

PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT

**Former Cote Ford Site
820 Cummins Highway and 30-32 Regis Road
Boston (Mattapan), Massachusetts**

Prepared for:



City of Boston
Department of Neighborhood Development
26 Court Street
Boston, Massachusetts 02109

Prepared by:



TRC Environmental Corporation
650 Suffolk Street
Lowell, Massachusetts 01854
(978) 970-5600

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EXECUTIVE SUMMARY

This Phase II Environmental Site Assessment (ESA) has been prepared on behalf of the City of Boston, Department of Neighborhood Development (DND) to document current soil and sub-slab soil gas conditions potentially associated with historical releases of oil and hazardous materials (OHM) to the environment at the property located at 820 Cummins Highway and 30-32 Regis Road in Mattapan, Massachusetts (the Site). The Site, as defined in this report, is listed by the Massachusetts Department of Environmental Protection (MassDEP) under Release Tracking Numbers (RTNs) 3-13055 and 3-13852. RTN 3-13055 was closed on October 24, 1996 by linking it with RTN 3-13852. RTN 3-13852 was closed with a Class A-3 Response Action Outcome (RAO) Statement and Activity and Use Limitation (AUL) submitted on August, 13 1997.

This Phase II ESA is being funded through the U.S. Brownfields Assessment Grant from Environmental Protection Agency (EPA). TRC understands that DND's objective is to re-evaluate current site conditions to determine if natural attenuation and has resulted in a reduction of contamination to the extent that the AUL could be amended or removed to facilitate re-development of the Site property. The goal of this Phase II is to collect additional data that could be used to evaluate whether or not current contaminant concentrations at the Site represent a potential significant risk through direct contact or vapor intrusion. Soil sampling and sub-slab soil vapor sampling were conducted to supplement groundwater sampling performed in December 2012 as documented in a Phase II ESA reported February 2013. Risk assessment was not included in the project objective.

Soil

TRC advanced the nine soil borings (TRC B-1 through TRC B-9) to a depth of approximately six (6) feet below ground surface (bgs) as part of this Phase II ESA. One sample from each boring was analyzed for volatile organic compounds (VOC), volatile petroleum hydrocarbons (VPH), and extractable petroleum hydrocarbons (EPH) with target polycyclic aromatic hydrocarbons (PAHs). Samples collected from borings TRC B-4 through TRC B-6 were also analyzed for MCP-14 metals and polychlorinated biphenyls (PCB). Soil samples were collected as set forth in the EPA-approved QAPP Addendum DND-F.

Several VPH and EPH constituents were detected above MCP Method 1 cleanup standards:

Constituents exceeding S-1/GW-2 and S-1/GW-3 cleanup standards only:

- C9-C10 Aromatics in sample TRC B-2 (6') – 370 mg/kg
- Benzo(a)anthracene in sample TRC B-5 (3-5') – 21 mg/kg
- Benzo(b)fluoranthene in samples TRC B-4 (3-4') and TRC B-5 (3-5') – 8.8 mg/kg and 25 mg/kg, respectively
- Dibenz(a,h)anthracene in samples TRC B-4 (3-4') and TRC B-5 (3-5') – 1.2 mg/kg and 3.4 mg/kg, respectively
- Indeno(1,2,3-cd)pyrene in sample TRC B-5 (3-5') – 13 mg/kg
- Cadmium in sample TRC B-4 (3-4') – 2.2 mg/kg

Constituents exceeding S-1/GW-2, S-1/GW-3 and S-2/GW-2, S-2/GW-3 cleanup standards:

- Benzo(a)pyrene in sample TRC B-4 (3-4') and TRC B-5 (3-5') – 6.5 mg/kg and 19 mg/kg, respectively

Constituents exceeding S-1/GW-2, S-1/GW-3, S-2/GW-2, S-2/GW-3, S-3/GW-2, and S-3/GW-3 cleanup standards:

- C5-C8 Aliphatics in sample TRC B-2 (6') – 630 mg/kg

Based on the determination made in the DUA, the validity of soil analytical data collected as part of this Phase II ESA may be used to evaluate whether soil at the Site represents a potential significant risk to human health.

Sub-Slab Soil Gas

TRC advanced three temporary sub-slab soil gas points (SG-1 through SG-3) as part of this Phase II ESA. Samples were submitted for laboratory analysis of air-phase petroleum hydrocarbons (APH) and VOCs by EPA Method TO-15.

Concentrations of analyzed constituents were not detected above residential and commercial/industrial sub-slab soil gas screening criteria established in MassDEP's Vapor Intrusion Guidance Document (December 2011) in samples SG-2 or SG-3. Naphthalene was detected above residential standards in SG-1, but below commercial/industrial standards. Concentrations of naphthalene in excess of residential screening criteria could potentially pose a vapor intrusion risk and may need to be taken into account when considering redevelopment options.

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1.0 INTRODUCTION

1.1 Objective

TRC Environmental Corporation (TRC) performed a Phase II Environmental Site Assessment (ESA) for the Former Cote Ford Site located at 820 Cummins Highway and 30-32 Regis Road, in the Mattapan Neighborhood of Boston, Massachusetts (the “Site”). This Phase II ESA was performed for The City of Boston’s Department of Neighborhood Development (DND) under Boston’s Petroleum Brownfield’s Assessment Grant Program funded by the United States Environmental Protection Agency (EPA).

This Phase II ESA was performed to evaluate current Site conditions, relative to the Response Action Outcome Statement (RAO) completed by Rizzo Associates, Inc. (Rizzo) in August 1997.

The goal of this Phase II is to collected additional data that could be used to evaluate whether or not current contaminant concentrations at the Site represent a potential significant risk through direct contact or vapor intrusion. Actual risk assessment was not included in the project objective. Soil sampling and sub-slab soil vapor sampling were conducted to supplement groundwater sampling performed in December 2012 as documented in a Phase II ESA reported February 2013. Risk assessment was not part of the project objective.

1.2 Site Location and Description

The property, located at 820 Cummins Highway, is occupied by a two-story reinforced concrete building, built in 1950, with an attached one-story asphalt-topped reinforced concrete garage added in 1968. The buildings were originally used for the display, sale, and repair of automobiles. The 30-32 Regis Road portion of the Site is occupied by a one-story building renovated to its current configuration in 1954. The property has historically been used as an auto body shop and vehicle repair facility. The remaining acreage is surfaced with asphalt and was formerly used for parking new and used vehicles for the above-mentioned operations. The Site has been connected to municipal water and sewer service since its construction.

The Site is currently owned by the City of Boston through tax-title taking from the JAM Realty Trust with the 820 Cummins Highway transaction occurring on April 6, 2011, and the 30-32 Regis Road transaction occurring on March 28, 2011. The Site is currently vacant and unoccupied.

A Site Location Map identifying the general Site vicinity is provided in Figure 1. A Site Plan illustrating the general features and layout of the Site and surrounding vicinity is provided as Figure 2.

1.3 Surrounding Area Description

The surrounding areas are served by municipal water and sewer. The estimated residential population within one-half mile of the Site is 17,431 persons, and the land surrounding the Site is

predominantly residential and commercial. No institutions, as defined in the Massachusetts Contingency Plan (MCP 310 CMR 40.0000), were identified within 500 feet of the Site.

No known private drinking water wells are located within 500 feet of the Disposal Site. According to the Massachusetts Geographic Information Systems (MassGIS) *MassDEP Priority Resource Map*, provided as Figure 3, no Areas of Critical Environmental Concern, Threatened or Endangered Species Habitats are within 500 feet of the Disposal Site. There is a portion of a Protected Open Space (Woodhaven Park) that is inside the 500 feet radius. This park is located north and hydrologically upgradient of the Site.

1.4 Geologic and Hydrologic Conditions

The physical setting of the Site was analyzed using available USGS topographic and geologic maps of the Site and surrounding area. The Site is located at an elevation of about 20 meters (approximately 65 feet) above the National Geodetic Vertical Datum (NGVD). Local topography in the area of the Site slopes down to the southeast. Groundwater flow from the Site and surrounding properties is expected to follow the Site topography and flow southeast toward the Neponset River.

Based on the observations by Rizzo Associates during the installation of soil borings, subsurface material in the area of the Site appears to comprise up to five feet of miscellaneous fills, which consist of loose sand and gravels mixed with traces of silt, clay, and brick which is underlain by 3 to 12 feet of silty sands overlying bedrock. Auger refusal was encountered at depths between 7 and 17 feet (Rizzo, 1996) and is interpreted to be due to bedrock. The bedrock in the vicinity of the Site is the Roxbury Conglomerate which has minor sandstone and siltstone subunits.

According to the MassGIS *MassDEP Priority Resource Map*, provided as Figure 3, the Site is not located within designated groundwater protection areas, interim wellhead protection areas, a productive or potentially productive aquifer, or a non-potential drinking water source area. The Neponset River (1,200 feet to the southeast) is the nearest wetland and potential fish habitat.

Groundwater elevations at Site monitoring wells ranged from approximately 2.8 to 6.48 feet below ground surface on December 19 to 20, 2012 during TRC's initial 2012 Phase II ESA. A Site map depicting soil boring and monitoring well locations is provided as Figure 2.

1.5 Release Tracking Numbers

A historical release of oil and petroleum constituents was identified by Rizzo at the property during the removal of three underground storage tanks (USTs) on October 17 and 18, 1995. Soil staining, petroleum odors, and elevated photoionization detector (PID) responses were observed throughout the extent of the UST excavation at depths of about 3 to 6 feet below ground surface. The MassDEP was notified of the release on October 18, 1995, and assigned RTN 3-13055 to JAM Realty Trust. This release area was adjacent to the building located at 820 Cummins Highway.

A separate release was reported to the MassDEP by Rizzo on behalf of the JAM Realty Trust on June 4, 1996 based on a total petroleum hydrocarbons (TPH) detection of 7,200 mg/kg in a soil sample obtained from the area east of the 30-32 Regis Road building. MassDEP assigned RTN 3-13852 to this condition and JAM Realty Trust was named the Potentially Responsible Party.

RTN 3-13852 was closed on October 24, 1996 by linking it to RTN 3-13055. RTN 3-13055 was closed with a Class A-3 Response Action Outcome (RAO) Statement and Activity and Use Limitation (AUL) submitted on August, 13 1997.

2.0 SITE HISTORY

2.1 Historic Site Use

City of Boston Assessor's Office records and Sanborn Map Company fire insurance maps were reviewed to document the history of the Site and surrounding properties.

The earliest record of the Site found during this investigation was a 1908 Sanborn Map Company fire insurance map that indicates the 820 Cummins Highway, then Oakland Street, was undeveloped and the Mattapan Express depot existed at what is currently 32 Regis Road. A few scattered residences were located in the vicinity of the Site, with the surrounding parcels undeveloped. The property at 820 Cummins Highway remained undeveloped until the current Site building was constructed in 1950. Automobiles were displayed on the first floor and automobile repair work was performed in the basement. A basement addition with open deck parking was added in 1968. The 30-32 Regis Road property remained an automobile garage from 1908 until it was last occupied in 1993. Many of the residences that presently abut the Site were built between 1930 and 1950.

2.2 Previous Environmental Site Investigations

2.2.1 Briggs Site Assessment Report - December 1986

Briggs conducted a limited site investigation in December 1986 and prepared a report entitled *MGL 21E Site Assessment Report*. As part of their investigation, Briggs installed three soil borings, each completed as a groundwater monitoring well. Water and soil samples taken from the observation wells and borings were tested for volatile organic compounds (VOCs), oil and grease concentrations, and Resource Conservation and Recovery Act (RCRA) 8 metals. A groundwater sample collected from monitoring well OW-3, which was installed adjacent to a 4,000-gallon UST on the 30-32 Regis Road property, had detections of benzene, ethylbenzene, and toluene.

As a result of this investigation, the 4,000-gallon gasoline UST was removed from the 30-32 Regis Road property along with approximately 80 cubic yards of petroleum-contaminated soil (Briggs, 1986).

2.2.2 UST Removal – October 1995

Under contract to JAM Realty Trust, Redwing Environmental Technologies, Inc. of Framingham, Massachusetts conducted the excavation and removal of three USTs on October 17 and 18, 1995 at the 820 Cummins Highway parcel. Rizzo was on-site to screen soil samples and to assist JAM Realty Trust in observation of UST removal operations.

A 1,000-gallon gasoline UST, a 5,000-gallon waste oil UST, and a 2,000-gallon fuel oil UST were located in a semi-paved and overgrown shrub area between the two-story garage and

Massachusetts Bay Transit Authority railroad tracks. During the excavation, soils collected from various locations within the UST excavation were screened for VOCs using a PID.

Following removal of the USTs, excavation of additional petroleum-contaminated soils was conducted as part of an Immediate Response Action (IRA) that was orally approved by the MassDEP on October 18, 1996. The lower limits of the excavation were at an average depth of about six to seven feet below ground surface. Approximately 200 cubic yards of petroleum-contaminated soils were sent off-site for disposal.

Following removal of the USTs and the additional excavation of petroleum-contaminated soil as part of the IRA, seven confirmatory composite soil samples were collected from the completed excavation on October 18 and 24, 1995. In addition, two confirmatory groundwater samples were collected from the completed excavation on October 18 and 24, 1995. An IRA Completion Statement was submitted to the MassDEP by Rizzo on December 22, 1995 (Rizzo, 1995).

2.2.3 Rizzo Associates Inc. –Limited Subsurface Investigation – 1996

Rizzo performed a limited subsurface investigation of the Site in January 1996, which consisted of the advancement of 14 soil borings and the completion of seven of those borings as monitoring wells. Based on PID screening results, six soil samples were selected for analysis for TPH by Gas Chromatograph/Flame Ionization Detector (GC/FID) and for VOCs by EPA Method 8260. The seven new groundwater monitoring wells and the existing groundwater monitoring wells on the property were surveyed, and a total of nine wells were sampled. Groundwater samples were analyzed for TPH by GC/FID and for VOCs by EPA Method 8260.

Rizzo also performed a subsurface investigation in July 1996. A total of seven additional soil borings (B-13 through B-18) were advanced in the area around the former 4,000 gallon gasoline tank on the Regis St parcel to further characterize soil conditions in this area of the Site. Soil samples were obtained in each boring at depths of grade to two feet and four to six feet below the ground surface using a split spoon sampler. Soil samples were screened for organic vapors using the jar headspace method and a PID. Based on the screening results, selected soil samples were analyzed at a state-certified laboratory by the VPH/EPH method for petroleum hydrocarbons.

Two monitoring wells, RIZ-5, inside the 820 Cummins Highway building, and MW-6, a newly discovered well on the 30-32 Regis Road parcel adjacent to the former gasoline underground storage tank, were sampled on July 25, 1996. Groundwater samples from RIZ-5 and MW-6 were analyzed at the laboratory by the VPH/EPH method for petroleum hydrocarbons. The boring and monitoring well locations are shown on Figure 2. These groundwater analytical results were included as an appendix in TRC's February 2013 Phase II ESA.

2.2.4 Rizzo Associates Inc. – Release Abatement Measure Plan– 1996

On December 30, 1996, Rizzo submitted a Release Abatement Measure (RAM) plan to MassDEP for the 30-32 Regis Street parcel. The activities covered by this plan were to remove

petroleum contaminated soil and transport it off site to an approved asphalt batching facility. The excavation was to go to a maximum depth of two to three feet below surface. The excavation was to remain open until confirmatory samples were below MCP S-1/GW-2 standards (Rizzo, 1996b).

2.2.5 Rizzo Associates Inc. – Release Abatement Measure Completion Report – 1997

On January 6, 1997, the RAM was initiated at the Site with the excavation of surficial soils in the vicinity of previous soil borings near the former 4,000 gallon gasoline UST. After removing the first two feet of soil, a previously unidentified UST was uncovered adjacent to the southwest corner of the building located at 30-32 Regis Street.

Soil excavation was temporarily suspended to assess the UST and determine further action. On January 21, 1997, RAM excavation was resumed with soil excavation down to a depth of approximately four feet around the UST, and removal and disposal of the UST. Upon removal, the UST was inspected and found to have several quarter-sized holes along the bottom. No evidence of free product was observed in the excavation.

Soil to a depth of two to four feet below the ground surface was removed from the RAM excavation area and stockpiled on-site in accordance with the RAM Plan. The excavated soil and the sidewalls of the excavation showed evidence of considerable amounts of ash, bricks, glass and wood. These observed characteristics are consistent with those of man-made fills in an urban setting with a history of industrial activity, such as the subject Site. Once soil excavation was completed, confirmatory soil samples were obtained from the sidewalls and bottom of the excavation. These samples were analyzed for EPH via MassDEP method and for VOCs by EPA Method 8260 (Rizzo, 1997a).

2.2.6 Rizzo Associates Inc. – Method 3 Risk Characterization – 1997

Rizzo conducted a Human Health and Environmental Risk Characterization (Method 3) in accordance with the MCP using all the data collected during the Phase I Limited Subsurface Investigation and RAM activities. Unacceptable risk was identified for this Site based on the Hazard Index (HI) and ELCR for the Construction/Utility Worker. An Activity and Use Limitation (AUL) was necessary to notify interested parties of the condition and to achieve a condition of no significant risk to human health (Rizzo, 1997b).

2.2.7 Rizzo Associates Inc. – Licensed Site Professional Option for the Activity and Use Limitation – 1997

With the completion of the IRA, RAM, Phase I, Risk Assessment, and the removal of the USTs, Rizzo determined that a Permanent Solution had been achieved for the specific historical petroleum releases. Rizzo concluded that no additional activities were required to further address the petroleum release. However, an AUL was required to maintain a condition of no significant risk to human health based on residual petroleum contamination at the Site. A Class A-3 RAO Statement was submitted to the DEP for the release sites.

An AUL was recorded for three distinct areas of the Site. The AUL is to prevent the exposure of children under 15 years of age to the surficial contaminated soil and to restrict the Construction/Utility Worker from trenching to the groundwater and inhaling the hydrocarbon vapors from the exposed groundwater (Rizzo, 1997b).

2.2.8 TRC Environmental – Phase II ESA Report – 2013

TRC conducted a Phase II ESA in December 2012 on behalf of the City of Boston DND to document groundwater conditions associated with historical releases of oil and hazardous materials (OHM) at the Site. The objective of the investigation was to re-evaluate Site conditions to assess whether natural attenuation has resulted in a reduction of contamination to the extent that the AULs at the Site could be amended or removed to facilitate re-development of the Site property.

TRC was able to locate and identify eleven of the thirteen wells previously installed at the Site to assess their physical condition. Only nine of the eleven wells were found to be viable for sampling. Because of the time elapsed between sampling events (fifteen years), the nine viable wells were redeveloped prior to sampling.

TRC collected samples from the nine wells using low flow sampling methods and analyzed for VOCs via EPA method 8260, VPH via MassDEP method and EPH via MassDEP method. This list of analytes was selected because the main contaminant of concern was petroleum. For the area identified as AUL “Area B” metals was added to the analyte list because there was formerly a waste oil underground storage tank located nearby. Metals were not analyzed during the previous investigations conducted by Rizzo.

The concentrations of petroleum contaminants in the groundwater identified by Rizzo in 1996 and 1997 were found at significantly lower concentrations during TRC’s investigation in 2012. This decrease in petroleum concentrations may be attributed to natural degradation of petroleum compounds over the last fifteen years and/or horizontal migration and dilution.

2.3 Compliance History

In 2002 the Site AUL was audited by the MassDEP. As a result of the audit, Rizzo prepared a Method 3 Risk Characterization to support amendments to the restrictions listed in the AUL. Rizzo reported that results of the risk characterization indicated that restrictions on activities and uses of the three designated AUL areas were still required to achieve and maintain a condition of No Significant Risk. In general, activities and uses of the AUL Areas that resulted in exposures of children and adults to identified subsurface contaminated soil located approximately four feet below the ground surface or excavation to groundwater and resultant exposure of construction workers to petroleum hydrocarbon vapors emanating from the groundwater must be restricted (Rizzo, 2002).

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Another audit was performed by the MassDEP on June 6, 2008. The site was found to be in compliance at that time with the current AUL. No further action was required.

3.0 SITE INVESTIGATION

The following sections summarize activities performed as part of TRC's 2014 Phase II ESA. A Site Plan depicting pertinent Site features is provided as Figure 2.

3.1 Soil Boring Advancement and Soil Sampling

On January 13, 2014, nine soil borings (TRC B-1 through TRC B-9) were advanced at the Site using direct push (Geoprobe®) drilling methods. Boring locations are depicted on Figure 2. The depth of each boring was extended to an approximate depth of six feet. Soil samples were screened in the field using the MassDEP jar headspace method for the presence of VOCs with a PID. One soil sample was collected from each boring and analyzed at Con-Test Analytical of East Longmeadow, Massachusetts (Con-Test). Samples collected from borings TRC B-1 through TRC B-9 were analyzed for VOC, VPH, and EPH (with target PAHs). Samples collected from borings TRC B-4 through TRC B-6 were also analyzed for MCP-14 metals and polychlorinated biphenyls (PCB). Samples were collected from a depth interval between three and six feet below ground surface (bgs) corresponding to the highest PID headspace reading and/or visual/olfactory evidence of contamination. If no visual, olfactory and/or elevated PID evidence of soil contamination was observed, then sample depths were collected just above the observed groundwater table. At TRC B-8, a soil sample was collected from two to three feet bgs due to the groundwater table being observed at approximately three feet bgs. Soil samples were collected as set forth in the EPA-approved QAPP Addendum DND-F. Soil boring logs are presented in Appendix A.

3.2 Sub-Slab Soil Gas Point Installation and Sub-Slab Soil Gas Sampling

On January 13, 2014 three borings were advanced (SG-1 through SG-3) for the purpose of providing temporary points from which to sample sub-slab soil gas. Boring SG-1 was advanced through an asphalt layer in AUL Area A, while SG-2 and SG-3 were advanced through the concrete slab located in AUL Area B and AUL Area C, respectively. The points were used to evaluate potential impacts to indoor air quality from vapor intrusion through the existing concrete slab. Boring SG-1 was installed by advancing a one-inch diameter drill bit through three inches of asphalt until soil was encountered. Due to a malfunctioning hammer drill, borings SG-2 and SG-3 were advanced through the approximately four-inch-thick concrete slab using a 1.5-inch diameter Geoprobe® bit. Borings were sealed using non-VOC inert sealant gum. Sub-slab soil gas point locations are depicted in Figure 2.

Purging of the sub-slab soil gas points was performed in conjunction with the tracer gas test. The purge rate was set at less than 0.2 liter per minute. Approximately five purge volumes were evacuated during the tracer gas test prior to sample collection. A Radiodetection® MGD-2002 helium gas detector was used to quantify the concentration of helium in the shroud and the Tedlar® bag during the tracer test. Each sub-slab soil gas probe exhibited less than 10 percent of the shroud helium concentration, confirming a competent seal.

Once competency of the seals was confirmed, soil gas samples were collected from the probes in pre-cleaned, evacuated, passivated stainless steel laboratory-supplied SUMMA® canisters over a period of approximately 30 minutes using flow controllers to ensure sample collection rates were less than 0.2 liter per minute. Samples were submitted to Con-Test for laboratory analysis of air-phase petroleum hydrocarbons (APH) and VOCs by EPA Method TO-15.

3.3 Applicable Soil and Sub-Slab Soil Gas Reporting and Cleanup Categories

Soil Criteria

Soil analytical results samples were compared to the applicable and potentially applicable MCP Method 1 cleanup standards (S-1/GW-2, S-1/GW-3, S-2/GW-2, S-2/GW-3, and S-3/GW-2, S-3/GW-3 for soil) to evaluate suitability of the Site for potential redevelopment. PCBs were evaluated according to EPA's Toxic Substances Control Act (TSCA) regulations.

Sub-Slab Soil Gas Criteria

Soil gas results were compared to the MassDEP December 2011 Interim Final Vapor Intrusion Guidance document (WSC-11-435) sub-slab soil gas screening values for residential and for commercial/industrial buildings.

4.0 ANALYTICAL RESULTS

A summary of the soil and soil gas samples collected and the analyses performed are provided in Table 1 and Table 2, respectively. A summary of the laboratory soil analytical results and soil gas analytical results are provided in Table 3 and Table 4, respectively. Copies of boring logs are provided in Appendix A. Copies of the associated laboratory analytical reports are provided in Appendix B.

4.1 Soil Analytical Results

Laboratory analytical results of soil samples collected from the Site were compared to MCP Method 1 S-1/GW-2, S-1/GW-3, S-2/GW-2, S-2/GW-3, and S-3/GW-2, S-3/GW-3 cleanup standards. PCBs were not detected above laboratory detection limits or MCP Method 1 standards in soils sampled on January 13, 2014. Several VOC, VPH, and EPH constituents were detected above laboratory detections limits, but below MCP Method 1 standards. Contaminants found to be in excess of MCP Method 1 standards are detailed below. A full summary of the soil analytical results from the soil samples collected at the Site as part of the January 2014 investigation is presented in Table 3.

Constituents exceeding S-1/GW-2 and S-1/GW-3 cleanup standards only:

- C9-C10 Aromatics in sample TRC B-2 (6') – 370 mg/kg
- Benzo(a)anthracene in sample TRC B-5 (3-5') – 21 mg/kg
- Benzo(b)fluoranthene in samples TRC B-4 (3-4') and TRC B-5 (3-5') – 8.8 mg/kg and 25 mg/kg, respectively
- Dibenz(a,h)anthracene in samples TRC B-4 (3-4') and TRC B-5 (3-5') – 1.2 mg/kg and 3.4 mg/kg, respectively
- Indeno(1,2,3-cd)pyrene in sample TRC B-5 (3-5') – 13 mg/kg
- Cadmium in sample TRC B-4 (3-4') – 2.2 mg/kg

Constituents exceeding S-1/GW-2, S-1/GW-3 and S-2/GW-2, S-2/GW-3 cleanup standards:

- Benzo(a)pyrene in sample TRC B-4 (3-4') and TRC B-5 (3-5') – 6.5 mg/kg and 19 mg/kg, respectively

Constituents exceeding S-1/GW-2, S-1/GW-3, S-2/GW-2, S-2/GW-3, S-3/GW-2, and S-3/GW-3 cleanup standards:

- C5-C8 Aliphatics in sample TRC B-2 (6') – 630 mg/kg

4.2 Sub-Slab Soil Gas Analytical Results

Laboratory analytical results of sub-slab soil gas samples were compared to the MassDEP December 2011 Interim Final Vapor Intrusion Guidance document (WSC-11-435) sub-slab soil gas screening values for residential and for commercial/industrial buildings. No VOC or APH constituents were detected above residential or commercial/industrial standards set forth in WSC-11-435 in samples SG-2 or SG-3. In sample SG-1, concentrations of naphthalene were detected above the residential standards set forth in WSC-11-435 via TO-15 analysis ($67 \mu\text{g}/\text{m}^3$)

and APH analysis ($88 \mu\text{g}/\text{m}^3$), but were not detected above the commercial/industrial standards. Laboratory analytical results for sub-slab soil gas are summarized in Table 4.

4.3 Data Usability Assessment

The data associated with soil samples collected on January 13, 2014 and soil gas samples collected on January 13 and 14, 2014 were reviewed. In general, the data are usable for MCP decisions based on a review of accuracy, precision, and sensitivity of the data. Although there were select quality control (QC) nonconformances, the data are valid as reported and may be used for decision-making purposes with no cautions or limitations.

Details on the data usability assessment are provided in Appendix C.

5.0 CONCLUSIONS

The following conclusions are based on TRC's Phase II ESA:

Soil Analytical Results – Several VPH and EPH constituents were detected above MCP Method 1 cleanup standards:

Constituents exceeding S-1/GW-2 and S-1/GW-3 cleanup standards only:

- C9-C10 Aromatics in sample TRC B-2 (6') – 370 mg/kg
- Benzo(a)anthracene in sample TRC B-5 (3-5') – 21 mg/kg
- Benzo(b)fluoranthene in samples TRC B-4 (3-4') and TRC B-5 (3-5') – 8.8 mg/kg and 25 mg/kg, respectively
- Dibenz(a,h)anthracene in samples TRC B-4 (3-4') and TRC B-5 (3-5') – 1.2 mg/kg and 3.4 mg/kg, respectively
- Indeno(1,2,3-cd)pyrene in sample TRC B-5 (3-5') – 13 mg/kg
- Cadmium in sample TRC B-4 (3-4') – 2.2 mg/kg

Constituents exceeding S-1/GW-2, S-1/GW-3 and S-2/GW-2, S-2/GW-3 cleanup standards:

- Benzo(a)pyrene in sample TRC B-4 (3-4') and TRC B-5 (3-5') – 6.5 mg/kg and 19 mg/kg, respectively

Constituents exceeding S-1/GW-2, S-1/GW-3, S-2/GW-2, S-2/GW-3, S-3/GW-2, and S-3/GW-3 cleanup standards:

- C5-C8 Aliphatics in sample TRC B-2 (6') – 630 mg/kg

Based on the determination made in the DUA, the validity of soil analytical data collected as part of this Phase II ESA may be used to determine if soil at the Site represents a potential significant risk through direct contact.

Sub-Slab Soil Gas Analytical Results – Concentrations of analyzed constituents were not detected above residential and commercial/industrial sub-slab soil gas screening criteria in samples SG-2 or SG-3. Naphthalene was detected above residential standards in SG-1, but below commercial/industrial standards.

6.0 LIMITATIONS

1. TRC's study was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area, and TRC observed that degree of care and skill was generally exercised by other consultants under similar circumstances and conditions. TRC's findings and conclusions must be considered not as scientific certainties, but rather as professional opinion concerning the significance of the limited data gathered during the course of the study. No other warranty, express or implied, is made. Specifically, TRC does not and cannot represent that the subject property contains no hazardous material, oil, or other latent condition beyond that observed by TRC during its study. Additionally, TRC makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a MassDEP audit.
2. This study and report have been prepared on behalf of and for the exclusive use of the **Owner and the Client**, solely for use in a Phase II ESA for the commercial properties located at 820 Cummins Highway and 30-32 Regis Road in Mattapan, Massachusetts (subject property). This submittal and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without the prior written consent of TRC or the Client.
3. The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by Client. The work described in this report was carried out in accordance with the Terms and Conditions referenced in our proposal to the Client.
4. In the event that the Client or others authorized to use this report obtain information on environmental or hazardous waste issues at the subject property not contained in this report, such information shall be brought to TRC's attention forthwith. TRC will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.
5. The purpose of this report was to re-evaluate and update the current environmental conditions for the site based on the groundwater for the subject property. No specific attempt was made to check on the compliance of present or past owners or operators of the Site with federal, state, or local laws and regulations, environmental or otherwise.

7.0 REFERENCES

- MassDEP, 2002d. Characterizing Risks Posed by petroleum Contaminated Sites: Implementations of the MADEP VPH/EPH Approach. Final Policy #WSC-02-411. Bureau of Waste Site Cleanup. October 31, 2002.
- Massachusetts Department of Environmental Protection (MassDEP), *Massachusetts Contingency Plan*, 310 CMR 40.0000, effective date, June 26, 2009.
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- Rizzo and Associates, Inc., *Immediate Response Action Completion Statement, 820 Cummins Highway and 30-32 Regis Road, Mattapan, Massachusetts* dated December 22, 1995.
- Rizzo and Associates, Inc., *Phase I Report and Tier Classification Submittal, 820 Cummins Highway and 30-32 Regis Road, Mattapan, Massachusetts* dated October 22, 1996.
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- Rizzo and Associates, Inc., *Release Abatement Measure Completion Report, 820 Cummins Highway and 30-32 Regis Road, Mattapan, Massachusetts* dated May 6, 1997.
- Rizzo and Associates, Inc., *Human Health and Environmental Risk Characterization, 820 Cummins Highway and 30-32 Regis Road, Mattapan, Massachusetts* dated August 6, 1997.
- Rizzo and Associates, Inc., *Response Action Outcome Statement, 820 Cummins Highway and 30-32 Regis Road, Mattapan, Massachusetts* dated August 13, 1997.
- Rizzo and Associates, Inc., *Amended Licensed Site Professional Opinion for Activity and Use Limitation, 820 Cummins Highway and 30-32 Regis Road, Mattapan, Massachusetts* dated May 31, 2002.
- TRC Environmental Corporation, *Brownfields Quality Assurance Project Plan, Addendum DND-F for Former Cote Ford Site at 820 Cummins Highway and 30-32 Regis Road, Mattapan, Massachusetts*, dated December 9, 2013.
- TRC Environmental Corporation, *Phase II Environmental Site Assessment Report, 820 Cummins Highway and 30-32 Regis Road, Mattapan, Massachusetts*, dated February 2013

TABLES

Table 1:
Summary of Soil Samples Submitted for Laboratory Analysis
Former Cote Ford
Mattapan, Massachusetts

Samples				Chemical Analytical Parameters				
Sample I.D.	Matrix	Sample Date	Sample Depth (ft bgs)	VOC	VPH	EPH (with target PAH)	MCP-14 Metals	PCB
Soil Boring Samples								
TRC B-1 (3-4)	Soil	1/13/2014	3-4	X	X	X		
TRC B-2 (4-6/6)	Soil	1/13/2014	4-6/6	X	X	X		
TRC B-3 (4-6)	Soil	1/13/2014	4-6	X	X	X		
TRC B-4 (3-4)	Soil	1/13/2014	3-4	X	X	X	X	X
TRC B-5 (3-5)	Soil	1/13/2014	3-5	X	X	X	X	X
TRC B-6 (3-5)	Soil	1/13/2014	3-5	X	X	X	X	X
TRC B-7 (4-5)	Soil	1/13/2014	4-5	X	X	X		
TRC B-8 (2-3)	Soil	1/13/2014	2-3	X	X	X		
TRC B-9 (4-5)	Soil	1/13/2014	4-5	X	X	X		

Notes:

VOC - Volatile Organic Compounds

VPH - Volatile Petroleum Hydrocarbons

EPH - Extractable Petroleum Hydrocarbons

PAH - Polycyclic Aromatic Hydrocarbons

PCB - Polychlorinated Biphenyls

bgs - below ground surface

Table 2:
Summary of Sub-Slab Soil Gas Samples Submitted for
Laboratory Analysis
Former Cote Ford Site
Mattapan, Massachusetts

Samples		Chemical Analytical Parameters		
Sample I.D.	Matrix	Sample Date	TO-15	APH
SG-1	Soil Gas	1/13/2014	X	X
SG-2	Soil Gas	1/14/2014	X	X
SG-3	Soil Gas	1/14/2014	X	X

Notes:

TO-15 - EPA Method for Volatile Organic Compounds

APH - Air Phase Hydrocarbons

Table 3 - Summary of Analytical Results for Soil Samples -- January 2014
Former Cote Ford Site - 820 Cummins Highway and 30-32 Regis Road
Mattapan, Massachusetts

Analysis	Analyte	Sample ID: Sample Depth (ft.): Sample Date:						TRC B-1 3-4 1/13/2014	TRC B-2 4-6/6 1/13/2014	TRC B-3 4-6 1/13/2014	TRC B-4 3-4 1/13/2014	TRC B-5 3-5 1/13/2014	TRC B-6		TRC B-7 4-5 1/13/2014	TRC B-8 2-3 1/13/2014	TRC B-9 4-5 1/13/2014
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-3/GW-2	S-3/GW-3							3-5 1/13/2014	3-5 1/13/2014			
VOCs (mg/kg)	Acetone	50	400	50	400	50	400	0.10 U	11 U	0.080 U	0.061 U	0.053 U	0.077 U	0.077 U	0.088 U	0.077 U	0.066 U
	tert-Amyl Methyl Ether (TAME)	NS	NS	NS	NS	NS	NS	0.0010 U	0.11 U	0.00080 U	0.00061 U	0.00053 U	0.00077 U	0.00077 U	0.00088 U	0.00077 U	0.00066 U
	Benzene	30	30	200	200	700	900	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	Bromobenzene	NS	NS	NS	NS	NS	NS	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	Bromo(chloromethane)	NS	NS	NS	NS	NS	NS	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	Bromodichloromethane	0.1	20	0.1	100	0.1	500	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	Bromoform	1	200	1	800	1	800	0.010 U	1.1 U	0.0080 U	0.0061 U	0.0053 U	0.0077 U	0.0077 U	0.0088 U	0.0077 U	0.0066 U
	Bromomethane	0.5	30	0.5	30	0.5	30	0.010 U	0.43 U	0.0080 U	0.0061 U	0.0053 U	0.0077 U	0.0077 U	0.0088 U	0.0077 U	0.0066 U
	2-Butanone (MEK)	50	400	50	400	50	400	0.040 U	4.3 U	0.032 U	0.024 U	0.021 U	0.031 U	0.031 U	0.035 U	0.031 U	0.026 U
	n-Butylbenzene	100 ⁽¹⁾	100 ⁽¹⁾	500 ⁽¹⁾	500 ⁽¹⁾	500 ⁽¹⁾	500 ⁽¹⁾	0.0040 U	2.8	0.0032 U	0.0024 U	0.0021 U	0.0031 U	0.0031 U	0.0035 U	0.0031 U	0.0026 U
	sec-Butylbenzene	100 ⁽¹⁾	100 ⁽¹⁾	500 ⁽¹⁾	500 ⁽¹⁾	500 ⁽¹⁾	500 ⁽¹⁾	0.0020 U	0.55	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	tert-Butylbenzene	100 ⁽¹⁾	100 ⁽¹⁾	500 ⁽¹⁾	500 ⁽¹⁾	500 ⁽¹⁾	500 ⁽¹⁾	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	tert-Butyl Ethyl Ether (TBEE)	NS	NS	NS	NS	NS	NS	0.0010 U	0.11 U	0.00080 U	0.00061 U	0.00053 U	0.00077 U	0.00077 U	0.00088 U	0.00077 U	0.00066 U
	Carbon Disulfide	NS	NS	NS	NS	NS	NS	0.0060 U	2.1 U	0.0048 U	0.0037 U	0.0032 U	0.0046 U	0.0046 U	0.0053 U	0.0046 U	0.0039 U
	Carbon Tetrachloride	5	10	5	60	5	400	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	Chlorobenzene	3	100	3	100	3	100	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	Chlorodibromomethane	0.03	20	0.03	100	0.03	500	0.0040 U	0.43 U	0.0032 U	0.0024 U	0.0021 U	0.0031 U	0.0031 U	0.0035 U	0.0031 U	0.0026 U
	Chloroethane	NS	NS	NS	NS	NS	NS	0.010 U	0.43 U	0.0080 U	0.0061 U	0.0053 U	0.0077 U	0.0077 U	0.0088 U	0.0077 U	0.0066 U
	Chloroform	0.3	400	0.3	800	0.3	800	0.0040 U	0.43 U	0.0032 U	0.0024 U	0.0021 U	0.0031 U	0.0031 U	0.0035 U	0.0031 U	0.0026 U
	Chloromethane	NS	NS	NS	NS	NS	NS	0.010 U	1.1 U	0.0080 U	0.0061 U	0.0053 U	0.0077 U	0.0077 U	0.0088 U	0.0077 U	0.0066 U
	2-Chlorotoluene	NS	NS	NS	NS	NS	NS	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	4-Chlorotoluene	NS	NS	NS	NS	NS	NS	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	1,2-Dibromo-3-chloropropane (DBCP)	NS	NS	NS	NS	NS	NS	0.010 U	0.85 U	0.0080 U	0.0061 U	0.0053 U	0.0077 U	0.0077 U	0.0088 U	0.0077 U	0.0066 U
	1,2-Dibromoethane (EDB)	0.1	0.7	0.1	4	0.1	30	0.0010 U	0.11 U	0.00080 U	0.00061 U	0.00053 U	0.00077 U	0.00077 U	0.00088 U	0.00077 U	0.00066 U
	Dibromomethane	NS	NS	NS	NS	NS	NS	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	1,2-Dichlorobenzene	30	300	30	300	30	300	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	1,3-Dichlorobenzene	40	100	40	500	40	500	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	1,4-Dichlorobenzene	4	50	4	300	4	2,000	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	Dichlorodifluoromethane (Freon 12)	NS	NS	NS	NS	NS	NS	0.010 U	1.1 U	0.0080 U	0.0061 U	0.0053 U	0.0077 U	0.0077 U	0.0088 U	0.0077 U	0.0066 U
	1,1-Dichloroethane	5	500	5	1,000	5	1,000	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	1,2-Dichloroethane	0.1	10	0.1	90	0.1	300	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	1,1-Dichloroethylene	40	500	40	1,000	40	3,000	0.0040 U	0.21 U	0.0032 U	0.0024 U	0.0021 U	0.0031 U	0.0031 U	0.0035 U	0.0031 U	0.0026 U
	cis-1,2-Dichloroethylene	0.4	100	0.4	500	0.4	500	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	trans-1,2-Dichloroethylene	1	500	1	1,000	1	3,000	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U
	1,2-Dichloropropane	0.1	10	0.1	100	0.1	600	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.00		

Table 3 - Summary of Analytical Results for Soil Samples -- January 2014
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Mattapan, Massachusetts

Analysis	Analyte	Sample ID: Sample Depth (ft.): Sample Date:						TRC B-1 3-4 1/13/2014	TRC B-2 4-6/6 1/13/2014	TRC B-3 4-6 1/13/2014	TRC B-4 3-4 1/13/2014	TRC B-5 3-5 1/13/2014	TRC B-6		TRC B-7 4-5 1/13/2014	TRC B-8 2-3 1/13/2014	TRC B-9 4-5 1/13/2014	
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3						3-5 1/13/2014	3-5 1/13/2014				
	Styrene	4	30	4	200	4	1,000	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U	0.0013 U
	1,1,1,2-Tetrachloroethane	0.1	7	0.1	100	0.1	300	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U	0.0013 U
	1,1,2,2-Tetrachloroethane	0.02	0.8	0.02	10	0.02	40	0.0010 U	0.11 U	0.00080 U	0.00061 U	0.00053 U	0.00077 U	0.00077 U	0.00088 U	0.00077 U	0.00066 U	0.00066 U
	Tetrachloroethylene	10	30	10	200	10	1,000	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U	0.0013 U
	Tetrahydrofuran	NS	NS	NS	NS	NS	NS	0.010 U	0.85 U	0.0080 U	0.0061 U	0.0053 U	0.0077 U	0.0077 U	0.0088 U	0.0077 U	0.0066 U	0.0066 U
	Toluene	500	500	1,000	1,000	2,000	3,000	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U	0.0013 U
	1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	0.010 U	0.85 U	0.0080 U	0.0061 U	0.0053 U	0.0077 U	0.0077 U	0.0088 U	0.0077 U	0.0066 U	0.0066 U
	1,2,4-Trichlorobenzene	70	500	70	900	70	900	0.010 U	0.43 U	0.0080 U	0.0061 U	0.0053 U	0.0077 U	0.0077 U	0.0088 U	0.0077 U	0.0066 U	0.0066 U
	1,1,1-Trichloroethane	500	500	600	1,000	600	3,000	0.0020 U	1.1 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U	0.0013 U
	1,1,2-Trichloroethane	2	4	2	60	2	200	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U	0.0013 U
	Trichloroethylene	2	90	2	700	2	2,000	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U	0.0013 U
	Trichlorofluoromethane (Freon 11)	NS	NS	NS	NS	NS	NS	0.010 U	1.1 U	0.0080 U	0.0061 U	0.0053 U	0.0077 U	0.0077 U	0.0088 U	0.0077 U	0.0066 U	0.0066 U
	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	0.0020 U	0.43 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U	0.0013 U
	1,2,4-Trimethylbenzene	100 ⁽¹⁾	100 ⁽¹⁾	500 ⁽¹⁾	500 ⁽¹⁾	500 ⁽¹⁾	500 ⁽¹⁾	0.0040 U	11	0.0032 U	0.0024 U	0.0021 U	0.0031 U	0.0031 U	0.0035 U	0.0031 U	0.0026 U	0.0026 U
	1,3,5-Trimethylbenzene	100 ⁽¹⁾	100 ⁽¹⁾	500 ⁽¹⁾	500 ⁽¹⁾	500 ⁽¹⁾	500 ⁽¹⁾	0.0020 U	3.8	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U	0.0013 U
	Vinyl Chloride	0.6	0.6	0.7	4	0.7	30	0.010 U	0.43 U	0.0080 U	0.0061 U	0.0053 U	0.0077 U	0.0077 U	0.0088 U	0.0077 U	0.0066 U	0.0066 U
	m+p Xylene	300	500	300	1,000	300	3,000	0.0040 U	1.9	0.0032 U	0.0024 U	0.0021 U	0.0031 U	0.0031 U	0.0035 U	0.0031 U	0.0026 U	0.0026 U
	o-Xylene	300	500	300	1,000	300	3,000	0.0020 U	0.21 U	0.0016 U	0.0012 U	0.0011 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U	0.0013 U	0.0013 U
	Xylenes (Total)	300	500	300	1,000	300	3,000	0.0040 U	1.9	0.0032 U	0.0024 U	0.0021 U	0.0031 U	0.0031 U	0.0035 U	0.0031 U	0.0026 U	0.0026 U
VPH (mg/kg)	C5-C8 Aliphatics	100	100	500	500	500	500	15 U	630	20 U	15 U	11 U	14 U	15 U	12 U	9.5 U	11 U	
	C9-C12 Aliphatics	1,000	1,000	3,000	3,000	5,000	5,000	15 U	170	20 U	15 U	11 U	14 U	15 U	12 U	9.5 U	11 U	
	C9-C10 Aromatics	100	100	500	500	500	500	15 U	370	20 U	15 U	11 U	14 U	15 U	12 U	9.5 U	11 U	
	Benzene	30	30	200	200	700	900	0.074 U	0.66 U	0.10 U	0.075 U	0.054 U	0.068 U	0.077 U	0.060 U	0.048 U	0.055 U	
	Ethylbenzene	500	500	1,000	1,000	1,000	3,000	0.074 U	3.1	0.10 U	0.075 U	0.054 U	0.068 U	0.077 U	0.060 U	0.048 U	0.055 U	
	Methyl tert-Butyl Ether (MTBE)	100	100	100	500	100	500	0.074 U	0.90	0.10 U	0.075 U	0.054 U	0.068 U	0.077 U	0.060 U	0.048 U	0.055 U	
	Naphthalene	40	500	40	1,000	40	3,000	0.37 U	3.3 U	0.50 U	0.38 U	0.27 U	0.34 U	0.39 U	0.30 U	0.24 U	0.28 U	
	Toluene	500	500	1,000	1,000	2,000	3,000	0.074 U	0.66 U	0.10 U	0.075 U	0.054 U	0.068 U	0.077 U	0.060 U	0.048 U	0.055 U	
	m+p Xylene	300	500	300	1,000	300	3,000	0.15 U	2.9	0.20 U	0.15 U	0.11 U	0.14 U	0.15 U	0.12 U	0.095 U	0.11 U	
	o-Xylene	300	500	300	1,000	300	3,000	0.074 U	0.66 U	0.10 U	0.075 U	0.054 U	0.068 U	0.077 U	0.060 U	0.048 U	0.055 U	
	Xylenes (Total)	300	500	300	1,000	300	3,000	0.15 U	2.9	0.20 U	0.15 U	0.11 U	0.14 U	0.15 U	0.12 U	0.095 U	0.11 U	
EPH (mg/kg)	C9-C18 Aliphatics	1,000	1,000	3,000	3,000	5,000	5,000	12 U	35	14 U	12 U	23 U	12 U	12 U	11 U	11 U	11 U	
	C19-C36 Aliphatics	3,000	3,000	5,000	5,000	5,000	5,000	12 U	12 U	14 U	51	31	12 U	12 U	69	11 U	61	
	C11-C22 Aromatics	1,000	1,000	3,000	3,000	5,000	5,000	18	17	14	130	360	12 U	12 U	60	11 U	21	
	Acenaphthene	1,000	1,000															

Table 3 - Summary of Analytical Results for Soil Samples -- January 2014
Former Cote Ford Site - 820 Cummins Highway and 30-32 Regis Road
Mattapan, Massachusetts

Analysis	Analyte	Sample ID: Sample Depth (ft.): Sample Date:						TRC B-1 3-4 1/13/2014	TRC B-2 4-6/6 1/13/2014	TRC B-3 4-6 1/13/2014	TRC B-4 3-4 1/13/2014	TRC B-5 3-5 1/13/2014	TRC B-6		TRC B-7 4-5 1/13/2014	TRC B-8 2-3 1/13/2014	TRC B-9 4-5 1/13/2014	
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	S-3/GW-2	S-3/GW-3						3-5 1/13/2014	3-5 1/13/2014	Field Dup			
PCBs (mg/kg)	Aroclor-1016	2	2	3	3	3	3	NA	NA	NA	0.11 U	0.11 U	0.12 U	0.12 U	NA	NA	NA	NA
	Aroclor-1221	2	2	3	3	3	3	NA	NA	NA	0.11 U	0.11 U	0.12 U	0.12 U	NA	NA	NA	NA
	Aroclor-1232	2	2	3	3	3	3	NA	NA	NA	0.11 U	0.11 U	0.12 U	0.12 U	NA	NA	NA	NA
	Aroclor-1242	2	2	3	3	3	3	NA	NA	NA	0.11 U	0.11 U	0.12 U	0.12 U	NA	NA	NA	NA
	Aroclor-1248	2	2	3	3	3	3	NA	NA	NA	0.11 U	0.11 U	0.12 U	0.12 U	NA	NA	NA	NA
	Aroclor-1254	2	2	3	3	3	3	NA	NA	NA	0.11 U	0.11 U	0.12 U	0.12 U	NA	NA	NA	NA
	Aroclor-1260	2	2	3	3	3	3	NA	NA	NA	0.11 U	0.11 U	0.12 U	0.12 U	NA	NA	NA	NA
	Aroclor-1262	2	2	3	3	3	3	NA	NA	NA	0.11 U	0.11 U	0.12 U	0.12 U	NA	NA	NA	NA
	Aroclor-1268	2	2	3	3	3	3	NA	NA	NA	0.11 U	0.11 U	0.12 U	0.12 U	NA	NA	NA	NA
	Total PCBs	2	2	3	3	3	3	NA	NA	NA	0.11 U	0.11 U	0.12 U	0.12 U	NA	NA	NA	NA
Metals (total) (mg/kg)	Antimony	20	20	30	30	30	30	NA	NA	NA	2.7 U	2.8 U	2.9 U	2.9 U	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	20	NA	NA	NA	2.7 U	3.0	2.9 U	2.9 U	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	5,000	5,000	NA	NA	NA	36	36	34	40	NA	NA	NA	NA
	Beryllium	100	100	200	200	200	200	NA	NA	NA	0.27 U	0.28 U	0.44	0.29 U	NA	NA	NA	NA
	Cadmium	2	2	30	30	30	30	NA	NA	NA	2.2	0.42	0.29 U	0.32	NA	NA	NA	NA
	Chromium	30	30	200	200	200	200	NA	NA	NA	12	11	7.9	10	NA	NA	NA	NA
	Lead	300	300	300	300	300	300	NA	NA	NA	29	25	12	13	NA	NA	NA	NA
	Mercury	20	20	30	30	30	30	NA	NA	NA	0.065	0.038	0.034	0.030 U	NA	NA	NA	NA
	Nickel	20	20	700	700	700	700	NA	NA	NA	10	7.8	5.7	6.8	NA	NA	NA	NA
	Selenium	400	400	800	800	800	800	NA	NA	NA	5.5 U	5.6 U	5.8 U	5.9 U	NA	NA	NA	NA
	Silver	100	100	200	200	200	200	NA	NA	NA	0.55 U	0.56 U	0.58 U	0.59 U	NA	NA	NA	NA
	Thallium	8	8	60	60	80	80	NA	NA	NA	2.7 U	2.8 U	2.9 U	2.9 U	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	1,000	1,000	NA	NA	NA	24	21	16	19	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	5,000	5,000	NA	NA	NA	2,400	71	45	44	NA	NA	NA	NA

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

NA - Sample not analyzed for the listed analyte.

NS - No MassDEP standards exist for this analyte.

U - Compound was not detected at specified quantitation limit.

Values in **Bold** indicate the compound was detected.

Values shown in Bold and shaded type exceed one or more of the listed MassDEP Method 1 standards.

VOCs - Volatile Organic Compounds.

VPH - Volatile Petroleum Hydrocarbons.

EPH - Extractable Petroleum Hydrocarbons.

PCBs - Polychlorinated Biphenyls.

Table 4 - Summary of Analytical Results for Soil Gas Samples -- January 2014
Former Cote Ford Site - 820 Cummins Highway and 30-32 Regis Road
Mattapan, Massachusetts

Analysis	Analyte		Sample ID: Sample Date: Commercial/ Industrial*	SG-1	SG-2	SG-3	
				1/13/2014	1/14/2014	1/14/2014	1/14/2014
TO-15 (ug/m3)		Residential*					Field Dup
Acetone	6,400	50,000	38	57	79	84	
Benzene	160	770	20	0.70	0.67	0.45	
Bromodichloromethane	9.1	46	0.34 U	0.34 U	0.34 U	0.34 U	
Bromoform	150	700	0.52 U	0.52 U	0.52 U	0.52 U	
Bromomethane	42	310	0.19 U	0.19 U	0.19 U	0.19 U	
2-Butanone (MEK)	840	310,000	5.9 U	5.9 U	7.1	8.0	
Carbon Tetrachloride	38	130	0.31 U	0.38	0.31 U	0.31 U	
Chlorobenzene	160	1,300	0.23 U	0.23 U	0.23 U	0.23 U	
Chloroform	130	210	0.24 U	0.24 U	0.24 U	0.24 U	
Dibromochloromethane	6.8	34	0.43 U	0.43 U	0.43 U	0.43 U	
1,2-Dibromoethane (EDB)	0.55	2.7	0.38 U	0.38 U	0.38 U	0.38 U	
1,2-Dichlorobenzene	50	13,000	0.30 U	1.3	0.30 U	0.30 U	
1,3-Dichlorobenzene	42	13,000	0.30 U	0.42	0.30 U	0.30 U	
1,4-Dichlorobenzene	35	120	0.30 U	0.36	0.30 U	0.30 U	
1,1-Dichloroethane	56	31,000	0.20 U	0.20 U	0.20 U	0.20 U	
1,2-Dichloroethane	6.3	31	0.20 U	0.20 U	0.20 U	0.20 U	
1,1-Dichloroethylene	56	13,000	0.20 U	0.20 U	0.20 U	0.20 U	
cis-1,2-Dichloroethylene	56	2,200	0.20 U	0.20 U	0.20 U	0.20 U	
trans-1,2-Dichloroethylene	56	4,300	0.20 U	0.20 U	0.20 U	0.20 U	
1,2-Dichloropropane	8.4	42	0.23 U	0.23 U	0.23 U	0.23 U	
cis-1,3-Dichloropropene	41	200	0.23 U	0.23 U	0.23 U	0.23 U	
trans-1,3-Dichloropropene	41	200	0.23 U	0.23 U	0.23 U	0.23 U	
1,4-Dioxane	40	200	1.8 U	1.8 U	2.9	2.8	
Ethylbenzene	520	62,000	3.3	0.22 U	0.22	0.22	
Hexachlorobutadiene	7.7	320	0.53 U	0.53 U	0.53 U	0.53 U	
Methyl tert-Butyl Ether (MTBE)	2,700	190,000	0.18 U	0.18 U	0.18 U	0.18 U	
Methylene Chloride	770	37,000	1.9	1.7 U	1.7 U	1.7 U	
4-Methyl-2-pentanone (MIBK)	150	190,000	0.90	3.1	0.90	0.94	
Naphthalene	42	190	67	0.79	1.3	0.52	
Styrene	98	1,400	2.1	0.21 U	0.21 U	0.21 U	
1,1,2,2-Tetrachloroethane	2.8	14	0.34 U	0.34 U	0.34 U	0.34 U	
Tetrachloroethylene	98	290	3.1	0.75	1.2	1.1	
Toluene	3,800	310,000	20	1.3	0.49	0.49	
1,2,4-Trichlorobenzene	240	13,000	0.37 U	0.37 U	0.37 U	0.37 U	
1,1,1-Trichloroethane	210	320,000	0.27 U	0.27 U	0.27 U	0.27 U	
1,1,2-Trichloroethane	11	50	0.27 U	0.27 U	0.27 U	0.27 U	
Trichloroethylene	28	130	0.38	3.6	0.27 U	0.27 U	
Vinyl Chloride	19	91	0.13 U	0.13 U	0.13 U	0.13 U	
m&p-Xylene	1,400	6,200	8.2	0.43 U	0.82	0.82	
o-Xylene	1,400	6,200	4.6	0.26	0.35	0.35	
APH (ug/m3)							
Benzene	160	770	24	0.85	0.79	0.60 U	
1,3-Butadiene	NS	NS	38	0.42 U	0.42 U	0.42 U	
Ethylbenzene	520	62,000	3.4	0.82 U	0.82 U	0.82 U	
Methyl tert-Butyl Ether (MTBE)	2,700	190,000	0.68 U	0.68 U	0.68 U	0.68 U	
Toluene	3,800	310,000	22	1.4	0.71 U	0.71 U	
Naphthalene	42	190	88	1.0	1.6	0.88 U	
m&p-Xylene	1,400	6,200	8.8	0.82 U	0.90	0.87	
o-Xylene	1,400	6,200	4.7	0.82 U	0.82 U	0.82 U	
C5-C8 Aliphatics	4,100	23,000	490	94	79	69	
C9-C10 Aromatics	700	3,100	50	9.4 U	9.4 U	9.4 U	
C9-C12 Aliphatics	4,800	15,000	260	100	85	65	

Notes:

ug/m3 - micrograms per cubic meters.

NS - No MassDEP Sub-slab Soil Gas Screening value exists for this analyte.

U - Compound was not detected at specified quantitation limit.

Values in **Bold** indicate the compound was detected.

Values shown in **Bold** and shaded type exceed one or more of the listed MassDEP Sub-slab Soil Gas Screening Values.

TO - Toxic organics.

APH - Air-Phase Petroleum Hydrocarbons.

* - MassDEP, Sub-slab Soil Gas Screening Values, Vapor Intrusion Guidance - Interim Final, December 2011 with updated screening values from February 22 and March 7, 2013.

FIGURES



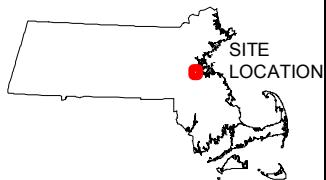
■ Approximate Site Boundary

0 1,000 2,000
Feet



Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
978-970-5600

MASSACHUSETTS

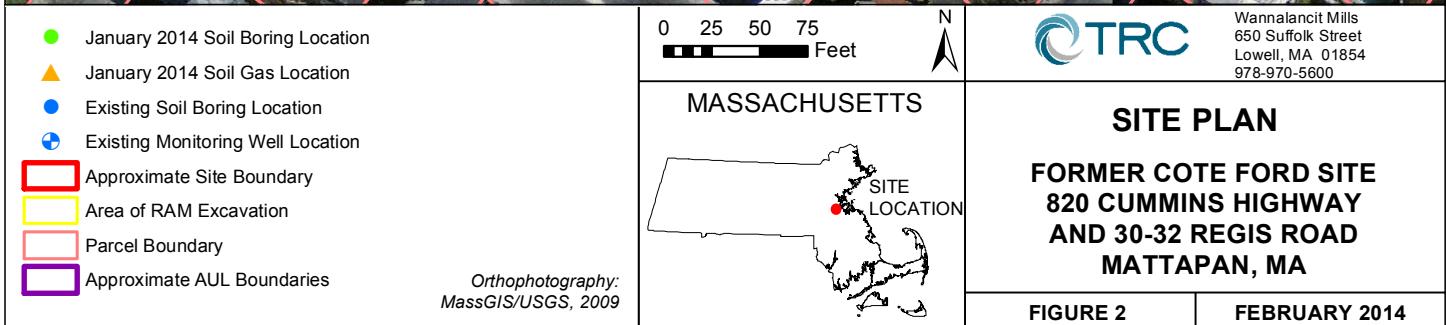
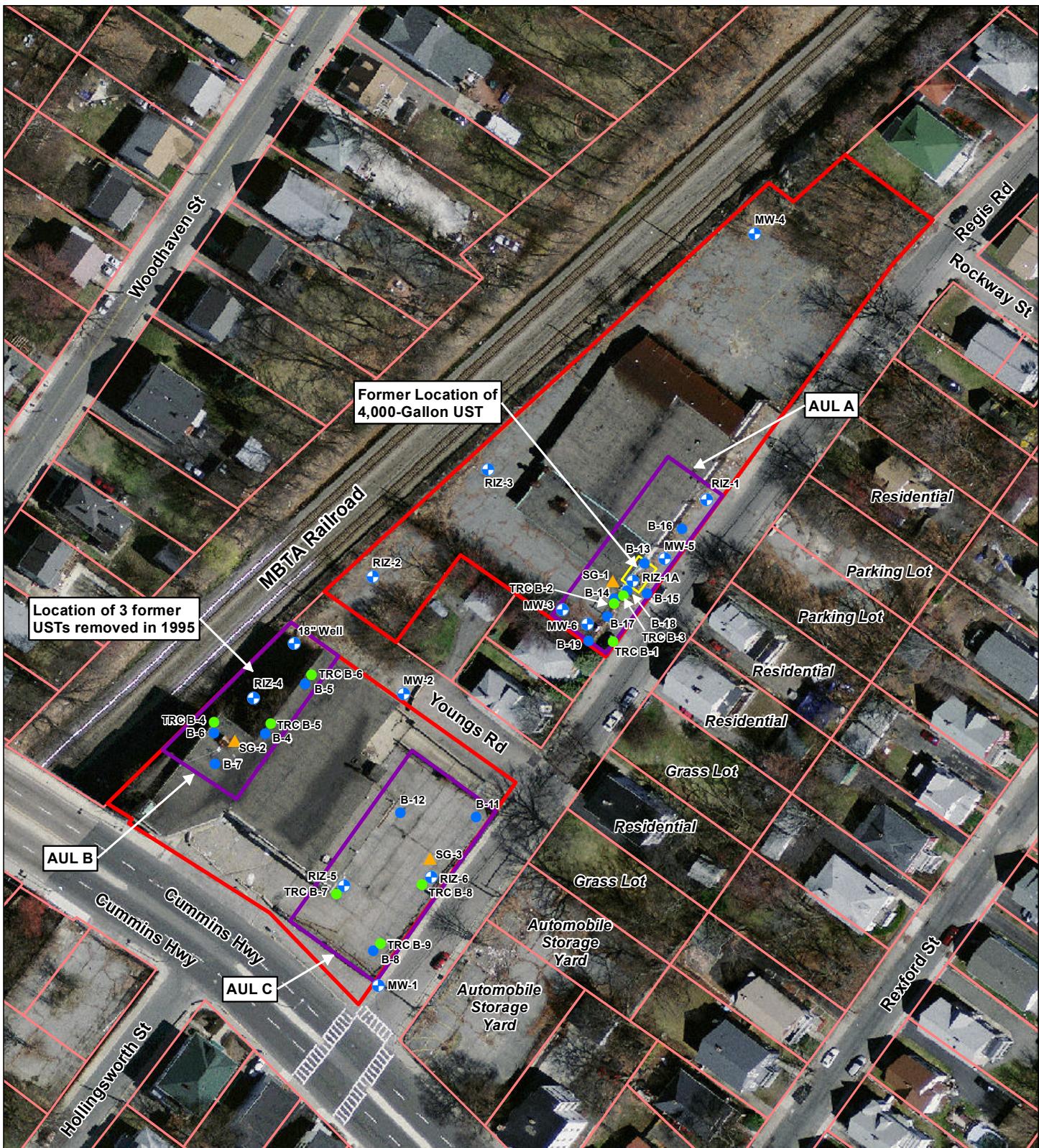


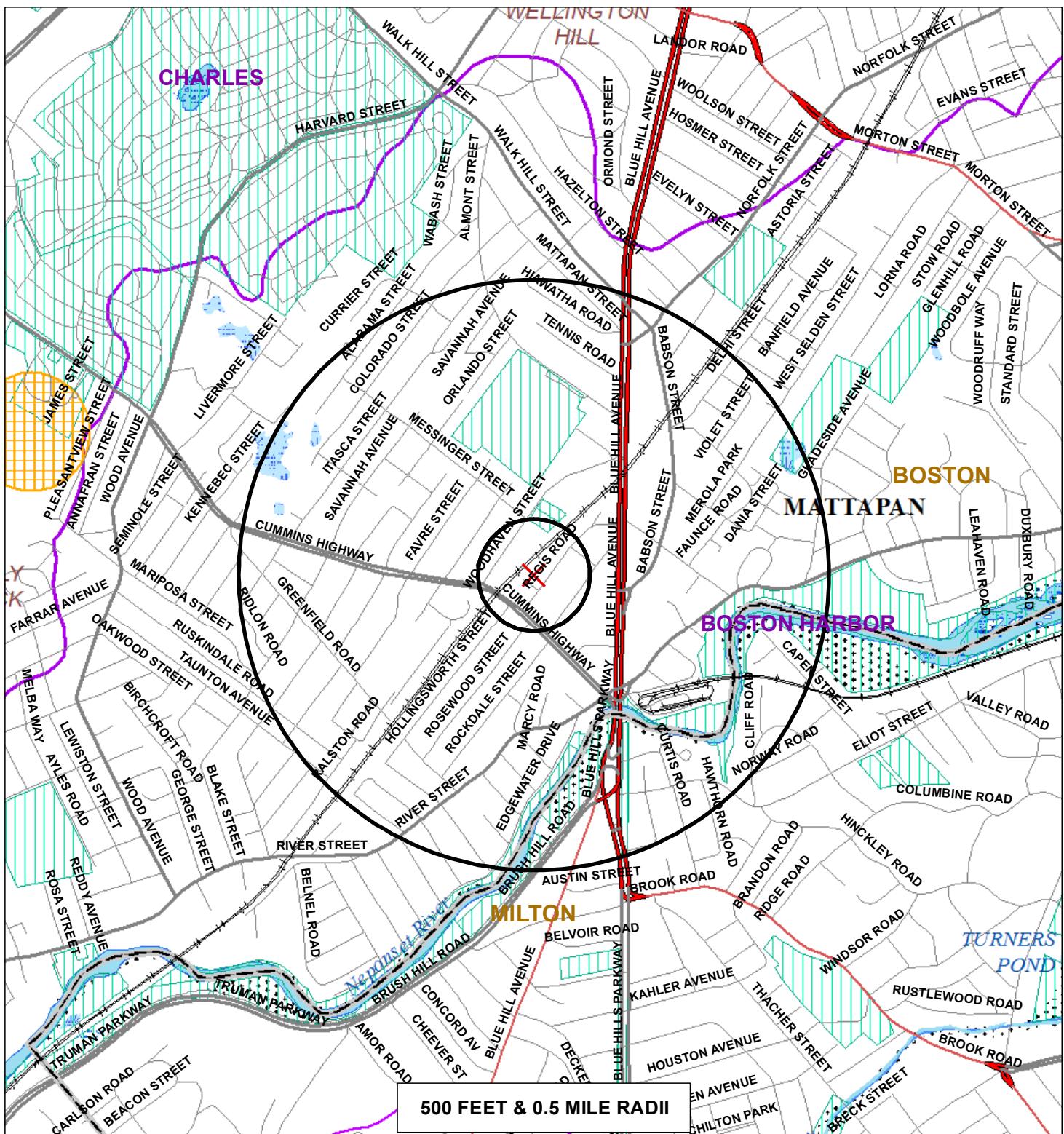
SITE LOCATION MAP

FORMER COTE FORD SITE
820 CUMMINS HIGHWAY
AND 30-32 REGIS ROAD
MATTAPAN, MA

FIGURE 1

FEBRUARY 2014





Roads: Limited Access, Multi-Lane, Major/Minor, Track, Trail

Railroad, Pipeline, Powerline

Major Basin, Sub Basin, Perennial Stream, Intermittent Stream

Shoreline, Man made Shore, Dam, Aqueduct

Wetland, Salt Wetland, Submerged Wetland, Open Water, Reservoir, Tidal Flat/Shoal

Potentially Productive Aquifers: Medium, High Yield

Non-Potential Drinking Water Source Area: Medium, High Yield

EPA Sole Source Aquifer, FEMA 100 Yr. Floodplain, DEP Solid Waste Facility

Approved Zone II, IWPA, Surface Water Supply Zone A

Protected Open Space, ACEC

Priority Habitat, Certified Vernal Pool

Boundaries: County and Town

Public Water Supplies: Ground, Surface, Non-Community (NTNC, TNC)

Source: MassGIS/EOEA



Wannalancit Mills
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FIGURE 3

MASSDEP PRIORITY RESOURCES MAP
FORMER COTE FORD SITE
820 CUMMINS HIGHWAY
AND 30-32 REGIS ROAD
MATTAPAN, MA



0 500 1,000 1,500
FEB
2014

APPENDIX A
BORING LOGS



650 Suffolk Street
Lowell, MA
Telephone: 978-970-5600
Fax: 978-453-1995

BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER Former Cote Ford / 204940 SCREEN TYPE/SLOT NA
BORING/WELL NUMBER TRC B-1 FILTER PACK TYPE NA
TRC GEOLOGIST K. Jordan SEAL TYPE NA
DRILLING CONTRACTOR/FOREMAN NE Geotech/ Dan Regan DEPTH TO WATER (Approximate Feet) 6
DATE DRILLED 1/13/14 TOTAL DEPTH (Feet) 6
LOCATION Approximately 28' S of TRC B-2 GROUND ELEVATION (Feet)
SAMPLING METHOD Continuous 48" Acetate Sleeve REFERENCE ELEVATION (Feet)
DRILLING METHOD Direct Push - Power Probe 9100-VTR
NOTES Sampled for VOC, VPH, and EPH (with target PAHs)

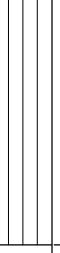
DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
	NA	48/24	S-1		0-6" ASPHALT. 6-20" FILL (brick, black sand). 20-24" Brown SILT, little fine sand, moist, no odor/staining. 0-24" Tan SILT, trace fine gravel, moist-wet at 6', no odor/staining.	OS: 0.0		
1						0.8		
2								
3								
4	NA	24/24	S-2		End of Boring - Terminated at 6 feet	0.2	TRC B-1 (3-4) 0930	No Monitoring Well Installed
5								
6								



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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER Former Cote Ford / 204940 SCREEN TYPE/SLOT NA
BORING/WELL NUMBER TRC B-2 FILTER PACK TYPE NA
TRC GEOLOGIST K. Jordan SEAL TYPE NA
DRILLING CONTRACTOR/FOREMAN NE Geotech/ Dan Regan DEPTH TO WATER (Approximate Feet) NA
DATE DRILLED 1/13/14 TOTAL DEPTH (Feet) 6
LOCATION Approximately 28' N of TRC B-1 GROUND ELEVATION (Feet) NA
SAMPLING METHOD Continuous 48" Acetate Sleeve REFERENCE ELEVATION (Feet) NA
DRILLING METHOD Direct Push - Power Probe 9100-VTR
NOTES Sampled for VOC, VPH, and EPH (with target PAHs)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
	NA	48/30	S-1		0-4" ASPHALT. 4-8" CONCRETE. 8-19" FILL (brick, black sand). 19-30" Dark brown fine to medium SAND, little to some fine to medium gravel, moist, no odor/staining.			
1						0.9		
2						0.8		
3								No Monitoring Well Installed
4	NA	24/20	S-2		0-20" Grey-greenish SILT, little clay, moist, petroleum odor, no staining.		TRC B-2 (4-6/6) 1000	
5								
6					End of Boring - Terminated at 6 feet	459.3		



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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER Former Cote Ford / 204940 SCREEN TYPE/SLOT NA
BORING/WELL NUMBER TRC B-3 FILTER PACK TYPE NA
TRC GEOLOGIST K. Jordan SEAL TYPE NA
DRILLING CONTRACTOR/FOREMAN NE Geotech/ Dan Regan DEPTH TO WATER (Approximate Feet) NA
DATE DRILLED 1/13/14 TOTAL DEPTH (Feet) 6
LOCATION Approximately 11' N of TRC B-2 GROUND ELEVATION (Feet) NA
SAMPLING METHOD Continuous 48" Acetate Sleeve REFERENCE ELEVATION (Feet) NA
DRILLING METHOD Direct Push - Power Probe 9100-VTR
NOTES Sampled for VOC, VPH, and EPH (with target PAHs)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
	NA	48/28	S-1		0-4" Dark brown TOPSOIL, moist, no odor/staining. 4-20" Brown fine to medium SAND, little fine to medium subangular gravel, moist, no odor/staining. 20-24" Brown fine to medium SAND and GRAVEL, moist, no odor/staining. 24-28" Pulverized CONCRETE.	OS: 0.0		
1						0.2		
2								
3								No Monitoring Well Installed
4	NA	24/22	S-2		0-11" Brown fine to medium SAND, little fine to medium subangular gravel, moist, no odor/staining. 11-17" Brown SILT, little clay, moist, no odor/staining. 17-22" Grey-green SILT, moist, no odor/staining.	OS: 0.0	TRC B-3 (4-6) 0910	
5						1.2		
6					End of Boring - Terminated at 6 feet			



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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER Former Cote Ford / 204940 SCREEN TYPE/SLOT NA
BORING/WELL NUMBER TRC B-4 FILTER PACK TYPE NA
TRC GEOLOGIST K. Jordan SEAL TYPE NA
DRILLING CONTRACTOR/FOREMAN NE Geotech/ Dan Regan DEPTH TO WATER (Approximate Feet) 5
DATE DRILLED 1/13/14 TOTAL DEPTH (Feet) 6
LOCATION Approximately 40' W of TRC B-4 GROUND ELEVATION (Feet)
SAMPLING METHOD Continuous 48" Acetate Sleeve REFERENCE ELEVATION (Feet)
DRILLING METHOD Direct Push - Power Probe 9100-VTR
NOTES Sampled for VOC, VPH, EPH (with target PAH), MCP-14 Metals, and PCB

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
1	NA	48/13	S-1		0-4" CONCRETE. 0-13" Brown fine to medium SAND, little fine to medium gravel and fill (brick, ash), moist, no odor/staining.	0.2		
2								
3								
4	NA	24/13	S-2		0-13" Tan SILT and CLAY, wet at ~5', no odor/staining.	0.3	TRC B-4 (3-4) 1420	
5								
6					End of Boring - Terminated at 6 feet			



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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER Former Cote Ford / 204940 SCREEN TYPE/SLOT NA
BORING/WELL NUMBER TRC B-5 FILTER PACK TYPE NA
TRC GEOLOGIST K. Jordan SEAL TYPE NA
DRILLING CONTRACTOR/FOREMAN NE Geotech/ Dan Regan DEPTH TO WATER (Approximate Feet) 5
DATE DRILLED 1/13/14 TOTAL DEPTH (Feet) 6
LOCATION Approximately 50' SW of TRC B-6 GROUND ELEVATION (Feet)
SAMPLING METHOD Continuous 48" Acetate Sleeve REFERENCE ELEVATION (Feet)
DRILLING METHOD Direct Push - Power Probe 9100-VTR
NOTES Sampled for VOC, VPH, EPH (with target PAH), MCP-14 Metals, and PCB

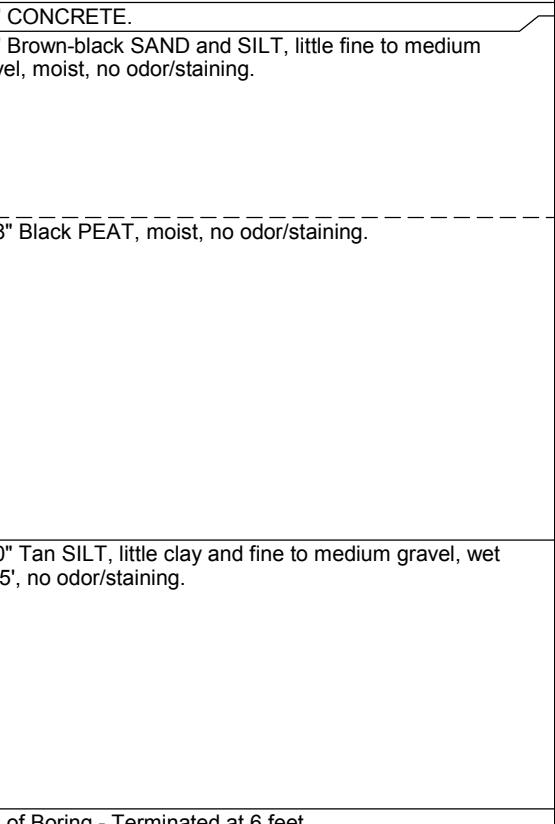
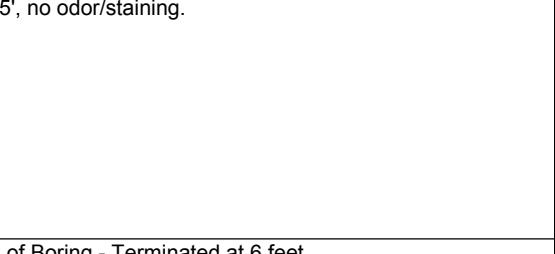
DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
	NA	48/12	S-1		0-4" CONCRETE. 0-12" Brown fine to medium SAND, little fine to medium gravel and brick, moist, no odor/staining.			
1						0.4		
2								
3								
4	NA	24/18	S-2		0-7" Brown fine to medium SAND, little fine to medium gravel and brick, moist, no odor/staining. 7-18" Tan SILT, little clay, wet at ~5', no odor/staining.	plus TRC B-5 (3-5) 1440 MS/DUP for metals		No Monitoring Well Installed
5						0.3		
6					End of Boring - Terminated at 6 feet			



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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER Former Cote Ford / 204940 SCREEN TYPE/SLOT NA
BORING/WELL NUMBER TRC B-6 FILTER PACK TYPE NA
TRC GEOLOGIST K. Jordan SEAL TYPE NA
DRILLING CONTRACTOR/FOREMAN NE Geotech/ Dan Regan DEPTH TO WATER (Approximate Feet) 5
DATE DRILLED 1/13/14 TOTAL DEPTH (Feet) 6
LOCATION Approximately 50' NE of TRC B-5 GROUND ELEVATION (Feet)
SAMPLING METHOD Continuous 48" Acetate Sleeve REFERENCE ELEVATION (Feet)
DRILLING METHOD Direct Push - Power Probe 9100-VTR
NOTES Sampled for VOC, VPH, EPH (with target PAH), MCP-14 Metals, and PCB

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
	NA	48/18	S-1		0-4" CONCRETE. 0-7" Brown-black SAND and SILT, little fine to medium gravel, moist, no odor/staining.			
1					7-18" Black PEAT, moist, no odor/staining.			
2								
3						0.3		
4	NA	24/20	S-2		0-20" Tan SILT, little clay and fine to medium gravel, wet at ~5', no odor/staining.		TRC B-6 (3-5) 1510 DUP-1 "1610"	No Monitoring Well Installed
5						0.3		
6					End of Boring - Terminated at 6 feet			



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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER Former Cote Ford / 204940 SCREEN TYPE/SLOT NA
BORING/WELL NUMBER TRC B-7 FILTER PACK TYPE NA
TRC GEOLOGIST K. Jordan SEAL TYPE NA
DRILLING CONTRACTOR/FOREMAN NE Geotech/ Dan Regan DEPTH TO WATER (Approximate Feet) 5
DATE DRILLED 1/13/14 TOTAL DEPTH (Feet) 6
LOCATION Approximately 65' W of TRC B-8 GROUND ELEVATION (Feet)
SAMPLING METHOD Continuous 48" Acetate Sleeve REFERENCE ELEVATION (Feet)
DRILLING METHOD Direct Push - Power Probe 9100-VTR
NOTES Sampled for VOC, VPH, and EPH (with target PAHs)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
NA	48/18	S-1		5" CONCRETE. 0-18" Tan fine to medium SAND, little fine to medium gravel, trace clinker at ~4', moist, no odor/staining.	0.5			
1								
2								
3								
4	NA	24/18	S-2		0-6" Tan fine to medium SAND, little fine to medium gravel and fill (coal, clinker, glass), moist, no odor/staining. 6-18" Brown SILT and CLAY, wet at ~5', no odor/staining.	0.3	TRC B-7 (4-5) 1320	
5								
6					End of Boring - Terminated at 6 feet			No Monitoring Well Installed



650 Suffolk Street
Lowell, MA
Telephone: 978-970-5600
Fax: 978-453-1995

BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER Former Cote Ford / 204940 SCREEN TYPE/SLOT NA
BORING/WELL NUMBER TRC B-8 FILTER PACK TYPE NA
TRC GEOLOGIST K. Jordan SEAL TYPE NA
DRILLING CONTRACTOR/FOREMAN NE Geotech/ Dan Regan DEPTH TO WATER (Approximate Feet) 3
DATE DRILLED 1/13/14 TOTAL DEPTH (Feet) 6
LOCATION Approximately 65' E of TRC B-7 GROUND ELEVATION (Feet)
SAMPLING METHOD Continuous 48" Acetate Sleeve REFERENCE ELEVATION (Feet)
DRILLING METHOD Direct Push - Power Probe 9100-VTR
NOTES Sampled for VOC, VPH, and EPH (with target PAHs)

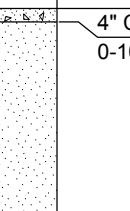
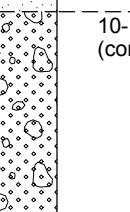
DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
NA	48/24	S-1			6" CONCRETE. 0-12" Tan fine SAND, trace fine gravel, moist, no odor/staining.			
1								
2					12-19" Brown fine to medium SAND and SILT, trace coal fragments, moist to wet, no odor/staining. 19-24" CONCRETE.			
3								
4	NA	24/16	S-2		0-16" Brown fine to medium SAND and SILT, wet, no odor/staining.	0.4	TRC B-8 (2-3) 1230	▽
5								
6					End of Boring - Terminated at 6 feet	0.3		No Monitoring Well Installed



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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER Former Cote Ford / 204940 SCREEN TYPE/SLOT NA
BORING/WELL NUMBER TRC B-9 FILTER PACK TYPE NA
TRC GEOLOGIST K. Jordan SEAL TYPE NA
DRILLING CONTRACTOR/FOREMAN NE Geotech/ Dan Regan DEPTH TO WATER (Approximate Feet) 5
DATE DRILLED 1/13/14 TOTAL DEPTH (Feet) 6
LOCATION Approximately 50' SW of TRC B-8 GROUND ELEVATION (Feet)
SAMPLING METHOD Continuous 48" Acetate Sleeve REFERENCE ELEVATION (Feet)
DRILLING METHOD Direct Push - Power Probe 9100-VTR
NOTES Sampled for VOC, VPH, and EPH (with target PAHs)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
1	NA	48/18	S-1		4" CONCRETE. 0-10" Tan fine SAND, moist, no odor/staining.	0.5		
2								
3								
4	NA	24/20	S-2		10-18" Tan fine to medium SAND and GRAVEL, little fill (concrete with trace brick), moist, no odor/staining.	0.5		
5								
6					0-20" Brown fine to medium SAND, SILT, and GRAVEL, wet at ~5', no odor/staining.	0.4	TRC B-9 (4-5) 1300	No Monitoring Well Installed
					End of Boring - Terminated at 6 feet			

APPENDIX B

LABORATORY ANALYTICAL DATA

January 21, 2014

Dave Gill
TRC Solutions - Lowell
650 Suffolk Street
Lowell, MA 01852

Project Location: Cote Ford
Client Job Number:
Project Number: 204940
Laboratory Work Order Number: 14A0376

Enclosed are results of analyses for samples received by the laboratory on January 14, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Meghan E. Kelley
Project Manager

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

REPORT DATE: 1/21/2014

TRC Solutions - Lowell
650 Suffolk Street
Lowell, MA 01852
ATTN: Dave Gill

PURCHASE ORDER NUMBER: 64769

PROJECT NUMBER: 204940

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14A0376

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Cote Ford

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
TRC B-3 (4-6)	14A0376-01	Soil		MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SM 2540G SW-846 8260C	
TRC B-1 (3-4)	14A0376-02	Soil		MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SM 2540G SW-846 8260C	
TRC B-2 (4-6/6)	14A0376-03	Soil		MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SM 2540G SW-846 8260C	
TRC B-8 (2-3)	14A0376-04	Soil		MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SM 2540G SW-846 8260C	
TRC B-9 (4-5)	14A0376-05	Soil		MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SM 2540G SW-846 8260C	
TRC B-7 (4-5)	14A0376-06	Soil		MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SM 2540G SW-846 8260C	
TRC B-4 (3-4)	14A0376-07	Soil		MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SM 2540G SW-846 6010C SW-846 7471B SW-846 8082A SW-846 8260C	
TRC B-5 (3-5)	14A0376-08	Soil		MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SM 2540G SW-846 6010C SW-846 7471B SW-846 8082A SW-846 8260C	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

REPORT DATE: 1/21/2014

TRC Solutions - Lowell
650 Suffolk Street
Lowell, MA 01852
ATTN: Dave Gill

PURCHASE ORDER NUMBER: 64769

PROJECT NUMBER: 204940

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14A0376

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Cote Ford

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
TRC B-6 (3-5)	14A0376-09	Soil		MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SM 2540G SW-846 6010C SW-846 7471B SW-846 8082A SW-846 8260C	
DUP-1	14A0376-10	Soil		MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SM 2540G SW-846 6010C SW-846 7471B SW-846 8082A SW-846 8260C	
Trip Blank	14A0376-11	Soil		SW-846 8260C	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For method 6010, Be hit on sample 14A0376-09 was confirmed by ICPMS.

MADEP-EPH-04-1.1

Qualifications:

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

C9-C18 Aliphatics, n-Decane, n-Nonane

14A0376-10[DUP-1], B088798-BLK1, B088798-BS1, B088798-BSD1

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

n-Dodecane

B088798-BSD1

MADEP-VPH-04-1.1

Qualifications:

Soil/methanol ratio does not meet method specifications. Excess amount of soil. Sample was completely covered with methanol, but with less than the method-specified amount.

Analyte & Samples(s) Qualified:

14A0376-04[TRC B-8 (2-3)]

Elevated reporting limit due to high concentration of target compounds. MA CAM reporting limit not met.

Analyte & Samples(s) Qualified:

Benzene, Naphthalene, o-Xylene, Toluene

14A0376-03[TRC B-2 (4-6/6)]

SW-846 6010C

Qualifications:

Result is serial dilution as per MA CAM/ CT RCP regulation.

Analyte & Samples(s) Qualified:

B088756-DUP2

Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

Antimony

14A0376-08[TRC B-5 (3-5)], B088756-MS1

Duplicate RPD is outside of control limits. Outlier can be attributed to sample non-homogeneity encountered during sample prep.

Analyte & Samples(s) Qualified:

Barium

14A0376-08[TRC B-5 (3-5)], B088756-DUP1

SW-846 8260C

Qualifications:

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:

Carbon Disulfide, tert-Amyl Methyl Ether (TAME)

B088758-BS1, B088758-BSD1

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

1,2-Dibromo-3-chloropropane (DBCP), 2,2-Dichloropropane, Bromoform, Chlorodibromomethane

14A0376-03[TRC B-2 (4-6)], B088724-BLK1, B088724-BS1, B088724-BSD1, 14A0376-01[TRC B-3 (4-6)], 14A0376-02[TRC B-1 (3-4)], 14A0376-04[TRC B-8 (2-3)], 14A0376-05[TRC B-9 (4-5)], 14A0376-06[TRC B-7 (4-5)], 14A0376-07[TRC B-4 (3-4)], 14A0376-08[TRC B-5 (3-5)], 14A0376-09[TRC B-6 (3-5)], 14A0376-10[DUP-1], 14A0376-11[Trip Blank], B088758-BLK1, B088758-BS1, B088758-BSD1, B088758-MS1

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

Chloromethane, tert-Butyl Ethyl Ether (TBEE)

B088758-BSD1, B088758-BS1

Compound classified by MA CAM as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.

Analyte & Samples(s) Qualified:

Bromomethane, Chloromethane, Dichlorodifluoromethane (Freon 12)

B088758-BS1, B088758-BSD1, B088724-BS1, B088724-BSD1

Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, Dichlorodifluoromethane (Freon 12), Naphthalene

14A0376-01[TRC B-3 (4-6)], B088758-MS1

Matrix spike recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:

2,2-Dichloropropane, Bromomethane

14A0376-01[TRC B-3 (4-6)], B088758-MS1

Matrix spike recovery is outside of control limits. Data validation is not affected since sample result is "not detected" and recovery bias is on the high side for this compound.

Analyte & Samples(s) Qualified:

Carbon Disulfide, Methylene Chloride

B088758-MS1

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:

Bromomethane

14A0376-01[TRC B-3 (4-6)], 14A0376-02[TRC B-1 (3-4)], 14A0376-04[TRC B-8 (2-3)], 14A0376-05[TRC B-9 (4-5)], 14A0376-06[TRC B-7 (4-5)], 14A0376-07[TRC B-4 (3-4)], 14A0376-08[TRC B-5 (3-5)], 14A0376-09[TRC B-6 (3-5)], 14A0376-10[DUP-1], 14A0376-11[Trip Blank], B088758-BLK1, B088758-BS1, B088758-BSD1, B088758-MS1

Elevated reporting limit due to high concentration of target compounds. MA CAM reporting limit not met.

Analyte & Samples(s) Qualified:

14A0376-03[TRC B-2 (4-6/6)]

Surrogate recovery outside of control limits due to suspected sample matrix interference. Chromatogram(s) is attached.

Analyte & Samples(s) Qualified:

Toluene-d8

14A0376-03[TRC B-2 (4-6/6)]

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

1,2-Dibromo-3-chloropropane (DBCP), 2,2-Dichloropropane, Bromoform, Carbon Tetrachloride, Chlorodibromomethane, Naphthalene, trans-1,3-Dichloropropene

14A0376-03[TRC B-2 (4-6/6)], B088724-BLK1, B088724-BS1, B088724-BSD1, 14A0376-01[TRC B-3 (4-6)], 14A0376-02[TRC B-1 (3-4)], 14A0376-04[TRC B-8 (2-3)], 14A0376-05[TRC B-9 (4-5)], 14A0376-06[TRC B-7 (4-5)], 14A0376-07[TRC B-4 (3-4)], 14A0376-08[TRC B-5 (3-5)], 14A0376-09[TRC B-6 (3-5)], 14A0376-10[DUP-1], 14A0376-11[Trip Blank], B088758-BLK1, B088758-BS1, B088758-BSD1, B088758-MS1

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

Analyte & Samples(s) Qualified:

1,4-Dioxane

14A0376-01[TRC B-3 (4-6)], 14A0376-02[TRC B-1 (3-4)], 14A0376-03[TRC B-2 (4-6/6)], 14A0376-04[TRC B-8 (2-3)], 14A0376-05[TRC B-9 (4-5)], 14A0376-06[TRC B-7 (4-5)], 14A0376-07[TRC B-4 (3-4)], 14A0376-08[TRC B-5 (3-5)], 14A0376-09[TRC B-6 (3-5)], 14A0376-10[DUP-1], 14A0376-11[Trip Blank], B088724-BLK1, B088724-BS1, B088724-BSD1, B088758-BLK1, B088758-BS1, B088758-BSD1, B088758-MS1

Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Bromomethane, Carbon Disulfide, tert-Amyl Methyl Ether (TAME)

B088724-BS1, B088724-BSD1, B088758-BS1, B088758-BSD1

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MADEP-EPH-04-1.1

SPE cartridge contamination with non-petroleum compounds, if present, is verified by GC/MS in each method blank per extraction batch and excluded from C11-C22 aromatic range fraction in all samples in the batch. No significant modifications were made to the method.

MADEP-VPH-04-1.1

No significant modifications were made to the method. All VPH samples were received preserved properly in methanol with a soil/methanol ratio of 1:1 +/- 25% completely covered by methanol in the proper containers specified on the chain-of-custody form unless specified in this narrative.

SW-846 8260C

Laboratory control sample recoveries for required MCP Data Enhancement 8260 compounds were all within limits specified by the method except for "difficult analytes" where recovery control limits of 40-160% are used and/or unless otherwise listed in this narrative. Difficult analytes: MIBK, MEK, acetone, 1,4-dioxane, chloromethane, dichlorodifluoromethane, 2-hexanone, and bromomethane.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Michael A. Erickson
Laboratory Director

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-3 (4-6)

Sampled: 1/13/2014 09:10

Sample ID: 14A0376-01

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Benzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Bromobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Bromochloromethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Bromodichloromethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Bromoform	ND	0.0080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Bromomethane	ND	0.0080	mg/Kg dry	1	MS-08, R-05	SW-846 8260C	1/15/14	1/15/14 11:35	MFF
2-Butanone (MEK)	ND	0.032	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
n-Butylbenzene	ND	0.0032	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
sec-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
tert-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Carbon Disulfide	ND	0.0048	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Carbon Tetrachloride	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Chlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Chlorodibromomethane	ND	0.0032	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Chloroethane	ND	0.0080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Chloroform	ND	0.0032	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Chloromethane	ND	0.0080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
2-Chlorotoluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
4-Chlorotoluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,2-Dibromoethane (EDB)	ND	0.00080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Dibromomethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,2-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,3-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,4-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0080	mg/Kg dry	1	MS-07	SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,1-Dichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,2-Dichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,1-Dichloroethylene	ND	0.0032	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
cis-1,2-Dichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
trans-1,2-Dichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,2-Dichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,3-Dichloropropane	ND	0.00080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
2,2-Dichloropropane	ND	0.0016	mg/Kg dry	1	L-04, MS-08, V-05	SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,1-Dichloropropene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
cis-1,3-Dichloropropene	ND	0.0032	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
trans-1,3-Dichloropropene	ND	0.0080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Diethyl Ether	ND	0.0080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Diisopropyl Ether (DIPE)	ND	0.00080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,4-Dioxane	ND	0.080	mg/Kg dry	1	V-16	SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Ethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-3 (4-6)

Sampled: 1/13/2014 09:10

Sample ID: 14A0376-01

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0032	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
2-Hexanone (MBK)	ND	0.032	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Isopropylbenzene (Cumene)	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0032	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Methylene Chloride	ND	0.0080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Naphthalene	ND	0.0080	mg/Kg dry	1	MS-07	SW-846 8260C	1/15/14	1/15/14 11:35	MFF
n-Propylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Styrene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,1,1,2-Tetrachloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,1,2,2-Tetrachloroethane	ND	0.00080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Tetrachloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Tetrahydrofuran	ND	0.0080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Toluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,2,3-Trichlorobenzene	ND	0.0080	mg/Kg dry	1	MS-07	SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,2,4-Trichlorobenzene	ND	0.0080	mg/Kg dry	1	MS-07	SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,1,1-Trichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,1,2-Trichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Trichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,2,3-Trichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,2,4-Trimethylbenzene	ND	0.0032	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
1,3,5-Trimethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Vinyl Chloride	ND	0.0080	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
m+p Xylene	ND	0.0032	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
o-Xylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 11:35	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	79.0	70-130					1/15/14 11:35		
Toluene-d8	103	70-130					1/15/14 11:35		
4-Bromofluorobenzene	96.0	70-130					1/15/14 11:35		

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-3 (4-6)

Sampled: 1/13/2014 09:10

Sample ID: 14A0376-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
C19-C36 Aliphatics	ND	14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Unadjusted C11-C22 Aromatics	16	14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
C11-C22 Aromatics	14	14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Acenaphthene	ND	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Acenaphthylene	ND	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Anthracene	ND	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Benzo(a)anthracene	0.17	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Benzo(a)pyrene	0.17	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Benzo(b)fluoranthene	0.24	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Benzo(g,h,i)perylene	ND	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Benzo(k)fluoranthene	ND	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Chrysene	0.19	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Dibenz(a,h)anthracene	ND	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Fluoranthene	0.35	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Fluorene	ND	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Indeno(1,2,3-cd)pyrene	0.30	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
2-Methylnaphthalene	ND	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Naphthalene	ND	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Phenanthrene	0.22	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Pyrene	0.33	0.14	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:12	SCS
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Chlorooctadecane (COD)	61.6		40-140					1/17/14 20:12	
o-Terphenyl (OTP)	74.6		40-140					1/17/14 20:12	
2-Bromonaphthalene	104		40-140					1/17/14 20:12	
2-Fluorobiphenyl	113		40-140					1/17/14 20:12	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-3 (4-6)

Sampled: 1/13/2014 09:10

Sample ID: 14A0376-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 0.84

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	20	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 16:26	EEH
C5-C8 Aliphatics	ND	20	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 16:26	EEH
Unadjusted C9-C12 Aliphatics	ND	20	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 16:26	EEH
C9-C12 Aliphatics	ND	20	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 16:26	EEH
C9-C10 Aromatics	ND	20	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 16:26	EEH
Benzene	ND	0.10	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 16:26	EEH
Ethylbenzene	ND	0.10	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 16:26	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.10	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 16:26	EEH
Naphthalene	ND	0.50	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 16:26	EEH
Toluene	ND	0.10	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 16:26	EEH
m+p Xylene	ND	0.20	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 16:26	EEH
o-Xylene	ND	0.10	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 16:26	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
2,5-Dibromotoluene (FID)	122	70-130					1/15/14 16:26		
2,5-Dibromotoluene (PID)	110	70-130					1/15/14 16:26		

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-3 (4-6)

Sampled: 1/13/2014 09:10

Sample ID: 14A0376-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	72.8		% Wt	1		SM 2540G	1/20/14	1/21/14 0:39	RH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-1 (3-4)

Sampled: 1/13/2014 09:30

Sample ID: 14A0376-02

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.10	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Benzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Bromobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Bromochloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Bromodichloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Bromoform	ND	0.010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Bromomethane	ND	0.010	mg/Kg dry	1	R-05	SW-846 8260C	1/15/14	1/15/14 12:02	MFF
2-Butanone (MEK)	ND	0.040	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
n-Butylbenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Carbon Disulfide	ND	0.0060	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Chlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Chlorodibromomethane	ND	0.0040	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Chloroethane	ND	0.010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Chloroform	ND	0.0040	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Chloromethane	ND	0.010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Dibromomethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,1-Dichloroethylene	ND	0.0040	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,3-Dichloropropane	ND	0.0010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg dry	1	L-04, V-05	SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,1-Dichloropropene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
cis-1,3-Dichloropropene	ND	0.0040	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
trans-1,3-Dichloropropene	ND	0.010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Diethyl Ether	ND	0.010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,4-Dioxane	ND	0.10	mg/Kg dry	1	V-16	SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Ethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-1 (3-4)

Sampled: 1/13/2014 09:30

Sample ID: 14A0376-02

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0040	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
2-Hexanone (MBK)	ND	0.040	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Methylene Chloride	ND	0.010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Naphthalene	ND	0.010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
n-Propylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Styrene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Tetrahydrofuran	ND	0.010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Toluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,2,3-Trichlorobenzene	ND	0.010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,2,4-Trichlorobenzene	ND	0.010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,1,1-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Trichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,2,4-Trimethylbenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Vinyl Chloride	ND	0.010	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
m+p Xylene	ND	0.0040	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
o-Xylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 12:02	MFF
Surrogates		% Recovery	Recovery Limits	Flag/Qual					
1,2-Dichloroethane-d4		81.6	70-130						1/15/14 12:02
Toluene-d8		102	70-130						1/15/14 12:02
4-Bromofluorobenzene		94.2	70-130						1/15/14 12:02

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-1 (3-4)

Sampled: 1/13/2014 09:30

Sample ID: 14A0376-02

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
C19-C36 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Unadjusted C11-C22 Aromatics	21	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
C11-C22 Aromatics	18	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Benzo(a)anthracene	0.29	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Benzo(a)pyrene	0.26	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Benzo(b)fluoranthene	0.40	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Benzo(g,h,i)perylene	0.16	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Benzo(k)fluoranthene	0.16	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Chrysene	0.35	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Fluoranthene	0.61	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Fluorene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Indeno(1,2,3-cd)pyrene	0.19	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Phenanthrene	0.36	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Pyrene	0.60	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:33	SCS
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Chlorooctadecane (COD)	56.6		40-140					1/17/14 20:33	
o-Terphenyl (OTP)	67.3		40-140					1/17/14 20:33	
2-Bromonaphthalene	98.1		40-140					1/17/14 20:33	
2-Fluorobiphenyl	106		40-140					1/17/14 20:33	

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-1 (3-4)

Sampled: 1/13/2014 09:30

Sample ID: 14A0376-02

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.02

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:02	EEH
C5-C8 Aliphatics	ND	15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:02	EEH
Unadjusted C9-C12 Aliphatics	ND	15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:02	EEH
C9-C12 Aliphatics	ND	15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:02	EEH
C9-C10 Aromatics	ND	15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:02	EEH
Benzene	ND	0.074	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:02	EEH
Ethylbenzene	ND	0.074	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:02	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.074	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:02	EEH
Naphthalene	ND	0.37	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:02	EEH
Toluene	ND	0.074	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:02	EEH
m+p Xylene	ND	0.15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:02	EEH
o-Xylene	ND	0.074	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:02	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
2,5-Dibromotoluene (FID)	89.7	70-130						1/15/14 17:02	
2,5-Dibromotoluene (PID)	77.1	70-130						1/15/14 17:02	

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-1 (3-4)

Sampled: 1/13/2014 09:30

Sample ID: 14A0376-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	79.9		% Wt	1		SM 2540G	1/20/14	1/21/14 0:39	RH

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-2 (4-6/6)

Sampled: 1/13/2014 10:00

Sample ID: 14A0376-03

Sample Matrix: Soil

Sample Flags: RL-05

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	11	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.11	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Benzene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Bromobenzene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Bromochloromethane	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Bromodichloromethane	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Bromoform	ND	1.1	mg/Kg dry	4	L-04, V-05	SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Bromomethane	ND	0.43	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
2-Butanone (MEK)	ND	4.3	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
n-Butylbenzene	2.8	0.43	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
sec-Butylbenzene	0.55	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
tert-Butylbenzene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.11	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Carbon Disulfide	ND	2.1	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Carbon Tetrachloride	ND	0.21	mg/Kg dry	4	V-05	SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Chlorobenzene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Chlorodibromomethane	ND	0.43	mg/Kg dry	4	L-04, V-05	SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Chloroethane	ND	0.43	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Chloroform	ND	0.43	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Chloromethane	ND	1.1	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
2-Chlorotoluene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
4-Chlorotoluene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.85	mg/Kg dry	4	L-04, V-05	SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,2-Dibromoethane (EDB)	ND	0.11	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Dibromomethane	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,2-Dichlorobenzene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,3-Dichlorobenzene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,4-Dichlorobenzene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Dichlorodifluoromethane (Freon 12)	ND	1.1	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,1-Dichloroethane	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,2-Dichloroethane	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,1-Dichloroethylene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
cis-1,2-Dichloroethylene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
trans-1,2-Dichloroethylene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,2-Dichloropropane	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,3-Dichloropropane	ND	0.11	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
2,2-Dichloropropane	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,1-Dichloropropene	ND	1.1	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
cis-1,3-Dichloropropene	ND	0.11	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
trans-1,3-Dichloropropene	ND	0.43	mg/Kg dry	4	V-05	SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Diethyl Ether	ND	0.43	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Diisopropyl Ether (DIPE)	ND	0.11	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,4-Dioxane	ND	11	mg/Kg dry	4	V-16	SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Ethylbenzene	1.8	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-2 (4-6/6)

Sampled: 1/13/2014 10:00

Sample ID: 14A0376-03

Sample Matrix: Soil

Sample Flags: RL-05

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	1.1	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
2-Hexanone (MBK)	ND	2.1	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Isopropylbenzene (Cumene)	0.80	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
p-Isopropyltoluene (p-Cymene)	0.72	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Methyl tert-Butyl Ether (MTBE)	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Methylene Chloride	ND	1.1	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
4-Methyl-2-pentanone (MIBK)	ND	2.1	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Naphthalene	1.1	0.43	mg/Kg dry	4	V-05	SW-846 8260C	1/15/14	1/16/14 19:04	LBD
n-Propylbenzene	2.1	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Styrene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,1,1,2-Tetrachloroethane	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,1,2,2-Tetrachloroethane	ND	0.11	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Tetrachloroethylene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Tetrahydrofuran	ND	0.85	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Toluene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,2,3-Trichlorobenzene	ND	0.85	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,2,4-Trichlorobenzene	ND	0.43	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,1,1-Trichloroethane	ND	1.1	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,1,2-Trichloroethane	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Trichloroethylene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Trichlorofluoromethane (Freon 11)	ND	1.1	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,2,3-Trichloropropane	ND	0.43	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,2,4-Trimethylbenzene	11	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
1,3,5-Trimethylbenzene	3.8	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
Vinyl Chloride	ND	0.43	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
m+p Xylene	1.9	0.43	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD
o-Xylene	ND	0.21	mg/Kg dry	4		SW-846 8260C	1/15/14	1/16/14 19:04	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	130	70-130		1/16/14 19:04
Toluene-d8	144 *	70-130	S-15	1/16/14 19:04
4-Bromofluorobenzene	123	70-130		1/16/14 19:04

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-2 (4-6/6)

Sampled: 1/13/2014 10:00

Sample ID: 14A0376-03

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	35	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
C19-C36 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Unadjusted C11-C22 Aromatics	18	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
C11-C22 Aromatics	17	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Benzo(a)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Benzo(a)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Benzo(b)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Benzo(g,h,i)perylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Benzo(k)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Chrysene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Fluorene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Indeno(1,2,3-cd)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
2-Methylnaphthalene	0.17	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Naphthalene	0.18	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Phenanthrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 20:54	SCS
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Chlorooctadecane (COD)	67.0		40-140					1/17/14 20:54	
o-Terphenyl (OTP)	82.7		40-140					1/17/14 20:54	
2-Bromonaphthalene	102		40-140					1/17/14 20:54	
2-Fluorobiphenyl	110		40-140					1/17/14 20:54	

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-2 (4-6/6)

Sampled: 1/13/2014 10:00

Sample ID: 14A0376-03

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.04

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	630	130	mg/Kg dry	10		MADEP-VPH-04-1.1	1/15/14	1/16/14 11:30	EEH
C5-C8 Aliphatics	630	130	mg/Kg dry	10		MADEP-VPH-04-1.1	1/15/14	1/16/14 11:30	EEH
Unadjusted C9-C12 Aliphatics	540	130	mg/Kg dry	10		MADEP-VPH-04-1.1	1/15/14	1/16/14 11:30	EEH
C9-C12 Aliphatics	170	130	mg/Kg dry	10		MADEP-VPH-04-1.1	1/15/14	1/16/14 11:30	EEH
C9-C10 Aromatics	370	130	mg/Kg dry	10		MADEP-VPH-04-1.1	1/15/14	1/16/14 11:30	EEH
Benzene	ND	0.66	mg/Kg dry	10	RL-05	MADEP-VPH-04-1.1	1/15/14	1/16/14 11:30	EEH
Ethylbenzene	3.1	0.66	mg/Kg dry	10		MADEP-VPH-04-1.1	1/15/14	1/16/14 11:30	EEH
Methyl tert-Butyl Ether (MTBE)	0.90	0.66	mg/Kg dry	10		MADEP-VPH-04-1.1	1/15/14	1/16/14 11:30	EEH
Naphthalene	ND	3.3	mg/Kg dry	10	RL-05	MADEP-VPH-04-1.1	1/15/14	1/16/14 11:30	EEH
Toluene	ND	0.66	mg/Kg dry	10	RL-05	MADEP-VPH-04-1.1	1/15/14	1/16/14 11:30	EEH
m+p Xylene	2.9	1.3	mg/Kg dry	10		MADEP-VPH-04-1.1	1/15/14	1/16/14 11:30	EEH
o-Xylene	ND	0.66	mg/Kg dry	10	RL-05	MADEP-VPH-04-1.1	1/15/14	1/16/14 11:30	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
2,5-Dibromotoluene (FID)	107	70-130					1/16/14 11:30		
2,5-Dibromotoluene (PID)	107	70-130					1/16/14 11:30		

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Sampled: 1/13/2014 10:00

Field Sample #: TRC B-2 (4-6/6)

Sample ID: 14A0376-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	84.6		% Wt	1		SM 2540G	1/20/14	1/21/14 0:39	RH

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-8 (2-3)

Sampled: 1/13/2014 12:30

Sample ID: 14A0376-04

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Benzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Bromobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Bromochloromethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Bromodichloromethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Bromoform	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Bromomethane	ND	0.0077	mg/Kg dry	1	R-05	SW-846 8260C	1/15/14	1/15/14 13:26	MFF
2-Butanone (MEK)	ND	0.031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
n-Butylbenzene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
sec-Butylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
tert-Butylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Carbon Disulfide	ND	0.0046	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Carbon Tetrachloride	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Chlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Chlorodibromomethane	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Chloroethane	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Chloroform	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Chloromethane	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
2-Chlorotoluene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
4-Chlorotoluene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,2-Dibromoethane (EDB)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Dibromomethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,2-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,3-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,4-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,1-Dichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,2-Dichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,1-Dichloroethylene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
cis-1,2-Dichloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
trans-1,2-Dichloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,2-Dichloropropane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,3-Dichloropropane	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
2,2-Dichloropropane	ND	0.0015	mg/Kg dry	1	L-04, V-05	SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,1-Dichloropropene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
cis-1,3-Dichloropropene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
trans-1,3-Dichloropropene	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Diethyl Ether	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Diisopropyl Ether (DIPE)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,4-Dioxane	ND	0.077	mg/Kg dry	1	V-16	SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Ethylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-8 (2-3)

Sampled: 1/13/2014 12:30

Sample ID: 14A0376-04

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
2-Hexanone (MBK)	ND	0.031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Isopropylbenzene (Cumene)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Methylene Chloride	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Naphthalene	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
n-Propylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Styrene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,1,1,2-Tetrachloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,1,2,2-Tetrachloroethane	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Tetrachloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Tetrahydrofuran	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Toluene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,2,3-Trichlorobenzene	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,2,4-Trichlorobenzene	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,1,1-Trichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,1,2-Trichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Trichloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,2,3-Trichloropropane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,2,4-Trimethylbenzene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
1,3,5-Trimethylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Vinyl Chloride	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
m+p Xylene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
o-Xylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:26	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	76.2	70-130					1/15/14 13:26		
Toluene-d8	103	70-130					1/15/14 13:26		
4-Bromofluorobenzene	93.0	70-130					1/15/14 13:26		

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-8 (2-3)

Sampled: 1/13/2014 12:30

Sample ID: 14A0376-04

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Chrysene	0.12	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Fluoranthene	0.20	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Fluorene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Phenanthrene	0.12	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Pyrene	0.23	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:14	SCS
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Chlorooctadecane (COD)	71.3		40-140					1/17/14 21:14	
o-Terphenyl (OTP)	86.7		40-140					1/17/14 21:14	
2-Bromonaphthalene	105		40-140					1/17/14 21:14	
2-Fluorobiphenyl	113		40-140					1/17/14 21:14	

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-8 (2-3)

Sampled: 1/13/2014 12:30

Sample ID: 14A0376-04

Sample Matrix: Soil

Sample Flags: O-01

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.31

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	9.5	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:38	EEH
C5-C8 Aliphatics	ND	9.5	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:38	EEH
Unadjusted C9-C12 Aliphatics	ND	9.5	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:38	EEH
C9-C12 Aliphatics	ND	9.5	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:38	EEH
C9-C10 Aromatics	ND	9.5	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:38	EEH
Benzene	ND	0.048	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:38	EEH
Ethylbenzene	ND	0.048	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:38	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.048	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:38	EEH
Naphthalene	ND	0.24	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:38	EEH
Toluene	ND	0.048	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:38	EEH
m+p Xylene	ND	0.095	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:38	EEH
o-Xylene	ND	0.048	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 17:38	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
2,5-Dibromotoluene (FID)	99.7	70-130						1/15/14 17:38	
2,5-Dibromotoluene (PID)	89.9	70-130						1/15/14 17:38	

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-8 (2-3)

Sampled: 1/13/2014 12:30

Sample ID: 14A0376-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.7		% Wt	1		SM 2540G	1/20/14	1/21/14 0:39	RH

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-9 (4-5)

Sampled: 1/13/2014 13:00

Sample ID: 14A0376-05

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Benzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Bromobenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Bromochloromethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Bromodichloromethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Bromoform	ND	0.0066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Bromomethane	ND	0.0066	mg/Kg dry	1	R-05	SW-846 8260C	1/15/14	1/15/14 13:53	MFF
2-Butanone (MEK)	ND	0.026	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
n-Butylbenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
sec-Butylbenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
tert-Butylbenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Carbon Disulfide	ND	0.0039	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Carbon Tetrachloride	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Chlorobenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Chlorodibromomethane	ND	0.0026	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Chloroethane	ND	0.0066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Chloroform	ND	0.0026	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Chloromethane	ND	0.0066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
2-Chlorotoluene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
4-Chlorotoluene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,2-Dibromoethane (EDB)	ND	0.00066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Dibromomethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,2-Dichlorobenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,3-Dichlorobenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,4-Dichlorobenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,1-Dichloroethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,2-Dichloroethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,1-Dichloroethylene	ND	0.0026	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
cis-1,2-Dichloroethylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
trans-1,2-Dichloroethylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,2-Dichloropropane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,3-Dichloropropane	ND	0.00066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
2,2-Dichloropropane	ND	0.0013	mg/Kg dry	1	L-04, V-05	SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,1-Dichloropropene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
cis-1,3-Dichloropropene	ND	0.0026	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
trans-1,3-Dichloropropene	ND	0.0066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Diethyl Ether	ND	0.0066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Diisopropyl Ether (DIPE)	ND	0.00066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,4-Dioxane	ND	0.066	mg/Kg dry	1	V-16	SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Ethylbenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-9 (4-5)

Sampled: 1/13/2014 13:00

Sample ID: 14A0376-05

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0026	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
2-Hexanone (MBK)	ND	0.026	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Isopropylbenzene (Cumene)	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0026	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Methylene Chloride	ND	0.0066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Naphthalene	ND	0.0066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
n-Propylbenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Styrene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,1,1,2-Tetrachloroethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,1,2,2-Tetrachloroethane	ND	0.00066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Tetrachloroethylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Tetrahydrofuran	ND	0.0066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Toluene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,2,3-Trichlorobenzene	ND	0.0066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,2,4-Trichlorobenzene	ND	0.0066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,1,1-Trichloroethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,1,2-Trichloroethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Trichloroethylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,2,3-Trichloropropane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,2,4-Trimethylbenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
1,3,5-Trimethylbenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Vinyl Chloride	ND	0.0066	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
m+p Xylene	ND	0.0026	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
o-Xylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 13:53	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	79.3	70-130					1/15/14 13:53		
Toluene-d8	105	70-130					1/15/14 13:53		
4-Bromofluorobenzene	93.6	70-130					1/15/14 13:53		

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-9 (4-5)

Sampled: 1/13/2014 13:00

Sample ID: 14A0376-05

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
C19-C36 Aliphatics	61	11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Unadjusted C11-C22 Aromatics	24	11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
C11-C22 Aromatics	21	11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Benzo(a)anthracene	0.23	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Benzo(a)pyrene	0.27	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Benzo(b)fluoranthene	0.40	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Benzo(g,h,i)perylene	0.21	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Benzo(k)fluoranthene	0.12	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Chrysene	0.28	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Fluoranthene	0.48	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Fluorene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Indeno(1,2,3-cd)pyrene	0.21	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Phenanthrene	0.21	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Pyrene	0.50	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:35	SCS
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Chlorooctadecane (COD)	58.8		40-140					1/17/14 21:35	
o-Terphenyl (OTP)	75.4		40-140					1/17/14 21:35	
2-Bromonaphthalene	99.7		40-140					1/17/14 21:35	
2-Fluorobiphenyl	108		40-140					1/17/14 21:35	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-9 (4-5)

Sampled: 1/13/2014 13:00

Sample ID: 14A0376-05

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.17

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:14	EEH
C5-C8 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:14	EEH
Unadjusted C9-C12 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:14	EEH
C9-C12 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:14	EEH
C9-C10 Aromatics	ND	11	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:14	EEH
Benzene	ND	0.055	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:14	EEH
Ethylbenzene	ND	0.055	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:14	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.055	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:14	EEH
Naphthalene	ND	0.28	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:14	EEH
Toluene	ND	0.055	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:14	EEH
m+p Xylene	ND	0.11	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:14	EEH
o-Xylene	ND	0.055	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:14	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
2,5-Dibromotoluene (FID)	98.6	70-130					1/15/14 18:14		
2,5-Dibromotoluene (PID)	87.9	70-130					1/15/14 18:14		

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-9 (4-5)

Sampled: 1/13/2014 13:00

Sample ID: 14A0376-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.4		% Wt	1		SM 2540G	1/20/14	1/21/14 0:39	RH

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-7 (4-5)

Sampled: 1/13/2014 13:20

Sample ID: 14A0376-06

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Benzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Bromobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Bromochloromethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Bromodichloromethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Bromoform	ND	0.0088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Bromomethane	ND	0.0088	mg/Kg dry	1	R-05	SW-846 8260C	1/15/14	1/15/14 14:20	MFF
2-Butanone (MEK)	ND	0.035	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
n-Butylbenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
sec-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
tert-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Carbon Disulfide	ND	0.0053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Carbon Tetrachloride	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Chlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Chlorodibromomethane	ND	0.0035	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Chloroethane	ND	0.0088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Chloroform	ND	0.0035	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Chloromethane	ND	0.0088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
2-Chlorotoluene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
4-Chlorotoluene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,2-Dibromoethane (EDB)	ND	0.00088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Dibromomethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,2-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,3-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,4-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,1-Dichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,2-Dichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,1-Dichloroethylene	ND	0.0035	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
cis-1,2-Dichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
trans-1,2-Dichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,2-Dichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,3-Dichloropropane	ND	0.00088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
2,2-Dichloropropane	ND	0.0018	mg/Kg dry	1	L-04, V-05	SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,1-Dichloropropene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
cis-1,3-Dichloropropene	ND	0.0035	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
trans-1,3-Dichloropropene	ND	0.0088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Diethyl Ether	ND	0.0088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Diisopropyl Ether (DIPE)	ND	0.00088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,4-Dioxane	ND	0.088	mg/Kg dry	1	V-16	SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Ethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-7 (4-5)

Sampled: 1/13/2014 13:20

Sample ID: 14A0376-06

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0035	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
2-Hexanone (MBK)	ND	0.035	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Isopropylbenzene (Cumene)	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0035	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Methylene Chloride	ND	0.0088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Naphthalene	ND	0.0088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
n-Propylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Styrene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,1,1,2-Tetrachloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,1,2,2-Tetrachloroethane	ND	0.00088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Tetrachloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Tetrahydrofuran	ND	0.0088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Toluene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,2,3-Trichlorobenzene	ND	0.0088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,2,4-Trichlorobenzene	ND	0.0088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,1,1-Trichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,1,2-Trichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Trichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,2,3-Trichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,2,4-Trimethylbenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
1,3,5-Trimethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Vinyl Chloride	ND	0.0088	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
m+p Xylene	ND	0.0035	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
o-Xylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:20	MFF
Surrogates		% Recovery	Recovery Limits	Flag/Qual					
1,2-Dichloroethane-d4		80.5	70-130						1/15/14 14:20
Toluene-d8		105	70-130						1/15/14 14:20
4-Bromofluorobenzene		94.8	70-130						1/15/14 14:20

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-7 (4-5)

Sampled: 1/13/2014 13:20

Sample ID: 14A0376-06

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
C19-C36 Aliphatics	69	11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Unadjusted C11-C22 Aromatics	79	11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
C11-C22 Aromatics	60	11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Acenaphthene	0.28	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Anthracene	0.48	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Benzo(a)anthracene	1.4	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Benzo(a)pyrene	1.2	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Benzo(b)fluoranthene	1.7	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Benzo(g,h,i)perylene	0.83	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Benzo(k)fluoranthene	0.54	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Chrysene	1.7	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Dibenz(a,h)anthracene	0.24	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Fluoranthene	3.0	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Fluorene	0.27	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Indeno(1,2,3-cd)pyrene	0.86	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Phenanthrene	3.2	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Pyrene	3.7	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 21:56	SCS
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Chlorooctadecane (COD)	67.0		40-140					1/17/14 21:56	
o-Terphenyl (OTP)	87.7		40-140					1/17/14 21:56	
2-Bromonaphthalene	104		40-140					1/17/14 21:56	
2-Fluorobiphenyl	113		40-140					1/17/14 21:56	

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-7 (4-5)

Sampled: 1/13/2014 13:20

Sample ID: 14A0376-06

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.08

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	12	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:50	EEH
C5-C8 Aliphatics	ND	12	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:50	EEH
Unadjusted C9-C12 Aliphatics	ND	12	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:50	EEH
C9-C12 Aliphatics	ND	12	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:50	EEH
C9-C10 Aromatics	ND	12	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:50	EEH
Benzene	ND	0.060	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:50	EEH
Ethylbenzene	ND	0.060	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:50	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.060	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:50	EEH
Naphthalene	ND	0.30	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:50	EEH
Toluene	ND	0.060	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:50	EEH
m+p Xylene	ND	0.12	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:50	EEH
o-Xylene	ND	0.060	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 18:50	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2,5-Dibromotoluene (FID)	117		70-130						1/15/14 18:50
2,5-Dibromotoluene (PID)	102		70-130						1/15/14 18:50

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-7 (4-5)

Sampled: 1/13/2014 13:20

Sample ID: 14A0376-06

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	87.6		% Wt	1		SM 2540G	1/20/14	1/21/14 0:39	RH

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-4 (3-4)

Sampled: 1/13/2014 14:20

Sample ID: 14A0376-07

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Benzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Bromobenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Bromochloromethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Bromodichloromethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Bromoform	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Bromomethane	ND	0.0061	mg/Kg dry	1	R-05	SW-846 8260C	1/15/14	1/15/14 14:47	MFF
2-Butanone (MEK)	ND	0.024	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
n-Butylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
sec-Butylbenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
tert-Butylbenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Carbon Disulfide	ND	0.0037	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Carbon Tetrachloride	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Chlorobenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Chlorodibromomethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Chloroethane	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Chloroform	ND	0.0024	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Chloromethane	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
2-Chlorotoluene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
4-Chlorotoluene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,2-Dibromoethane (EDB)	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Dibromomethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,2-Dichlorobenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,3-Dichlorobenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,4-Dichlorobenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,1-Dichloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,2-Dichloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,1-Dichloroethylene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
cis-1,2-Dichloroethylene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
trans-1,2-Dichloroethylene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,2-Dichloropropane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,3-Dichloropropane	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
2,2-Dichloropropane	ND	0.0012	mg/Kg dry	1	L-04, V-05	SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,1-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
cis-1,3-Dichloropropene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
trans-1,3-Dichloropropene	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Diethyl Ether	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Diisopropyl Ether (DIPE)	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,4-Dioxane	ND	0.061	mg/Kg dry	1	V-16	SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Ethylbenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-4 (3-4)

Sampled: 1/13/2014 14:20

Sample ID: 14A0376-07

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
2-Hexanone (MBK)	ND	0.024	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Isopropylbenzene (Cumene)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0024	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Methylene Chloride	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Naphthalene	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
n-Propylbenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Styrene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,1,1,2-Tetrachloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,1,2,2-Tetrachloroethane	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Tetrachloroethylene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Tetrahydrofuran	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Toluene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,2,3-Trichlorobenzene	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,2,4-Trichlorobenzene	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,1,1-Trichloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,1,2-Trichloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Trichloroethylene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,2,3-Trichloropropane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,2,4-Trimethylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
1,3,5-Trimethylbenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Vinyl Chloride	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
m+p Xylene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
o-Xylene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 14:47	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	77.2	70-130					1/15/14 14:47		
Toluene-d8	102	70-130					1/15/14 14:47		
4-Bromofluorobenzene	91.5	70-130					1/15/14 14:47		

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-4 (3-4)

Sampled: 1/13/2014 14:20

Sample ID: 14A0376-07

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:09	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:09	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:09	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:09	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:09	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:09	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:09	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:09	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:09	JMB
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
Decachlorobiphenyl [1]	98.3	30-150							1/17/14 3:09
Decachlorobiphenyl [2]	97.9	30-150							1/17/14 3:09
Tetrachloro-m-xylene [1]	98.3	30-150							1/17/14 3:09
Tetrachloro-m-xylene [2]	97.1	30-150							1/17/14 3:09

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-4 (3-4)

Sampled: 1/13/2014 14:20

Sample ID: 14A0376-07

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
C19-C36 Aliphatics	51	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Unadjusted C11-C22 Aromatics	230	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
C11-C22 Aromatics	130	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Acenaphthene	2.2	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Acenaphthylene	0.38	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Anthracene	2.0	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Benzo(a)anthracene	6.9	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Benzo(a)pyrene	6.5	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Benzo(b)fluoranthene	8.8	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Benzo(g,h,i)perylene	4.4	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Benzo(k)fluoranthene	3.1	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Chrysene	7.8	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Dibenz(a,h)anthracene	1.2	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Fluoranthene	18	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Fluorene	1.6	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Indeno(1,2,3-cd)pyrene	4.6	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
2-Methylnaphthalene	0.78	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Naphthalene	2.1	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Phenanthrene	17	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Pyrene	16	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:17	SCS
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Chlorooctadecane (COD)	66.7		40-140					1/17/14 22:17	
o-Terphenyl (OTP)	84.5		40-140					1/17/14 22:17	
2-Bromonaphthalene	105		40-140					1/17/14 22:17	
2-Fluorobiphenyl	112		40-140					1/17/14 22:17	

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-4 (3-4)

Sampled: 1/13/2014 14:20

Sample ID: 14A0376-07

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 0.86

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 19:26	EEH
C5-C8 Aliphatics	ND	15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 19:26	EEH
Unadjusted C9-C12 Aliphatics	ND	15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 19:26	EEH
C9-C12 Aliphatics	ND	15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 19:26	EEH
C9-C10 Aromatics	ND	15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 19:26	EEH
Benzene	ND	0.075	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 19:26	EEH
Ethylbenzene	ND	0.075	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 19:26	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.075	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 19:26	EEH
Naphthalene	ND	0.38	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 19:26	EEH
Toluene	ND	0.075	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 19:26	EEH
m+p Xylene	ND	0.15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 19:26	EEH
o-Xylene	ND	0.075	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 19:26	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
2,5-Dibromotoluene (FID)	101	70-130					1/15/14 19:26		
2,5-Dibromotoluene (PID)	92.1	70-130					1/15/14 19:26		

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-4 (3-4)

Sampled: 1/13/2014 14:20

Sample ID: 14A0376-07

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.7	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:17	OP
Arsenic	ND	2.7	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:17	OP
Barium	36	2.7	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:17	OP
Beryllium	ND	0.27	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:17	OP
Cadmium	2.2	0.27	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:17	OP
Chromium	12	0.55	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:17	OP
Lead	29	0.82	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:17	OP
Mercury	0.065	0.028	mg/Kg dry	1		SW-846 7471B	1/15/14	1/15/14 17:09	SAJ
Nickel	10	0.55	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:17	OP
Selenium	ND	5.5	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:17	OP
Silver	ND	0.55	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:17	OP
Thallium	ND	2.7	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:17	OP
Vanadium	24	1.1	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:17	OP
Zinc	2400	1.1	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:17	OP

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-4 (3-4)

Sampled: 1/13/2014 14:20

Sample ID: 14A0376-07

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	86.5		% Wt	1		SM 2540G	1/20/14	1/21/14 0:39	RH

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-5 (3-5)

Sampled: 1/13/2014 14:40

Sample ID: 14A0376-08

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Benzene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Bromobenzene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Bromochloromethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Bromodichloromethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Bromoform	ND	0.0053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Bromomethane	ND	0.0053	mg/Kg dry	1	R-05	SW-846 8260C	1/15/14	1/15/14 15:14	MFF
2-Butanone (MEK)	ND	0.021	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
n-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
sec-Butylbenzene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
tert-Butylbenzene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Carbon Disulfide	ND	0.0032	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Carbon Tetrachloride	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Chlorobenzene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Chlorodibromomethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Chloroethane	ND	0.0053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Chloroform	ND	0.0021	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Chloromethane	ND	0.0053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
2-Chlorotoluene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
4-Chlorotoluene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,2-Dibromoethane (EDB)	ND	0.00053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Dibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,2-Dichlorobenzene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,3-Dichlorobenzene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,4-Dichlorobenzene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,1-Dichloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,2-Dichloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,1-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
cis-1,2-Dichloroethylene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
trans-1,2-Dichloroethylene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,2-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,3-Dichloropropane	ND	0.00053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
2,2-Dichloropropane	ND	0.0011	mg/Kg dry	1	L-04, V-05	SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,1-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
cis-1,3-Dichloropropene	ND	0.0021	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
trans-1,3-Dichloropropene	ND	0.0053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Diethyl Ether	ND	0.0053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Diisopropyl Ether (DIPE)	ND	0.00053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,4-Dioxane	ND	0.053	mg/Kg dry	1	V-16	SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Ethylbenzene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-5 (3-5)

Sampled: 1/13/2014 14:40

Sample ID: 14A0376-08

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0021	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
2-Hexanone (MBK)	ND	0.021	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Isopropylbenzene (Cumene)	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0021	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Methylene Chloride	ND	0.0053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Naphthalene	ND	0.0053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
n-Propylbenzene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Styrene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,1,1,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,1,2,2-Tetrachloroethane	ND	0.00053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Tetrachloroethylene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Tetrahydrofuran	ND	0.0053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Toluene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,2,3-Trichlorobenzene	ND	0.0053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,2,4-Trichlorobenzene	ND	0.0053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,1,1-Trichloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,1,2-Trichloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Trichloroethylene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,2,3-Trichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,2,4-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
1,3,5-Trimethylbenzene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Vinyl Chloride	ND	0.0053	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
m+p Xylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
o-Xylene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:14	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	74.8	70-130					1/15/14 15:14		
Toluene-d8	102	70-130					1/15/14 15:14		
4-Bromofluorobenzene	95.6	70-130					1/15/14 15:14		

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-5 (3-5)

Sampled: 1/13/2014 14:40

Sample ID: 14A0376-08

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:22	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:22	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:22	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:22	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:22	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:22	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:22	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:22	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:22	JMB
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
Decachlorobiphenyl [1]	94.3	30-150							1/17/14 3:22
Decachlorobiphenyl [2]	95.8	30-150							1/17/14 3:22
Tetrachloro-m-xylene [1]	87.4	30-150							1/17/14 3:22
Tetrachloro-m-xylene [2]	88.0	30-150							1/17/14 3:22

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-5 (3-5)

Sampled: 1/13/2014 14:40

Sample ID: 14A0376-08

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
C19-C36 Aliphatics	31	23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
Unadjusted C11-C22 Aromatics	680	23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
C11-C22 Aromatics	360	23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
Acenaphthene	7.9	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
Acenaphthylene	0.97	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
Anthracene	7.6	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
Benzo(a)anthracene	21	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
Benzo(a)pyrene	19	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
Benzo(b)fluoranthene	25	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
Benzo(g,h,i)perylene	11	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
Benzo(k)fluoranthene	8.9	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
Chrysene	23	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
Dibenz(a,h)anthracene	3.4	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
Fluoranthene	53	1.1	mg/Kg dry	5		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:53	PJG
Fluorene	7.0	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
Indeno(1,2,3-cd)pyrene	13	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
2-Methylnaphthalene	2.7	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
Naphthalene	7.1	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:26	PJG
Phenanthrene	52	1.1	mg/Kg dry	5		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:53	PJG
Pyrene	49	1.1	mg/Kg dry	5		MADEP-EPH-04-1.1	1/20/14	1/21/14 14:53	PJG
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Chlorooctadecane (COD)	60.8		40-140					1/21/14 14:26	
o-Terphenyl (OTP)	73.0		40-140					1/21/14 14:26	
2-Bromonaphthalene	92.2		40-140					1/21/14 14:26	
2-Fluorobiphenyl	98.6		40-140					1/21/14 14:26	

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-5 (3-5)

Sampled: 1/13/2014 14:40

Sample ID: 14A0376-08

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.23

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:02	EEH
C5-C8 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:02	EEH
Unadjusted C9-C12 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:02	EEH
C9-C12 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:02	EEH
C9-C10 Aromatics	ND	11	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:02	EEH
Benzene	ND	0.054	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:02	EEH
Ethylbenzene	ND	0.054	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:02	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.054	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:02	EEH
Naphthalene	ND	0.27	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:02	EEH
Toluene	ND	0.054	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:02	EEH
m+p Xylene	ND	0.11	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:02	EEH
o-Xylene	ND	0.054	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:02	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
2,5-Dibromotoluene (FID)	113	70-130					1/15/14 20:02		
2,5-Dibromotoluene (PID)	101	70-130					1/15/14 20:02		

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-5 (3-5)

Sampled: 1/13/2014 14:40

Sample ID: 14A0376-08

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.8	mg/Kg dry	1	MS-07	SW-846 6010C	1/15/14	1/16/14 12:01	OP
Arsenic	3.0	2.8	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 12:01	OP
Barium	36	2.8	mg/Kg dry	1	R-02	SW-846 6010C	1/15/14	1/16/14 12:01	OP
Beryllium	ND	0.28	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 12:01	OP
Cadmium	0.42	0.28	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 12:01	OP
Chromium	11	0.56	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 12:01	OP
Lead	25	0.84	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 12:01	OP
Mercury	0.038	0.028	mg/Kg dry	1		SW-846 7471B	1/15/14	1/15/14 17:11	SAJ
Nickel	7.8	0.56	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 12:01	OP
Selenium	ND	5.6	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 12:01	OP
Silver	ND	0.56	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 12:01	OP
Thallium	ND	2.8	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 12:01	OP
Vanadium	21	1.1	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 12:01	OP
Zinc	71	1.1	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 12:01	OP

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-5 (3-5)

Sampled: 1/13/2014 14:40

Sample ID: 14A0376-08

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	87.5		% Wt	1		SM 2540G	1/20/14	1/21/14 0:39	RH

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-6 (3-5)

Sampled: 1/13/2014 15:10

Sample ID: 14A0376-09

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Benzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Bromobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Bromochloromethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Bromodichloromethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Bromoform	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Bromomethane	ND	0.0077	mg/Kg dry	1	R-05	SW-846 8260C	1/15/14	1/15/14 15:41	MFF
2-Butanone (MEK)	ND	0.031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
n-Butylbenzene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
sec-Butylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
tert-Butylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Carbon Disulfide	ND	0.0046	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Carbon Tetrachloride	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Chlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Chlorodibromomethane	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Chloroethane	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Chloroform	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Chloromethane	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
2-Chlorotoluene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
4-Chlorotoluene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,2-Dibromoethane (EDB)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Dibromomethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,2-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,3-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,4-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,1-Dichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,2-Dichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,1-Dichloroethylene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
cis-1,2-Dichloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
trans-1,2-Dichloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,2-Dichloropropane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,3-Dichloropropane	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
2,2-Dichloropropane	ND	0.0015	mg/Kg dry	1	L-04, V-05	SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,1-Dichloropropene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
cis-1,3-Dichloropropene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
trans-1,3-Dichloropropene	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Diethyl Ether	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Diisopropyl Ether (DIPE)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,4-Dioxane	ND	0.077	mg/Kg dry	1	V-16	SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Ethylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-6 (3-5)

Sampled: 1/13/2014 15:10

Sample ID: 14A0376-09

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
2-Hexanone (MBK)	ND	0.031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Isopropylbenzene (Cumene)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Methylene Chloride	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Naphthalene	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
n-Propylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Styrene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,1,1,2-Tetrachloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,1,2,2-Tetrachloroethane	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Tetrachloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Tetrahydrofuran	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Toluene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,2,3-Trichlorobenzene	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,2,4-Trichlorobenzene	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,1,1-Trichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,1,2-Trichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Trichloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,2,3-Trichloropropane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,2,4-Trimethylbenzene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
1,3,5-Trimethylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Vinyl Chloride	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
m+p Xylene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
o-Xylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 15:41	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	78.6	70-130					1/15/14 15:41		
Toluene-d8	102	70-130					1/15/14 15:41		
4-Bromofluorobenzene	91.9	70-130					1/15/14 15:41		

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-6 (3-5)

Sampled: 1/13/2014 15:10

Sample ID: 14A0376-09

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:35	JMB
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:35	JMB
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:35	JMB
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:35	JMB
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:35	JMB
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:35	JMB
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:35	JMB
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:35	JMB
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:35	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		94.9	30-150					1/17/14 3:35	
Decachlorobiphenyl [2]		99.3	30-150					1/17/14 3:35	
Tetrachloro-m-xylene [1]		93.7	30-150					1/17/14 3:35	
Tetrachloro-m-xylene [2]		93.7	30-150					1/17/14 3:35	

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-6 (3-5)

Sampled: 1/13/2014 15:10

Sample ID: 14A0376-09

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
C19-C36 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Unadjusted C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Benzo(a)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Benzo(a)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Benzo(b)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Benzo(g,h,i)perylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Benzo(k)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Chrysene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Fluorene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Indeno(1,2,3-cd)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Phenanthrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/15/14	1/17/14 22:58	SCS
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Chlorooctadecane (COD)	63.3		40-140					1/17/14 22:58	
o-Terphenyl (OTP)	81.0		40-140					1/17/14 22:58	
2-Bromonaphthalene	114		40-140					1/17/14 22:58	
2-Fluorobiphenyl	121		40-140					1/17/14 22:58	

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-6 (3-5)

Sampled: 1/13/2014 15:10

Sample ID: 14A0376-09

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.06

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	14	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:38	EEH
C5-C8 Aliphatics	ND	14	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:38	EEH
Unadjusted C9-C12 Aliphatics	ND	14	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:38	EEH
C9-C12 Aliphatics	ND	14	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:38	EEH
C9-C10 Aromatics	ND	14	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:38	EEH
Benzene	ND	0.068	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:38	EEH
Ethylbenzene	ND	0.068	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:38	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.068	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:38	EEH
Naphthalene	ND	0.34	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:38	EEH
Toluene	ND	0.068	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:38	EEH
m+p Xylene	ND	0.14	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:38	EEH
o-Xylene	ND	0.068	mg/Kg dry	1		MADEP-VPH-04-1.1	1/15/14	1/15/14 20:38	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
2,5-Dibromotoluene (FID)	106	70-130					1/15/14 20:38		
2,5-Dibromotoluene (PID)	94.8	70-130					1/15/14 20:38		

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-6 (3-5)

Sampled: 1/13/2014 15:10

Sample ID: 14A0376-09

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.9	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:23	OP
Arsenic	ND	2.9	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:23	OP
Barium	34	2.9	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:23	OP
Beryllium	0.44	0.29	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:23	OP
Cadmium	ND	0.29	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:23	OP
Chromium	7.9	0.58	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:23	OP
Lead	12	0.86	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:23	OP
Mercury	0.034	0.029	mg/Kg dry	1		SW-846 7471B	1/15/14	1/15/14 17:13	SAJ
Nickel	5.7	0.58	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:23	OP
Selenium	ND	5.8	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:23	OP
Silver	ND	0.58	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:23	OP
Thallium	ND	2.9	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:23	OP
Vanadium	16	1.2	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:23	OP
Zinc	45	1.2	mg/Kg dry	1		SW-846 6010C	1/14/14	1/15/14 20:23	OP

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: TRC B-6 (3-5)

Sampled: 1/13/2014 15:10

Sample ID: 14A0376-09

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	82.2		% Wt	1		SM 2540G	1/20/14	1/21/14 0:39	RH

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: DUP-1

Sampled: 1/13/2014 16:10

Sample ID: 14A0376-10

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Benzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Bromobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Bromochloromethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Bromodichloromethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Bromoform	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Bromomethane	ND	0.0077	mg/Kg dry	1	R-05	SW-846 8260C	1/15/14	1/15/14 16:08	MFF
2-Butanone (MEK)	ND	0.031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
n-Butylbenzene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
sec-Butylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
tert-Butylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Carbon Disulfide	ND	0.0046	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Carbon Tetrachloride	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Chlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Chlorodibromomethane	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Chloroethane	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Chloroform	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Chloromethane	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
2-Chlorotoluene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
4-Chlorotoluene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,2-Dibromoethane (EDB)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Dibromomethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,2-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,3-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,4-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,1-Dichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,2-Dichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,1-Dichloroethylene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
cis-1,2-Dichloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
trans-1,2-Dichloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,2-Dichloropropane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,3-Dichloropropane	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
2,2-Dichloropropane	ND	0.0015	mg/Kg dry	1	L-04, V-05	SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,1-Dichloropropene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
cis-1,3-Dichloropropene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
trans-1,3-Dichloropropene	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Diethyl Ether	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Diisopropyl Ether (DIPE)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,4-Dioxane	ND	0.077	mg/Kg dry	1	V-16	SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Ethylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: DUP-1

Sampled: 1/13/2014 16:10

Sample ID: 14A0376-10

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
2-Hexanone (MBK)	ND	0.031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Isopropylbenzene (Cumene)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Methylene Chloride	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Naphthalene	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
n-Propylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Styrene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,1,1,2-Tetrachloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,1,2,2-Tetrachloroethane	ND	0.00077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Tetrachloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Tetrahydrofuran	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Toluene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,2,3-Trichlorobenzene	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,2,4-Trichlorobenzene	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,1,1-Trichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,1,2-Trichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Trichloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,2,3-Trichloropropane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,2,4-Trimethylbenzene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
1,3,5-Trimethylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
Vinyl Chloride	ND	0.0077	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
m+p Xylene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF
o-Xylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/15/14	1/15/14 16:08	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	78.5	70-130		1/15/14 16:08
Toluene-d8	103	70-130		1/15/14 16:08
4-Bromofluorobenzene	89.5	70-130		1/15/14 16:08

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: DUP-1

Sampled: 1/13/2014 16:10

Sample ID: 14A0376-10

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:48	JMB
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:48	JMB
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:48	JMB
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:48	JMB
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:48	JMB
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:48	JMB
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:48	JMB
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:48	JMB
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/15/14	1/17/14 3:48	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		95.7	30-150					1/17/14 3:48	
Decachlorobiphenyl [2]		98.3	30-150					1/17/14 3:48	
Tetrachloro-m-xylene [1]		96.4	30-150					1/17/14 3:48	
Tetrachloro-m-xylene [2]		96.3	30-150					1/17/14 3:48	

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: DUP-1

Sampled: 1/13/2014 16:10

Sample ID: 14A0376-10

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1	L-04	MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
C19-C36 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Unadjusted C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Benzo(a)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Benzo(a)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Benzo(b)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Benzo(g,h,i)perylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Benzo(k)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Chrysene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Fluorene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Indeno(1,2,3-cd)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Phenanthrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	1/16/14	1/17/14 19:51	SCS
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Chlorooctadecane (COD)	44.8		40-140					1/17/14 19:51	
o-Terphenyl (OTP)	55.9		40-140					1/17/14 19:51	
2-Bromonaphthalene	96.6		40-140					1/17/14 19:51	
2-Fluorobiphenyl	104		40-140					1/17/14 19:51	

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: DUP-1

Sampled: 1/13/2014 16:10

Sample ID: 14A0376-10

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 0.90

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/16/14	1/16/14 9:06	EEH
C5-C8 Aliphatics	ND	15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/16/14	1/16/14 9:06	EEH
Unadjusted C9-C12 Aliphatics	ND	15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/16/14	1/16/14 9:06	EEH
C9-C12 Aliphatics	ND	15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/16/14	1/16/14 9:06	EEH
C9-C10 Aromatics	ND	15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/16/14	1/16/14 9:06	EEH
Benzene	ND	0.077	mg/Kg dry	1		MADEP-VPH-04-1.1	1/16/14	1/16/14 9:06	EEH
Ethylbenzene	ND	0.077	mg/Kg dry	1		MADEP-VPH-04-1.1	1/16/14	1/16/14 9:06	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.077	mg/Kg dry	1		MADEP-VPH-04-1.1	1/16/14	1/16/14 9:06	EEH
Naphthalene	ND	0.39	mg/Kg dry	1		MADEP-VPH-04-1.1	1/16/14	1/16/14 9:06	EEH
Toluene	ND	0.077	mg/Kg dry	1		MADEP-VPH-04-1.1	1/16/14	1/16/14 9:06	EEH
m+p Xylene	ND	0.15	mg/Kg dry	1		MADEP-VPH-04-1.1	1/16/14	1/16/14 9:06	EEH
o-Xylene	ND	0.077	mg/Kg dry	1		MADEP-VPH-04-1.1	1/16/14	1/16/14 9:06	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
2,5-Dibromotoluene (FID)	113	70-130						1/16/14 9:06	
2,5-Dibromotoluene (PID)	96.7	70-130						1/16/14 9:06	

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: DUP-1

Sampled: 1/13/2014 16:10

Sample ID: 14A0376-10

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.9	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 18:07	OP
Arsenic	ND	2.9	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 18:07	OP
Barium	40	2.9	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 18:07	OP
Beryllium	ND	0.29	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 18:07	OP
Cadmium	0.32	0.29	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 18:07	OP
Chromium	10	0.59	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 18:07	OP
Lead	13	0.88	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 18:07	OP
Mercury	ND	0.030	mg/Kg dry	1		SW-846 7471B	1/15/14	1/15/14 17:14	SAJ
Nickel	6.8	0.59	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 18:07	OP
Selenium	ND	5.9	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 18:07	OP
Silver	ND	0.59	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 18:07	OP
Thallium	ND	2.9	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 18:07	OP
Vanadium	19	1.2	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 18:07	OP
Zinc	44	1.2	mg/Kg dry	1		SW-846 6010C	1/15/14	1/16/14 18:07	OP

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Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: DUP-1

Sampled: 1/13/2014 16:10

Sample ID: 14A0376-10

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	83.2		% Wt	1		SM 2540G	1/20/14	1/21/14 0:39	RH

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: Trip Blank

Sampled: 1/13/2014 00:00

Sample ID: 14A0376-11

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.10	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Benzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Bromobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Bromochloromethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Bromodichloromethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Bromoform	ND	0.010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Bromomethane	ND	0.010	mg/Kg wet	1	R-05	SW-846 8260C	1/15/14	1/15/14 16:35	MFF
2-Butanone (MEK)	ND	0.040	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
n-Butylbenzene	ND	0.0040	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Carbon Disulfide	ND	0.0060	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Chlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Chlorodibromomethane	ND	0.0040	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Chloroethane	ND	0.010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Chloroform	ND	0.0040	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Chloromethane	ND	0.010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Dibromomethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,3-Dichloropropane	ND	0.0010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg wet	1	L-04, V-05	SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,1-Dichloropropene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
cis-1,3-Dichloropropene	ND	0.0040	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
trans-1,3-Dichloropropene	ND	0.010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Diethyl Ether	ND	0.010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,4-Dioxane	ND	0.10	mg/Kg wet	1	V-16	SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Ethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF

Project Location: Cote Ford

Sample Description:

Work Order: 14A0376

Date Received: 1/14/2014

Field Sample #: Trip Blank

Sampled: 1/13/2014 00:00

Sample ID: 14A0376-11

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0040	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
2-Hexanone (MBK)	ND	0.040	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Methylene Chloride	ND	0.010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Naphthalene	ND	0.010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
n-Propylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Styrene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Tetrahydrofuran	ND	0.010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Toluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,2,3-Trichlorobenzene	ND	0.010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,2,4-Trichlorobenzene	ND	0.010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Trichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,2,4-Trimethylbenzene	ND	0.0040	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Vinyl Chloride	ND	0.010	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
m+p Xylene	ND	0.0040	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
o-Xylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C	1/15/14	1/15/14 16:35	MFF
Surrogates		% Recovery	Recovery Limits	Flag/Qual					
1,2-Dichloroethane-d4		78.7	70-130						1/15/14 16:35
Toluene-d8		104	70-130						1/15/14 16:35
4-Bromofluorobenzene		93.8	70-130						1/15/14 16:35

Sample Extraction Data
Prep Method: SW-846 3546-MADEP-EPH-04-1.1

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14A0376-01 [TRC B-3 (4-6)]	B088752	20.1	2.00	01/15/14
14A0376-02 [TRC B-1 (3-4)]	B088752	20.6	2.00	01/15/14
14A0376-03 [TRC B-2 (4-6/6)]	B088752	20.3	2.00	01/15/14
14A0376-04 [TRC B-8 (2-3)]	B088752	20.0	2.00	01/15/14
14A0376-05 [TRC B-9 (4-5)]	B088752	20.2	2.00	01/15/14
14A0376-06 [TRC B-7 (4-5)]	B088752	20.2	2.00	01/15/14
14A0376-07 [TRC B-4 (3-4)]	B088752	20.0	2.00	01/15/14
14A0376-09 [TRC B-6 (3-5)]	B088752	20.1	2.00	01/15/14

Prep Method: SW-846 3546-MADEP-EPH-04-1.1

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14A0376-10 [DUP-1]	B088798	20.0	2.00	01/16/14

Prep Method: SW-846 3546-MADEP-EPH-04-1.1

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14A0376-08RE1 [TRC B-5 (3-5)]	B089026	10.0	2.00	01/20/14

Prep Method: MA VPH-MADEP-VPH-04-1.1

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14A0376-01 [TRC B-3 (4-6)]	B088738	12.6	18.5	01/15/14
14A0376-02 [TRC B-1 (3-4)]	B088738	15.3	18.2	01/15/14
14A0376-03 [TRC B-2 (4-6/6)]	B088738	15.6	17.5	01/15/14
14A0376-04 [TRC B-8 (2-3)]	B088738	19.6	16.9	01/15/14
14A0376-05 [TRC B-9 (4-5)]	B088738	17.5	17.1	01/15/14
14A0376-06 [TRC B-7 (4-5)]	B088738	16.2	17.1	01/15/14
14A0376-07 [TRC B-4 (3-4)]	B088738	12.9	16.8	01/15/14
14A0376-08 [TRC B-5 (3-5)]	B088738	18.5	17.4	01/15/14
14A0376-09 [TRC B-6 (3-5)]	B088738	15.9	17.9	01/15/14
14A0376-10 [DUP-1]	B088738	13.5	17.4	01/16/14

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14A0376-01 [TRC B-3 (4-6)]	B088993	01/20/14
14A0376-02 [TRC B-1 (3-4)]	B088993	01/20/14
14A0376-03 [TRC B-2 (4-6/6)]	B088993	01/20/14
14A0376-04 [TRC B-8 (2-3)]	B088993	01/20/14
14A0376-05 [TRC B-9 (4-5)]	B088993	01/20/14
14A0376-06 [TRC B-7 (4-5)]	B088993	01/20/14
14A0376-07 [TRC B-4 (3-4)]	B088993	01/20/14
14A0376-08 [TRC B-5 (3-5)]	B088993	01/20/14
14A0376-09 [TRC B-6 (3-5)]	B088993	01/20/14
14A0376-10 [DUP-1]	B088993	01/20/14

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: SW-846 3050B-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14A0376-07 [TRC B-4 (3-4)]	B088666	1.05	50.0	01/14/14
14A0376-09 [TRC B-6 (3-5)]	B088666	1.06	50.0	01/14/14

Prep Method: SW-846 3050B-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14A0376-08 [TRC B-5 (3-5)]	B088756	1.02	50.0	01/15/14
14A0376-10 [DUP-1]	B088756	1.02	50.0	01/15/14

Prep Method: SW-846 7471-SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14A0376-07 [TRC B-4 (3-4)]	B088755	0.620	50.0	01/15/14
14A0376-08 [TRC B-5 (3-5)]	B088755	0.608	50.0	01/15/14
14A0376-09 [TRC B-6 (3-5)]	B088755	0.619	50.0	01/15/14
14A0376-10 [DUP-1]	B088755	0.600	50.0	01/15/14

Prep Method: SW-846 3540C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14A0376-07 [TRC B-4 (3-4)]	B088773	10.1	10.0	01/15/14
14A0376-08 [TRC B-5 (3-5)]	B088773	10.0	10.0	01/15/14
14A0376-09 [TRC B-6 (3-5)]	B088773	10.3	10.0	01/15/14
14A0376-10 [DUP-1]	B088773	10.4	10.0	01/15/14

Prep Method: SW-846 5035-SW-846 8260C

Lab Number [Field ID]	Batch	Sample Amount(g)	Methanol Volume(mL)	Methanol Aliquot(mL)	Final Volume(mL)	Date
14A0376-03 [TRC B-2 (4-6/6)]	B088724	20.3	18.4	0.25	50	01/15/14

Prep Method: SW-846 5035-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14A0376-01 [TRC B-3 (4-6)]	B088758	8.58	10.0	01/15/14
14A0376-02 [TRC B-1 (3-4)]	B088758	6.22	10.0	01/15/14
14A0376-04 [TRC B-8 (2-3)]	B088758	7.20	10.0	01/15/14
14A0376-05 [TRC B-9 (4-5)]	B088758	8.63	10.0	01/15/14
14A0376-06 [TRC B-7 (4-5)]	B088758	6.48	10.0	01/15/14
14A0376-07 [TRC B-4 (3-4)]	B088758	9.46	10.0	01/15/14
14A0376-08 [TRC B-5 (3-5)]	B088758	10.8	10.0	01/15/14
14A0376-09 [TRC B-6 (3-5)]	B088758	7.91	10.0	01/15/14
14A0376-10 [DUP-1]	B088758	7.82	10.0	01/15/14
14A0376-11 [Trip Blank]	B088758	5.00	10.0	01/15/14

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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Batch B088724 - SW-846 5035

Blank (B088724-BLK1)										Prepared: 01/15/14 Analyzed: 01/16/14
Acetone	ND	2.5	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.025	mg/Kg wet							
Benzene	ND	0.051	mg/Kg wet							
Bromobenzene	ND	0.051	mg/Kg wet							
Bromoform	ND	0.051	mg/Kg wet							L-04, V-05
Bromomethane	ND	0.10	mg/Kg wet							
2-Butanone (MEK)	ND	1.0	mg/Kg wet							
n-Butylbenzene	ND	0.051	mg/Kg wet							
sec-Butylbenzene	ND	0.051	mg/Kg wet							
tert-Butylbenzene	ND	0.051	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.025	mg/Kg wet							
Carbon Disulfide	ND	0.51	mg/Kg wet							
Carbon Tetrachloride	ND	0.051	mg/Kg wet							V-05
Chlorobenzene	ND	0.051	mg/Kg wet							
Chlorodibromomethane	ND	0.025	mg/Kg wet							L-04, V-05
Chloroethane	ND	0.10	mg/Kg wet							
Chloroform	ND	0.10	mg/Kg wet							
Chloromethane	ND	0.10	mg/Kg wet							
2-Chlorotoluene	ND	0.051	mg/Kg wet							
4-Chlorotoluene	ND	0.051	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.20	mg/Kg wet							L-04, V-05
1,2-Dibromoethane (EDB)	ND	0.025	mg/Kg wet							
Dibromomethane	ND	0.051	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.051	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.051	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.051	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.10	mg/Kg wet							
1,1-Dichloroethane	ND	0.051	mg/Kg wet							
1,2-Dichloroethane	ND	0.051	mg/Kg wet							
1,1-Dichloroethylene	ND	0.051	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.051	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.051	mg/Kg wet							
1,2-Dichloropropane	ND	0.051	mg/Kg wet							
1,3-Dichloropropane	ND	0.025	mg/Kg wet							
2,2-Dichloropropane	ND	0.051	mg/Kg wet							
1,1-Dichloropropene	ND	0.10	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.025	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.025	mg/Kg wet							V-05
Diethyl Ether	ND	0.10	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.025	mg/Kg wet							
1,4-Dioxane	ND	2.5	mg/Kg wet							V-16
Ethylbenzene	ND	0.051	mg/Kg wet							
Hexachlorobutadiene	ND	0.051	mg/Kg wet							
2-Hexanone (MBK)	ND	0.51	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.051	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.051	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.051	mg/Kg wet							
Methylene Chloride	ND	0.25	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.51	mg/Kg wet							
Naphthalene	ND	0.10	mg/Kg wet							V-05

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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Batch B088724 - SW-846 5035

Blank (B088724-BLK1)										
Prepared: 01/15/14 Analyzed: 01/16/14										
n-Propylbenzene	ND	0.051	mg/Kg wet							
Styrene	ND	0.051	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.051	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.025	mg/Kg wet							
Tetrachloroethylene	ND	0.051	mg/Kg wet							
Tetrahydrofuran	ND	0.20	mg/Kg wet							
Toluene	ND	0.051	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.20	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.051	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.051	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.051	mg/Kg wet							
Trichloroethylene	ND	0.051	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.10	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.10	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.051	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.051	mg/Kg wet							
Vinyl Chloride	ND	0.10	mg/Kg wet							
m+p Xylene	ND	0.10	mg/Kg wet							
o-Xylene	ND	0.051	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	1.26		mg/Kg wet	1.33		94.4		70-130		
Surrogate: Toluene-d8	1.23		mg/Kg wet	1.33		92.1		70-130		
Surrogate: 4-Bromofluorobenzene	1.20		mg/Kg wet	1.33		90.3		70-130		

LCS (B088724-BS1)										
Prepared: 01/15/14 Analyzed: 01/16/14										
Acetone	0.125	0.057	mg/Kg wet	0.113		110		40-160		†
tert-Amyl Methyl Ether (TAME)	0.0100	0.00057	mg/Kg wet	0.0113		88.2		70-130		
Benzene	0.0128	0.0011	mg/Kg wet	0.0113		113		70-130		
Bromobenzene	0.0117	0.0011	mg/Kg wet	0.0113		103		70-130		
Bromochloromethane	0.0130	0.0011	mg/Kg wet	0.0113		115		70-130		
Bromodichloromethane	0.00983	0.0011	mg/Kg wet	0.0113		86.7		70-130		
Bromoform	0.00746	0.0011	mg/Kg wet	0.0113		65.8	*	70-130		L-04, V-05
Bromomethane	0.0103	0.0023	mg/Kg wet	0.0113		91.0		40-160		V-20
2-Butanone (MEK)	0.117	0.023	mg/Kg wet	0.113		103		40-160		†
n-Butylbenzene	0.0117	0.0011	mg/Kg wet	0.0113		103		70-130		
sec-Butylbenzene	0.0120	0.0011	mg/Kg wet	0.0113		106		70-130		
tert-Butylbenzene	0.0113	0.0011	mg/Kg wet	0.0113		99.3		70-130		
tert-Butyl Ethyl Ether (TBEE)	0.0112	0.00057	mg/Kg wet	0.0113		98.6		70-130		
Carbon Disulfide	0.00949	0.011	mg/Kg wet	0.0113		83.7		70-130		
Carbon Tetrachloride	0.00952	0.0011	mg/Kg wet	0.0113		84.0		70-130		V-05
Chlorobenzene	0.0116	0.0011	mg/Kg wet	0.0113		102		70-130		
Chlorodibromomethane	0.00790	0.00057	mg/Kg wet	0.0113		69.7	*	70-130		L-04, V-05
Chloroethane	0.0123	0.0023	mg/Kg wet	0.0113		108		70-130		
Chloroform	0.0141	0.0023	mg/Kg wet	0.0113		124		70-130		
Chloromethane	0.00876	0.0023	mg/Kg wet	0.0113		77.3		40-160		†
2-Chlorotoluene	0.0113	0.0011	mg/Kg wet	0.0113		99.4		70-130		
4-Chlorotoluene	0.0117	0.0011	mg/Kg wet	0.0113		103		70-130		
1,2-Dibromo-3-chloropropane (DBCP)	0.00724	0.0045	mg/Kg wet	0.0113		63.9	*	70-130		L-04, V-05
1,2-Dibromoethane (EDB)	0.0121	0.00057	mg/Kg wet	0.0113		106		70-130		
Dibromomethane	0.0120	0.0011	mg/Kg wet	0.0113		106		70-130		
1,2-Dichlorobenzene	0.0115	0.0011	mg/Kg wet	0.0113		101		70-130		
1,3-Dichlorobenzene	0.0116	0.0011	mg/Kg wet	0.0113		102		70-130		
1,4-Dichlorobenzene	0.0116	0.0011	mg/Kg wet	0.0113		102		70-130		

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
Batch B088724 - SW-846 5035										
LCS (B088724-BS1)										
Prepared: 01/15/14 Analyzed: 01/16/14										
Dichlorodifluoromethane (Freon 12)	0.00614	0.0023	mg/Kg wet	0.0113	54.2	40-160			L-14	†
1,1-Dichloroethane	0.0127	0.0011	mg/Kg wet	0.0113	112	70-130				
1,2-Dichloroethane	0.0124	0.0011	mg/Kg wet	0.0113	109	70-130				
1,1-Dichloroethylene	0.0132	0.0011	mg/Kg wet	0.0113	116	70-130				
cis-1,2-Dichloroethylene	0.0121	0.0011	mg/Kg wet	0.0113	107	70-130				
trans-1,2-Dichloroethylene	0.0127	0.0011	mg/Kg wet	0.0113	112	70-130				
1,2-Dichloropropane	0.0119	0.0011	mg/Kg wet	0.0113	105	70-130				
1,3-Dichloropropane	0.0120	0.00057	mg/Kg wet	0.0113	106	70-130				
2,2-Dichloropropane	0.0112	0.0011	mg/Kg wet	0.0113	98.5	70-130				
1,1-Dichloropropene	0.0121	0.0023	mg/Kg wet	0.0113	107	70-130				
cis-1,3-Dichloropropene	0.00960	0.00057	mg/Kg wet	0.0113	84.7	70-130				
trans-1,3-Dichloropropene	0.00891	0.00057	mg/Kg wet	0.0113	78.6	70-130			V-05	
Diethyl Ether	0.0132	0.0023	mg/Kg wet	0.0113	116	70-130				
Diisopropyl Ether (DIPE)	0.0124	0.00057	mg/Kg wet	0.0113	109	70-130				
1,4-Dioxane	0.142	0.057	mg/Kg wet	0.113	125	40-160			V-16	†
Ethylbenzene	0.0122	0.0011	mg/Kg wet	0.0113	108	70-130				
Hexachlorobutadiene	0.0128	0.0011	mg/Kg wet	0.0113	113	70-130				
2-Hexanone (MBK)	0.116	0.011	mg/Kg wet	0.113	102	40-160				†
Isopropylbenzene (Cumene)	0.0119	0.0011	mg/Kg wet	0.0113	105	70-130				
p-Isopropyltoluene (p-Cymene)	0.0123	0.0011	mg/Kg wet	0.0113	109	70-130				
Methyl tert-Butyl Ether (MTBE)	0.0118	0.0011	mg/Kg wet	0.0113	104	70-130				
Methylene Chloride	0.0129	0.0057	mg/Kg wet	0.0113	114	70-130				
4-Methyl-2-pentanone (MIBK)	0.117	0.011	mg/Kg wet	0.113	103	40-160				†
Naphthalene	0.0106	0.0023	mg/Kg wet	0.0113	93.8	70-130			V-05	
n-Propylbenzene	0.0123	0.0011	mg/Kg wet	0.0113	109	70-130				
Styrene	0.0122	0.0011	mg/Kg wet	0.0113	108	70-130				
1,1,1,2-Tetrachloroethane	0.0104	0.0011	mg/Kg wet	0.0113	91.4	70-130				
1,1,2,2-Tetrachloroethane	0.0118	0.00057	mg/Kg wet	0.0113	104	70-130				
Tetrachloroethylene	0.0124	0.0011	mg/Kg wet	0.0113	109	70-130				
Tetrahydrofuran	0.0124	0.0045	mg/Kg wet	0.0113	109	70-130				
Toluene	0.0125	0.0011	mg/Kg wet	0.0113	111	70-130				
1,2,3-Trichlorobenzene	0.0115	0.0045	mg/Kg wet	0.0113	102	70-130				
1,2,4-Trichlorobenzene	0.0105	0.0011	mg/Kg wet	0.0113	92.6	70-130				
1,1,1-Trichloroethane	0.0105	0.0011	mg/Kg wet	0.0113	92.4	70-130				
1,1,2-Trichloroethane	0.0120	0.0011	mg/Kg wet	0.0113	106	70-130				
Trichloroethylene	0.0119	0.0011	mg/Kg wet	0.0113	105	70-130				
Trichlorofluoromethane (Freon 11)	0.0126	0.0023	mg/Kg wet	0.0113	111	70-130				
1,2,3-Trichloropropane	0.0117	0.0023	mg/Kg wet	0.0113	103	70-130				
1,2,4-Trimethylbenzene	0.0117	0.0011	mg/Kg wet	0.0113	103	70-130				
1,3,5-Trimethylbenzene	0.0119	0.0011	mg/Kg wet	0.0113	105	70-130				
Vinyl Chloride	0.0103	0.0023	mg/Kg wet	0.0113	90.5	70-130				
m+p Xylene	0.0242	0.0023	mg/Kg wet	0.0227	107	70-130				
o-Xylene	0.0116	0.0011	mg/Kg wet	0.0113	103	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.0286		mg/Kg wet	0.0283	101	70-130				
Surrogate: Toluene-d8	0.0284		mg/Kg wet	0.0283	100	70-130				
Surrogate: 4-Bromofluorobenzene	0.0279		mg/Kg wet	0.0283	98.6	70-130				

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B088724 - SW-846 5035										
LCS Dup (B088724-BSD1)										
Prepared: 01/15/14 Analyzed: 01/16/14										
Acetone	0.112	0.057	mg/Kg wet	0.113	99.0	40-160	10.7	20		†
tert-Amyl Methyl Ether (TAME)	0.00928	0.00057	mg/Kg wet	0.0113	81.9	70-130	7.41	20		
Benzene	0.0119	0.0011	mg/Kg wet	0.0113	105	70-130	7.35	20		
Bromobenzene	0.0112	0.0011	mg/Kg wet	0.0113	98.7	70-130	4.36	20		
Bromoform	0.0121	0.0011	mg/Kg wet	0.0113	107	70-130	7.41	20		
Bromochloromethane	0.00953	0.0011	mg/Kg wet	0.0113	84.1	70-130	3.04	20		
Bromoform	0.00703	0.0011	mg/Kg wet	0.0113	62.0 *	70-130	5.95	20	L-04, V-05	
Bromomethane	0.0104	0.0023	mg/Kg wet	0.0113	91.7	40-160	0.766	20	V-20	†
2-Butanone (MEK)	0.107	0.023	mg/Kg wet	0.113	94.5	40-160	8.83	20		†
n-Butylbenzene	0.0115	0.0011	mg/Kg wet	0.0113	102	70-130	1.27	20		
sec-Butylbenzene	0.0119	0.0011	mg/Kg wet	0.0113	105	70-130	1.23	20		
tert-Butylbenzene	0.0110	0.0011	mg/Kg wet	0.0113	97.2	70-130	2.14	20		
tert-Butyl Ethyl Ether (TBEE)	0.0103	0.00057	mg/Kg wet	0.0113	90.6	70-130	8.46	20		
Carbon Disulfide	0.00878	0.011	mg/Kg wet	0.0113	77.5	70-130	7.69	20		
Carbon Tetrachloride	0.00932	0.0011	mg/Kg wet	0.0113	82.2	70-130	2.17	20	V-05	
Chlorobenzene	0.0110	0.0011	mg/Kg wet	0.0113	96.8	70-130	5.43	20		
Chlorodibromomethane	0.00775	0.00057	mg/Kg wet	0.0113	68.4 *	70-130	1.88	20	L-04, V-05	
Chloroethane	0.0116	0.0023	mg/Kg wet	0.0113	103	70-130	5.40	20		
Chloroform	0.0131	0.0023	mg/Kg wet	0.0113	116	70-130	7.09	20		
Chloromethane	0.00832	0.0023	mg/Kg wet	0.0113	73.4	40-160	5.18	20		†
2-Chlorotoluene	0.0107	0.0011	mg/Kg wet	0.0113	94.8	70-130	4.74	20		
4-Chlorotoluene	0.0113	0.0011	mg/Kg wet	0.0113	99.9	70-130	2.86	20		
1,2-Dibromo-3-chloropropane (DBCP)	0.00707	0.0045	mg/Kg wet	0.0113	62.4 *	70-130	2.38	20	L-04, V-05	
1,2-Dibromoethane (EDB)	0.0113	0.00057	mg/Kg wet	0.0113	99.7	70-130	6.60	20		
Dibromomethane	0.0113	0.0011	mg/Kg wet	0.0113	99.9	70-130	5.74	20		
1,2-Dichlorobenzene	0.0109	0.0011	mg/Kg wet	0.0113	96.1	70-130	5.17	20		
1,3-Dichlorobenzene	0.0111	0.0011	mg/Kg wet	0.0113	97.6	70-130	4.41	20		
1,4-Dichlorobenzene	0.0111	0.0011	mg/Kg wet	0.0113	97.9	70-130	4.30	20		
Dichlorodifluoromethane (Freon 12)	0.00621	0.0023	mg/Kg wet	0.0113	54.8	40-160	1.10	20	L-14	†
1,1-Dichloroethane	0.0117	0.0011	mg/Kg wet	0.0113	103	70-130	8.29	20		
1,2-Dichloroethane	0.0116	0.0011	mg/Kg wet	0.0113	102	70-130	6.62	20		
1,1-Dichloroethylene	0.0128	0.0011	mg/Kg wet	0.0113	113	70-130	3.32	20		
cis-1,2-Dichloroethylene	0.0112	0.0011	mg/Kg wet	0.0113	98.9	70-130	7.77	20		
trans-1,2-Dichloroethylene	0.0116	0.0011	mg/Kg wet	0.0113	103	70-130	8.66	20		
1,2-Dichloropropane	0.0111	0.0011	mg/Kg wet	0.0113	98.0	70-130	6.52	20		
1,3-Dichloropropane	0.0114	0.00057	mg/Kg wet	0.0113	100	70-130	5.52	20		
2,2-Dichloropropane	0.0106	0.0011	mg/Kg wet	0.0113	93.3	70-130	5.42	20		
1,1-Dichloropropene	0.0117	0.0023	mg/Kg wet	0.0113	103	70-130	4.00	20		
cis-1,3-Dichloropropene	0.00902	0.00057	mg/Kg wet	0.0113	79.6	70-130	6.21	20		
trans-1,3-Dichloropropene	0.00842	0.00057	mg/Kg wet	0.0113	74.3	70-130	5.62	20	V-05	
Diethyl Ether	0.0124	0.0023	mg/Kg wet	0.0113	110	70-130	6.10	20		
Diisopropyl Ether (DIPE)	0.0115	0.00057	mg/Kg wet	0.0113	101	70-130	7.60	20		
1,4-Dioxane	0.134	0.057	mg/Kg wet	0.113	118	40-160	5.79	20	V-16	†
Ethylbenzene	0.0118	0.0011	mg/Kg wet	0.0113	104	70-130	3.88	20		
Hexachlorobutadiene	0.0125	0.0011	mg/Kg wet	0.0113	111	70-130	1.97	20		
2-Hexanone (MBK)	0.108	0.011	mg/Kg wet	0.113	95.0	40-160	7.03	20		†
Isopropylbenzene (Cumene)	0.0117	0.0011	mg/Kg wet	0.0113	103	70-130	1.92	20		
p-Isopropyltoluene (p-Cymene)	0.0121	0.0011	mg/Kg wet	0.0113	107	70-130	1.57	20		
Methyl tert-Butyl Ether (MTBE)	0.0104	0.0011	mg/Kg wet	0.0113	91.9	70-130	12.8	20		
Methylene Chloride	0.0118	0.0057	mg/Kg wet	0.0113	104	70-130	8.87	20		
4-Methyl-2-pentanone (MIBK)	0.108	0.011	mg/Kg wet	0.113	95.3	40-160	8.07	20		†
Naphthalene	0.00935	0.0023	mg/Kg wet	0.0113	82.5	70-130	12.8	20	V-05	

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B088724 - SW-846 5035

LCS Dup (B088724-BSD1)					Prepared: 01/15/14 Analyzed: 01/16/14					
n-Propylbenzene	0.0121	0.0011	mg/Kg wet	0.0113	106	70-130	2.23	20		
Styrene	0.0117	0.0011	mg/Kg wet	0.0113	103	70-130	4.47	20		
1,1,1,2-Tetrachloroethane	0.0101	0.0011	mg/Kg wet	0.0113	88.7	70-130	3.00	20		
1,1,2,2-Tetrachloroethane	0.0112	0.00057	mg/Kg wet	0.0113	98.4	70-130	5.34	20		
Tetrachloroethylene	0.0121	0.0011	mg/Kg wet	0.0113	107	70-130	2.04	20		
Tetrahydrofuran	0.0109	0.0045	mg/Kg wet	0.0113	95.9	70-130	12.9	20		
Toluene	0.0119	0.0011	mg/Kg wet	0.0113	105	70-130	5.29	20		
1,2,3-Trichlorobenzene	0.00998	0.0045	mg/Kg wet	0.0113	88.1	70-130	14.4	20		
1,2,4-Trichlorobenzene	0.00963	0.0011	mg/Kg wet	0.0113	85.0	70-130	8.56	20		
1,1,1-Trichloroethane	0.00993	0.0011	mg/Kg wet	0.0113	87.6	70-130	5.33	20		
1,1,2-Trichloroethane	0.0113	0.0011	mg/Kg wet	0.0113	100	70-130	5.54	20		
Trichloroethylene	0.0116	0.0011	mg/Kg wet	0.0113	102	70-130	3.18	20		
Trichlorofluoromethane (Freon 11)	0.0123	0.0023	mg/Kg wet	0.0113	108	70-130	2.73	20		
1,2,3-Trichloropropane	0.0114	0.0023	mg/Kg wet	0.0113	101	70-130	2.65	20		
1,2,4-Trimethylbenzene	0.0113	0.0011	mg/Kg wet	0.0113	99.5	70-130	3.26	20		
1,3,5-Trimethylbenzene	0.0116	0.0011	mg/Kg wet	0.0113	102	70-130	2.51	20		
Vinyl Chloride	0.00988	0.0023	mg/Kg wet	0.0113	87.2	70-130	3.71	20		
m+p Xylene	0.0233	0.0023	mg/Kg wet	0.0227	103	70-130	3.77	20		
o-Xylene	0.0111	0.0011	mg/Kg wet	0.0113	98.2	70-130	4.29	20		
Surrogate: 1,2-Dichloroethane-d4	0.0280		mg/Kg wet	0.0283	99.1	70-130				
Surrogate: Toluene-d8	0.0282		mg/Kg wet	0.0283	99.9	70-130				
Surrogate: 4-Bromofluorobenzene	0.0283		mg/Kg wet	0.0283	100	70-130				

Batch B088758 - SW-846 5035

Blank (B088758-BLK1)					Prepared & Analyzed: 01/15/14					
Acetone	ND	0.10	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							R-05
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.010	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
Batch B088758 - SW-846 5035										
Blank (B088758-BLK1)										
Prepared & Analyzed: 01/15/14										
1,4-Dichlorobenzene										
Dichlorodifluoromethane (Freon 12)	ND	0.0020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							L-04, V-05
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.010	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							V-16
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methylene Chloride	ND	0.010	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.0040	mg/Kg wet							
n-Propylbenzene	ND	0.0020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0384	mg/Kg wet	0.0500		76.7	70-130				
Surrogate: Toluene-d8	0.0518	mg/Kg wet	0.0500		104	70-130				
Surrogate: 4-Bromofluorobenzene	0.0486	mg/Kg wet	0.0500		97.1	70-130				

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
Batch B088758 - SW-846 5035										
LCS (B088758-BS1)										
Prepared & Analyzed: 01/15/14										
Acetone	0.227	0.10	mg/Kg wet	0.200	114	40-160				†
tert-Amyl Methyl Ether (TAME)	0.0290	0.0010	mg/Kg wet	0.0200	145	*	70-130			L-02, V-20
Benzene	0.0208	0.0020	mg/Kg wet	0.0200	104	70-130				
Bromobenzene	0.0199	0.0020	mg/Kg wet	0.0200	99.5	70-130				
Bromoform	0.0190	0.0020	mg/Kg wet	0.0200	94.8	70-130				
Bromochloromethane	0.0212	0.0020	mg/Kg wet	0.0200	106	70-130				
Bromodichloromethane	0.0206	0.0020	mg/Kg wet	0.0200	103	70-130				
Bromomethane	0.00930	0.010	mg/Kg wet	0.0200	46.5	40-160				L-14, R-05 †
2-Butanone (MEK)	0.176	0.040	mg/Kg wet	0.200	88.2	40-160				†
n-Butylbenzene	0.0206	0.0020	mg/Kg wet	0.0200	103	70-130				
sec-Butylbenzene	0.0202	0.0020	mg/Kg wet	0.0200	101	70-130				
tert-Butylbenzene	0.0199	0.0020	mg/Kg wet	0.0200	99.7	70-130				
tert-Butyl Ethyl Ether (TBEE)	0.0265	0.0010	mg/Kg wet	0.0200	132	*	70-130			L-07
Carbon Disulfide	0.0296	0.0060	mg/Kg wet	0.0200	148	*	70-130			L-02, V-20
Carbon Tetrachloride	0.0187	0.0020	mg/Kg wet	0.0200	93.3	70-130				
Chlorobenzene	0.0212	0.0020	mg/Kg wet	0.0200	106	70-130				
Chlorodibromomethane	0.0206	0.0010	mg/Kg wet	0.0200	103	70-130				
Chloroethane	0.0244	0.010	mg/Kg wet	0.0200	122	70-130				
Chloroform	0.0204	0.0040	mg/Kg wet	0.0200	102	70-130				
Chloromethane	0.00808	0.010	mg/Kg wet	0.0200	40.4	40-160				L-14 †
2-Chlorotoluene	0.0220	0.0020	mg/Kg wet	0.0200	110	70-130				
4-Chlorotoluene	0.0222	0.0020	mg/Kg wet	0.0200	111	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	0.0191	0.0020	mg/Kg wet	0.0200	95.5	70-130				
1,2-Dibromoethane (EDB)	0.0215	0.0010	mg/Kg wet	0.0200	108	70-130				
Dibromomethane	0.0199	0.0020	mg/Kg wet	0.0200	99.4	70-130				
1,2-Dichlorobenzene	0.0236	0.0020	mg/Kg wet	0.0200	118	70-130				
1,3-Dichlorobenzene	0.0219	0.0020	mg/Kg wet	0.0200	110	70-130				
1,4-Dichlorobenzene	0.0216	0.0020	mg/Kg wet	0.0200	108	70-130				
Dichlorodifluoromethane (Freon 12)	0.0112	0.010	mg/Kg wet	0.0200	55.9	40-160				L-14 †
1,1-Dichloroethane	0.0188	0.0020	mg/Kg wet	0.0200	93.8	70-130				
1,2-Dichloroethane	0.0183	0.0020	mg/Kg wet	0.0200	91.5	70-130				
1,1-Dichloroethylene	0.0239	0.0040	mg/Kg wet	0.0200	119	70-130				
cis-1,2-Dichloroethylene	0.0196	0.0020	mg/Kg wet	0.0200	98.2	70-130				
trans-1,2-Dichloroethylene	0.0205	0.0020	mg/Kg wet	0.0200	103	70-130				
1,2-Dichloropropane	0.0223	0.0020	mg/Kg wet	0.0200	111	70-130				
1,3-Dichloropropane	0.0217	0.0010	mg/Kg wet	0.0200	109	70-130				
2,2-Dichloropropane	0.0138	0.0020	mg/Kg wet	0.0200	68.9	*	70-130			L-04, V-05
1,1-Dichloropropene	0.0217	0.0020	mg/Kg wet	0.0200	108	70-130				
cis-1,3-Dichloropropene	0.0207	0.0010	mg/Kg wet	0.0200	103	70-130				
trans-1,3-Dichloropropene	0.0223	0.0010	mg/Kg wet	0.0200	112	70-130				
Diethyl Ether	0.0231	0.010	mg/Kg wet	0.0200	116	70-130				
Diisopropyl Ether (DIPE)	0.0226	0.0010	mg/Kg wet	0.0200	113	70-130				
1,4-Dioxane	0.237	0.10	mg/Kg wet	0.200	118	40-160				V-16 †
Ethylbenzene	0.0231	0.0020	mg/Kg wet	0.0200	116	70-130				
Hexachlorobutadiene	0.0218	0.0020	mg/Kg wet	0.0200	109	70-130				
2-Hexanone (MBK)	0.201	0.020	mg/Kg wet	0.200	100	40-160				†
Isopropylbenzene (Cumene)	0.0205	0.0020	mg/Kg wet	0.0200	102	70-130				
p-Isopropyltoluene (p-Cymene)	0.0223	0.0020	mg/Kg wet	0.0200	111	70-130				
Methyl tert-Butyl Ether (MTBE)	0.0223	0.0040	mg/Kg wet	0.0200	112	70-130				
Methylene Chloride	0.0184	0.010	mg/Kg wet	0.0200	91.8	70-130				
4-Methyl-2-pentanone (MIBK)	0.213	0.020	mg/Kg wet	0.200	107	40-160				†
Naphthalene	0.0191	0.0040	mg/Kg wet	0.0200	95.6	70-130				

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
Batch B088758 - SW-846 5035									
LCS (B088758-BS1)									
Prepared & Analyzed: 01/15/14									
n-Propylbenzene	0.0221	0.0020	mg/Kg wet	0.0200	110	70-130			
Styrene	0.0221	0.0020	mg/Kg wet	0.0200	111	70-130			
1,1,1,2-Tetrachloroethane	0.0230	0.0020	mg/Kg wet	0.0200	115	70-130			
1,1,2,2-Tetrachloroethane	0.0218	0.0010	mg/Kg wet	0.0200	109	70-130			
Tetrachloroethylene	0.0239	0.0020	mg/Kg wet	0.0200	120	70-130			
Tetrahydrofuran	0.0184	0.010	mg/Kg wet	0.0200	91.9	70-130			
Toluene	0.0220	0.0020	mg/Kg wet	0.0200	110	70-130			
1,2,3-Trichlorobenzene	0.0183	0.0020	mg/Kg wet	0.0200	91.6	70-130			
1,2,4-Trichlorobenzene	0.0195	0.0020	mg/Kg wet	0.0200	97.6	70-130			
1,1,1-Trichloroethane	0.0195	0.0020	mg/Kg wet	0.0200	97.5	70-130			
1,1,2-Trichloroethane	0.0212	0.0020	mg/Kg wet	0.0200	106	70-130			
Trichloroethylene	0.0210	0.0020	mg/Kg wet	0.0200	105	70-130			
Trichlorofluoromethane (Freon 11)	0.0190	0.010	mg/Kg wet	0.0200	95.2	70-130			
1,2,3-Trichloropropane	0.0192	0.0020	mg/Kg wet	0.0200	96.1	70-130			
1,2,4-Trimethylbenzene	0.0195	0.0020	mg/Kg wet	0.0200	97.6	70-130			
1,3,5-Trimethylbenzene	0.0210	0.0020	mg/Kg wet	0.0200	105	70-130			
Vinyl Chloride	0.0161	0.010	mg/Kg wet	0.0200	80.5	70-130			
m+p Xylene	0.0457	0.0040	mg/Kg wet	0.0400	114	70-130			
o-Xylene	0.0223	0.0020	mg/Kg wet	0.0200	111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0402		mg/Kg wet	0.0500	80.5	70-130			
Surrogate: Toluene-d8	0.0526		mg/Kg wet	0.0500	105	70-130			
Surrogate: 4-Bromofluorobenzene	0.0513		mg/Kg wet	0.0500	103	70-130			
LCS Dup (B088758-BSD1)									
Prepared & Analyzed: 01/15/14									
Acetone	0.213	0.10	mg/Kg wet	0.200	106	40-160	6.54	20	†
tert-Amyl Methyl Ether (TAME)	0.0281	0.0010	mg/Kg wet	0.0200	140	*	70-130	3.29	20 L-02, V-20
Benzene	0.0209	0.0020	mg/Kg wet	0.0200	104	70-130	0.288	20	
Bromobenzene	0.0199	0.0020	mg/Kg wet	0.0200	99.5	70-130	0.00	20	
Bromochloromethane	0.0197	0.0020	mg/Kg wet	0.0200	98.3	70-130	3.63	20	
Bromodichloromethane	0.0209	0.0020	mg/Kg wet	0.0200	105	70-130	1.14	20	
Bromoform	0.0202	0.0020	mg/Kg wet	0.0200	101	70-130	1.96	20	
Bromomethane	0.0118	0.010	mg/Kg wet	0.0200	58.9	40-160	23.5	*	20 L-14, R-05 †
2-Butanone (MEK)	0.169	0.040	mg/Kg wet	0.200	84.5	40-160	4.39	20	
n-Butylbenzene	0.0203	0.0020	mg/Kg wet	0.0200	102	70-130	1.27	20	
sec-Butylbenzene	0.0203	0.0020	mg/Kg wet	0.0200	101	70-130	0.297	20	
tert-Butylbenzene	0.0197	0.0020	mg/Kg wet	0.0200	98.4	70-130	1.31	20	
tert-Butyl Ethyl Ether (TBEE)	0.0254	0.0010	mg/Kg wet	0.0200	127	70-130	4.17	20	
Carbon Disulfide	0.0293	0.0060	mg/Kg wet	0.0200	146	*	70-130	1.02	20 V-20, L-02
Carbon Tetrachloride	0.0190	0.0020	mg/Kg wet	0.0200	94.8	70-130	1.59	20	
Chlorobenzene	0.0212	0.0020	mg/Kg wet	0.0200	106	70-130	0.189	20	
Chlorodibromomethane	0.0199	0.0010	mg/Kg wet	0.0200	99.7	70-130	3.26	20	
Chloroethane	0.0247	0.010	mg/Kg wet	0.0200	124	70-130	1.30	20	
Chloroform	0.0204	0.0040	mg/Kg wet	0.0200	102	70-130	0.294	20	
Chloromethane	0.00798	0.010	mg/Kg wet	0.0200	39.9	*	40-160	1.25	20 L-07 †
2-Chlorotoluene	0.0219	0.0020	mg/Kg wet	0.0200	109	70-130	0.456	20	
4-Chlorotoluene	0.0224	0.0020	mg/Kg wet	0.0200	112	70-130	0.808	20	
1,2-Dibromo-3-chloropropane (DBCP)	0.0188	0.0020	mg/Kg wet	0.0200	94.0	70-130	1.58	20	
1,2-Dibromoethane (EDB)	0.0205	0.0010	mg/Kg wet	0.0200	102	70-130	4.85	20	
Dibromomethane	0.0192	0.0020	mg/Kg wet	0.0200	95.9	70-130	3.58	20	
1,2-Dichlorobenzene	0.0230	0.0020	mg/Kg wet	0.0200	115	70-130	2.66	20	
1,3-Dichlorobenzene	0.0216	0.0020	mg/Kg wet	0.0200	108	70-130	1.38	20	
1,4-Dichlorobenzene	0.0214	0.0020	mg/Kg wet	0.0200	107	70-130	1.02	20	

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B088758 - SW-846 5035										
LCS Dup (B088758-BSD1)										
Prepared & Analyzed: 01/15/14										
Dichlorodifluoromethane (Freon 12)	0.0108	0.010	mg/Kg wet	0.0200	54.2	40-160	3.09	20	L-14	†
1,1-Dichloroethane	0.0183	0.0020	mg/Kg wet	0.0200	91.7	70-130	2.26	20		
1,2-Dichloroethane	0.0176	0.0020	mg/Kg wet	0.0200	88.1	70-130	3.79	20		
1,1-Dichloroethylene	0.0239	0.0040	mg/Kg wet	0.0200	120	70-130	0.168	20		
cis-1,2-Dichloroethylene	0.0192	0.0020	mg/Kg wet	0.0200	96.2	70-130	2.06	20		
trans-1,2-Dichloroethylene	0.0208	0.0020	mg/Kg wet	0.0200	104	70-130	1.07	20		
1,2-Dichloropropane	0.0217	0.0020	mg/Kg wet	0.0200	108	70-130	2.73	20		
1,3-Dichloropropane	0.0205	0.0010	mg/Kg wet	0.0200	103	70-130	5.77	20		
2,2-Dichloropropane	0.0133	0.0020	mg/Kg wet	0.0200	66.3	*	70-130	3.85	20	L-04, V-05
1,1-Dichloropropene	0.0224	0.0020	mg/Kg wet	0.0200	112	70-130	3.09	20		
cis-1,3-Dichloropropene	0.0207	0.0010	mg/Kg wet	0.0200	104	70-130	0.386	20		
trans-1,3-Dichloropropene	0.0223	0.0010	mg/Kg wet	0.0200	112	70-130	0.00	20		
Diethyl Ether	0.0228	0.010	mg/Kg wet	0.0200	114	70-130	1.48	20		
Diisopropyl Ether (DIPE)	0.0219	0.0010	mg/Kg wet	0.0200	109	70-130	3.24	20		
1,4-Dioxane	0.248	0.10	mg/Kg wet	0.200	124	40-160	4.56	20	V-16	†
Ethylbenzene	0.0233	0.0020	mg/Kg wet	0.0200	116	70-130	0.862	20		
Hexachlorobutadiene	0.0223	0.0020	mg/Kg wet	0.0200	111	70-130	2.18	20		
2-Hexanone (MBK)	0.189	0.020	mg/Kg wet	0.200	94.7	40-160	5.76	20		†
Isopropylbenzene (Cumene)	0.0207	0.0020	mg/Kg wet	0.0200	104	70-130	1.07	20		
p-Isopropyltoluene (p-Cymene)	0.0220	0.0020	mg/Kg wet	0.0200	110	70-130	1.17	20		
Methyl tert-Butyl Ether (MTBE)	0.0214	0.0040	mg/Kg wet	0.0200	107	70-130	4.39	20		
Methylene Chloride	0.0177	0.010	mg/Kg wet	0.0200	88.5	70-130	3.66	20		
4-Methyl-2-pentanone (MIBK)	0.205	0.020	mg/Kg wet	0.200	103	40-160	3.71	20		†
Naphthalene	0.0187	0.0040	mg/Kg wet	0.0200	93.4	70-130	2.33	20		
n-Propylbenzene	0.0223	0.0020	mg/Kg wet	0.0200	111	70-130	0.903	20		
Styrene	0.0219	0.0020	mg/Kg wet	0.0200	110	70-130	0.817	20		
1,1,1,2-Tetrachloroethane	0.0230	0.0020	mg/Kg wet	0.0200	115	70-130	0.0870	20		
1,1,2,2-Tetrachloroethane	0.0208	0.0010	mg/Kg wet	0.0200	104	70-130	4.42	20		
Tetrachloroethylene	0.0239	0.0020	mg/Kg wet	0.0200	120	70-130	0.00	20		
Tetrahydrofuran	0.0202	0.010	mg/Kg wet	0.0200	101	70-130	9.24	20		
Toluene	0.0218	0.0020	mg/Kg wet	0.0200	109	70-130	0.913	20		
1,2,3-Trichlorobenzene	0.0183	0.0020	mg/Kg wet	0.0200	91.6	70-130	0.00	20		
1,2,4-Trichlorobenzene	0.0194	0.0020	mg/Kg wet	0.0200	97.1	70-130	0.514	20		
1,1,1-Trichloroethane	0.0191	0.0020	mg/Kg wet	0.0200	95.6	70-130	1.97	20		
1,1,2-Trichloroethane	0.0202	0.0020	mg/Kg wet	0.0200	101	70-130	4.93	20		
Trichloroethylene	0.0214	0.0020	mg/Kg wet	0.0200	107	70-130	1.89	20		
Trichlorofluoromethane (Freon 11)	0.0189	0.010	mg/Kg wet	0.0200	94.5	70-130	0.738	20		
1,2,3-Trichloropropane	0.0196	0.0020	mg/Kg wet	0.0200	98.1	70-130	2.06	20		
1,2,4-Trimethylbenzene	0.0192	0.0020	mg/Kg wet	0.0200	96.0	70-130	1.65	20		
1,3,5-Trimethylbenzene	0.0210	0.0020	mg/Kg wet	0.0200	105	70-130	0.00	20		
Vinyl Chloride	0.0158	0.010	mg/Kg wet	0.0200	78.9	70-130	2.01	20		
m+p Xylene	0.0461	0.0040	mg/Kg wet	0.0400	115	70-130	0.872	20		
o-Xylene	0.0225	0.0020	mg/Kg wet	0.0200	112	70-130	0.983	20		
Surrogate: 1,2-Dichloroethane-d4	0.0389		mg/Kg wet	0.0500	77.8	70-130				
Surrogate: Toluene-d8	0.0530		mg/Kg wet	0.0500	106	70-130				
Surrogate: 4-Bromofluorobenzene	0.0512		mg/Kg wet	0.0500	102	70-130				

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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Batch B088758 - SW-846 5035

Matrix Spike (B088758-MS1)	Source: 14A0376-01			Prepared & Analyzed: 01/15/14				
Acetone	0.209	0.096	mg/Kg dry	0.193	ND	108	70-130	
tert-Amyl Methyl Ether (TAME)	0.0242	0.00096	mg/Kg dry	0.0193	ND	125	70-130	
Benzene	0.0176	0.0019	mg/Kg dry	0.0193	ND	91.2	70-130	
Bromobenzene	0.0174	0.0019	mg/Kg dry	0.0193	ND	90.0	70-130	
Bromoform	0.0173	0.0019	mg/Kg dry	0.0193	ND	89.5	70-130	
Bromomethane	0.0183	0.0019	mg/Kg dry	0.0193	ND	95.1	70-130	
2-Butanone (MEK)	0.0175	0.0019	mg/Kg dry	0.0193	ND	90.7	70-130	
n-Butylbenzene	0.0100	0.0096	mg/Kg dry	0.0193	ND	52.0 *	70-130	R-05, MS-08
sec-Butylbenzene	0.156	0.039	mg/Kg dry	0.193	ND	80.8	70-130	
tert-Butylbenzene	0.0166	0.0019	mg/Kg dry	0.0193	ND	86.3	70-130	
tert-Butylbenzene	0.0175	0.0019	mg/Kg dry	0.0193	ND	90.6	70-130	
tert-Butyl Ethyl Ether (TBEE)	0.0194	0.0019	mg/Kg dry	0.0193	ND	100	70-130	
Carbon Disulfide	0.0221	0.00096	mg/Kg dry	0.0193	ND	115	70-130	
Carbon Tetrachloride	0.0259	0.0058	mg/Kg dry	0.0193	ND	134 *	70-130	MS-14
Chlorobenzene	0.0158	0.0019	mg/Kg dry	0.0193	ND	81.7	70-130	
Chlorodibromomethane	0.0190	0.0019	mg/Kg dry	0.0193	ND	98.5	70-130	
Chloroethane	0.0185	0.00096	mg/Kg dry	0.0193	ND	96.1	70-130	
Chloroform	0.0233	0.0096	mg/Kg dry	0.0193	ND	121	70-130	
Chloromethane	0.0179	0.0039	mg/Kg dry	0.0193	ND	93.0	70-130	
2-Chlorotoluene	0.0136	0.0096	mg/Kg dry	0.0193	ND	70.5	70-130	
4-Chlorotoluene	0.0189	0.0019	mg/Kg dry	0.0193	ND	98.1	70-130	
1,2-Dibromo-3-chloropropane (DBCP)	0.0174	0.0019	mg/Kg dry	0.0193	ND	90.3	70-130	
1,2-Dibromoethane (EDB)	0.0182	0.00096	mg/Kg dry	0.0193	ND	94.4	70-130	
Dibromomethane	0.0173	0.0019	mg/Kg dry	0.0193	ND	89.6	70-130	
1,2-Dichlorobenzene	0.0191	0.0019	mg/Kg dry	0.0193	ND	98.8	70-130	
1,3-Dichlorobenzene	0.0192	0.0019	mg/Kg dry	0.0193	ND	99.3	70-130	
1,4-Dichlorobenzene	0.0187	0.0019	mg/Kg dry	0.0193	ND	97.1	70-130	
Dichlorodifluoromethane (Freon 12)	0.0126	0.0096	mg/Kg dry	0.0193	ND	65.2 *	70-130	MS-07
1,1-Dichloroethane	0.0159	0.0019	mg/Kg dry	0.0193	ND	82.2	70-130	
1,2-Dichloroethane	0.0156	0.0019	mg/Kg dry	0.0193	ND	81.1	70-130	
1,1-Dichloroethylene	0.0215	0.0039	mg/Kg dry	0.0193	ND	111	70-130	
cis-1,2-Dichloroethylene	0.0167	0.0019	mg/Kg dry	0.0193	ND	86.7	70-130	
trans-1,2-Dichloroethylene	0.0179	0.0019	mg/Kg dry	0.0193	ND	92.9	70-130	
1,2-Dichloropropane	0.0190	0.0019	mg/Kg dry	0.0193	ND	98.7	70-130	
1,3-Dichloropropane	0.0183	0.00096	mg/Kg dry	0.0193	ND	95.0	70-130	
2,2-Dichloropropane	0.0111	0.0019	mg/Kg dry	0.0193	ND	57.4 *	70-130	L-04, MS-08, V-05
1,1-Dichloropropene	0.0181	0.0019	mg/Kg dry	0.0193	ND	93.9	70-130	
cis-1,3-Dichloropropene	0.0182	0.00096	mg/Kg dry	0.0193	ND	94.4	70-130	
trans-1,3-Dichloropropene	0.0198	0.00096	mg/Kg dry	0.0193	ND	102	70-130	
Diethyl Ether	0.0202	0.0096	mg/Kg dry	0.0193	ND	105	70-130	
Diisopropyl Ether (DIPE)	0.0200	0.00096	mg/Kg dry	0.0193	ND	104	70-130	
1,4-Dioxane	0.182	0.096	mg/Kg dry	0.193	ND	94.3	70-130	V-16
Ethylbenzene	0.0206	0.0019	mg/Kg dry	0.0193	ND	107	70-130	
Hexachlorobutadiene	0.0157	0.0019	mg/Kg dry	0.0193	ND	81.3	70-130	
2-Hexanone (MBK)	0.160	0.019	mg/Kg dry	0.193	ND	82.9	70-130	
Isopropylbenzene (Cumene)	0.0180	0.0019	mg/Kg dry	0.0193	ND	93.2	70-130	
p-Isopropyltoluene (p-Cymene)	0.0192	0.0019	mg/Kg dry	0.0193	ND	99.5	70-130	
Methyl tert-Butyl Ether (MTBE)	0.0173	0.0039	mg/Kg dry	0.0193	ND	89.9	70-130	
Methylene Chloride	0.0297	0.0096	mg/Kg dry	0.0193	ND	154 *	70-130	MS-14
4-Methyl-2-pentanone (MIBK)	0.177	0.019	mg/Kg dry	0.193	ND	91.8	70-130	
Naphthalene	0.0123	0.0039	mg/Kg dry	0.0193	ND	63.9 *	70-130	MS-07

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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Batch B088758 - SW-846 5035

Matrix Spike (B088758-MS1)	Source: 14A0376-01			Prepared & Analyzed: 01/15/14				
n-Propylbenzene	0.0189	0.0019	mg/Kg dry	0.0193	ND	97.8	70-130	
Styrene	0.0190	0.0019	mg/Kg dry	0.0193	ND	98.3	70-130	
1,1,1,2-Tetrachloroethane	0.0209	0.0019	mg/Kg dry	0.0193	ND	108	70-130	
1,1,2,2-Tetrachloroethane	0.0181	0.00096	mg/Kg dry	0.0193	ND	93.8	70-130	
Tetrachloroethylene	0.0196	0.0019	mg/Kg dry	0.0193	ND	102	70-130	
Tetrahydrofuran	0.0190	0.0096	mg/Kg dry	0.0193	ND	98.5	70-130	
Toluene	0.0185	0.0019	mg/Kg dry	0.0193	ND	96.0	70-130	
1,2,3-Trichlorobenzene	0.0118	0.0019	mg/Kg dry	0.0193	ND	61.3 *	70-130	MS-07
1,2,4-Trichlorobenzene	0.0132	0.0019	mg/Kg dry	0.0193	ND	68.5 *	70-130	MS-07
1,1,1-Trichloroethane	0.0165	0.0019	mg/Kg dry	0.0193	ND	85.5	70-130	
1,1,2-Trichloroethane	0.0182	0.0019	mg/Kg dry	0.0193	ND	94.5	70-130	
Trichloroethylene	0.0176	0.0019	mg/Kg dry	0.0193	ND	91.0	70-130	
Trichlorofluoromethane (Freon 11)	0.0172	0.0096	mg/Kg dry	0.0193	ND	89.4	70-130	
1,2,3-Trichloropropane	0.0168	0.0019	mg/Kg dry	0.0193	ND	87.3	70-130	
1,2,4-Trimethylbenzene	0.0175	0.0019	mg/Kg dry	0.0193	ND	90.9	70-130	
1,3,5-Trimethylbenzene	0.0175	0.0019	mg/Kg dry	0.0193	ND	90.9	70-130	
Vinyl Chloride	0.0158	0.0096	mg/Kg dry	0.0193	ND	82.0	70-130	
m+p Xylene	0.0402	0.0039	mg/Kg dry	0.0386	ND	104	70-130	
o-Xylene	0.0199	0.0019	mg/Kg dry	0.0193	ND	103	70-130	
Surrogate: 1,2-Dichloroethane-d4	0.0379		mg/Kg dry	0.0482		78.5	70-130	
Surrogate: Toluene-d8	0.0501		mg/Kg dry	0.0482		104	70-130	
Surrogate: 4-Bromofluorobenzene	0.0483		mg/Kg dry	0.0482		100	70-130	

QUALITY CONTROL
Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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Batch B088773 - SW-846 3540C
Blank (B088773-BLK1)

Prepared: 01/15/14 Analyzed: 01/17/14

Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.173		mg/Kg wet	0.200		86.4		30-150		
Surrogate: Decachlorobiphenyl [2C]	0.185		mg/Kg wet	0.200		92.4		30-150		
Surrogate: Tetrachloro-m-xylene	0.162		mg/Kg wet	0.200		81.1		30-150		
Surrogate: Tetrachloro-m-xylene [2C]	0.171		mg/Kg wet	0.200		85.4		30-150		

LCS (B088773-BS1)

Prepared: 01/15/14 Analyzed: 01/17/14

Aroclor-1016	0.18	0.10	mg/Kg wet	0.200		91.4		40-140		
Aroclor-1016 [2C]	0.20	0.10	mg/Kg wet	0.200		99.6		40-140		
Aroclor-1260	0.19	0.10	mg/Kg wet	0.200		92.9		40-140		
Aroclor-1260 [2C]	0.19	0.10	mg/Kg wet	0.200		97.0		40-140		
Surrogate: Decachlorobiphenyl	0.189		mg/Kg wet	0.200		94.5		30-150		
Surrogate: Decachlorobiphenyl [2C]	0.201		mg/Kg wet	0.200		100		30-150		
Surrogate: Tetrachloro-m-xylene	0.180		mg/Kg wet	0.200		90.0		30-150		
Surrogate: Tetrachloro-m-xylene [2C]	0.181		mg/Kg wet	0.200		90.3		30-150		

LCS Dup (B088773-BSD1)

Prepared: 01/15/14 Analyzed: 01/17/14

Aroclor-1016	0.21	0.10	mg/Kg wet	0.200		106		40-140	14.9	30
Aroclor-1016 [2C]	0.23	0.10	mg/Kg wet	0.200		114		40-140	13.4	30
Aroclor-1260	0.21	0.10	mg/Kg wet	0.200		107		40-140	14.0	30
Aroclor-1260 [2C]	0.22	0.10	mg/Kg wet	0.200		110		40-140	12.8	30
Surrogate: Decachlorobiphenyl	0.206		mg/Kg wet	0.200		103		30-150		
Surrogate: Decachlorobiphenyl [2C]	0.213		mg/Kg wet	0.200		106		30-150		
Surrogate: Tetrachloro-m-xylene	0.197		mg/Kg wet	0.200		98.5		30-150		
Surrogate: Tetrachloro-m-xylene [2C]	0.197		mg/Kg wet	0.200		98.3		30-150		

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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Batch B088752 - SW-846 3546

Blank (B088752-BLK1)										Prepared: 01/15/14 Analyzed: 01/16/14
C9-C18 Aliphatics	ND	10	mg/Kg wet							
C19-C36 Aliphatics	ND	10	mg/Kg wet							
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg wet							
C11-C22 Aromatics	ND	10	mg/Kg wet							
Acenaphthene	ND	0.10	mg/Kg wet							
Acenaphthylene	ND	0.10	mg/Kg wet							
Anthracene	ND	0.10	mg/Kg wet							
Benzo(a)anthracene	ND	0.10	mg/Kg wet							
Benzo(a)pyrene	ND	0.10	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.10	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.10	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.10	mg/Kg wet							
Chrysene	ND	0.10	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.10	mg/Kg wet							
Fluoranthene	ND	0.10	mg/Kg wet							
Fluorene	ND	0.10	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg wet							
2-Methylnaphthalene	ND	0.10	mg/Kg wet							
Naphthalene	ND	0.10	mg/Kg wet							
Phenanthrene	ND	0.10	mg/Kg wet							
Pyrene	ND	0.10	mg/Kg wet							
n-Decane	ND	0.10	mg/Kg wet							
n-Docosane	ND	0.10	mg/Kg wet							
n-Dodecane	ND	0.10	mg/Kg wet							
n-Eicosane	ND	0.10	mg/Kg wet							
n-Hexacosane	ND	0.10	mg/Kg wet							
n-Hexadecane	ND	0.10	mg/Kg wet							
n-Hexatriacontane	ND	0.10	mg/Kg wet							
n-Nonadecane	ND	0.10	mg/Kg wet							
n-Nonane	ND	0.10	mg/Kg wet							
n-Octacosane	ND	0.10	mg/Kg wet							
n-Octadecane	ND	0.10	mg/Kg wet							
n-Tetracosane	ND	0.10	mg/Kg wet							
n-Tetradecane	ND	0.10	mg/Kg wet							
n-Triacontane	ND	0.10	mg/Kg wet							
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
Surrogate: Chlorooctadecane (COD)	3.29	mg/Kg wet	4.99		66.0	40-140				
Surrogate: o-Terphenyl (OTP)	4.22	mg/Kg wet	5.00		84.4	40-140				
Surrogate: 2-Bromonaphthalene	4.95	mg/Kg wet	5.00		99.0	40-140				
Surrogate: 2-Fluorobiphenyl	5.17	mg/Kg wet	5.00		103	40-140				

LCS (B088752-BS1)										Prepared: 01/15/14 Analyzed: 01/16/14
Acenaphthene	4.35	0.10	mg/Kg wet	5.00		87.1	40-140			
Acenaphthylene	4.26	0.10	mg/Kg wet	5.00		85.1	40-140			
Anthracene	4.84	0.10	mg/Kg wet	5.00		96.8	40-140			
Benzo(a)anthracene	5.07	0.10	mg/Kg wet	5.00		101	40-140			
Benzo(a)pyrene	4.79	0.10	mg/Kg wet	5.00		95.7	40-140			
Benzo(b)fluoranthene	5.10	0.10	mg/Kg wet	5.00		102	40-140			
Benzo(g,h,i)perylene	5.26	0.10	mg/Kg wet	5.00		105	40-140			
Benzo(k)fluoranthene	4.99	0.10	mg/Kg wet	5.00		99.8	40-140			
Chrysene	4.73	0.10	mg/Kg wet	5.00		94.6	40-140			

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B088752 - SW-846 3546										
LCS (B088752-BS1)										
Prepared: 01/15/14 Analyzed: 01/16/14										
Dibenz(a,h)anthracene	5.25	0.10	mg/Kg wet	5.00	105	40-140				
Fluoranthene	4.92	0.10	mg/Kg wet	5.00	98.5	40-140				
Fluorene	4.57	0.10	mg/Kg wet	5.00	91.4	40-140				
Indeno(1,2,3-cd)pyrene	5.27	0.10	mg/Kg wet	5.00	105	40-140				
2-Methylnaphthalene	4.09	0.10	mg/Kg wet	5.00	81.8	40-140				
Naphthalene	3.75	0.10	mg/Kg wet	5.00	74.9	40-140				
Phenanthrene	4.79	0.10	mg/Kg wet	5.00	95.8	40-140				
Pyrene	4.81	0.10	mg/Kg wet	5.00	96.2	40-140				
n-Decane	2.67	0.10	mg/Kg wet	5.00	53.4	40-140				
n-Docosane	4.59	0.10	mg/Kg wet	5.00	91.7	40-140				
n-Dodecane	3.27	0.10	mg/Kg wet	5.00	65.4	40-140				
n-Eicosane	4.40	0.10	mg/Kg wet	5.00	87.9	40-140				
n-Hexacosane	4.64	0.10	mg/Kg wet	5.00	92.9	40-140				
n-Hexadecane	4.00	0.10	mg/Kg wet	5.00	80.0	40-140				
n-Hexatriacontane	3.88	0.10	mg/Kg wet	5.00	77.7	40-140				
n-Nonadecane	4.32	0.10	mg/Kg wet	5.00	86.4	40-140				
n-Nonane	1.79	0.10	mg/Kg wet	5.00	35.8	30-140				
n-Octacosane	4.52	0.10	mg/Kg wet	5.00	90.4	40-140				
n-Octadecane	4.28	0.10	mg/Kg wet	5.00	85.5	40-140				
n-Tetracosane	4.57	0.10	mg/Kg wet	5.00	91.4	40-140				
n-Tetradecane	3.60	0.10	mg/Kg wet	5.00	71.9	40-140				
n-Triacontane	4.55	0.10	mg/Kg wet	5.00	91.0	40-140				
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00		0-5				
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00		0-5				
Surrogate: Chlorooctadecane (COD)	3.88		mg/Kg wet	4.99	77.8	40-140				
Surrogate: o-Terphenyl (OTP)	4.74		mg/Kg wet	5.00	94.8	40-140				
Surrogate: 2-Bromonaphthalene	5.28		mg/Kg wet	5.00	106	40-140				
Surrogate: 2-Fluorobiphenyl	5.57		mg/Kg wet	5.00	111	40-140				
LCS Dup (B088752-BSD1)										
Prepared: 01/15/14 Analyzed: 01/16/14										
Acenaphthene	4.32	0.10	mg/Kg wet	5.00	86.4	40-140	0.758	25		
Acenaphthylene	4.23	0.10	mg/Kg wet	5.00	84.5	40-140	0.679	25		
Anthracene	4.82	0.10	mg/Kg wet	5.00	96.4	40-140	0.404	25		
Benzo(a)anthracene	5.05	0.10	mg/Kg wet	5.00	101	40-140	0.480	25		
Benzo(a)pyrene	4.77	0.10	mg/Kg wet	5.00	95.4	40-140	0.391	25		
Benzo(b)fluoranthene	5.06	0.10	mg/Kg wet	5.00	101	40-140	0.663	25		
Benzo(g,h,i)perylene	5.24	0.10	mg/Kg wet	5.00	105	40-140	0.415	25		
Benzo(k)fluoranthene	4.97	0.10	mg/Kg wet	5.00	99.5	40-140	0.287	25		
Chrysene	4.71	0.10	mg/Kg wet	5.00	94.2	40-140	0.479	25		
Dibenz(a,h)anthracene	5.23	0.10	mg/Kg wet	5.00	105	40-140	0.418	25		
Fluoranthene	4.90	0.10	mg/Kg wet	5.00	98.0	40-140	0.493	25		
Fluorene	4.54	0.10	mg/Kg wet	5.00	90.7	40-140	0.723	25		
Indeno(1,2,3-cd)pyrene	5.24	0.10	mg/Kg wet	5.00	105	40-140	0.392	25		
2-Methylnaphthalene	4.08	0.10	mg/Kg wet	5.00	81.5	40-140	0.335	25		
Naphthalene	3.73	0.10	mg/Kg wet	5.00	74.6	40-140	0.476	25		
Phenanthrene	4.77	0.10	mg/Kg wet	5.00	95.3	40-140	0.492	25		
Pyrene	4.79	0.10	mg/Kg wet	5.00	95.8	40-140	0.356	25		
n-Decane	2.65	0.10	mg/Kg wet	5.00	52.9	40-140	0.884	25		
n-Docosane	4.51	0.10	mg/Kg wet	5.00	90.1	40-140	1.74	25		
n-Dodecane	3.23	0.10	mg/Kg wet	5.00	64.6	40-140	1.27	25		
n-Eicosane	4.33	0.10	mg/Kg wet	5.00	86.6	40-140	1.48	25		
n-Hexacosane	4.58	0.10	mg/Kg wet	5.00	91.7	40-140	1.30	25		

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B088752 - SW-846 3546

LCS Dup (B088752-BSD1)	Prepared: 01/15/14 Analyzed: 01/16/14								
n-Hexadecane	3.93	0.10	mg/Kg wet	5.00	78.5	40-140	1.79	25	
n-Hexatriacontane	3.82	0.10	mg/Kg wet	5.00	76.4	40-140	1.71	25	
n-Nonadecane	4.26	0.10	mg/Kg wet	5.00	85.2	40-140	1.47	25	
n-Nonane	1.78	0.10	mg/Kg wet	5.00	35.6	30-140	0.723	25	
n-Octacosane	4.45	0.10	mg/Kg wet	5.00	89.0	40-140	1.56	25	
n-Octadecane	4.20	0.10	mg/Kg wet	5.00	84.0	40-140	1.75	25	
n-Tetracosane	4.50	0.10	mg/Kg wet	5.00	90.0	40-140	1.51	25	
n-Tetradecane	3.53	0.10	mg/Kg wet	5.00	70.6	40-140	1.80	25	
n-Triacontane	4.49	0.10	mg/Kg wet	5.00	89.9	40-140	1.27	25	
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00		0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00		0-5			
Surrogate: Chlorooctadecane (COD)	3.83		mg/Kg wet	4.99	76.7	40-140			
Surrogate: o-Terphenyl (OTP)	4.71		mg/Kg wet	5.00	94.2	40-140			
Surrogate: 2-Bromonaphthalene	5.24		mg/Kg wet	5.00	105	40-140			
Surrogate: 2-Fluorobiphenyl	5.53		mg/Kg wet	5.00	111	40-140			

Batch B088798 - SW-846 3546

Blank (B088798-BLK1)	Prepared: 01/16/14 Analyzed: 01/17/14								
C9-C18 Aliphatics	ND	10	mg/Kg wet						L-04
C19-C36 Aliphatics	ND	10	mg/Kg wet						
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg wet						
C11-C22 Aromatics	ND	10	mg/Kg wet						
Acenaphthene	ND	0.10	mg/Kg wet						
Acenaphthylene	ND	0.10	mg/Kg wet						
Anthracene	ND	0.10	mg/Kg wet						
Benzo(a)anthracene	ND	0.10	mg/Kg wet						
Benzo(a)pyrene	ND	0.10	mg/Kg wet						
Benzo(b)fluoranthene	ND	0.10	mg/Kg wet						
Benzo(g,h,i)perylene	ND	0.10	mg/Kg wet						
Benzo(k)fluoranthene	ND	0.10	mg/Kg wet						
Chrysene	ND	0.10	mg/Kg wet						
Dibenz(a,h)anthracene	ND	0.10	mg/Kg wet						
Fluoranthene	ND	0.10	mg/Kg wet						
Fluorene	ND	0.10	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg wet						
2-Methylnaphthalene	ND	0.10	mg/Kg wet						
Naphthalene	ND	0.10	mg/Kg wet						
Phenanthrene	ND	0.10	mg/Kg wet						
Pyrene	ND	0.10	mg/Kg wet						
n-Decane	ND	0.10	mg/Kg wet						L-04
n-Docosane	ND	0.10	mg/Kg wet						
n-Dodecane	ND	0.10	mg/Kg wet						
n-Eicosane	ND	0.10	mg/Kg wet						
n-Hexacosane	ND	0.10	mg/Kg wet						
n-Hexadecane	ND	0.10	mg/Kg wet						
n-Hexatriacontane	ND	0.10	mg/Kg wet						
n-Nonadecane	ND	0.10	mg/Kg wet						
n-Nonane	ND	0.10	mg/Kg wet						L-04
n-Octacosane	ND	0.10	mg/Kg wet						
n-Octadecane	ND	0.10	mg/Kg wet						
n-Tetracosane	ND	0.10	mg/Kg wet						
n-Tetradecane	ND	0.10	mg/Kg wet						

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
Batch B088798 - SW-846 3546										
Blank (B088798-BLK1)										
Prepared: 01/16/14 Analyzed: 01/17/14										
n-Triaccontane	ND	0.10	mg/Kg wet							
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
Surrogate: Chlorooctadecane (COD)	2.68		mg/Kg wet	4.99		53.6	40-140			
Surrogate: o-Terphenyl (OTP)	3.42		mg/Kg wet	5.00		68.4	40-140			
Surrogate: 2-Bromonaphthalene	5.75		mg/Kg wet	5.00		115	40-140			
Surrogate: 2-Fluorobiphenyl	6.03		mg/Kg wet	5.00		121	40-140			
LCS (B088798-BS1) EPH DOC 1										
Prepared: 01/16/14 Analyzed: 01/17/14										
Acenaphthene	3.09	0.10	mg/Kg wet	5.00		61.8	40-140			
Acenaphthylene	3.01	0.10	mg/Kg wet	5.00		60.2	40-140			
Anthracene	3.35	0.10	mg/Kg wet	5.00		67.0	40-140			
Benzo(a)anthracene	3.50	0.10	mg/Kg wet	5.00		69.9	40-140			
Benzo(a)pyrene	3.33	0.10	mg/Kg wet	5.00		66.5	40-140			
Benzo(b)fluoranthene	3.52	0.10	mg/Kg wet	5.00		70.5	40-140			
Benzo(g,h,i)perylene	3.65	0.10	mg/Kg wet	5.00		72.9	40-140			
Benzo(k)fluoranthene	3.47	0.10	mg/Kg wet	5.00		69.4	40-140			
Chrysene	3.30	0.10	mg/Kg wet	5.00		66.1	40-140			
Dibenz(a,h)anthracene	3.68	0.10	mg/Kg wet	5.00		73.7	40-140			
Fluoranthene	3.37	0.10	mg/Kg wet	5.00		67.4	40-140			
Fluorene	3.21	0.10	mg/Kg wet	5.00		64.2	40-140			
Indeno(1,2,3-cd)pyrene	3.63	0.10	mg/Kg wet	5.00		72.7	40-140			
2-Methylnaphthalene	2.95	0.10	mg/Kg wet	5.00		59.1	40-140			
Naphthalene	2.74	0.10	mg/Kg wet	5.00		54.8	40-140			
Phenanthrene	3.31	0.10	mg/Kg wet	5.00		66.2	40-140			
Pyrene	3.30	0.10	mg/Kg wet	5.00		66.0	40-140			
n-Decane	1.77	0.10	mg/Kg wet	5.00	35.4	*	40-140			L-04
n-Docosane	2.95	0.10	mg/Kg wet	5.00		59.0	40-140			
n-Dodecane	2.20	0.10	mg/Kg wet	5.00		44.0	40-140			
n-Eicosane	2.85	0.10	mg/Kg wet	5.00		56.9	40-140			
n-Hexacosane	2.98	0.10	mg/Kg wet	5.00		59.6	40-140			
n-Hexadecane	2.66	0.10	mg/Kg wet	5.00		53.3	40-140			
n-Hexatriacontane	2.96	0.10	mg/Kg wet	5.00		59.1	40-140			
n-Nonadecane	2.82	0.10	mg/Kg wet	5.00		56.3	40-140			
n-Nonane	1.17	0.10	mg/Kg wet	5.00	23.5	*	30-140			L-04
n-Octacosane	2.90	0.10	mg/Kg wet	5.00		58.1	40-140			
n-Octadecane	2.79	0.10	mg/Kg wet	5.00		55.9	40-140			
n-Tetracosane	2.93	0.10	mg/Kg wet	5.00		58.6	40-140			
n-Tetradecane	2.42	0.10	mg/Kg wet	5.00		48.4	40-140			
n-Triacontane	2.98	0.10	mg/Kg wet	5.00		59.6	40-140			
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	2.50		mg/Kg wet	4.99		50.1	40-140			
Surrogate: o-Terphenyl (OTP)	3.28		mg/Kg wet	5.00		65.6	40-140			
Surrogate: 2-Bromonaphthalene	6.41		mg/Kg wet	5.00		128	40-140			
Surrogate: 2-Fluorobiphenyl	6.66		mg/Kg wet	5.00		133	40-140			

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B088798 - SW-846 3546

LCS Dup (B088798-BSD1) EPH DOC 7		Prepared: 01/16/14 Analyzed: 01/17/14							
Acenaphthene	2.79	0.10	mg/Kg wet	5.00	55.9	40-140	10.1	25	
Acenaphthylene	2.72	0.10	mg/Kg wet	5.00	54.4	40-140	10.1	25	
Anthracene	2.94	0.10	mg/Kg wet	5.00	58.7	40-140	13.2	25	
Benzo(a)anthracene	3.04	0.10	mg/Kg wet	5.00	60.7	40-140	14.1	25	
Benzo(a)pyrene	2.89	0.10	mg/Kg wet	5.00	57.8	40-140	14.1	25	
Benzo(b)fluoranthene	3.01	0.10	mg/Kg wet	5.00	60.1	40-140	15.9	25	
Benzo(g,h,i)perylene	3.11	0.10	mg/Kg wet	5.00	62.2	40-140	15.9	25	
Benzo(k)fluoranthene	3.05	0.10	mg/Kg wet	5.00	61.0	40-140	12.9	25	
Chrysene	2.90	0.10	mg/Kg wet	5.00	58.1	40-140	12.9	25	
Dibenz(a,h)anthracene	3.24	0.10	mg/Kg wet	5.00	64.9	40-140	12.7	25	
Fluoranthene	2.91	0.10	mg/Kg wet	5.00	58.1	40-140	14.9	25	
Fluorene	2.87	0.10	mg/Kg wet	5.00	57.3	40-140	11.3	25	
Indeno(1,2,3-cd)pyrene	3.14	0.10	mg/Kg wet	5.00	62.9	40-140	14.5	25	
2-Methylnaphthalene	2.67	0.10	mg/Kg wet	5.00	53.4	40-140	10.0	25	
Naphthalene	2.47	0.10	mg/Kg wet	5.00	49.5	40-140	10.2	25	
Phenanthere	2.90	0.10	mg/Kg wet	5.00	58.1	40-140	13.1	25	
Pyrene	2.84	0.10	mg/Kg wet	5.00	56.8	40-140	15.1	25	
n-Decane	1.63	0.10	mg/Kg wet	5.00	32.6 *	40-140	8.22	25	L-04
n-Docosane	2.50	0.10	mg/Kg wet	5.00	49.9	40-140	16.7	25	
n-Dodecane	1.95	0.10	mg/Kg wet	5.00	39.0 *	40-140	12.1	25	L-07
n-Eicosane	2.41	0.10	mg/Kg wet	5.00	48.2	40-140	16.7	25	
n-Hexacosane	2.50	0.10	mg/Kg wet	5.00	50.1	40-140	17.4	25	
n-Hexadecane	2.34	0.10	mg/Kg wet	5.00	46.9	40-140	12.7	25	
n-Hexatriaccontane	2.51	0.10	mg/Kg wet	5.00	50.2	40-140	16.4	25	
n-Nonadecane	2.40	0.10	mg/Kg wet	5.00	47.9	40-140	16.2	25	
n-Nonane	1.18	0.10	mg/Kg wet	5.00	23.5 *	30-140	0.204	25	L-04
n-Octacosane	2.44	0.10	mg/Kg wet	5.00	48.8	40-140	17.3	25	
n-Octadecane	2.40	0.10	mg/Kg wet	5.00	48.1	40-140	15.0	25	
n-Tetracosane	2.47	0.10	mg/Kg wet	5.00	49.4	40-140	17.1	25	
n-Tetradecane	2.16	0.10	mg/Kg wet	5.00	43.2	40-140	11.4	25	
n-Triacontane	2.49	0.10	mg/Kg wet	5.00	49.9	40-140	17.9	25	
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00		0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00		0-5			
Surrogate: Chlorooctadecane (COD)	2.07		mg/Kg wet	4.99	41.5	40-140			
Surrogate: o-Terphenyl (OTP)	2.79		mg/Kg wet	5.00	55.9	40-140			
Surrogate: 2-Bromonaphthalene	6.27		mg/Kg wet	5.00	125	40-140			
Surrogate: 2-Fluorobiphenyl	6.57		mg/Kg wet	5.00	131	40-140			

Batch B089026 - SW-846 3546

Blank (B089026-BLK1)		Prepared: 01/20/14 Analyzed: 01/21/14							
C9-C18 Aliphatics	ND	10	mg/Kg wet						
C19-C36 Aliphatics	ND	10	mg/Kg wet						
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg wet						
C11-C22 Aromatics	ND	10	mg/Kg wet						
Acenaphthene	ND	0.10	mg/Kg wet						
Acenaphthylene	ND	0.10	mg/Kg wet						
Anthracene	ND	0.10	mg/Kg wet						
Benzo(a)anthracene	ND	0.10	mg/Kg wet						
Benzo(a)pyrene	ND	0.10	mg/Kg wet						
Benzo(b)fluoranthene	ND	0.10	mg/Kg wet						
Benzo(g,h,i)perylene	ND	0.10	mg/Kg wet						
Benzo(k)fluoranthene	ND	0.10	mg/Kg wet						

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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Batch B089026 - SW-846 3546
Blank (B089026-BLK1)

Prepared: 01/20/14 Analyzed: 01/21/14

Chrysene	ND	0.10	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.10	mg/Kg wet							
Fluoranthene	ND	0.10	mg/Kg wet							
Fluorene	ND	0.10	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg wet							
2-Methylnaphthalene	ND	0.10	mg/Kg wet							
Naphthalene	ND	0.10	mg/Kg wet							
Phenanthrene	ND	0.10	mg/Kg wet							
Pyrene	ND	0.10	mg/Kg wet							
n-Decane	ND	0.10	mg/Kg wet							
n-Docosane	ND	0.10	mg/Kg wet							
n-Dodecane	ND	0.10	mg/Kg wet							
n-Eicosane	ND	0.10	mg/Kg wet							
n-Hexacosane	ND	0.10	mg/Kg wet							
n-Hexadecane	ND	0.10	mg/Kg wet							
n-Hexatriacontane	ND	0.10	mg/Kg wet							
n-Nonadecane	ND	0.10	mg/Kg wet							
n-Nonane	ND	0.10	mg/Kg wet							
n-Octacosane	ND	0.10	mg/Kg wet							
n-Octadecane	ND	0.10	mg/Kg wet							
n-Tetracosane	ND	0.10	mg/Kg wet							
n-Tetradecane	ND	0.10	mg/Kg wet							
n-Triacontane	ND	0.10	mg/Kg wet							
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
Surrogate: Chlorooctadecane (COD)	3.74		mg/Kg wet	4.99		74.9		40-140		
Surrogate: o-Terphenyl (OTP)	4.43		mg/Kg wet	5.00		88.5		40-140		
Surrogate: 2-Bromonaphthalene	4.66		mg/Kg wet	5.00		93.1		40-140		
Surrogate: 2-Fluorobiphenyl	4.86		mg/Kg wet	5.00		97.2		40-140		

LCS (B089026-BS1)

Prepared: 01/20/14 Analyzed: 01/21/14

Acenaphthene	4.28	0.10	mg/Kg wet	5.00		85.7		40-140		
Acenaphthylene	4.18	0.10	mg/Kg wet	5.00		83.6		40-140		
Anthracene	4.55	0.10	mg/Kg wet	5.00		91.1		40-140		
Benzo(a)anthracene	4.64	0.10	mg/Kg wet	5.00		92.7		40-140		
Benzo(a)pyrene	4.38	0.10	mg/Kg wet	5.00		87.7		40-140		
Benzo(b)fluoranthene	4.64	0.10	mg/Kg wet	5.00		92.9		40-140		
Benzo(g,h,i)perylene	4.82	0.10	mg/Kg wet	5.00		96.4		40-140		
Benzo(k)fluoranthene	4.57	0.10	mg/Kg wet	5.00		91.4		40-140		
Chrysene	4.32	0.10	mg/Kg wet	5.00		86.4		40-140		
Dibenz(a,h)anthracene	4.80	0.10	mg/Kg wet	5.00		96.0		40-140		
Fluoranthene	4.54	0.10	mg/Kg wet	5.00		90.8		40-140		
Fluorene	4.45	0.10	mg/Kg wet	5.00		89.0		40-140		
Indeno(1,2,3-cd)pyrene	4.81	0.10	mg/Kg wet	5.00		96.3		40-140		
2-Methylnaphthalene	4.00	0.10	mg/Kg wet	5.00		79.9		40-140		
Naphthalene	3.61	0.10	mg/Kg wet	5.00		72.3		40-140		
Phenanthrene	4.54	0.10	mg/Kg wet	5.00		90.7		40-140		
Pyrene	4.44	0.10	mg/Kg wet	5.00		88.8		40-140		
n-Decane	2.36	0.10	mg/Kg wet	5.00		47.2		40-140		
n-Docosane	4.15	0.10	mg/Kg wet	5.00		82.9		40-140		
n-Dodecane	3.02	0.10	mg/Kg wet	5.00		60.4		40-140		
n-Eicosane	4.00	0.10	mg/Kg wet	5.00		79.9		40-140		

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B089026 - SW-846 3546										
LCS (B089026-BS1)										
Prepared: 01/20/14 Analyzed: 01/21/14										
n-Hexacosane	4.20	0.10	mg/Kg wet	5.00	84.0	40-140				
n-Hexadecane	3.78	0.10	mg/Kg wet	5.00	75.5	40-140				
n-Hexatriacontane	4.17	0.10	mg/Kg wet	5.00	83.5	40-140				
n-Nonadecane	3.96	0.10	mg/Kg wet	5.00	79.2	40-140				
n-Nonane	1.55	0.10	mg/Kg wet	5.00	31.0	30-140				
n-Octacosane	4.10	0.10	mg/Kg wet	5.00	82.1	40-140				
n-Octadecane	3.93	0.10	mg/Kg wet	5.00	78.6	40-140				
n-Tetracosane	4.13	0.10	mg/Kg wet	5.00	82.6	40-140				
n-Tetradecane	3.43	0.10	mg/Kg wet	5.00	68.6	40-140				
n-Triacontane	4.20	0.10	mg/Kg wet	5.00	84.0	40-140				
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00		0-5				
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00		0-5				
Surrogate: Chlorooctadecane (COD)	3.63		mg/Kg wet	4.99	72.8	40-140				
Surrogate: o-Terphenyl (OTP)	4.58		mg/Kg wet	5.00	91.6	40-140				
Surrogate: 2-Bromonaphthalene	4.79		mg/Kg wet	5.00	95.7	40-140				
Surrogate: 2-Fluorobiphenyl	5.02		mg/Kg wet	5.00	100	40-140				
LCS Dup (B089026-BS1D)										
Prepared: 01/20/14 Analyzed: 01/21/14										
Acenaphthene	4.38	0.10	mg/Kg wet	5.00	87.6	40-140	2.26	25		
Acenaphthylene	4.30	0.10	mg/Kg wet	5.00	85.9	40-140	2.72	25		
Anthracene	4.78	0.10	mg/Kg wet	5.00	95.5	40-140	4.79	25		
Benzo(a)anthracene	4.90	0.10	mg/Kg wet	5.00	97.9	40-140	5.47	25		
Benzo(a)pyrene	4.63	0.10	mg/Kg wet	5.00	92.6	40-140	5.49	25		
Benzo(b)fluoranthene	4.92	0.10	mg/Kg wet	5.00	98.4	40-140	5.78	25		
Benzo(g,h,i)perylene	5.08	0.10	mg/Kg wet	5.00	102	40-140	5.33	25		
Benzo(k)fluoranthene	4.81	0.10	mg/Kg wet	5.00	96.1	40-140	5.05	25		
Chrysene	4.56	0.10	mg/Kg wet	5.00	91.3	40-140	5.47	25		
Dibenz(a,h)anthracene	5.07	0.10	mg/Kg wet	5.00	101	40-140	5.40	25		
Fluoranthene	4.80	0.10	mg/Kg wet	5.00	96.0	40-140	5.59	25		
Fluorene	4.59	0.10	mg/Kg wet	5.00	91.9	40-140	3.20	25		
Indeno(1,2,3-cd)pyrene	5.07	0.10	mg/Kg wet	5.00	101	40-140	5.29	25		
2-Methylnaphthalene	4.09	0.10	mg/Kg wet	5.00	81.7	40-140	2.20	25		
Naphthalene	3.70	0.10	mg/Kg wet	5.00	73.9	40-140	2.21	25		
Phenanthrene	4.75	0.10	mg/Kg wet	5.00	94.9	40-140	4.49	25		
Pyrene	4.69	0.10	mg/Kg wet	5.00	93.8	40-140	5.56	25		
n-Decane	2.56	0.10	mg/Kg wet	5.00	51.2	40-140	8.18	25		
n-Docosane	4.50	0.10	mg/Kg wet	5.00	90.0	40-140	8.19	25		
n-Dodecane	3.23	0.10	mg/Kg wet	5.00	64.7	40-140	6.92	25		
n-Eicosane	4.36	0.10	mg/Kg wet	5.00	87.1	40-140	8.62	25		
n-Hexacosane	4.59	0.10	mg/Kg wet	5.00	91.8	40-140	8.87	25		
n-Hexadecane	4.03	0.10	mg/Kg wet	5.00	80.5	40-140	6.38	25		
n-Hexatriacontane	4.57	0.10	mg/Kg wet	5.00	91.3	40-140	8.99	25		
n-Nonadecane	4.32	0.10	mg/Kg wet	5.00	86.3	40-140	8.57	25		
n-Nonane	1.73	0.10	mg/Kg wet	5.00	34.7	30-140	11.0	25		
n-Octacosane	4.48	0.10	mg/Kg wet	5.00	89.7	40-140	8.90	25		
n-Octadecane	4.26	0.10	mg/Kg wet	5.00	85.2	40-140	8.04	25		
n-Tetracosane	4.50	0.10	mg/Kg wet	5.00	90.0	40-140	8.54	25		
n-Tetradecane	3.64	0.10	mg/Kg wet	5.00	72.7	40-140	5.77	25		
n-Triacontane	4.60	0.10	mg/Kg wet	5.00	92.0	40-140	9.09	25		
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00		0-5				
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00		0-5				
Surrogate: Chlorooctadecane (COD)	3.83		mg/Kg wet	4.99	76.8	40-140				

QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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Batch B089026 - SW-846 3546

LCS Dup (B089026-BSD1)	Prepared: 01/20/14 Analyzed: 01/21/14				
Surrogate: o-Terphenyl (OTP)	4.61	mg/Kg wet	5.00	92.2	40-140
Surrogate: 2-Bromonaphthalene	4.71	mg/Kg wet	5.00	94.1	40-140
Surrogate: 2-Fluorobiphenyl	5.00	mg/Kg wet	5.00	100	40-140

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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Batch B088738 - MA VPH

Blank (B088738-BLK1)	Prepared & Analyzed: 01/15/14					
Unadjusted C5-C8 Aliphatics	ND	10	mg/Kg wet			
C5-C8 Aliphatics	ND	10	mg/Kg wet			
Unadjusted C9-C12 Aliphatics	ND	10	mg/Kg wet			
C9-C12 Aliphatics	ND	10	mg/Kg wet			
C9-C10 Aromatics	ND	10	mg/Kg wet			
Benzene	ND	0.050	mg/Kg wet			
Butylcyclohexane	ND	0.050	mg/Kg wet			
Decane	ND	0.050	mg/Kg wet			
Ethylbenzene	ND	0.050	mg/Kg wet			
Methyl tert-Butyl Ether (MTBE)	ND	0.050	mg/Kg wet			
2-Methylpentane	ND	0.050	mg/Kg wet			
Naphthalene	ND	0.25	mg/Kg wet			
Nonane	ND	0.050	mg/Kg wet			
Pentane	ND	0.050	mg/Kg wet			
Toluene	ND	0.050	mg/Kg wet			
1,2,4-Trimethylbenzene	ND	0.050	mg/Kg wet			
2,2,4-Trimethylpentane	ND	0.050	mg/Kg wet			
m+p Xylene	ND	0.10	mg/Kg wet			
o-Xylene	ND	0.050	mg/Kg wet			
Surrogate: 2,5-Dibromotoluene (FID)	5.86		mg/Kg wet	6.67	88.0	70-130
Surrogate: 2,5-Dibromotoluene (PID)	5.30		mg/Kg wet	6.67	79.5	70-130

LCS (B088738-BS1)	Prepared & Analyzed: 01/15/14					
Benzene	4.39	0.050	mg/Kg wet	5.00	87.8	70-130
Butylcyclohexane	4.39	0.050	mg/Kg wet	5.00	87.8	70-130
Decane	4.85	0.050	mg/Kg wet	5.00	97.0	70-130
Ethylbenzene	4.63	0.050	mg/Kg wet	5.00	92.5	70-130
Methyl tert-Butyl Ether (MTBE)	4.23	0.050	mg/Kg wet	5.00	84.6	70-130
2-Methylpentane	5.16	0.050	mg/Kg wet	5.00	103	70-130
Naphthalene	4.64	0.25	mg/Kg wet	5.00	92.8	70-130
Nonane	4.52	0.050	mg/Kg wet	5.00	90.4	30-130
Pentane	5.33	0.050	mg/Kg wet	5.00	107	70-130
Toluene	4.52	0.050	mg/Kg wet	5.00	90.4	70-130
1,2,4-Trimethylbenzene	4.72	0.050	mg/Kg wet	5.00	94.4	70-130
2,2,4-Trimethylpentane	4.94	0.050	mg/Kg wet	5.00	98.8	70-130
m+p Xylene	9.33	0.10	mg/Kg wet	10.0	93.3	70-130
o-Xylene	4.67	0.050	mg/Kg wet	5.00	93.5	70-130
Surrogate: 2,5-Dibromotoluene (FID)	2.83		mg/Kg wet	3.33	84.8	70-130
Surrogate: 2,5-Dibromotoluene (PID)	2.54		mg/Kg wet	3.33	76.2	70-130

LCS Dup (B088738-BSD1)	Prepared & Analyzed: 01/15/14					
Benzene	4.86	0.050	mg/Kg wet	5.00	97.1	70-130
Butylcyclohexane	4.81	0.050	mg/Kg wet	5.00	96.1	70-130
Decane	5.27	0.050	mg/Kg wet	5.00	105	70-130
Ethylbenzene	5.11	0.050	mg/Kg wet	5.00	102	70-130
Methyl tert-Butyl Ether (MTBE)	4.57	0.050	mg/Kg wet	5.00	91.4	70-130
2-Methylpentane	6.10	0.050	mg/Kg wet	5.00	122	70-130
Naphthalene	4.65	0.25	mg/Kg wet	5.00	93.0	70-130
Nonane	4.88	0.050	mg/Kg wet	5.00	97.6	30-130
Pentane	6.10	0.050	mg/Kg wet	5.00	122	70-130
Toluene	5.00	0.050	mg/Kg wet	5.00	99.9	70-130
1,2,4-Trimethylbenzene	5.15	0.050	mg/Kg wet	5.00	103	70-130

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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Batch B088738 - MA VPH

LCS Dup (B088738-BSD1)									Prepared & Analyzed: 01/15/14
2,2,4-Trimethylpentane	4.92	0.050	mg/Kg wet	5.00	98.3	70-130	0.429	25	
m+p Xylene	10.3	0.10	mg/Kg wet	10.0	103	70-130	9.87	25	
o-Xylene	5.12	0.050	mg/Kg wet	5.00	102	70-130	9.11	25	
Surrogate: 2,5-Dibromotoluene (FID)	3.11		mg/Kg wet	3.33	93.3	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	2.77		mg/Kg wet	3.33	83.2	70-130			

QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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Batch B088666 - SW-846 3050B
Blank (B088666-BLK1)

Prepared: 01/14/14 Analyzed: 01/16/14

Antimony	ND	2.5	mg/Kg wet
Arsenic	ND	2.5	mg/Kg wet
Barium	ND	2.5	mg/Kg wet
Beryllium	ND	0.25	mg/Kg wet
Cadmium	ND	0.25	mg/Kg wet
Chromium	ND	0.50	mg/Kg wet
Lead	ND	0.75	mg/Kg wet
Nickel	ND	0.50	mg/Kg wet
Selenium	ND	5.0	mg/Kg wet
Silver	ND	0.50	mg/Kg wet
Thallium	ND	2.5	mg/Kg wet
Vanadium	ND	1.0	mg/Kg wet
Zinc	ND	1.0	mg/Kg wet

LCS (B088666-BS1)

Prepared: 01/14/14 Analyzed: 01/16/14

Antimony	108	4.9	mg/Kg wet	88.2	122	8.2-218.9
Arsenic	103	4.9	mg/Kg wet	99.6	104	83-117.6
Barium	310	4.9	mg/Kg wet	310	100	83.2-117.5
Beryllium	79.3	0.49	mg/Kg wet	72.3	110	83.9-116
Cadmium	178	0.49	mg/Kg wet	182	97.9	83.1-116.9
Chromium	139	0.99	mg/Kg wet	136	102	81.6-117.6
Lead	110	1.5	mg/Kg wet	115	96.1	82.4-117.8
Nickel	151	0.99	mg/Kg wet	153	99.0	84.4-115.6
Selenium	153	9.9	mg/Kg wet	150	102	80-120
Silver	36.4	0.99	mg/Kg wet	40.4	90.0	66.2-133.8
Thallium	161	4.9	mg/Kg wet	174	92.7	81.2-118.8
Vanadium	104	2.0	mg/Kg wet	97.6	107	75.5-124
Zinc	160	2.0	mg/Kg wet	161	99.1	81.9-117.6

LCS Dup (B088666-BS1D)

Prepared: 01/14/14 Analyzed: 01/16/14

Antimony	112	5.0	mg/Kg wet	88.2	127	8.2-218.9	3.46	30
Arsenic	107	5.0	mg/Kg wet	99.6	108	83-117.6	3.65	30
Barium	318	5.0	mg/Kg wet	310	103	83.2-117.5	2.47	30
Beryllium	80.4	0.50	mg/Kg wet	72.3	111	83.9-116	1.39	30
Cadmium	182	0.50	mg/Kg wet	182	100	83.1-116.9	2.24	30
Chromium	144	1.0	mg/Kg wet	136	106	81.6-117.6	2.94	30
Lead	115	1.5	mg/Kg wet	115	99.7	82.4-117.8	3.70	30
Nickel	155	1.0	mg/Kg wet	153	101	84.4-115.6	2.38	30
Selenium	157	10	mg/Kg wet	150	104	80-120	2.11	30
Silver	37.7	1.0	mg/Kg wet	40.4	93.3	66.2-133.8	3.63	30
Thallium	167	5.0	mg/Kg wet	174	96.3	81.2-118.8	3.73	30
Vanadium	107	2.0	mg/Kg wet	97.6	110	75.5-124	2.98	30
Zinc	163	2.0	mg/Kg wet	161	101	81.9-117.6	2.30	30

QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
Batch B088666 - SW-846 3050B										
MRL Check (B088666-MRL1)										
Prepared: 01/14/14 Analyzed: 01/16/14										
Lead	0.759	0.70	mg/Kg wet	0.695		109	80-120			
Batch B088755 - SW-846 7471										
Blank (B088755-BLK1)										
Prepared & Analyzed: 01/15/14										
Mercury	ND	0.025	mg/Kg wet							
LCS (B088755-BS1)										
Prepared & Analyzed: 01/15/14										
Mercury	3.80	0.32	mg/Kg wet	4.05		93.9	71.6-128.1			
LCS Dup (B088755-BSD1)										
Prepared & Analyzed: 01/15/14										
Mercury	3.47	0.32	mg/Kg wet	4.05		85.7	71.6-128.1	9.12	30	
Duplicate (B088755-DUP2)										
Source: 14A0376-08 Prepared & Analyzed: 01/15/14										
Mercury	0.0400	0.028	mg/Kg dry		0.0376			6.00	35	
Matrix Spike (B088755-MS2)										
Source: 14A0376-08 Prepared & Analyzed: 01/15/14										
Mercury	0.217	0.028	mg/Kg dry	0.186	0.0376	96.5	75-125			
Batch B088756 - SW-846 3050B										
Blank (B088756-BLK1)										
Prepared: 01/15/14 Analyzed: 01/16/14										
Antimony	ND	2.5	mg/Kg wet							
Arsenic	ND	2.5	mg/Kg wet							
Barium	ND	2.5	mg/Kg wet							
Beryllium	ND	0.25	mg/Kg wet							
Cadmium	ND	0.25	mg/Kg wet							
Chromium	ND	0.50	mg/Kg wet							
Lead	ND	0.75	mg/Kg wet							
Nickel	ND	0.50	mg/Kg wet							
Selenium	ND	5.0	mg/Kg wet							
Silver	ND	0.50	mg/Kg wet							
Thallium	ND	2.5	mg/Kg wet							
Vanadium	ND	1.0	mg/Kg wet							
Zinc	ND	1.0	mg/Kg wet							
LCS (B088756-BS1)										
Prepared: 01/15/14 Analyzed: 01/16/14										
Antimony	105	5.0	mg/Kg wet	88.2		119	8.2-218.9			
Arsenic	99.6	5.0	mg/Kg wet	99.6		100	83-117.6			
Barium	303	5.0	mg/Kg wet	310		97.7	83.2-117.5			
Beryllium	77.1	0.50	mg/Kg wet	72.3		107	83.9-116			
Cadmium	175	0.50	mg/Kg wet	182		96.3	83.1-116.9			
Chromium	137	1.0	mg/Kg wet	136		100	81.6-117.6			
Lead	108	1.5	mg/Kg wet	115		93.5	82.4-117.8			
Nickel	147	1.0	mg/Kg wet	153		95.9	84.4-115.6			
Selenium	153	10	mg/Kg wet	150		102	80-120			
Silver	36.5	1.0	mg/Kg wet	40.4		90.5	66.2-133.8			
Thallium	162	5.0	mg/Kg wet	174		93.2	81.2-118.8			
Vanadium	102	2.0	mg/Kg wet	97.6		104	75.5-124			
Zinc	156	2.0	mg/Kg wet	161		96.9	81.9-117.6			

QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B088756 - SW-846 3050B										
LCS Dup (B088756-BSD1)										
Prepared: 01/15/14 Analyzed: 01/16/14										
Antimony	106	5.0	mg/Kg wet	88.2	121	8.2-218.9	1.28	30		
Arsenic	99.5	5.0	mg/Kg wet	99.6	99.9	83-117.6	0.130	30		
Barium	305	5.0	mg/Kg wet	310	98.4	83.2-117.5	0.737	30		
Beryllium	75.7	0.50	mg/Kg wet	72.3	105	83.9-116	1.85	30		
Cadmium	173	0.50	mg/Kg wet	182	95.3	83.1-116.9	0.983	30		
Chromium	136	1.0	mg/Kg wet	136	100	81.6-117.6	0.423	30		
Lead	104	1.5	mg/Kg wet	115	90.8	82.4-117.8	2.96	30		
Nickel	147	1.0	mg/Kg wet	153	95.9	84.4-115.6	0.0546	30		
Selenium	154	10	mg/Kg wet	150	103	80-120	0.779	30		
Silver	36.2	1.0	mg/Kg wet	40.4	89.6	66.2-133.8	0.930	30		
Thallium	160	5.0	mg/Kg wet	174	91.8	81.2-118.8	1.53	30		
Vanadium	102	2.0	mg/Kg wet	97.6	105	75.5-124	0.374	30		
Zinc	153	2.0	mg/Kg wet	161	95.0	81.9-117.6	2.03	30		
Duplicate (B088756-DUP1)										
Source: 14A0376-08 Prepared: 01/15/14 Analyzed: 01/16/14										
Antimony	ND	2.9	mg/Kg dry		ND		NC	35		
Arsenic	3.03	2.9	mg/Kg dry		3.01		0.754	35		
Barium	64.1	2.9	mg/Kg dry		35.9		56.5 *	35	R-02	
Beryllium	ND	0.29	mg/Kg dry		ND		NC	35		
Cadmium	0.435	0.29	mg/Kg dry		0.421		3.32	35		
Chromium	11.0	0.57	mg/Kg dry		11.1		1.38	35		
Lead	23.2	0.86	mg/Kg dry		25.0		7.69	35		
Nickel	8.51	0.57	mg/Kg dry		7.79		8.81	35		
Selenium	ND	5.7	mg/Kg dry		ND		NC	35		
Silver	ND	0.57	mg/Kg dry		ND		NC	35		
Thallium	ND	2.9	mg/Kg dry		ND		NC	35		
Vanadium	23.9	1.1	mg/Kg dry		20.8		14.0	35		
Zinc	64.5	1.1	mg/Kg dry		70.8		9.35	35		
Duplicate (B088756-DUP2)										
Source: 14A0376-08 Prepared: 01/15/14 Analyzed: 01/16/14 M-07										
Zinc	75.2	5.6	mg/Kg dry		70.8		5.91	10		
MRL Check (B088756-MRL1)										
Prepared: 01/15/14 Analyzed: 01/16/14										
Lead	0.745	0.75	mg/Kg wet	0.750	99.4	80-120				
Matrix Spike (B088756-MS1)										
Source: 14A0376-08 Prepared: 01/15/14 Analyzed: 01/16/14										
Antimony	61.4	2.8	mg/Kg dry	114	ND	54.0 *	75-125			MS-07
Arsenic	118	2.8	mg/Kg dry	114	3.01	102	75-125			
Barium	152	2.8	mg/Kg dry	114	35.9	102	75-125			
Beryllium	123	0.28	mg/Kg dry	114	0.152	108	75-125			
Cadmium	115	0.28	mg/Kg dry	114	0.421	100	75-125			
Chromium	128	0.57	mg/Kg dry	114	11.1	103	75-125			
Lead	135	0.85	mg/Kg dry	114	25.0	96.8	75-125			
Nickel	119	0.57	mg/Kg dry	114	7.79	97.8	75-125			
Selenium	113	5.7	mg/Kg dry	114	2.64	96.9	75-125			
Silver	106	0.57	mg/Kg dry	114	ND	92.8	75-125			
Thallium	106	2.8	mg/Kg dry	114	ND	93.3	75-125			
Vanadium	140	1.1	mg/Kg dry	114	20.8	105	75-125			
Zinc	177	1.1	mg/Kg dry	114	70.8	93.8	75-125			

QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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Batch B088993 - % Solids

Duplicate (B088993-DUP3)	Source: 14A0376-08	Prepared: 01/20/14 Analyzed: 01/21/14
% Solids	87.0	% Wt

FLAG/QUALIFIER SUMMARY

- * QC result is outside of established limits.
- † Wide recovery limits established for difficult compound.
- ‡ Wide RPD limits established for difficult compound.
- # Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

- L-02 Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
- L-04 Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
- L-07 Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
- L-14 Compound classified by MA CAM as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.
- M-07 Result is serial dilution as per MA CAM/ CT RCP regulation.
- MS-07 Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possiblity of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.
- MS-08 Matrix spike recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
- MS-14 Matrix spike recovery is outside of control limits. Data validation is not affected since sample result is "not detected" and recovery bias is on the high side for this compound.
- O-01 Soil/methanol ratio does not meet method specifications. Excess amount of soil. Sample was completely covered with methanol, but with less than the method-specified amount.
- R-02 Duplicate RPD is outside of control limits. Outlier can be attributed to sample non-homogeneity encountered during sample prep.
- R-05 Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
- RL-05 Elevated reporting limit due to high concentration of target compounds. MA CAM reporting limit not met.
- S-15 Surrogate recovery outside of control limits due to suspected sample matrix interference. Chromatogram(s) is attached.
- V-05 Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
- V-16 Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
- V-20 Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
MADEP-EPH-04-1.1 in Soil	
C9-C18 Aliphatics	CT,NC,WA,ME,ME,NH-P
C19-C36 Aliphatics	CT,NC,WA,ME,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,WA,ME,ME,NH-P
C11-C22 Aromatics	CT,NC,WA,ME,ME,NH-P
Acenaphthene	CT,NC,WA,ME,ME,NH-P
Acenaphthylene	CT,NC,WA,ME,ME,NH-P
Anthracene	CT,NC,WA,ME,ME,NH-P
Benzo(a)anthracene	CT,NC,WA,ME,ME,NH-P
Benzo(a)pyrene	CT,NC,WA,ME,ME,NH-P
Benzo(b)fluoranthene	CT,NC,WA,ME,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,WA,ME,ME,NH-P
Benzo(k)fluoranthene	CT,NC,WA,ME,ME,NH-P
Chrysene	CT,NC,WA,ME,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,WA,ME,ME,NH-P
Fluoranthene	CT,NC,WA,ME,ME,NH-P
Fluorene	CT,NC,WA,ME,ME
Indeno(1,2,3-cd)pyrene	CT,NC,WA,ME,ME,NH-P
2-Methylnaphthalene	CT,NC,WA,ME,ME
Naphthalene	CT,NC,WA,ME,ME,NH-P
Phenanthrene	CT,NC,WA,ME,ME,NH-P
Pyrene	CT,NC,WA,ME,ME,NH-P
MADEP-VPH-04-1.1 in Soil	
Unadjusted C5-C8 Aliphatics	CT,NC,WA,ME,NH-P
C5-C8 Aliphatics	CT,NC,WA,ME,NH-P
Unadjusted C9-C12 Aliphatics	CT,NC,WA,ME,NH-P
C9-C12 Aliphatics	CT,NC,WA,ME,NH-P
C9-C10 Aromatics	CT,NC,WA,ME,NH-P
Benzene	CT,NC,WA,ME,NH-P
Ethylbenzene	CT,NC,WA,ME,NH-P
Methyl tert-Butyl Ether (MTBE)	CT,NC,WA,ME,NH-P
Naphthalene	CT,NC,WA,ME,NH-P
Toluene	CT,NC,WA,ME,NH-P
m+p Xylene	CT,NC,WA,ME,NH-P
o-Xylene	CT,NC,WA,ME,NH-P
SW-846 6010C in Soil	
Antimony	CT,NH,NY,NC,ME,VA,NJ
Arsenic	CT,NH,NY,ME,NC,VA,NJ
Barium	CT,NH,NY,ME,NC,VA,NJ
Beryllium	CT,NH,NY,ME,NC,VA,NJ
Cadmium	CT,NH,NY,ME,NC,VA,NJ
Chromium	CT,NH,NY,ME,NC,VA,NJ
Lead	CT,NH,NY,AIHA,ME,NC,VA,NJ
Nickel	CT,NH,NY,ME,NC,VA,NJ
Selenium	CT,NH,NY,ME,NC,VA,NJ
Silver	CT,NH,NY,ME,NC,VA,NJ
Thallium	CT,NH,NY,ME,NC,VA,NJ

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 6010C in Soil</i>	
Vanadium	CT,NH,NY,ME,NC,VA,NJ
Zinc	CT,NH,NY,ME,NC,VA,NJ
<i>SW-846 7471B in Soil</i>	
Mercury	CT,NH,NY,NC,ME,VA,NJ
<i>SW-846 8082A in Soil</i>	
Aroclor-1016	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1016 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1221	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1221 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1232	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1232 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1242	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1242 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1248	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1248 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1254	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1254 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1260	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1260 [2C]	CT,NH,NY,ME,NC,VA,NJ
<i>SW-846 8260C in Soil</i>	
Acetone	CT,NH,NY,ME
Acetone	CT,NH,NY,ME
Benzene	CT,NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	NH,NY,ME
Bromobenzene	NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	CT,NH,NY,ME
n-Butylbenzene	CT,NH,NY,ME
sec-Butylbenzene	CT,NH,NY,ME
sec-Butylbenzene	CT,NH,NY,ME
tert-Butylbenzene	CT,NH,NY,ME
tert-Butylbenzene	CT,NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Soil	
Chlorobenzene	CT,NH,NY,ME
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
2-Chlorotoluene	CT,NH,NY,ME
2-Chlorotoluene	CT,NH,NY,ME
4-Chlorotoluene	CT,NH,NY,ME
4-Chlorotoluene	CT,NH,NY,ME
Dibromomethane	NH,NY,ME
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NH,NY,ME
1,2-Dichlorobenzene	CT,NH,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
1,4-Dichlorobenzene	CT,NH,NY,ME
1,4-Dichlorobenzene	CT,NH,NY,ME
Dichlorodifluoromethane (Freon 12)	NY,ME
Dichlorodifluoromethane (Freon 12)	NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	CT,NH,NY,ME
1,1-Dichloroethylene	CT,NH,NY,ME
1,1-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	CT,NH,NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,3-Dichloropropane	NH,NY,ME
1,3-Dichloropropane	NH,NY,ME
2,2-Dichloropropane	NH,NY,ME
2,2-Dichloropropane	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME
cis-1,3-Dichloropropene	CT,NH,NY,ME
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
Ethylbenzene	CT,NH,NY,ME

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Soil</i>	
Ethylbenzene	CT,NH,NY,ME
Hexachlorobutadiene	NH,NY,ME
Hexachlorobutadiene	NH,NY,ME
2-Hexanone (MBK)	CT,NH,NY,ME
2-Hexanone (MBK)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	CT,NH,NY,ME
p-Isopropyltoluene (p-Cymene)	NH,NY
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl tert-Butyl Ether (MTBE)	NY
Methyl tert-Butyl Ether (MTBE)	NY
Methylene Chloride	CT,NH,NY,ME
Methylene Chloride	CT,NH,NY,ME
4-Methyl-2-pentanone (MIBK)	CT,NH,NY
4-Methyl-2-pentanone (MIBK)	CT,NH,NY
Naphthalene	NH,NY,ME
Naphthalene	NH,NY,ME
n-Propylbenzene	NH,NY
n-Propylbenzene	NH,NY
Styrene	CT,NH,NY,ME
Styrene	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME
Tetrachloroethylene	CT,NH,NY,ME
Tetrachloroethylene	CT,NH,NY,ME
Toluene	CT,NH,NY,ME
Toluene	CT,NH,NY,ME
1,2,3-Trichlorobenzene	ME
1,2,4-Trichlorobenzene	NH,NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME
1,1,2-Trichloroethane	CT,NH,NY,ME
1,1,2-Trichloroethane	CT,NH,NY,ME
Trichloroethylene	CT,NH,NY,ME
Trichloroethylene	CT,NH,NY,ME
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME
1,2,3-Trichloropropane	NH,NY,ME
1,2,3-Trichloropropane	NH,NY,ME
1,2,4-Trimethylbenzene	CT,NH,NY,ME
1,2,4-Trimethylbenzene	CT,NH,NY,ME
1,3,5-Trimethylbenzene	CT,NH,NY,ME
1,3,5-Trimethylbenzene	CT,NH,NY,ME
Vinyl Chloride	CT,NH,NY,ME

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Soil</i>	
Vinyl Chloride	CT,NH,NY,ME
m+p Xylene	CT,NH,NY,ME
m+p Xylene	CT,NH,NY,ME
o-Xylene	CT,NH,NY,ME
o-Xylene	CT,NH,NY,ME

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2014
CT	Connecticut Department of Public Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2014
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2014
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2014
FL	Florida Department of Health	E871027 NELAP	06/30/2014
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2014
WA	State of Washington Department of Ecology	C2065	02/23/2014
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Page _____ of _____

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Rev 04/05/12

Company Name:	TRC	Telephone:	(413) 570-5600	Project #:	14A0376	# of Containers:	
Address:	656 South Street Lower, MA 01854	Client PO#:	647769	**Preservation:			
Attention:	David Gill	FAX #:		**Container Code:			
Sampled By:	WP 156	E-mail:	dj110@msn.com	Dissolved Metals			
Project Location:	Cape Cod	Format:	<input checked="" type="radio"/> PDF <input type="radio"/> EXCEL <input type="radio"/> GIS	Field Filtered			
Project Proposal Provided? (for billing purposes)		<input type="radio"/> OTHER	<input type="radio"/> Lab to Filter				
O Yes _____ O No _____ proposal date		<input type="radio"/> "Enhanced Data Package"	<input type="radio"/> Glass				
Con-Test Lab ID	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite Grab	Matrix	One Lab	
O1	TRC B-3 (4-16)	1/13/14	0910	X	S	4	X
O2	TRC B-4 (3-4)		0925	X	S	4	X
O3	TRC B-2 (4-16/10)		1005	X	S	4	X
O4	TRC B-8 (3-3)		1230	X	S	4	X
O5	TRC B-9 (4-5)	1300		X	S	4	X
O6	TRC B-7 (4-5)	1320		X	S	4	X
O7	TRC B-1 (3-6)	1425		X	S	4	X
O8	TRC B-5 (3-5)	1445		X	S	4	X
O9	TRC B-6 (3-5)	1515		X	S	4	X
O10	DUP1 - TRPBlk 1/13/14	1618		X	S	4	X
Comments: Please refer to SARP Number: City of Boston DDO-F for this site. No known contaminants proposed for this site.							
<p>* Please analyze trip B-14 for high PTH. Per high PTH.</p> <p>Relinquished by: (signature) <i>[Signature]</i> Date/time: <i>1/14/14</i> Turnaround: <i>1 Day</i></p> <p>Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Cone. Code Box:</p> <p>H = High, M = Medium, L = Low, C = Clean, U = Unknown</p>							
<p>Is your project MCP or RCP?</p> <p>MCP Form Required <input checked="" type="checkbox"/> RCP Form Required <input type="checkbox"/></p> <p>MA State DW Form Required <input type="checkbox"/> NELAC & AWWA-LAP, LLC Accredited <input type="checkbox"/></p> <p>Other <input type="checkbox"/> Connection <input type="checkbox"/> RUSH <input type="checkbox"/> Other <input type="checkbox"/></p> <p>Turnaround time: <i>1-14-14 7:00</i></p> <p>Date/Time: <i>1/14/14</i> Date/Time: <i>1/14/14</i></p> <p>Date/Time: <i>1/14/14</i> Date/Time: <i>1/14/14</i></p> <p>Date/Time: <i>1/14/14</i> Date/Time: <i>1/14/14</i></p> <p>Powered by (signature) <i>[Signature]</i> Date/Time: <i>1/14/14</i> Date/Time: <i>1/14/14</i></p> <p>Permit #: <i>1700</i> Date/Time: <i>1/14/14</i> Date/Time: <i>1/14/14</i></p> <p>† Require lab approval Other _____</p>							

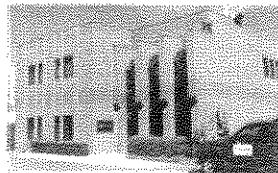
* TURNAROUND TIME STARTS AT 9:00 AM. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.



39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com



Page 1 of 2



Sample Receipt Checklist

CLIENT NAME: TRC

RECEIVED BY: KOB

DATE: 1-14-14

1) Was the chain(s) of custody relinquished and signed? Yes No No CoC Included

2) Does the chain agree with the samples? Yes No

If not, explain:

3) Are all the samples in good condition? Yes No

If not, explain:

4) How were the samples received:

On Ice Direct from Sampling Ambient In Cooler(s)

Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 45

5) Are there Dissolved samples for the lab to filter? Yes No

Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes No

Who was notified _____ Date _____ Time _____

Permission to subcontract samples? Yes No

(Walk-in clients only) if not already approved

Client Signature:

7) Location where samples are stored: 19

8) Do all samples have the proper Acid pH: Yes No N/A

9) Do all samples have the proper Base pH: Yes No N/A

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	<u>11</u>
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below	<u>44</u>	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments: Trip Blanks not on CoC but rec'd

40 mL vials: # HCl	# Methanol	22	Time and Date Frozen:
Doc# 277	# Bisulfate	22	<u>1-14-14 1700</u>
Rev. 4 August 2013	# Thiosulfate	Unpreserved	

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)
Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	N/A	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	N/A	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	Kay-H-T	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	N/A	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements?

Doc #277 Rev. 4 August 2013

Log-In Technician Initials: /KOB

Date/Time:

Date/Time: 1-14-14 1700

Meghan Kelley

From: Denly, Elizabeth [edenly@trcsolutions.com]
Sent: Wednesday, January 15, 2014 11:17 AM
To: Jordan, Kevin; Meghan Kelley; Gill, Dave
Subject: RE: Cote Ford

VOCs

Elizabeth Denly
Senior QA Chemist
Environmental Sector and Remediation Practice Quality Coordinator

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-----Original Message-----

From: Jordan, Kevin
Sent: Wednesday, January 15, 2014 11:03 AM
To: Meghan Kelley; Gill, Dave
Cc: Denly, Elizabeth
Subject: RE: Cote Ford

Please analyze the DUP for all parameters listed on the chain.

Dave/Liz, I included a trip blank for both VOC and VPH, which ones would you like analyzed?

From: Meghan Kelley [mkelley@contestlabs.com]
Sent: Wednesday, January 15, 2014 10:17 AM
To: Gill, Dave; Jordan, Kevin
Cc: Denly, Elizabeth
Subject: Cote Ford

Hi Dave,

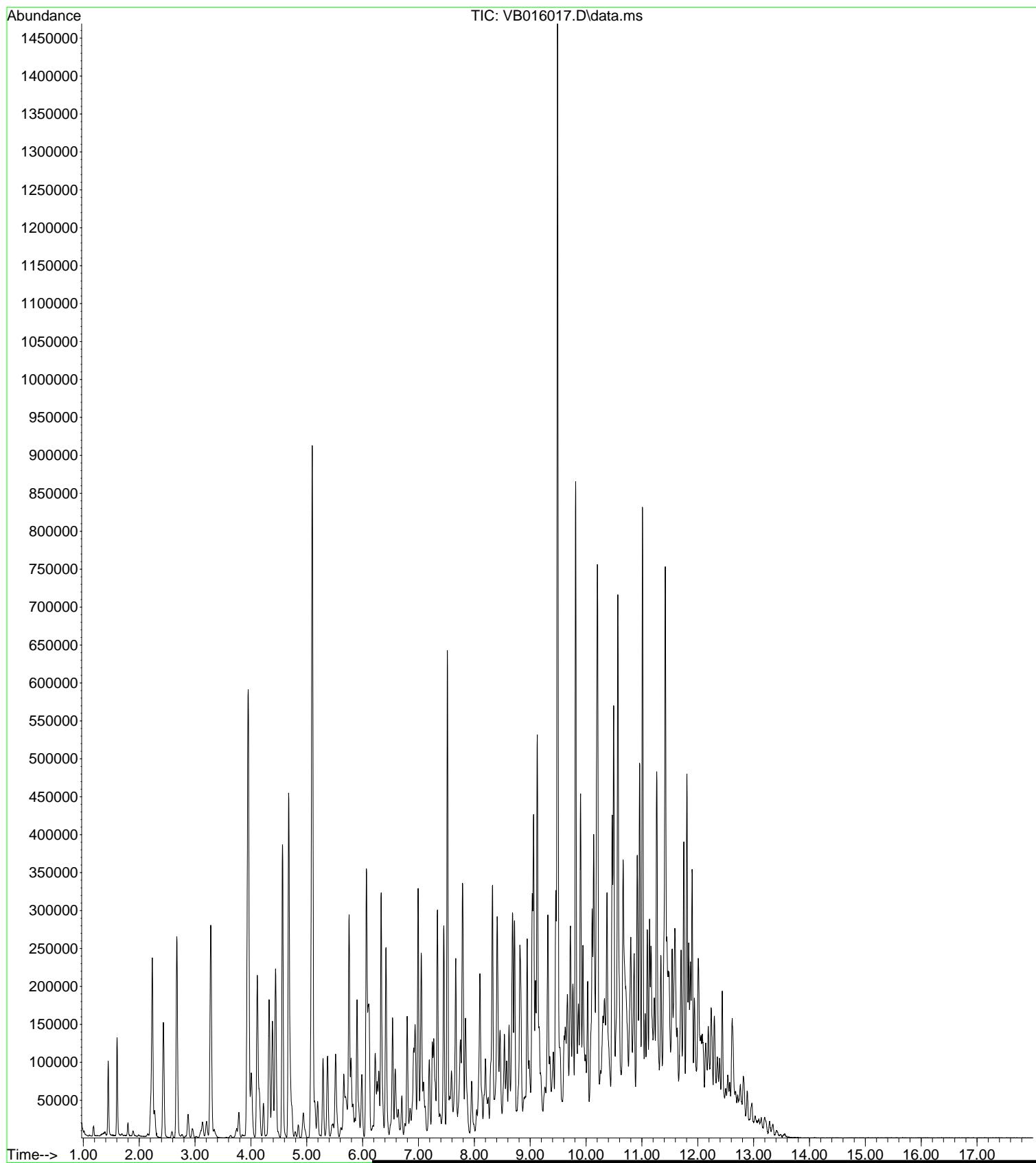
Attached is the COC for the Cote Ford samples received on 1/14. There are no analysis checked off for the DUP sample, should we analyze for all the parameters listed on the COC? Should we analyze the trip blank for 8260 or VPH?

-Meghan

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File : \\\Voa2\MSDChem\1\DATA\011614\VB016017.D
Operator :
Acquired : 16 Jan 2014 7:04 pm using AcqMethod B0107W14.M
Instrument : GCMSVOA2
Sample Name: 14A0376-03 @ 200X MEOH TRC
Misc Info : 200
Vial Number: 17



MADEP MCP Analytical Method Report Certification Form

Laboratory Name:	Con-Test Analytical Laboratory	Project #:	14A0376
Project Location:	Cote Ford	RTN:	

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

14A0376-01 thru 14A0376-11

Matrices: Soil

CAM Protocol (check all that below)

8260 VOC CAM II A (X)	7470/7471 Hg CAM IIIB (X)	MassDEP VPH CAM IV A (X)	8081 Pesticides CAM V B ()	7196 Hex Cr CAM VI B ()	MassDEP APH CAM IX A ()
8270 SVOC CAM II B ()	7010 Metals CAM III C ()	MassDEP EPH CAM IV A (X)	8151 Herbicides CAM V C ()	8330 Explosives CAM VIII A ()	TO-15 VOC CAM IX B ()
6010 Metals CAM III A (X)	6020 Metals CAM III D ()	8082 PCB CAM V A (X)	9014 Total Cyanide/PAC CAM VI A ()	6860 Perchlorate CAM VIII B ()	

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?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
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?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
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?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
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).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input type="checkbox"/> Yes <input type="checkbox"/> No ¹
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)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹

A response to questions G, H and I below 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
----------	---	--

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹

¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature:		Position:	Laboratory Director
Printed Name:	Michael A. Erickson	Date:	01/21/14

APPENDIX C

DATA USABILITY ASSESSMENT

**Former Cote Ford Site
820 Cummins Highway and 30-32 Regis Road
Mattapan, MA
Data Usability Assessment
Prepared: 1/30/14**

A. Overall Summary

The data associated with soil samples collected on January 13, 2014 and soil gas samples collected on January 13 and 14, 2014 were reviewed. In general, the data are usable for MCP decisions based on a review of accuracy, precision, and sensitivity of the data. Although there were select quality control (QC) nonconformances, the data are valid as reported and may be used for decision-making purposes with no cautions or limitations.

Soil Samples Included in the Data Usability Assessment: TRC B-1 (3-4), TRC B-2 (4-6/6), TRC B-3 (4-6), TRC B-4 (3-4), TRC B-5 (3-5), TRC B-6 (3-5), TRC B-7 (4-5), TRC B-8 (2-3), TRC B-9 (4-5)

Soil Gas Samples Included in the Data Usability Assessment: SG-1, SG-2, SG-3

Field Duplicates: TRC B-6 (3-5): VOCs, VPH, EPH, PCB Aroclors and metals; SG-3 (VOCs, APH)

MS/DUPs: TRC B-3 (4-6): VOCs; TRC B-5 (3-5): metals

Soil Analyses Performed: VOCs, VPH, EPH, PCB Aroclors, metals

Soil Gas Analyses Performed: VOCs, APH

Laboratory Data Packages: 14A0373, 14A0376 (Con-test Analytical)

B. Sensitivity Evaluation

Sensitivity was acceptable for all analyses of soil gas samples (nondetect results exhibited quantitation limits [QLs] below the MassDEP Residential and Commercial/Industrial Sub-slab Soil Gas Screening Values).

With the exception of VOCs in sample TRC B-2 (4-6/6), sensitivity was acceptable for all analyses of soil samples (nondetect results exhibited QLs below the MCP Method 1 S-1/GW-2, S-1/GW-3, S-2/GW-2, S-2/GW-3, S-3/GW-2 and S-3/GW-3 standards). The nondetect results for bromodichloromethane, bromoform, chlorodibromomethane, chloroform, 1,2-dibromoethane, 1,2-dichloroethane, 1,2-dichloropropane, trans-1,3-dichloropropene, 1,1,1,2-tetrachloroethane, and 1,1,2,2-tetrachloroethane in sample TRC B-2 (4-6/6) exceeded one or more of the project action levels. Since these compounds are not contaminants of concern based on site history, there was no adverse effect to the overall data usability and decision-making process.

C. Evaluation of Accuracy and Precision: Soil

There were no biases or uncertainty associated with the VPH, EPH, and PCB Aroclor analyses of the soil samples. Biases or uncertainty associated with the VOC and metals analyses are discussed below.

C-1. Low-Biased Results: Soil

Potential low bias exists for select results due to various QC nonconformances. In general, the overall data usability and decision-making process were not affected by these QC nonconformances, as shown in the table below.

Samples Affected	Analytes Affected	Reason for Low Bias	Reason Data Usability or Decision-making Process Not Affected
TRC B-2 (4-6/6)	Bromoform, chlorodibromomethane, 1,2-dibromo-3-chloropropane, dichlorodifluoromethane	Low recoveries in LCS and LCS Duplicate	Project action levels do not exist for 1,2-dibromo-3-chloropropane and dichlorodifluoromethane. None of affected analytes are contaminants of concern based on site history.
TRC B-1 (3-4), TRC B-3 (4-6), TRC B-4 (3-4), TRC B-5 (3-5), TRC B-6 (3-5), TRC B-7 (4-5), TRC B-8 (2-3), TRC B-9 (4-5)	Bromomethane, chloromethane, dichlorodifluoromethane, 2,2-dichloropropane	Low recoveries in LCS, LCS Duplicate, and/or MS	Project action levels do not exist for chloromethane, dichlorodifluoromethane, and 2,2-dichloropropane. Nondetect results for bromomethane significantly below project action levels in affected samples.
TRC B-3 (4-6)	Naphthalene, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene	Low recoveries in MS	Nondetect result for naphthalene and 1,2,4-trichlorobenzene significantly below project action levels in sample TRC B-3 (4-6). No project action level exists for 1,2,3-trichlorobenzene.
TRC B-4 (3-4), TRC B-5 (3-5), TRC B-6 (3-5)	Antimony	Low recovery in MS	Nondetect results for antimony significantly below project action levels in affected samples.

C-2. High-Biased Results: Soil

Potential high bias exists for select results due to various QC nonconformances. In general, the overall data usability and decision-making process were not affected by these QC nonconformances, as shown in the table below.

Samples Affected	Analytes Affected	Reason for High Bias	Reason Data Usability or Decision-making Process Not Affected
TRC B-1 (3-4), TRC B-3 (4-6), TRC B-4 (3-4), TRC B-5 (3-5), TRC B-6 (3-5), TRC B-7 (4-5), TRC B-8 (2-3), TRC B-9 (4-5)	Tert-amyl methyl ether, tert butyl ethyl ether, carbon disulfide	High recoveries in LCS and/or LCS Duplicate	Affected VOCs not detected in affected samples.
TRC B-3 (4-6)	Carbon disulfide, methylene chloride	High recoveries in MS	Affected VOCs not detected in sample TRC B-3 (4-6).
TRC B-2 (4-6/6)	n-Butylbenzene, sec-butylbenzene, ethylbenzene, isopropylbenzene, p-isopropyltoluene, naphthalene, n-propylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, m&p-xylenes	High surrogate recovery	Affected VOCs below project action levels in sample TRC B-2 (4-6/6).

C-3. Potential Uncertainty: Soil

Potential uncertainty exists for select results due to various QC nonconformances. In general, the overall data usability and decision-making process were not affected by these QC nonconformances, as shown in the table below.

Samples Affected	Analytes Affected	Reason for Uncertainty	Reason Data Usability or Decision-making Process Not Affected
TRC B-1 (3-4), TRC B-3 (4-6), TRC B-4 (3-4), TRC B-5 (3-5), TRC B-6 (3-5), TRC B-7 (4-5), TRC B-8 (2-3), TRC B-9 (4-5)	Bromomethane	LCS/LCS Duplicate variability	Nondetect results for bromomethane significantly below project action levels in affected samples.
TRC B-4 (3-4), TRC B-5 (3-5), TRC B-6 (3-5)	Barium	Laboratory duplicate variability	Results for barium significantly below project action levels in affected samples.

D. Evaluation of Accuracy and Precision: Soil Gas

Biases or uncertainty associated with the VOC and APH analyses of the soil gas samples are discussed below.

D-1. Low-Biased Results: Soil Gas

Potential low bias exists for select results due to various QC nonconformances. In general, the overall data usability and decision-making process were not affected by these QC nonconformances, as shown in the table below.

Samples Affected	Analytes Affected	Reason for Low Bias	Reason Data Usability or Decision-making Process Not Affected
All soil gas samples	4-Methyl-2-pentanone, naphthalene	Low recoveries in LCS	Results for 4-methyl-2-pentanone significantly below project action levels in affected samples. Results for naphthalene either above project action levels or significantly below project action levels.

D-2. High-Biased Results: Soil Gas

Potential high bias exists for select results due to various QC nonconformances. In general, the overall data usability and decision-making process were not affected by these QC nonconformances, as shown in the table below.

Samples Affected	Analytes Affected	Reason for High Bias	Reason Data Usability or Decision-making Process Not Affected
All soil gas samples	Methyl tert butyl ether (APH)	High recovery in LCS	Methyl tert butyl ether not detected in affected samples.