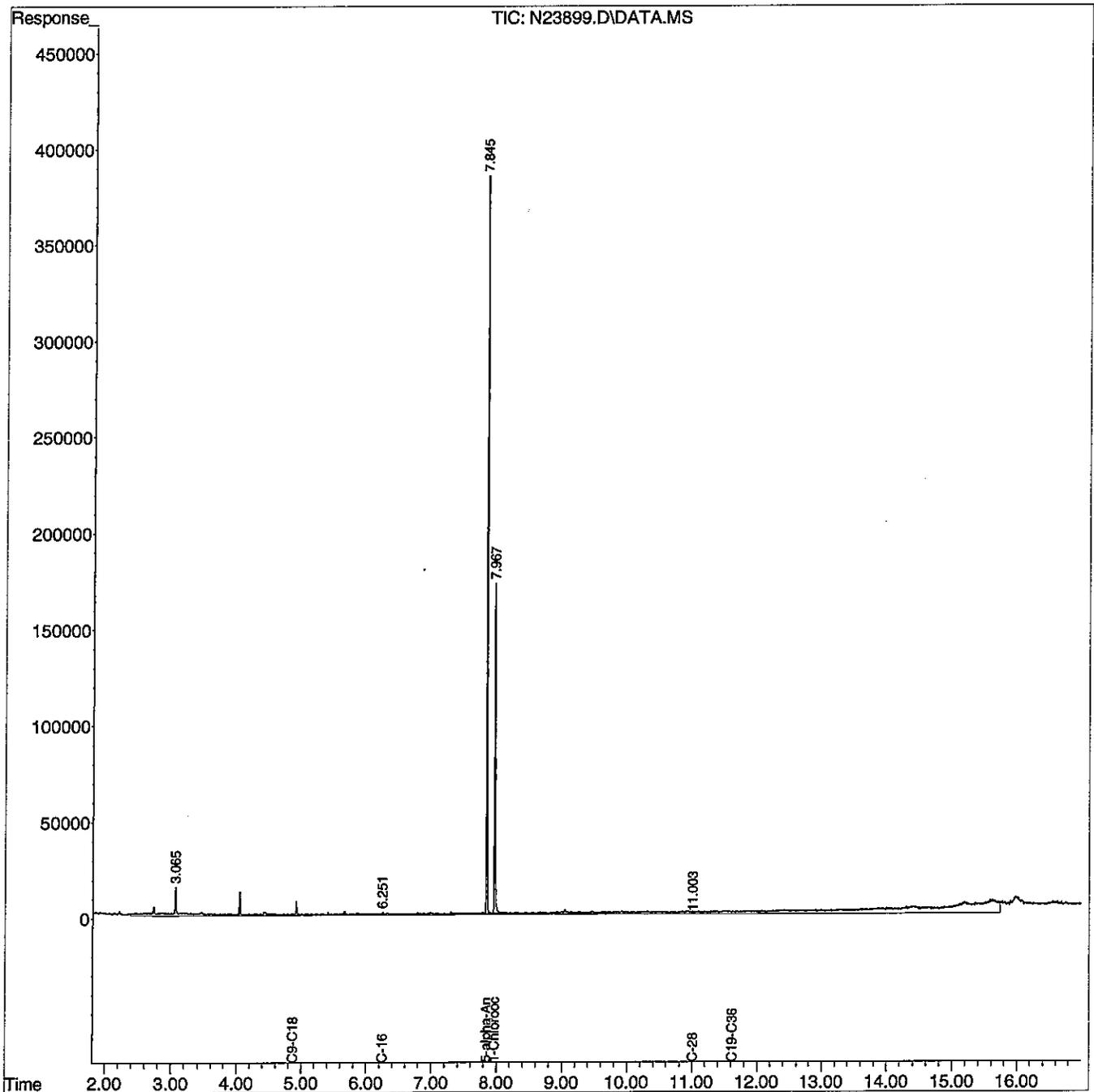
Quant Time: Dec 20 08:32:52 2012
 Quant Method : C:\msdchem\1\METHODS\ARM121912N.M
 Quant Title : EPH MS AROMATICS
 QLast Update : Wed Dec 19 15:12:26 2012
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\121812-N\
 Data File : N23899.D
 Signal(s) : DATA.MS
 Acq On : 18 Dec 2012 12:25 pm
 Operator : MG/MT
 Sample : B121312EW,RF
 Misc : ALI
 ALS Vial : 19 Sample Multiplier: 1

Integration File: rteint.p
 Quant Time: Dec 18 17:15:34 2012
 Quant Method : C:\msdchem\1\METHODS\ALG121712N.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Mon Dec 17 19:17:43 2012
 Response via : Initial Calibration
 Integrator: RTE

Volume Inj. :
 Signal Phase :
 Signal Info :



December 20, 2012

Mr. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

SAMPLE DATA

Lab Sample ID: B121312EASE RR
Matrix: Solid
Percent Solid: 100
Dilution Factor: 1.0
Collection Date:
Lab Receipt Date:
Extraction Date: 12/13/12
Analysis Date: 12/20/12

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
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
	Benzoflanthracene	267	µg/kg
	Chrysene	267	µg/kg
	Benzoflfluoranthene	267	µg/kg
	Benzoklfluoranthene	267	µg/kg
	Benzoflpyrene	267	µg/kg
	Indenof 1,2,3-cdipyrene	267	µg/kg
	Dibenzofa,hlanthracene	267	µg/kg
Benzofg,hilpervlene	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)			63
Aromatic Surrogate % Recovery (O-Terphenyl)			90
Sample Surrogate Acceptance Range	--	--	40-140%
#1 Fractionation Surrogate % Recovery (2-Fluorobiphenyl)			86
#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			

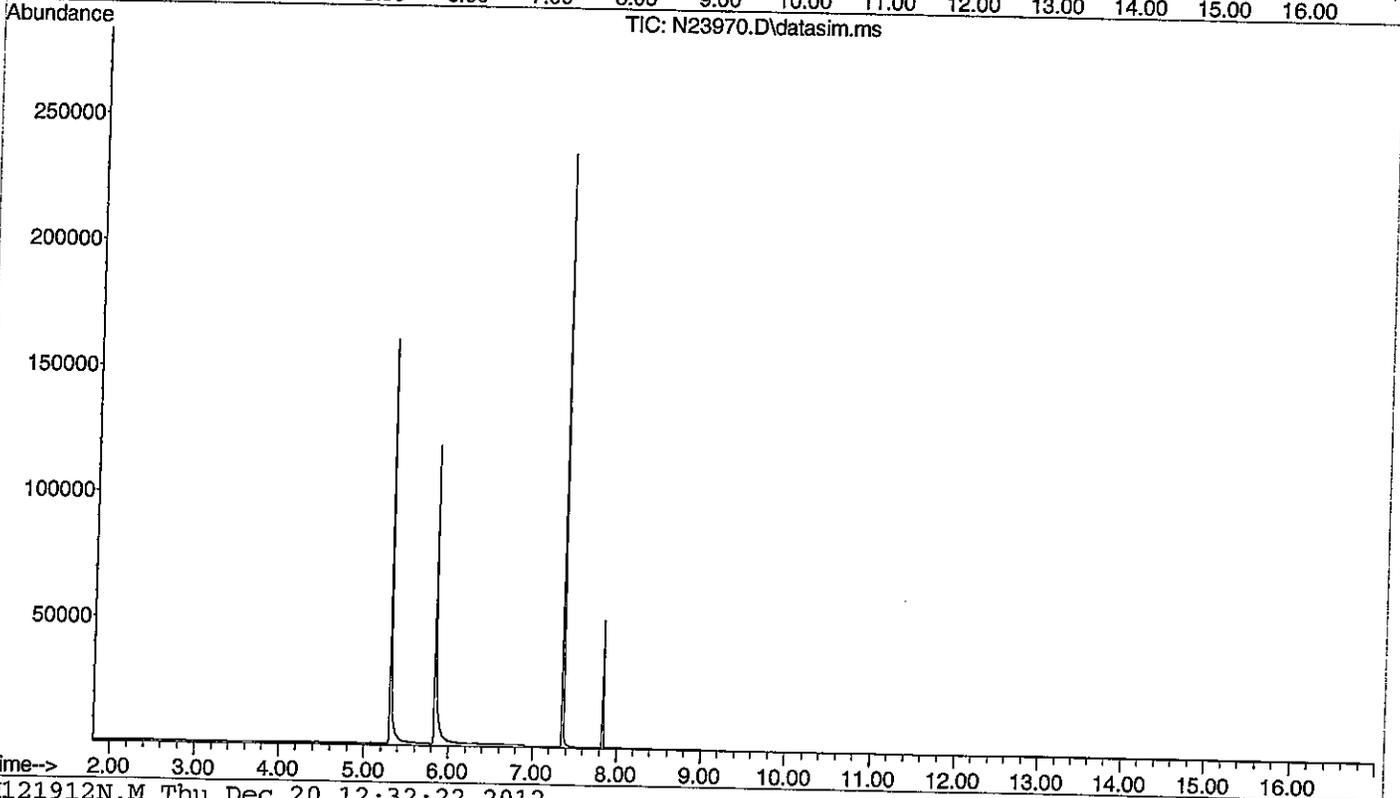
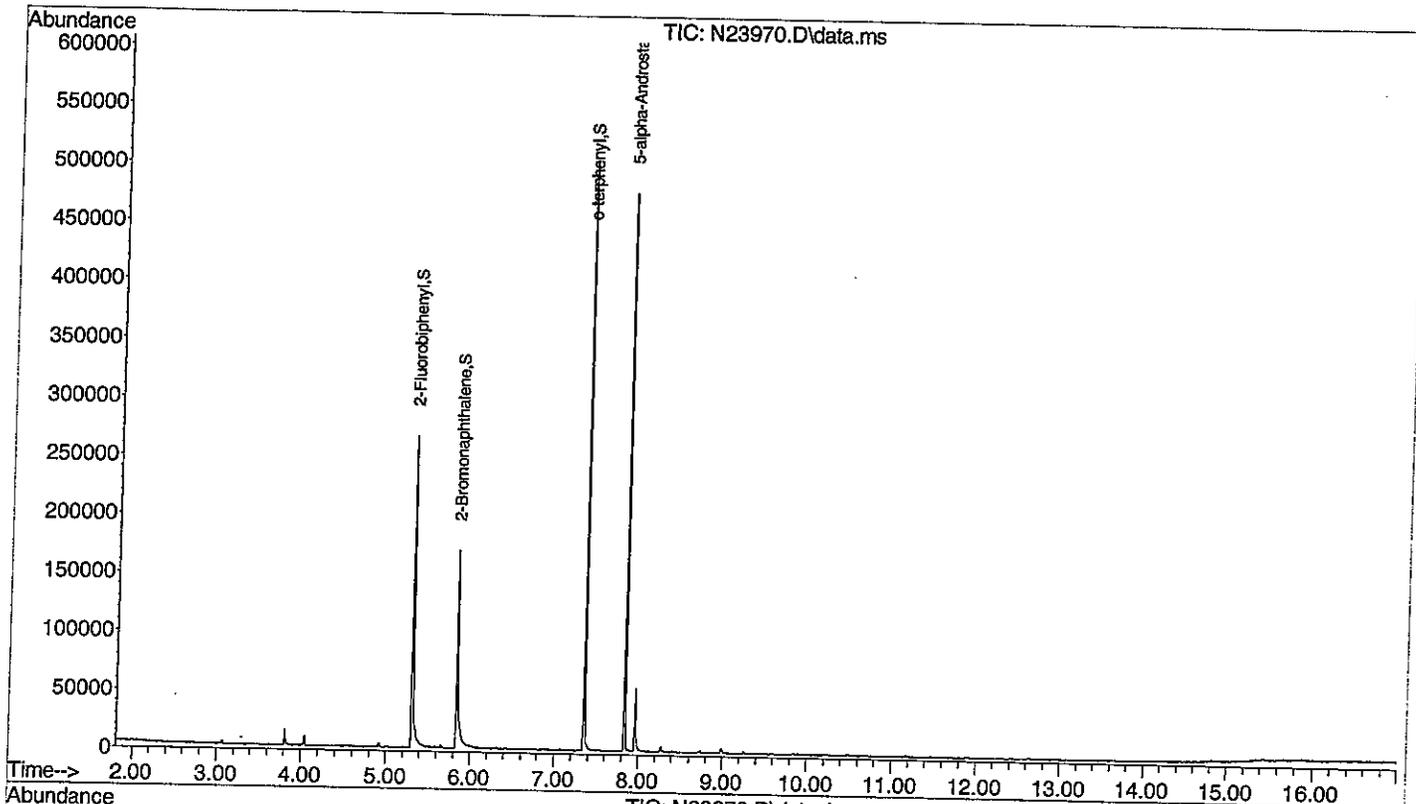
METHODOLOGY:MADEP Extractable Petroleum Hydrocarbons (EPH), ORS Division of Environmental Analysis, May 2004 Revision 1.1. Samples were extracted in accordance with SW-846 Method 3545

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\122012-N\
Data File : N23970.D
Acq On : 20 Dec 2012 11:09 am
Operator : MG
Sample : B121312EASE,RR
Misc : ARO
ALS Vial : 44 Sample Multiplier: 1

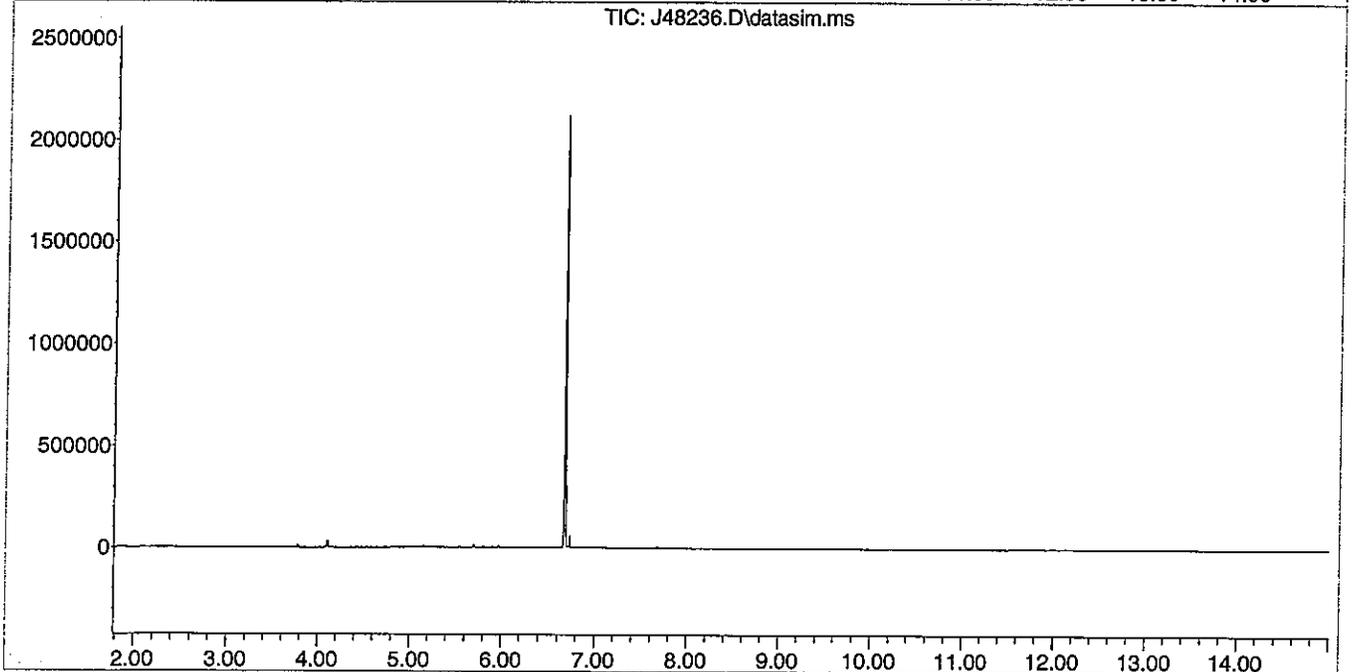
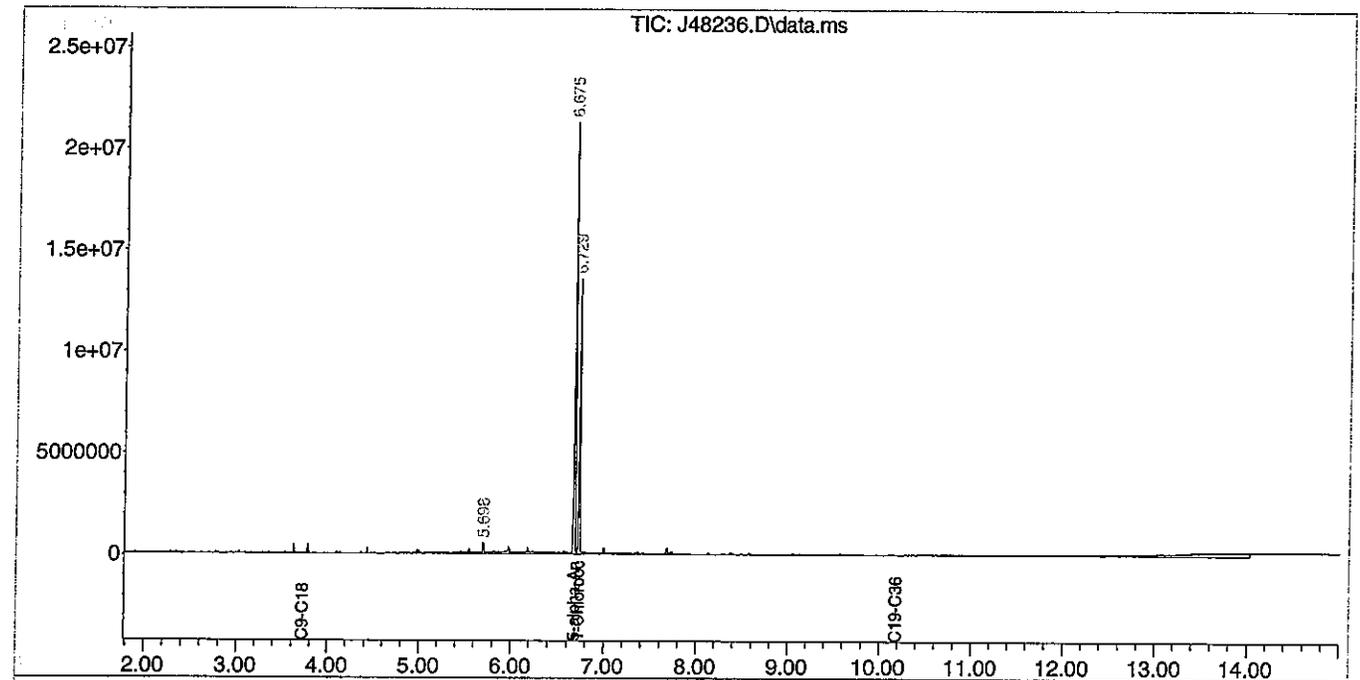
Quant Time: Dec 20 12:32:22 2012
Quant Method : C:\msdchem\1\METHODS\ARM121912N.M
Quant Title : EPH MS AROMATICS
QLast Update : Wed Dec 19 15:12:26 2012
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\121912-J\
 Data File : J48236.D
 Signal(s) : Signal #1: data.ms Signal #2: datasim.ms
 Acq On : 19 Dec 2012 4:07 pm
 Operator : MG
 Sample : b121312ease,rr
 Misc : SOIL
 ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 20 11:47:53 2012
 Quant Method : C:\msdchem\1\METHODS\ALG121712.M
 Quant Title : EPH GC ALIPHATICS
 QLast Update : Thu Dec 20 11:43:36 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: N
 GC Column: ZB-5ms
 Column ID: 0.25 mm

SDG:
 Non-spiked sample: B120712EW
 Spike: L120712EW
 Spike duplicate: LD120712EW

COMPOUND	SPIKE	LOWER	UPPER	RPD	NON-SPIKE	SPIKE	SPIKE	SPIKE DUP	SPIKE DUP		
	ADDED	LIMIT	LIMIT	LIMIT	RESULT (ug/L)	RESULT (ug/L)	% REC #	RESULT (ug/L)	% REC #	RPD	#
C-9	25	30	140	25	0.0	13	53	13	54		1
C-10	25	40	140	25	0.0	16	66	16	65		1
C-12	25	40	140	25	0.0	17	69	18	72		4
C-14	25	40	140	25	0.0	19	75	20	80		7
C-16	25	40	140	25	0.0	20	79	20	81		2
C-18	25	40	140	25	0.0	20	81	21	84		3
C-19	25	40	140	25	0.0	19	76	19	78		3
C-20	25	40	140	25	0.0	20	82	21	85		4
C-22	25	40	140	25	0.0	20	81	21	83		3
C-24	25	40	140	25	0.0	20	80	20	82		2
C-26	25	40	140	25	0.0	21	86	22	86		1
C-28	25	40	140	25	0.0	21	85	22	88		3
C-30	25	40	140	25	0.0	21	85	22	87		3
C-36	25	40	140	25	0.0	21	84	22	88		4
C9-C18 Aliphatics	150	40	140	25	0	106	71	109	73		3
C19-C36 Aliphatics	200	40	140	25	0	165	82	169	85		3

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
 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: B120712EW
 Spike: L120712EW
 Spike duplicate: LD120712EW

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	17	69		17	67		2	
2-Methylnaphthalene	25	40	140	20	0.0	17	70		17	70		0	
Acenaphthylene	25	40	140	20	0.0	18	70		18	73		4	
Acenaphthene	25	40	140	20	0.0	18	73		19	74		2	
Fluorene	25	40	140	20	0.0	19	76		19	78		2	
Phenanthrene	25	40	140	20	0.0	20	81		21	83		3	
Anthracene	25	40	140	20	0.0	20	78		21	83		6	
Fluoranthene	25	40	140	20	0.0	20	80		21	84		5	
Pyrene	25	40	140	20	0.0	20	79		21	83		5	
Benzo[a]anthracene	25	40	140	20	0.0	21	84		22	87		4	
Chrysene	25	40	140	20	0.0	20	81		22	86		6	
Benzo[b]fluoranthene	25	40	140	20	0.0	21	85		22	88		4	
Benzo[k]fluoranthene	25	40	140	20	0.0	21	84		22	87		4	
Benzo[a]pyrene	25	40	140	20	0.0	21	83		22	89		7	
Indeno [1,2,3-cd] pyrene	25	40	140	20	0.0	21	84		23	90		7	
Dibenz [a,h] anthracene	25	40	140	20	0.0	23	90		23	94		4	
Benzo(g,h,i) perylene	25	40	140	20	0.0	21	85		22	90		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 AROMATIC BREAKTHROUGH REPORT
OF ALIPHATIC LABORATORY CONTROL SAMPLE

Instrument ID: N

SDG:

GC Column: ZB-5ms

Aliphatic LCS: L120712EW

Column ID: 0.25 mm

Aromatic LCS: L120712EW

COMPOUND	LOWER LIMIT	UPPER LIMIT	ALIPHATIC RESULT (ug/mL)	AROMATIC RESULT (ug/mL)	% BREAKTHROUGH	#
Naphthalene	0	5	0.00	17.2	0.0	
2-Methylnaphthalene	0	5	0.00	17.5	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: LD120712EW
Aromatic LCS: LD120712EW

COMPOUND	LOWER LIMIT	UPPER LIMIT	ALIPHATIC RESULT (ug/mL)	AROMATIC RESULT (ug/mL)	% BREAKTHROUGH	#
Naphthalene	0	5	0.07	16.9	0.4	
2-Methylnaphthalene	0	5	0.00	17.4	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

2/2/22

Instrument ID: N
 GC Column: ZB-5ms
 Column ID: 0.25 mm

SDG:
 Non-spiked sample: B121312EASE
 Spike: L121312EASE
 Spike duplicate: LD121312EASE

COMPOUND	LCS SPIKE	LCD SPIKE	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/kg)	SPIKE RESULT (ug/kg)	SPIKE		SPIKE DUP		SPIKE DUP		RPD #
	ADDED (ug/kg)	ADDED (ug/kg)						% REC	#	RESULT (ug/kg)	% REC	#	RESULT (ug/kg)	
C-9	3333	3333	30	140	25	0	1604	48		1525	46		5	
C-10	3333	3333	40	140	25	0	1736	52		1837	55		6	
C-12	3333	3333	40	140	25	0	1907	57		1944	58		2	
C-14	3333	3333	40	140	25	0	2012	60		2275	68		12	
C-16	3333	3333	40	140	25	0	2077	62		2955	89		35	*
C-18	3333	3333	40	140	25	0	2395	72		2629	79		9	
C-19	3333	3333	40	140	25	0	2336	70		2444	73		5	
C-20	3333	3333	40	140	25	0	2844	85		2576	77		10	
C-22	3333	3333	40	140	25	0	2528	76		3044	91		19	
C-24	3333	3333	40	140	25	0	2803	84		2815	84		0	
C-26	3333	3333	40	140	25	0	2603	78		2229	67		15	
C-28	3333	3333	40	140	25	0	2355	71		2175	65		8	
C-30	3333	3333	40	140	25	0	2372	71		2124	64		11	
C-36	3333	3333	40	140	25	0	2352	71		2085	63		12	
<hr/>														
C9-C18 Aliphatics	20000	20000	40	140	25	0	11731	59		13165	66		12	
C19-C36 Aliphatics	26667	26667	40	140	25	0	20192	76		19492	73		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: _____

*WUT
12/18/22*

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: B121312EASE
 Spike: L121312EASE
 Spike duplicate: LD121312EASE

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	#	RPD	#
Naphthalene	3333	3333	40	140	30	0	1978	59		1915	57		3	
2-Methylnaphthalene	3333	3333	40	140	30	0	2182	65		2434	73		11	
Acenaphthylene	3333	3333	40	140	30	0	2604	78		2265	68		14	
Acenaphthene	3333	3333	40	140	30	0	2507	75		2330	70		7	
Fluorene	3333	3333	40	140	30	0	2594	78		2266	68		14	
Phenanthrene	3333	3333	40	140	30	0	2863	86		2575	77		11	
Anthracene	3333	3333	40	140	30	0	2573	77		2476	74		4	
Fluoranthene	3333	3333	40	140	30	0	2862	86		2522	76		13	
Pyrene	3333	3333	40	140	30	0	2751	83		2505	75		9	
Benzo[a]anthracene	3333	3333	40	140	30	0	2840	85		2573	77		10	
Chrysene	3333	3333	40	140	30	0	2824	85		2534	76		11	
Benzo[b] fluoranthene	3333	3333	40	140	30	0	2668	80		2488	75		7	
Benzo[k] fluoranthene	3333	3333	40	140	30	0	2545	76		2491	75		2	
Benzo[a] pyrene	3333	3333	40	140	30	0	2696	81		2525	76		7	
Indeno [1,2,3-cd] pyrene	3333	3333	40	140	30	0	2656	80		2450	73		8	
Dibenz [a,h] anthracene	3333	3333	40	140	30	0	2687	81		2471	74		8	
Benzo[g,h,i] perylene	3333	3333	40	140	30	0	2655	80		2383	71		11	

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
GC Column: ZB-5ms
Column ID: 0.25 mm

SDG:
Aliphatic LCS: L121312EASE
Aromatic LCS: L121312EASE

COMPOUND	LOWER	UPPER	ALIPHATIC	AROMATIC	%	
	LIMIT	LIMIT	RESULT (ug/mL)	RESULT (ug/mL)	BREAKTHROUGH	#
Naphthalene	0	5	0.00	14.8	0.0	
2-Methylnaphthalene	0	5	0.00	16.4	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 AROMATIC BREAKTHROUGH REPORT
OF ALIPHATIC LABORATORY CONTROL SAMPLE

Instrument ID: N
GC Column: ZB-5ms
Column ID: 0.25 mm

SDG:
Aliphatic LCS: LD121312EASE
Aromatic LCS: LD121312EASE

COMPOUND	LOWER	UPPER	ALIPHATIC	AROMATIC	% BREAKTHROUGH	
	LIMIT	LIMIT	RESULT (ug/mL)	RESULT (ug/mL)		#
Naphthalene	0	5	0.00	14.4	0.0	
2-Methylnaphthalene	0	5	0.00	18.3	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: N
GC Column: ZB-5ms
Column ID: 0.25 mm

SDG:
Non-spiked sample: 74440-7
Spike: 74440-7,MS
Spike duplicate: 74440-7,MSD

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	4100	4047	30	140	25	0.00	2224	54		2248	56		1	
C-10	4100	4047	40	140	25	0.00	2567	63		2634	65		3	
C-12	4100	4047	40	140	25	0.00	2977	73		2969	73		0	
C-14	4100	4047	40	140	25	0.00	3385	83		3296	81		3	
C-16	4100	4047	40	140	25	0.00	3061	75		3019	75		1	
C-18	4100	4047	40	140	25	0.00	3831	93		3827	95		0	
C-19	4100	4047	40	140	25	0.00	3354	82		3377	83		1	
C-20	4100	4047	40	140	25	0.00	3697	90		3704	92		0	
C-22	4100	4047	40	140	25	0.00	4027	98		4103	101		2	
C-24	4100	4047	40	140	25	0.00	4260	104		4516	112		6	
C-26	4100	4047	40	140	25	0.00	4150	101		4330	107		4	
C-28	4100	4047	40	140	25	0.00	3979	97		4159	103		4	
C-30	4100	4047	40	140	25	0.00	4401	107		4612	114		5	
C-36	4100	4047	40	140	25	0.00	4396	107		4377	108		0	
C9-C18 Aliphatics	24603	24281	40	140	25	0	18045	73		17992	74		0	
C19-C36 Aliphatics	32804	32374	40	140	25	0	32263	98		33177	102		3	

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 MATRIX SPIKE/MATRIX SPIKE DUPLICATE
PERCENT RECOVERY

Instrument ID: J
GC Column: ZB-5ms
Column ID: 0.25 mm

SDG:
Non-spiked sample: 74440-7
Spike: 74440-7,MS
Spike duplicate: 74440-7,MSD

COMPOUND	MS SPIKE ADDED (ug/kg)	MSD 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	#
Naphthalene	4100	4047	40	140	50	0	2596	63		2455	61		6	
2-Methylnaphthalene	4100	4047	40	140	50	0	2621	64		2609	64		0	
Acenaphthylene	4100	4047	40	140	50	0	2906	71		2814	70		3	
Acenaphthene	4100	4047	40	140	50	0	2884	70		2903	72		1	
Fluorene	4100	4047	40	140	50	0	3050	74		2968	73		3	
Phenanthrene	4100	4047	40	140	50	250	3405	77		3466	79		2	
Anthracene	4100	4047	40	140	50	0	3049	74		3061	76		0	
Fluoranthene	4100	4047	40	140	50	373	3418	74		3557	79		4	
Pyrene	4100	4047	40	140	50	353	3396	74		3559	79		5	
Benzo[a]anthracene	4100	4047	40	140	50	200	3575	82		3603	84		1	
Chrysene	4100	4047	40	140	50	201	3336	76		3303	77		1	
Benzo[b]fluoranthene	4100	4047	40	140	50	260	3718	84		3665	84		1	
Benzo[k]fluoranthene	4100	4047	40	140	50	139	3396	79		3432	81		1	
Benzo[a]pyrene	4100	4047	40	140	50	198	3634	84		3548	83		2	
Indeno [1,2,3-cd] pyrene	4100	4047	40	140	50	0	3600	88		3529	87		2	
Dibenz [a,h] anthracene	4100	4047	40	140	50	0	3453	84		3362	83		3	
Benzo(g,h,i) perylene	4100	4047	40	140	50	0	3546	86		3525	87		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: _____

PCB
DATA SUMMARIES

Mr. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

December 12, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: SB-2-S3

Lab Sample ID: 74440-2
Matrix: Solid
Percent Solid: 89
Dilution Factor: 1.1
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Extraction Date: 12/10/12
Analysis Date: 12/11/12

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
Surrogate Standard Recovery		
2,4,5,6-Tetrachloro-m-xylene	80	%
Decachlorobiphenyl	80	%
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 8082A.
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.

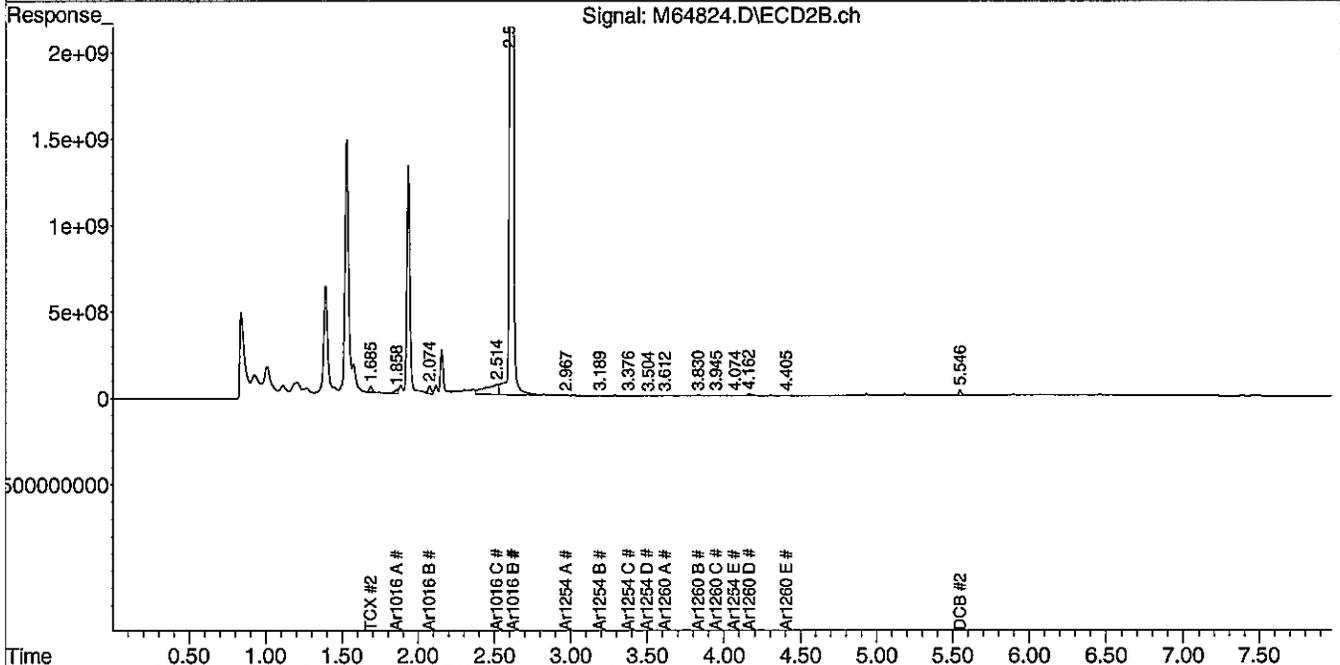
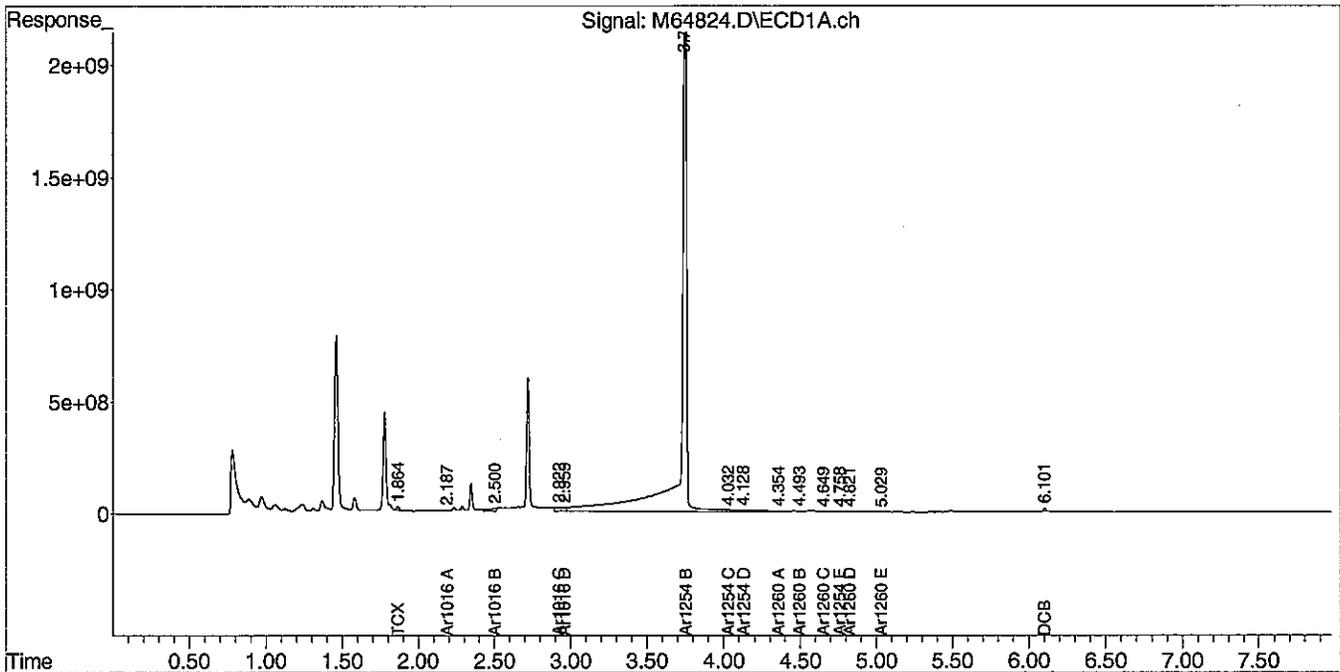
COMMENTS: Results are expressed on a dry weight basis.



Data Path : C:\msdchem\1\DATA\121112-M\
 Data File : M64824.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Dec 2012 1:17 pm
 Operator : JK
 Sample : 74440-2,,A/C
 Misc : SOIL
 ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: events.e
 Integration File signal 2: events2.e
 Quant Time: Dec 12 10:13:15 2012
 Quant Method : C:\msdchem\1\METHODS\PCB101812.M
 Quant Title : SW-846 METHOD 8082 Aroclor 1016/1260/1254
 QLast Update : Thu Dec 06 14:17:53 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. Erik Phenix
 Ransom Consulting, Inc.
 400 Commercial Street Suite 404
 Portland, ME 04101

December 12, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: SB-3-S3

Lab Sample ID: 74440-3
Matrix: Solid
Percent Solid: 88
Dilution Factor: 1.1
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Extraction Date: 12/10/12
Analysis Date: 12/11/12

PCB ANALYTICAL RESULTS			
COMPOUND	Quantitation Limit µg/kg		Results µg/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
Surrogate Standard Recovery			
	2,4,5,6-Tetrachloro-m-xylene	67	%
	Decachlorobiphenyl	63	%
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 8082A.
 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.

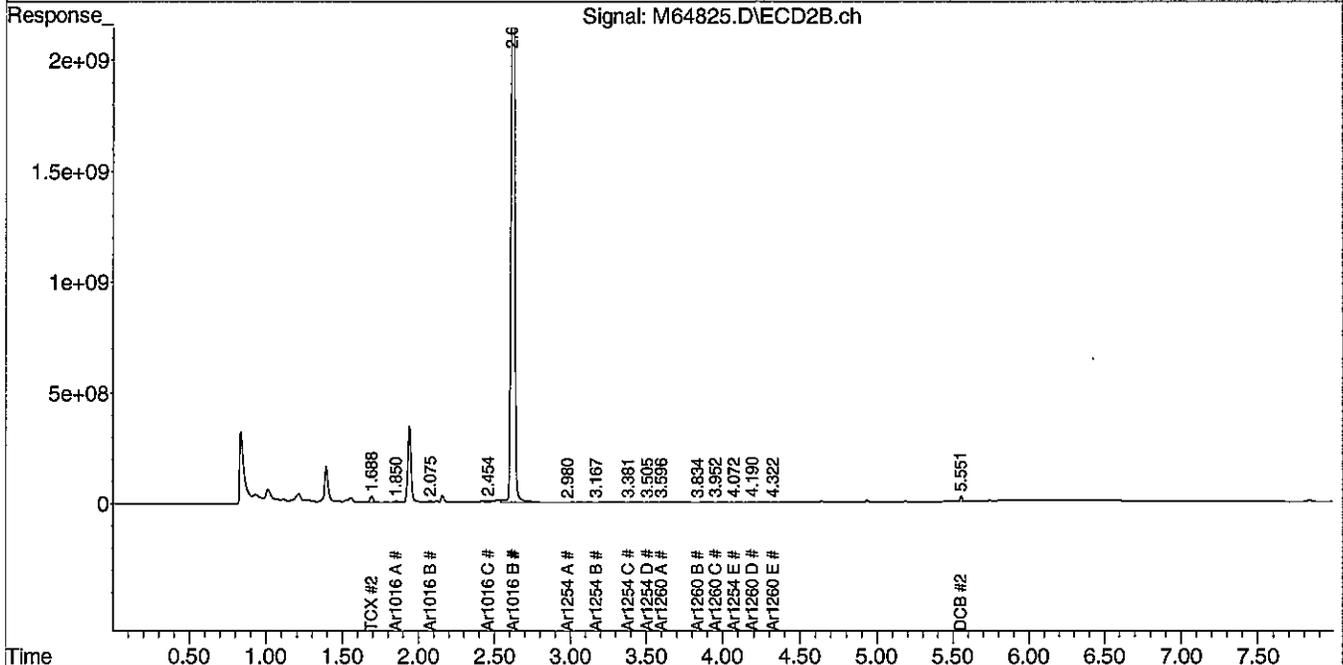
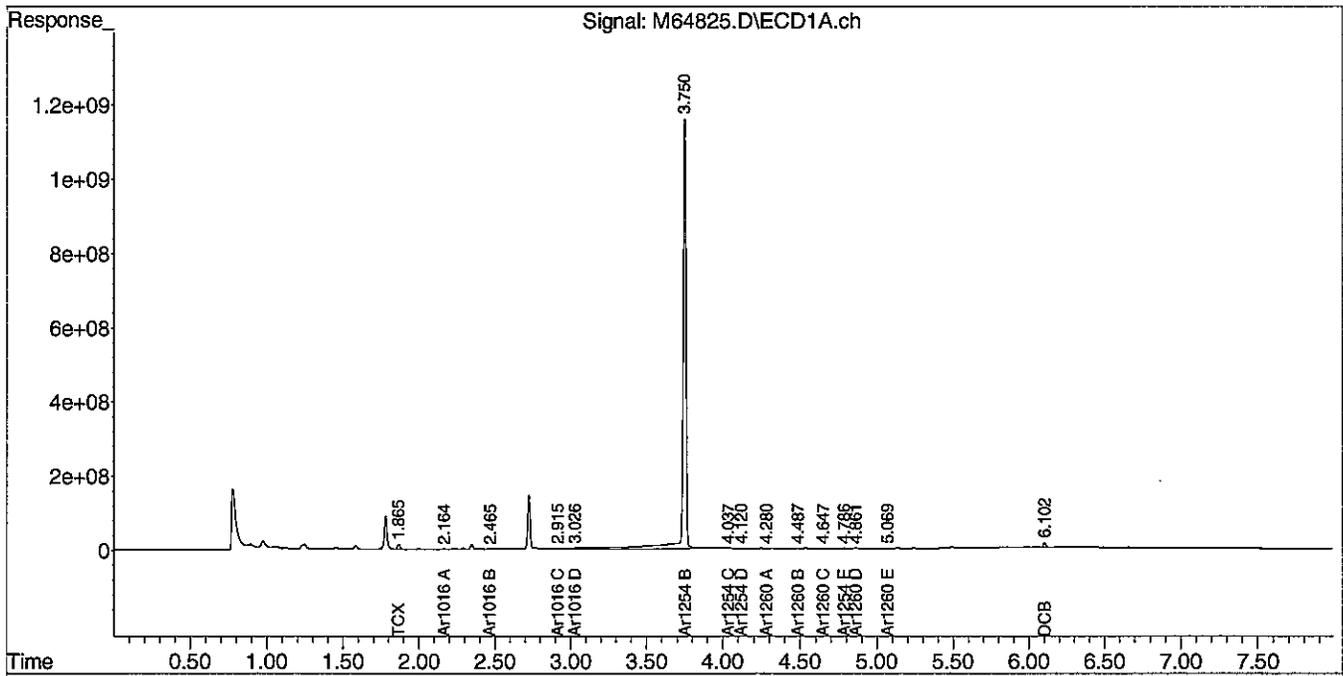
COMMENTS: Results are expressed on a dry weight basis.

Authorized signature 

Data Path : C:\msdchem\1\DATA\121112-M\
 Data File : M64825.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Dec 2012 1:27 pm
 Operator : JK
 Sample : 74440-3,,A/C
 Misc : SOIL
 ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: events.e
 Integration File signal 2: events2.e
 Quant Time: Dec 12 10:13:17 2012
 Quant Method : C:\msdchem\1\METHODS\PCB101812.M
 Quant Title : SW-846 METHOD 8082 Aroclor 1016/1260/1254
 QLast Update : Thu Dec 06 14:17:53 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. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

December 12, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast

Project Number: 111.06134.026

Field Sample ID: SB-4-S3

Lab Sample ID: 74440-4

Matrix: Solid

Percent Solid: 94

Dilution Factor: 1.0

Collection Date: 12/05/12

Lab Receipt Date: 12/06/12

Extraction Date: 12/10/12

Analysis Date: 12/11/12

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	75	%
	Decachlorobiphenyl	85	%
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 8082A.
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.

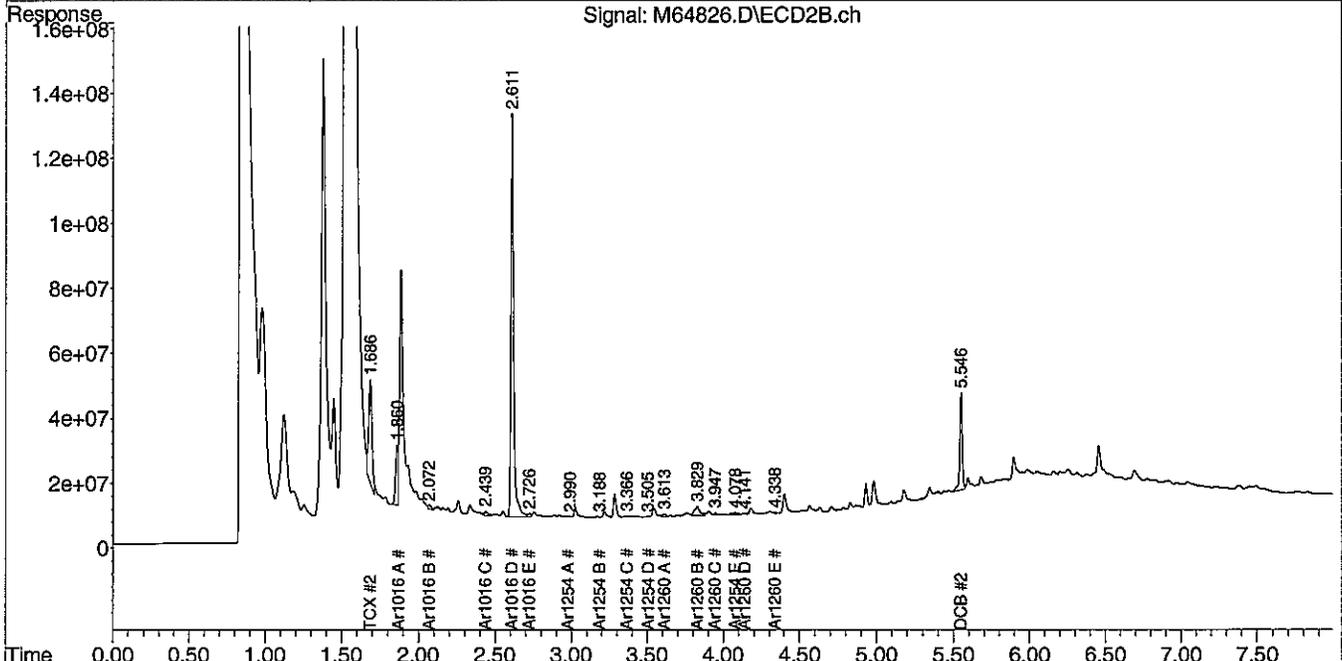
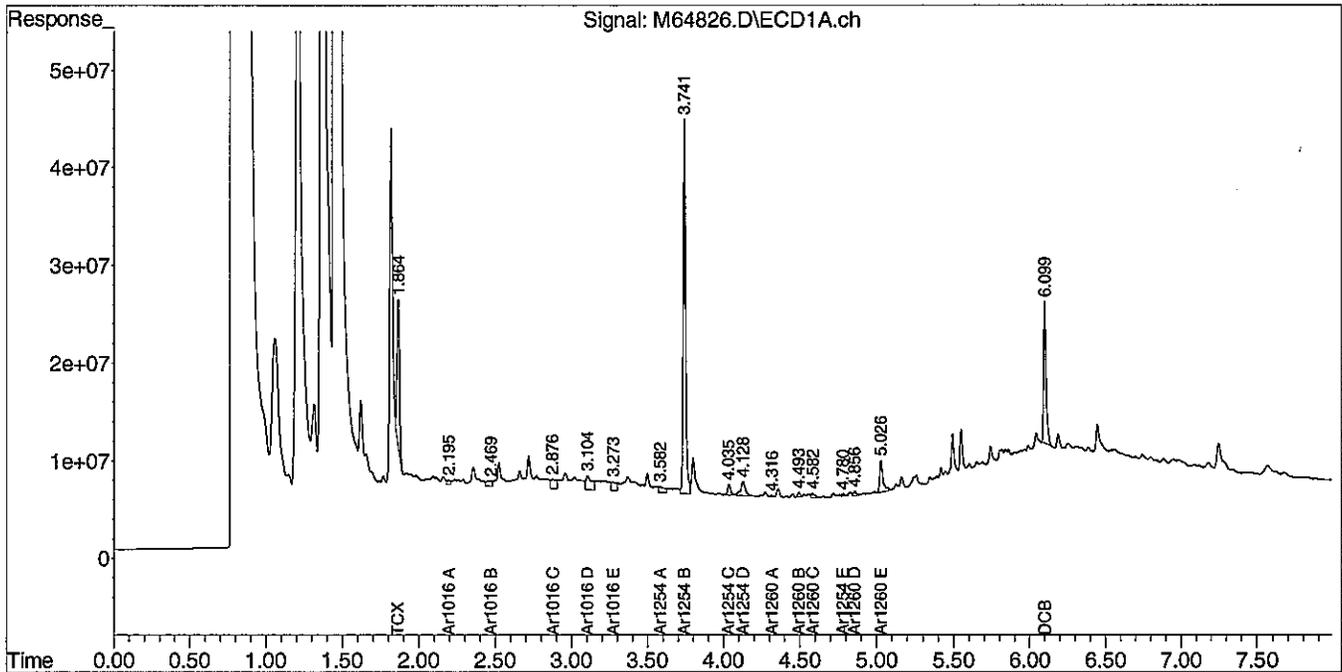
COMMENTS: Results are expressed on a dry weight basis.



Data Path : C:\msdchem\1\DATA\121112-M\
 Data File : M64826.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Dec 2012 1:37 pm
 Operator : JK
 Sample : 74440-4,,A/C
 Misc : SOIL
 ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: events.e
 Integration File signal 2: events2.e
 Quant Time: Dec 12 10:15:43 2012
 Quant Method : C:\msdchem\1\METHODS\PCB101812.M
 Quant Title : SW-846 METHOD 8082 Aroclor 1016/1260/1254
 QLast Update : Thu Dec 06 14:17:53 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. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

December 12, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: SB-DUP

Lab Sample ID: 74440-6
Matrix: Solid
Percent Solid: 88
Dilution Factor: 1.1
Collection Date: 12/05/12
Lab Receipt Date: 12/06/12
Extraction Date: 12/10/12
Analysis Date: 12/11/12

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
Surrogate Standard Recovery		
2,4,5,6-Tetrachloro-m-xylene	61	%
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 8082A.
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.

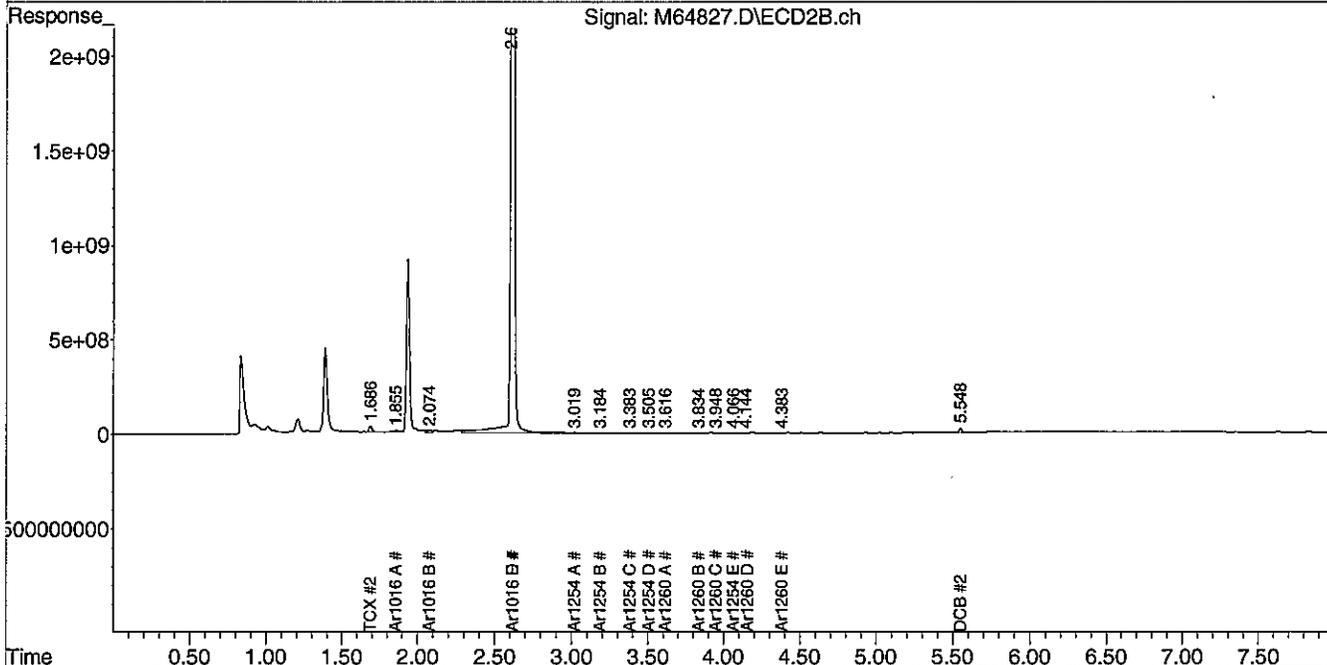
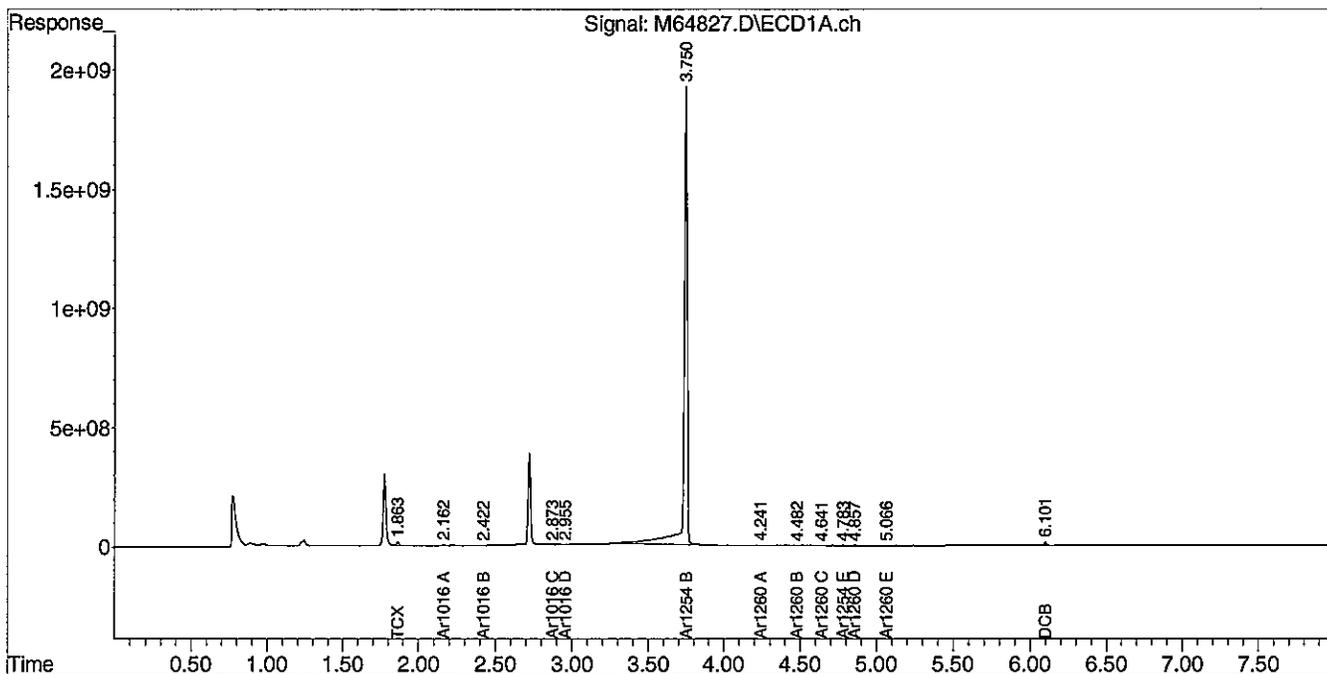
COMMENTS: Results are expressed on a dry weight basis.



Data Path : C:\msdchem\1\DATA\121112-M\
 Data File : M64827.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Dec 2012 1:47 pm
 Operator : JK
 Sample : 74440-6,,A/C
 Misc : SOIL
 ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: events.e
 Integration File signal 2: events2.e
 Quant Time: Dec 12 10:13:21 2012
 Quant Method : C:\msdchem\1\METHODS\PCB101812.M
 Quant Title : SW-846 METHOD 8082 Aroclor 1016/1260/1254
 QLast Update : Thu Dec 06 14:17:53 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. Erik Phenix
Ransom Consulting, Inc.
400 Commercial Street Suite 404
Portland, ME 04101

December 12, 2012

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: 40 Main St. Belfast
Project Number: 111.06134.026
Field Sample ID: Lab QC

Lab Sample ID: B121012PSOX RR
Matrix: Soil
Percent Solid: 100
Dilution Factor: 1.0
Collection Date:
Lab Receipt Date:
Extraction Date: 12/10/12
Analysis Date: 12/11/12

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
<u>Surrogate Standard Recovery</u>		
2,4,5,6-Tetrachloro-m-xylene	76	%
Decachlorobiphenyl	70	%
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank		

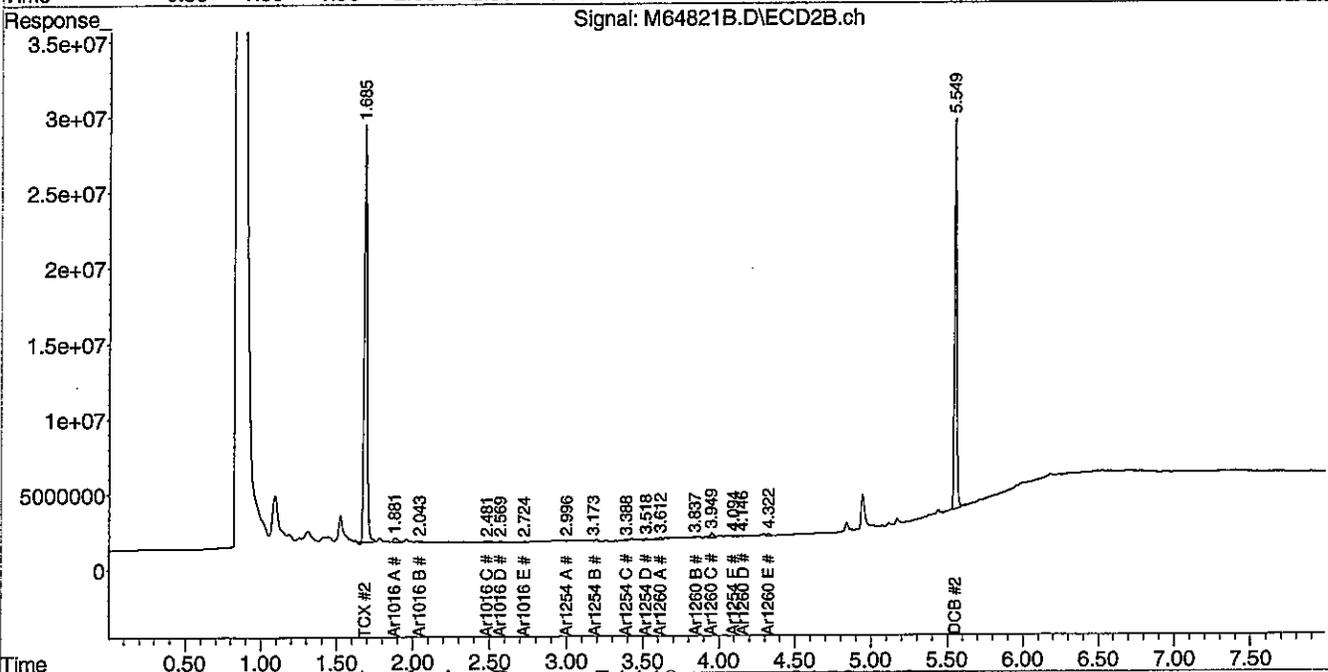
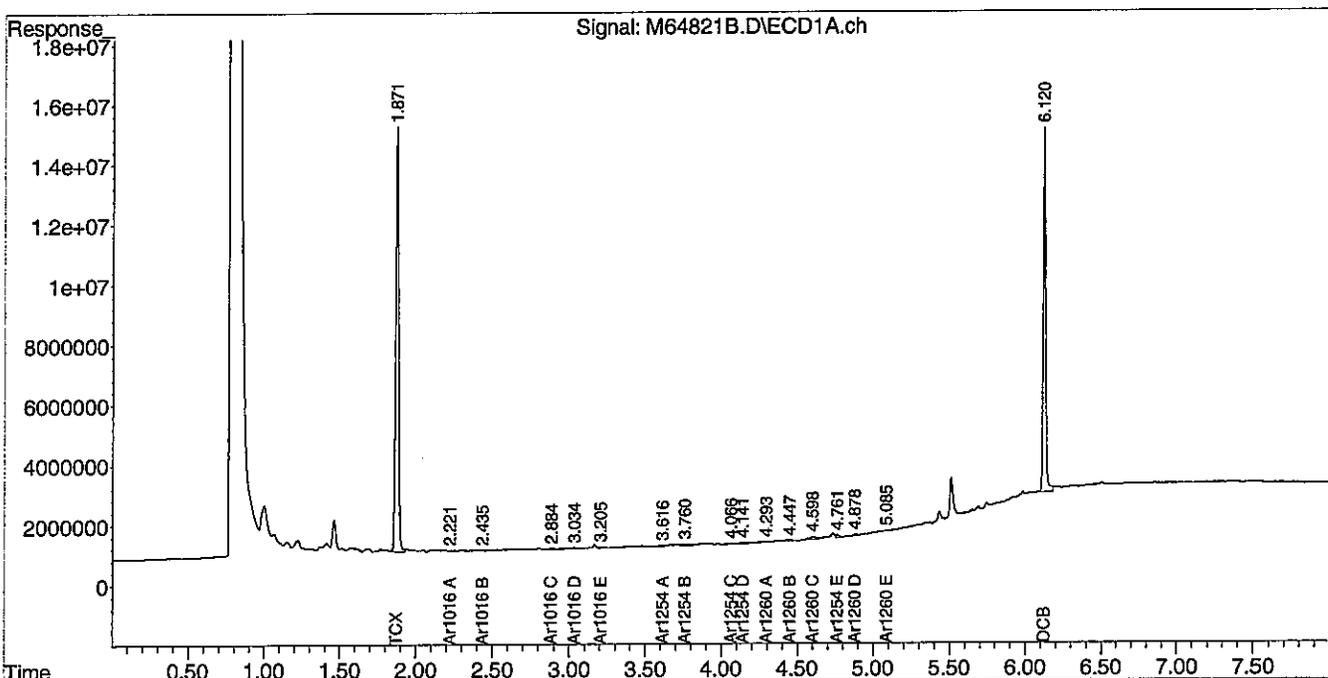
METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082A.
Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.
Sample cleanup was conducted according to SW-846 Method 3665A.

COMMENTS: Results are expressed on a dry weight basis.

Data Path : C:\msdchem\1\DATA\121112-M\
 Data File : M64821B.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Dec 2012 12:47 pm
 Operator : JK
 Sample : B121012PSOX,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: Dec 12 10:13:09 2012
 Quant Method : C:\msdchem\1\METHODS\PCB101812.M
 Quant Title : SW-846 METHOD 8082 Aroclor 1016/1260/1254
 QLast Update : Thu Dec 06 14:17:52 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:

Non-spiked sample: B121012PSOX,RR,,A/C

Spike: L121012PSOX,RR,,A/C

Spike duplicate: LD121012PSOX,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	#	RESULT (ug/kg)	% REC	#
PCB 1016	200	200	65	140	30	0	155	77		155	78		0.4		
PCB 1260	200	200	60	130	30	0	169	84		168	84		0.4		
PCB 1016 #2	200	200	65	140	30	0	154	77		158	79		2.7		
PCB 1260 #2	200	200	60	130	30	0	165	83		172	86		4.1		

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:

Non-spiked sample: 74440-6,,A/C

Spike: 74440-6,MS,,A/C

Spike duplicate: 74440-6,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	#	RESULT (ug/kg)	% REC	#
PCB 1016	227	226	65	140	30	0	225	99		198	87				12.8
PCB 1260	227	226	60	130	30	0	198	87		155	68				24.5
PCB 1016 #2	227	226	65	140	30	0	228	101		216	95				5.7
PCB 1260 #2	227	226	60	130	30	0	218	96		183	81				17.2

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: 40 Main St. Belfast
Project NO: 111.06134.026

Sample ID: SB-1-S3

Report Date: 12/13/2012

SDG ID: 74440
Lab ID: 74440-1
Date Sampled: 12/05/12
Date Received: 12/06/12
Matrix: Solid
% Solid: 95
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Lead (Total)	41		mg/Kg	0.11	0.22	12/11/12	12/12/12	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: 40 Main St. Belfast
Project NO: 111.06134.026

Sample ID: SB-2-S3

Report Date: 12/13/2012

SDG ID: 74440
Lab ID: 74440-2
Date Sampled: 12/05/12
Date Received: 12/06/12
Matrix: Solid
% Solid: 89
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic (Total)	20		mg/Kg	1.2	2.3	12/11/12	12/12/12	TD	2.00
Lead (Total)	23		mg/Kg	0.29	0.59	12/11/12	12/12/12	TD	2.00

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: 40 Main St. Belfast
Project NO: 111.06134.026

Sample ID: SB-3-S3

Report Date: 12/13/2012

SDG ID: 74440
Lab ID: 74440-3
Date Sampled: 12/05/12
Date Received: 12/06/12
Matrix: Solid
% Solid: 88
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic (Total)	11		mg/Kg	0.58	1.2	12/11/12	12/12/12	TD	1.00
Lead (Total)	18		mg/Kg	0.15	0.29	12/11/12	12/12/12	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: 40 Main St. Belfast
Project NO: 111.06134.026

Sample ID: SB-4-S3

Report Date: 12/13/2012

SDG ID: 74440
Lab ID: 74440-4
Date Sampled: 12/05/12
Date Received: 12/06/12
Matrix: Solid
% Solid: 94
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic (Total)	15		mg/Kg	0.48	0.96	12/11/12	12/12/12	TD	1.00
Lead (Total)	16		mg/Kg	0.12	0.24	12/11/12	12/12/12	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: 40 Main St. Belfast
Project NO: 111.06134.026

Sample ID: SB-5-S3

Report Date: 12/13/2012

SDG ID: 74440
Lab ID: 74440-5
Date Sampled: 12/05/12
Date Received: 12/06/12
Matrix: Solid
% Solid: 89
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Lead (Total)	69		mg/Kg	0.13	0.27	12/11/12	12/12/12	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: 40 Main St. Belfast
 Project NO: 111.06134.026

Sample ID: SB-DUP

Report Date: 12/13/2012

SDG ID: 74440
 Lab ID: 74440-6
 Date Sampled: 12/05/12
 Date Received: 12/06/12
 Matrix: Solid
 % Solid: 88
 Method: 6010B
 Preparation: 3050B

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic (Total)	7.4		mg/Kg	0.52	1	12/11/12	12/12/12	TD	1.00
Lead (Total)	8.1		mg/Kg	0.13	0.26	12/11/12	12/12/12	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: 40 Main St. Belfast
Project NO: 111.06134.026

Sample ID: BK-1

Report Date: 12/13/2012

SDG ID: 74440
Lab ID: 74440-7
Date Sampled: 12/05/12
Date Received: 12/06/12
Matrix: Solid
% Solid: 81
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic (Total)	17		mg/Kg	0.58	1.2	12/11/12	12/12/12	TD	1.00
Lead (Total)	17		mg/Kg	0.14	0.29	12/11/12	12/12/12	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



environmental
laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151

Client: Ransom Consulting, Inc.
Project name: 40 Main St. Belfast
Project NO: 111.06134.026

Sample ID: BK-2

Report Date: 12/13/2012

SDG ID: 74440
Lab ID: 74440-8
Date Sampled: 12/05/12
Date Received: 12/06/12
Matrix: Solid
% Solid: 91
Method: 6010B
Preparation: 3050B

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic (Total)	13		mg/Kg	0.48	0.95	12/11/12	12/12/12	TD	1.00
Lead (Total)	38		mg/Kg	0.12	0.24	12/11/12	12/12/12	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: 40 Main St. Belfast
 Project NO: 111.06134.026

Sample ID: BK-3

Report Date: 12/13/2012

SDG ID: 74440
 Lab ID: 74440-9
 Date Sampled: 12/05/12
 Date Received: 12/06/12
 Matrix: Solid
 % Solid: 91
 Method: 6010B
 Preparation: 3050B

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic (Total)	14		mg/Kg	0.51	1	12/11/12	12/12/12	TD	1.00
Lead (Total)	726		mg/Kg	0.13	0.25	12/11/12	12/12/12	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: 40 Main St. Belfast
Project NO: 111.06134.026

Sample ID: MW-1

Report Date: 12/13/2012

SDG ID: 74440
Lab ID: 74440-10
Date Sampled: 12/05/12
Date Received: 12/06/12
Matrix: Aqueous
% Solid: NA
Method: 6010B
Preparation: 3005A

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Lead (Dissolved)	0.007		mg/L	0.003	0.005	12/10/12	12/11/12	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: 40 Main St. Belfast
Project NO: 111.06134.026

Sample ID: MW-3

Report Date: 12/13/2012

SDG ID: 74440
Lab ID: 74440-11
Date Sampled: 12/05/12
Date Received: 12/06/12
Matrix: Aqueous
% Solid: NA
Method: 6010B
Preparation: 3005A

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic (Dissolved)	U		mg/L	0.004	0.009	12/10/12	12/11/12	TD	1.00
Lead (Dissolved)	0.005	J	mg/L	0.003	0.005	12/10/12	12/11/12	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: 40 Main St. Belfast
Project NO: 111.06134.026

Sample ID: MW-4

Report Date: 12/13/2012

SDG ID: 74440
Lab ID: 74440-12
Date Sampled: 12/05/12
Date Received: 12/06/12
Matrix: Aqueous
% Solid: NA
Method: 6010B
Preparation: 3005A

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Lead (Dissolved)	0.005	J	mg/L	0.003	0.005	12/10/12	12/11/12	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: 40 Main St. Belfast
Project NO: 111.06134.026

Sample ID: MW-5

Report Date: 12/13/2012

SDG ID: 74440
Lab ID: 74440-13
Date Sampled: 12/05/12
Date Received: 12/06/12
Matrix: Aqueous
% Solid: NA
Method: 6010B
Preparation: 3005A

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic (Dissolved)	U		mg/L	0.004	0.009	12/10/12	12/11/12	TD	1.00
Lead (Dissolved)	0.004	J	mg/L	0.003	0.005	12/10/12	12/11/12	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: 40 Main St. Belfast
Project NO: 111.06134.026

Sample ID: MW-DUP

Report Date: 12/13/2012

SDG ID: 74440
Lab ID: 74440-14
Date Sampled: 12/05/12
Date Received: 12/06/12
Matrix: Aqueous
% Solid: NA
Method: 6010B
Preparation: 3005A

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Lead (Dissolved)	0.01		mg/L	0.003	0.005	12/10/12	12/11/12	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: 40 Main St. Belfast
Project NO: 111.06134.026

Sample ID: Lab QC

Report Date: 12/13/2012

SDG ID: 74440
Lab ID: B121112MS
Date Sampled: NA
Date Received: NA
Matrix: Solid
% Solid: 100
Method: 6010B
Preparation:

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Arsenic (Total)	U		mg/Kg	0.5	1	12/11/12	12/12/12	TD	1.00
Lead (Total)	U		mg/Kg	0.13	0.25	12/11/12	12/12/12	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:



Client: Ransom Consulting, Inc.
Project name: 40 Main St. Belfast
Project NO: 111.06134.026

Sample ID: Lab QC

Report Date: 12/13/2012

SDG ID: 74440
Lab ID: B121012MW3
Date Sampled: NA
Date Received: NA
Matrix: Aqueous
% Solid: NA
Method: 6010B
Preparation: 3005A

Metals Results

Analyte	Result	Qual	Units	LOD	LOQ	Prepared	Analyzed	Analyst	Dilution
Lead (Dissolved)	U		mg/L	0.003	0.005	12/10/12	12/11/12	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

7-IN
Metals
Laboratory Control Sample
Laboratory Control Sample Duplicate
Percent Recovery

Method: 6010B
Matrix: Solid
Date Analyzed: 12/12/2012

SDG: 74440
Non-spiked Sample B121112MS
Spike: L121112MS
Spike Duplicate: LD121112MS

Analyte	Spike added	LCS Result	Unit	% Rec	Low Limit	High Limit
Arsenic	60.7	45.7	mg/kg	75%	40.8	80.6
Lead	65.9	59.1	mg/kg	90%	44.2	87.6

Analyte	Spike added	LCS Result	Unit	% Rec	Low Limit	High Limit	RPD	RPD Limit
Arsenic	60.7	44.0	mg/kg	73%	40.8	80.6	4%	20
Lead	65.9	58.0	mg/kg	88%	44.2	87.6	2%	20

7-IN
Metals
Laboratory Control Sample
Laboratory Control Sample Duplicate
Percent Recovery

Method: 6010B
Matrix: Aqueous
Date Analyzed: 12/11/2012

SDG: 74440
Non-spiked Sample B1201012MW3
Spike: L1201012MW3
Spike Duplicate: LD1201012MW3

Analyte	Spike added	LCS Result	Unit	% Rec	% Rec Limits
Arsenic	0.5	0.4900	mg/L	98%	80-120
Lead	0.5	0.5207	mg/L	104%	80-120

Analyte	Spike added	LCSD Result	Unit	% Rec	% Rec Limits	RPD	RPD Limit
Arsenic	0.5	0.4881	mg/L	98%	80-120	0%	20
Lead	0.5	0.5197	mg/L	104%	85-115	0%	20

CHAIN OF CUSTODIES

Chain Of Custody Form

analytix environmental laboratory LLC

Project Name: 40 Main St. Belfast
 Project#: 111.06134.026
 Company: Ransom Consulting Inc.
 Report to: Erik Phenix
 Address: 400 Commercial St. Ste 404
 Portland ME 04101
 Phone: (207) 772-2891
 Quote #: _____
 PO# (if required): 4821

195 Commerce Way, Suite E
 Portsmouth, NH 03801
 (800) 929-9906

(603) 436-5111
 (603) 430-2151 Fax

For Analytix Use Only

Samples were: Hand Delivered

1) Shipped or Hand Delivered

2) Temperature (°C): 16

3) Received in good condition: O or N
N/A

4) pH checked by: VEZ 12/6/12

5) Labels checked by: VEZ 12/6/12

Sample Identification	Sample Date	Sample Time	Circle and/or Write Required Analysis Followed by Preservation Code										Matrix	No. of Containers	pH checked	Analytix Sample #	
			VOC: 8260 524.2 624	SVOC: 8270 625 PAH only SIM	Pesticides: 8081 608	PCB: 8082 508 Soxhlet: Y or N	TPH: 8015 (Gas Range) ME427	TH: 8015 (Diesel Range) 8100M ME425	EPA: Full or Ranges only TETPH	VPH: Full or Ranges only	Metals: RCRA8 Pp3 TAL23 Other**	Lead Scavengers (Bare)					VPH: Ranges Only
SB-1-S3	12/5/12	0855	X			X	X	X	X	X	X	X	X	X	58		74440-1
SB-2-S3	12/5/12	0945	X			X	X	X	X	X	X	X	X	X	69		2
SB-3-S3	12/5/12	1030	X			X	X	X	X	X	X	X	X	X	69		3
SB-4-S3	12/5/12	1240	X			X	X	X	X	X	X	X	X	X	69		4
SB-5-S3	12/5/12	1145	X			X	X	X	X	X	X	X	X	X	47		5
SB-DUP	12/5/12	1030	X			X	X	X	X	X	X	X	X	X	69		6
BK-1	12/5/12	1404													2		7
BK-2	12/5/12	1407													1		8
BK-3	12/5/12	1105													1		9

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

Report Type:
 MCP* Level II* Level III* Level IV* Standard
 CTRCP* DOD* Other:

State: NH MA ME CT RI
 State Standard: _____
 (eg. S-1 or GW-1)
 EDD Required: Y N
 Type: ME DEP

Project Requirements:
 *Fee may apply

Comments, Additional Analyses, or Special Instructions:
Lead Scavengers = 1,2-dichloroethane, Chlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, and 1,2-dibromoethane
U.S. EPA Brownfields Project
 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.

Email Results to: ephenix@ransomenv.com

Turnaround Time (TAT)
 1 Day* 2 Days* 3 Days* 4 Days* 5 Days*
 *Fee may apply; lab approval required

Sampler Name (Print): Erik Phenix
 Relinquished By Sampler: Erik Phenix
 Relinquished By: _____
 Relinquished By: _____

Date: 12/6/12 Time: 1135 Received By: Cathy
 Date: _____ Time: _____ Received By: _____
 Date: _____ Time: _____ Received By: _____

ANALYTICS SAMPLE RECEIPT CHECKLIST



AEL LAB#: 74440
 CLIENT: Ransom
 PROJECT: 40 Main St. Belfast

COOLER NUMBER: 138
 NUMBER OF COOLERS: 1

A: PRELIMINARY EXAMINATION:

1. Cooler received by(initials): OP DATE COOLER RECEIVED/OPENED: 12/6/12
2. Circle one: Hand delivered
(If so, skip 3) Shipped
3. Did cooler come with a shipping slip? Y NA
- 3a. Enter carrier name and airbill number here: _____
4. Were custody seals on the outside of cooler?
 How many & where: _____ Seal Date: _____ Seal Name: Y N
5. Did the custody seals arrive unbroken and intact upon arrival? Y NA
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: 1.6°

B. Log-In: Date samples were logged in: 12/6/12 By: OP

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 AEL's expiration date? Y N
20. Were VOA samples absent of greater than pea-sized bubbles?
(Note: Pea-sized bubbles or smaller are acceptable and are not considered to adversely affect volatiles data.) Y N*

*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): VSJ Date: 12/6/12

**The expiration date is recommended by Analytics Environmental Laboratory and not the method. Therefore this does not mean that the results are non-compliant.



ANALYTICAL REPORT

Lab Number:	L122232
Client:	Ransom Environmental 400 Commercial Street Suite 404 Portland, ME 04101-4660
ATTN:	Peter Sherr
Phone:	(207) 772-2891
Project Name:	40 MAIN STREET
Project Number:	111.06134.026
Report Date:	12/14/12

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: 40 MAIN STREET
Project Number: 111.06134.026

Lab Number: L1222232
Report Date: 12/14/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1222232-01	SV-1	BELFAST, ME	12/05/12 15:24
L1222232-02	SV-2	BELFAST, ME	12/05/12 14:42
L1222232-03	SV-3	BELFAST, ME	12/05/12 13:54
L1222232-04	SV-DUP	BELFAST, ME	12/05/12 14:42

Project Name: 40 MAIN STREET

Lab Number: L1222232

Project Number: 111.06134.026

Report Date: 12/14/12

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: 40 MAIN STREET
Project Number: 111.06134.026

Lab Number: L1222232
Report Date: 12/14/12

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: 40 MAIN STREET
Project Number: 111.06134.026

Lab Number: L1222232
Report Date: 12/14/12

Case Narrative (continued)

Canisters were released from the laboratory on November 29, 2012.

The canister certification data is provided as an addendum.

MCP Related Narratives

Petroleum Hydrocarbons in Air

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

L1222232-02, -03, and -04: All significant concentrations of non-petroleum VOCs detected in the TO-15 analysis were subtracted from the corresponding hydrocarbon ranges.

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:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 12/14/12

AIR

Project Name: 40 MAIN STREET**Lab Number:** L122232**Project Number:** 111.06134.026**Report Date:** 12/14/12**SAMPLE RESULTS**

Lab ID: L122232-02
 Client ID: SV-2
 Sample Location: BELFAST, ME
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/13/12 01:11
 Analyst: RY

Date Collected: 12/05/12 14:42
 Date Received: 12/07/12
 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	0.289	0.050	--	1.43	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	0.165	0.020	--	0.365	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Trichlorofluoromethane	1.46	0.050	--	8.20	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	0.020	0.020	--	0.072	0.072	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	0.037	0.020	--	0.181	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	0.020	0.020	--	0.109	0.109	--		1
Benzene	0.138	0.100	--	0.441	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



Project Name: 40 MAIN STREET**Lab Number:** L1222232**Project Number:** 111.06134.026**Report Date:** 12/14/12**SAMPLE RESULTS**

Lab ID: L1222232-02

Date Collected: 12/05/12 14:42

Client ID: SV-2

Date Received: 12/07/12

Sample Location: BELFAST, ME

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	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	0.150	0.050	--	0.565	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.910	0.020	--	6.17	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	0.034	0.020	--	0.148	0.087	--		1
p/m-Xylene	0.116	0.040	--	0.504	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	0.043	0.020	--	0.183	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	0.049	0.020	--	0.213	0.087	--		1
1,3,5-Trimethylbenzene	0.041	0.020	--	0.202	0.098	--		1
1,2,4-Trimethylbenzene	0.164	0.020	--	0.806	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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	105		60-140
chlorobenzene-d5	96		60-140



Project Name: 40 MAIN STREET
Project Number: 111.06134.026

Lab Number: L1222232
Report Date: 12/14/12

SAMPLE RESULTS

Lab ID: L1222232-03
 Client ID: SV-3
 Sample Location: BELFAST, ME
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/13/12 01:43
 Analyst: RY

Date Collected: 12/05/12 13:54
 Date Received: 12/07/12
 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	0.673	0.050	--	3.33	0.247	--		1
Chloromethane	1.13	0.500	--	2.33	1.03	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	0.071	0.020	--	0.181	0.051	--		1
1,3-Butadiene	6.81	0.020	--	15.1	0.044	--		1
Bromomethane	0.027	0.020	--	0.105	0.078	--		1
Chloroethane	0.093	0.020	--	0.245	0.053	--		1
Trichlorofluoromethane	0.656	0.050	--	3.69	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	0.064	0.050	--	0.490	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	0.072	0.020	--	0.291	0.081	--		1
Methyl tert butyl ether	0.048	0.020	--	0.173	0.072	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	0.199	0.020	--	0.972	0.098	--		1
1,2-Dichloroethane	0.146	0.020	--	0.591	0.081	--		1
1,1,1-Trichloroethane	0.446	0.020	--	2.43	0.109	--		1
Benzene	1.86	0.100	--	5.94	0.319	--		1
Carbon tetrachloride	0.021	0.020	--	0.132	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
Trichloroethene	0.027	0.020	--	0.145	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1



Project Name: 40 MAIN STREET**Lab Number:** L1222232**Project Number:** 111.06134.026**Report Date:** 12/14/12**SAMPLE RESULTS**

Lab ID: L1222232-03

Date Collected: 12/05/12 13:54

Client ID: SV-3

Date Received: 12/07/12

Sample Location: BELFAST, ME

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	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	2.66	0.050	--	10.0	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	4.60	0.020	--	31.2	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	0.668	0.020	--	2.90	0.087	--		1
p/m-Xylene	1.18	0.040	--	5.12	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	0.048	0.020	--	0.204	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	0.551	0.020	--	2.39	0.087	--		1
1,3,5-Trimethylbenzene	0.400	0.020	--	1.97	0.098	--		1
1,2,4-Trimethylbenzene	0.518	0.020	--	2.55	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	0.042	0.020	--	0.252	0.120	--		1
1,2,4-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	94		60-140
bromochloromethane	106		60-140
chlorobenzene-d5	97		60-140



Project Name: 40 MAIN STREET
Project Number: 111.06134.026

Lab Number: L1222232
Report Date: 12/14/12

SAMPLE RESULTS

Lab ID: L1222232-04
 Client ID: SV-DUP
 Sample Location: BELFAST, ME
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/13/12 02:15
 Analyst: RY

Date Collected: 12/05/12 14:42
 Date Received: 12/07/12
 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	0.293	0.050	--	1.45	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	0.160	0.020	--	0.354	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Trichlorofluoromethane	1.45	0.050	--	8.15	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	0.032	0.020	--	0.115	0.072	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	0.038	0.020	--	0.186	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	0.140	0.100	--	0.447	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



Project Name: 40 MAIN STREET**Lab Number:** L1222232**Project Number:** 111.06134.026**Report Date:** 12/14/12**SAMPLE RESULTS**

Lab ID: L1222232-04
 Client ID: SV-DUP
 Sample Location: BELFAST, ME

Date Collected: 12/05/12 14:42
 Date Received: 12/07/12
 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	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	0.163	0.050	--	0.614	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.915	0.020	--	6.20	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	0.036	0.020	--	0.156	0.087	--		1
p/m-Xylene	0.126	0.040	--	0.547	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	0.046	0.020	--	0.196	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	0.051	0.020	--	0.222	0.087	--		1
1,3,5-Trimethylbenzene	0.043	0.020	--	0.211	0.098	--		1
1,2,4-Trimethylbenzene	0.169	0.020	--	0.831	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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	97		60-140
bromochloromethane	105		60-140
chlorobenzene-d5	97		60-140



Project Name: 40 MAIN STREET

Lab Number: L1222232

Project Number: 111.06134.026

Report Date: 12/14/12

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 12/12/12 16:23

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 02-04 Batch: WG579095-4								
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
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
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		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



Project Name: 40 MAIN STREET

Lab Number: L1222232

Project Number: 111.06134.026

Report Date: 12/14/12

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 12/12/12 16:23

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 02-04 Batch: WG579095-4								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		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

Project Name: 40 MAIN STREET

Lab Number: L1222232

Project Number: 111.06134.026

Report Date: 12/14/12

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 12/12/12 16:23

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 02-04 Batch: WG579095-4								
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
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

Lab Control Sample Analysis

Batch Quality Control

Project Name: 40 MAIN STREET

Lab Number: L1222232

Project Number: 111.06134.026

Report Date: 12/14/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02-04 Batch: WG579095-3								
Dichlorodifluoromethane	107		-		70-130	-		25
Chloromethane	103		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	109		-		70-130	-		25
Vinyl chloride	109		-		70-130	-		25
1,3-Butadiene	110		-		70-130	-		25
Bromomethane	108		-		70-130	-		25
Chloroethane	107		-		70-130	-		25
Acetone	106		-		70-130	-		25
Trichlorofluoromethane	109		-		70-130	-		25
Acrylonitrile	94		-		70-130	-		25
1,1-Dichloroethene	111		-		70-130	-		25
Methylene chloride	111		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	112		-		70-130	-		25
Halothane	94		-		70-130	-		25
trans-1,2-Dichloroethene	97		-		70-130	-		25
1,1-Dichloroethane	111		-		70-130	-		25
Methyl tert butyl ether	104		-		70-130	-		25
2-Butanone	96		-		70-130	-		25
cis-1,2-Dichloroethene	118		-		70-130	-		25
Chloroform	102		-		70-130	-		25
1,2-Dichloroethane	109		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 40 MAIN STREET

Project Number: 111.06134.026

Lab Number: L1222232

Report Date: 12/14/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02-04 Batch: WG579095-3								
1,1,1-Trichloroethane	104		-		70-130	-		25
Benzene	97		-		70-130	-		25
Carbon tetrachloride	103		-		70-130	-		25
1,2-Dichloropropane	100		-		70-130	-		25
Bromodichloromethane	96		-		70-130	-		25
1,4-Dioxane	92		-		70-130	-		25
Trichloroethene	101		-		70-130	-		25
cis-1,3-Dichloropropene	107		-		70-130	-		25
4-Methyl-2-pentanone	94		-		70-130	-		25
trans-1,3-Dichloropropene	91		-		70-130	-		25
1,1,2-Trichloroethane	104		-		70-130	-		25
Toluene	99		-		70-130	-		25
Dibromochloromethane	94		-		70-130	-		25
1,2-Dibromoethane	103		-		70-130	-		25
Tetrachloroethene	101		-		70-130	-		25
1,1,1,2-Tetrachloroethane	87		-		70-130	-		25
Chlorobenzene	102		-		70-130	-		25
Ethylbenzene	102		-		70-130	-		25
p/m-Xylene	102		-		70-130	-		25
Bromoform	86		-		70-130	-		25
Styrene	104		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 40 MAIN STREET

Project Number: 111.06134.026

Lab Number: L122232

Report Date: 12/14/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02-04 Batch: WG579095-3								
1,1,2,2-Tetrachloroethane	104		-		70-130	-		25
o-Xylene	103		-		70-130	-		25
Isopropylbenzene	92		-		70-130	-		25
1,3,5-Trimethylbenzene	101		-		70-130	-		25
1,2,4-Trimethylbenzene	105		-		70-130	-		25
1,3-Dichlorobenzene	105		-		70-130	-		25
1,4-Dichlorobenzene	103		-		70-130	-		25
sec-Butylbenzene	92		-		70-130	-		25
p-Isopropyltoluene	83		-		70-130	-		25
1,2-Dichlorobenzene	104		-		70-130	-		25
n-Butylbenzene	96		-		70-130	-		25
1,2,4-Trichlorobenzene	111		-		70-130	-		25
Naphthalene	88		-		70-130	-		25
1,2,3-Trichlorobenzene	102		-		70-130	-		25
Hexachlorobutadiene	110		-		70-130	-		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: 40 MAIN STREET

Project Number: 111.06134.026

Lab Number: L1222232

Report Date: 12/14/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02-04 QC Batch ID: WG579095-5 QC Sample: L1222505-01 Client ID: DUP Sample						
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	0.036	0.031	ppbV	15		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,2-Dichloroethane	0.022	0.023	ppbV	4		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	0.167	0.132	ppbV	23		25
Trichloroethene	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Tetrachloroethene	ND	ND	ppbV	NC		25
Ethylbenzene	0.111	0.111	ppbV	0		25
Naphthalene	0.377	0.374	ppbV	1		25

Project Name: 40 MAIN STREET
Project Number: 111.06134.026

Lab Number: L1222232
Report Date: 12/14/12

SAMPLE RESULTS

Lab ID: L1222232-01
 Client ID: SV-1
 Sample Location: BELFAST, ME
 Matrix: Soil_Vapor
 Analytical Method: 96,APH
 Analytical Date: 12/13/12 00:40
 Analyst: RY

Date Collected: 12/05/12 15:24
 Date Received: 12/07/12
 Field Prep: Not Specified

Quality Control Information

Sample Type:	20 Minute Composite
Sample Container Type:	Canister - 2.7 Liter
Sampling Flow Controller:	Mechanical
Sampling Zone:	Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check:	<=20%
Were all QA/QC procedures REQUIRED by the method followed?	Yes
Were all performance/acceptance standards for the required procedures achieved?	Yes
Were significant modifications made to the method as specified in Sect 11.1.2?	No

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
C5-C8 Aliphatics, Adjusted	330		ug/m3	12	--	1
Toluene	ND		ug/m3	2.0	--	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	1400		ug/m3	14	--	1
C9-C10 Aromatics Total	ND		ug/m3	10	--	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		50-200
Bromochloromethane	99		50-200
Chlorobenzene-d5	94		50-200

Project Name: 40 MAIN STREET
Project Number: 111.06134.026

Lab Number: L1222232
Report Date: 12/14/12

SAMPLE RESULTS

Lab ID: L1222232-02
 Client ID: SV-2
 Sample Location: BELFAST, ME
 Matrix: Soil_Vapor
 Analytical Method: 96,APH
 Analytical Date: 12/13/12 01:11
 Analyst: RY

Date Collected: 12/05/12 14:42
 Date Received: 12/07/12
 Field Prep: Not Specified

Quality Control Information

Sample Type: 20 Minute Composite
 Sample Container Type: Canister - 2.7 Liter
 Sampling Flow Controller: Mechanical
 Sampling Zone: Unknown
 Sampling Flow Meter RPD of pre & post-sampling calibration check: <=20%
 Were all QA/QC procedures REQUIRED by the method followed? Yes
 Were all performance/acceptance standards for the required procedures achieved? Yes
 Were significant modifications made to the method as specified in Sect 11.1.2? No

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
C5-C8 Aliphatics, Adjusted	110		ug/m3	12	--	1
Toluene	ND		ug/m3	2.0	--	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	70		ug/m3	14	--	1
C9-C10 Aromatics Total	ND		ug/m3	10	--	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		50-200
Bromochloromethane	102		50-200
Chlorobenzene-d5	95		50-200

Project Name: 40 MAIN STREET
Project Number: 111.06134.026

Lab Number: L1222232
Report Date: 12/14/12

SAMPLE RESULTS

Lab ID: L1222232-03
 Client ID: SV-3
 Sample Location: BELFAST, ME
 Matrix: Soil_Vapor
 Analytical Method: 96,APH
 Analytical Date: 12/13/12 01:43
 Analyst: RY

Date Collected: 12/05/12 13:54
 Date Received: 12/07/12
 Field Prep: Not Specified

Quality Control Information

Sample Type: 20 Minute Composite
 Sample Container Type: Canister - 2.7 Liter
 Sampling Flow Controller: Mechanical
 Sampling Zone: Unknown
 Sampling Flow Meter RPD of pre & post-sampling calibration check: <=20%
 Were all QA/QC procedures REQUIRED by the method followed? Yes
 Were all performance/acceptance standards for the required procedures achieved? Yes
 Were significant modifications made to the method as specified in Sect 11.1.2? No

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	15		ug/m3	2.0	--	1
Methyl tert butyl ether	ND		ug/m3	2.0	--	1
Benzene	5.9		ug/m3	2.0	--	1
C5-C8 Aliphatics, Adjusted	1900		ug/m3	12	--	1
Toluene	9.8		ug/m3	2.0	--	1
Ethylbenzene	2.8		ug/m3	2.0	--	1
p/m-Xylene	4.9		ug/m3	4.0	--	1
o-Xylene	2.4		ug/m3	2.0	--	1
Naphthalene	3.6		ug/m3	2.0	--	1
C9-C12 Aliphatics, Adjusted	3100		ug/m3	14	--	1
C9-C10 Aromatics Total	35		ug/m3	10	--	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		50-200
Bromochloromethane	100		50-200
Chlorobenzene-d5	95		50-200

Project Name: 40 MAIN STREET
Project Number: 111.06134.026

Lab Number: L1222232
Report Date: 12/14/12

SAMPLE RESULTS

Lab ID: L1222232-04
 Client ID: SV-DUP
 Sample Location: BELFAST, ME
 Matrix: Soil_Vapor
 Analytical Method: 96,APH
 Analytical Date: 12/13/12 02:15
 Analyst: RY

Date Collected: 12/05/12 14:42
 Date Received: 12/07/12
 Field Prep: Not Specified

Quality Control Information

Sample Type:	20 Minute Composite
Sample Container Type:	Canister - 2.7 Liter
Sampling Flow Controller:	Mechanical
Sampling Zone:	Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check:	<=20%
Were all QA/QC procedures REQUIRED by the method followed?	Yes
Were all performance/acceptance standards for the required procedures achieved?	Yes
Were significant modifications made to the method as specified in Sect 11.1.2?	No

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
C5-C8 Aliphatics, Adjusted	200		ug/m3	12	--	1
Toluene	ND		ug/m3	2.0	--	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	100		ug/m3	14	--	1
C9-C10 Aromatics Total	11		ug/m3	10	--	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		50-200
Bromochloromethane	103		50-200
Chlorobenzene-d5	95		50-200

Project Name: 40 MAIN STREET
Project Number: 111.06134.026

Lab Number: L1222232
Report Date: 12/14/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 96,APH
Analytical Date: 12/12/12 16:23
Analyst: RY

Parameter	Result	Qualifier	Units	RL	MDL
Petroleum Hydrocarbons in Air - Mansfield Lab for sample(s): 01-04 Batch: WG579094-4					
1,3-Butadiene	ND		ug/m3	2.0	--
Methyl tert butyl ether	ND		ug/m3	2.0	--
Benzene	ND		ug/m3	2.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/m3	12	--
Toluene	ND		ug/m3	2.0	--
Ethylbenzene	ND		ug/m3	2.0	--
p/m-Xylene	ND		ug/m3	4.0	--
o-Xylene	ND		ug/m3	2.0	--
Naphthalene	ND		ug/m3	2.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/m3	14	--
C9-C10 Aromatics Total	ND		ug/m3	10	--

Lab Control Sample Analysis

Batch Quality Control

Project Name: 40 MAIN STREET

Project Number: 111.06134.026

Lab Number: L1222232

Report Date: 12/14/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Petroleum Hydrocarbons in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG579094-3								
1,3-Butadiene	96		-		70-130	-		
Methyl tert butyl ether	93		-		70-130	-		
Benzene	94		-		70-130	-		
C5-C8 Aliphatics, Adjusted	90		-		70-130	-		
Toluene	96		-		70-130	-		
Ethylbenzene	97		-		70-130	-		
p/m-Xylene	95		-		70-130	-		
o-Xylene	97		-		70-130	-		
Naphthalene	110		-		50-150	-		
C9-C12 Aliphatics, Adjusted	95		-		70-130	-		
C9-C10 Aromatics Total	80		-		70-130	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: 40 MAIN STREET

Project Number: 111.06134.026

Lab Number: L1222232

Report Date: 12/14/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Petroleum Hydrocarbons in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG579094-5 QC Sample: L1222505-01 Client ID: DUP Sample						
1,3-Butadiene	ND	ND	ug/m3	NC		30
Methyl tert butyl ether	ND	ND	ug/m3	NC		30
Benzene	ND	ND	ug/m3	NC		30
C5-C8 Aliphatics, Adjusted	51	63	ug/m3	21		30
Toluene	ND	ND	ug/m3	NC		30
Ethylbenzene	ND	ND	ug/m3	NC		30
p/m-Xylene	ND	ND	ug/m3	NC		30
o-Xylene	ND	ND	ug/m3	NC		30
Naphthalene	2.5	2.5	ug/m3	0		30
C9-C12 Aliphatics, Adjusted	110	120	ug/m3	9		30
C9-C10 Aromatics Total	22	23	ug/m3	4		30

Project Name: 40 MAIN STREET

Project Number: 111.06134.026

Serial_No:12141209:14
Lab Number: L1222232

Report Date: 12/14/12

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
L1222232-01	SV-1	0165	#20 AMB	11/29/12	83606		-	-	-	Pass	107	115	7
L1222232-01	SV-1	359	2.7L Can	11/29/12	83606	L1220510-01	Pass	-29.1	-2.3	-	-	-	-
L1222232-02	SV-2	0236	#90 SV	11/29/12	83606		-	-	-	Pass	109	118	8
L1222232-02	SV-2	262	2.7L Can	11/29/12	83606	L1220510-01	Pass	-29.1	-2.5	-	-	-	-
L1222232-03	SV-3	0230	#90 SV	11/29/12	83606		-	-	-	Pass	109	121	10
L1222232-03	SV-3	337	2.7L Can	11/29/12	83606	L1220510-01	Pass	-29.1	-2.9	-	-	-	-
L1222232-04	SV-DUP	0364	#90 SV	11/29/12	83606		-	-	-	Pass	109	117	7
L1222232-04	SV-DUP	199	2.7L Can	11/29/12	83606	L1220510-01	Pass	-29.1	-1.8	-	-	-	-

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

Lab Number: L1220510
Report Date: 12/14/12

Air Canister Certification Results

Lab ID: L1220510-01
 Client ID: CAN 382 SHELF #9
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 11/19/12 16:50
 Analyst: MB

Date Collected: 11/12/12 15:37
 Date Received: 11/13/12
 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: L1220510
Report Date: 12/14/12

Air Canister Certification Results

Lab ID: L1220510-01
 Client ID: CAN 382 SHELF #9
 Sample Location:

Date Collected: 11/12/12 15:37
 Date Received: 11/13/12
 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

Lab Number: L1220510

Project Number: CANISTER QC BAT

Report Date: 12/14/12

Air Canister Certification Results

Lab ID: L1220510-01

Date Collected: 11/12/12 15:37

Client ID: CAN 382 SHELF #9

Date Received: 11/13/12

Sample Location:

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: L1220510
Report Date: 12/14/12

Air Canister Certification Results

Lab ID: L1220510-01
 Client ID: CAN 382 SHELF #9
 Sample Location:

Date Collected: 11/12/12 15:37
 Date Received: 11/13/12
 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

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1220510**Project Number:** CANISTER QC BAT**Report Date:** 12/14/12**Air Canister Certification Results**

Lab ID: L1220510-01

Date Collected: 11/12/12 15:37

Client ID: CAN 382 SHELF #9

Date Received: 11/13/12

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	98		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	98		60-140

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

Lab Number: L1220510
Report Date: 12/14/12

Air Canister Certification Results

Lab ID: L1220510-01
 Client ID: CAN 382 SHELF #9
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 11/16/12 15:29
 Analyst: RY

Date Collected: 11/12/12 15:37
 Date Received: 11/13/12
 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
Halothane	ND	0.050	--	ND	0.404	--		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



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

Lab Number: L1220510
Report Date: 12/14/12

Air Canister Certification Results

Lab ID: L1220510-01
 Client ID: CAN 382 SHELF #9
 Sample Location:

Date Collected: 11/12/12 15:37
 Date Received: 11/13/12
 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								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
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



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

Lab Number: L1220510
Report Date: 12/14/12

Air Canister Certification Results

Lab ID: L1220510-01 Date Collected: 11/12/12 15:37
 Client ID: CAN 382 SHELF #9 Date Received: 11/13/12
 Sample Location: 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								
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
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	96		60-140
bromochloromethane	116		60-140
chlorobenzene-d5	97		60-140

AIR Petro Can Certification

Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1220510**Project Number:** CANISTER QC BAT**Report Date:** 12/14/12**AIR CAN CERTIFICATION RESULTS**

Lab ID: L1220510-01
Client ID: CAN 382 SHELF #9
Sample Location: Not Specified
Matrix: Air
Analytical Method: 96,APH
Analytical Date: 11/16/12 15:29
Analyst: MB

Date Collected: 11/12/12 15:37
Date Received: 11/13/12
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
C5-C8 Aliphatics, Adjusted	ND		ug/m3	12	--	1
Toluene	ND		ug/m3	2.0	--	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: 40 MAIN STREET

Lab Number: L1222232

Project Number: 111.06134.026

Report Date: 12/14/12

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal**Cooler**

NA Present/Intact

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1222232-01A	Canister - 2.7 Liter	NA	NA	NA	NA	Present/Intact	APH-10(30)
L1222232-02A	Canister - 2.7 Liter	NA	NA	NA	NA	Present/Intact	APH-10(30),TO15-SIM(30)
L1222232-03A	Canister - 2.7 Liter	NA	NA	NA	NA	Present/Intact	APH-10(30),TO15-SIM(30)
L1222232-04A	Canister - 2.7 Liter	NA	NA	NA	NA	Present/Intact	APH-10(30),TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name: 40 MAIN STREET
Project Number: 111.06134.026

Lab Number: L1222232
Report Date: 12/14/12

GLOSSARY

Acronyms

EDL	- Estimated 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 EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
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

Report Format: Data Usability Report



Project Name: 40 MAIN STREET
Project Number: 111.06134.026

Lab Number: L1222232
Report Date: 12/14/12

Data Qualifiers

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.
- 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: 40 MAIN STREET
Project Number: 111.06134.026

Lab Number: L1222232
Report Date: 12/14/12

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.
- 96 Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), MassDEP, December 2009, Revision 1 with QC Requirements & Performance Standards for the Analysis of APH by GC/MS under the Massachusetts Contingency Plan, WSC-CAM-IXA, July 2010.

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.



CHAIN OF CUSTODY

AIR ANALYSIS

PAGE 1 OF 1

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

Client Information

Client: **Ransom Consulting Inc.**

Address: **400 Commercial St. Ste 100**

Portland ME 04101

Phone: **(207) 772-2891**

Fax: **(207) 772-3248**

Email: **ephenix@ransomenv.com**

These samples have been previously analyzed by Alpha
Other Project Specific Requirements/Comments:

Project Information

Project Name: **40 Main Street**

Project Location: **Belfast ME**

Project #: **11.06134.026**

Project Manager: **Peter Sherr**

ALPHA Quote #:

Turn-Around Time

Standard RUSH (only confirmed if pre-approved)

Date Due: Time:

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:

MAINE DEP EDD

Report to: (if different than Project Manager)

ephenix@ransomenv.com

ALPHA Job #: **1122232**

Billing Information

Same as Client info

PO #: **4822**

Ransom, 12 Kent Way Ste 100

Belfast MA 01922

Regulatory Requirements/Report Limits

State/Fed Program Criteria

U.S. EPA Brownfields

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION				Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID-Flow Controller	Sample Comments (i.e. PID)
		Date	Start Time	End Time	Initial Vacuum						
1122232-01	SV-1	12/5/12	1503	1524	-29.30	-3.53	SV	EPP	2.7L 359	165	X
	SV-2	12/5/12	1423	1442	-28.87	-3.58	SV	EPP	2.7L 262	236	X X
	SV-3	12/5/12	1337	1354	-29.31	-3.91	SV	EPP	2.7L 337	230	X X
	SV-DUP	12/5/12	1423	1442	-28.86	-3.03	SV	EPP	2.7L 199	364	X X

*SAMPLE MATRIX CODES

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

Relinquished By: **Eric Plunge** Date/Time: _____

Received By: **FedEx** Date/Time: **12/7/12 10:00**

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.