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# ADDITIONAL SOIL AND GROUNDWATER INVESTIGATION

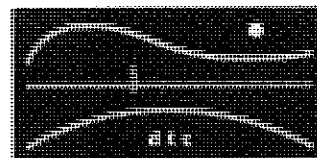


## Portion of VA Connecticut Healthcare System Newington Campus Newington, Connecticut

DTC No. 11-358-201

Submitted to:  
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**DIVERSIFIED TECHNOLOGY CONSULTANTS**

HAMDEN, CT ANDOVER, MA

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**SIGNATURE PAGE**

**ADDITIONAL SOIL AND GROUNDWATER INVESTIGATION  
PORTION OF VA CONNECTICUT HEALTHCARE SYSTEM  
NEWINGTON CAMPUS  
555 WILLARD AVENUE, NEWINGTON, CONNECTICUT**

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## **1.0 INTRODUCTION**

Diversified Technology Consultants, Inc. (DTC) was retained by the Concourse Federal Group, LLC to conduct an Additional Soil and Groundwater Investigation for a portion of the United States, Department of Veterans Affairs (VA) Connecticut Healthcare System, Newington Campus at 555 Willard Avenue in Newington, Connecticut (Figure 1 – Site Location Map). This report summarizes the work completed, the findings of the investigation, an interpretation of the analytical data, and our conclusions and recommendations.

### **1.1 Purpose & Goal**

DTC completed a Phase I Environmental Site Assessment (ESA) Update (dated October 2011) for the site which identified three on-site Areas of Concern (AOCs) where regulated compounds may have potentially been released to the environment.

A detailed discussion of each AOC identified at the time of the Phase I ESA Update is provided in Section 2.0.

The environmental condition of the site was preliminarily evaluated by DTC and Woodard & Curran (W&C). DTC completed a Phase I ESA in 2004 and W&C completed a Phase II ESA in September and October 2005. The previous investigation conducted by W&C included sampling and analysis of soil and groundwater samples from several of the AOCs identified in DTC's Phase I ESA report.

The purpose of this investigation was to investigate each of the identified AOCs by collecting additional soil and groundwater samples for laboratory analysis, to further evaluate the horizontal and vertical extent of contamination in soil, and confirm previous groundwater sampling results. Soil samples were also collected to evaluate the presence of contaminants within a proposed utility work area. The field work for the Additional Soil and Groundwater Investigation was completed on November 17, 2011.

### **1.2 Scope of Work**

The work for this investigation was completed in accordance with DTC's proposal dated November 16, 2011, which was approved by Mr. Geoffrey Perkins, Esq., of Concourse Federal Group, LLC.

The scope of work for this investigation included:

- Advancement of 16 soil borings using a Geoprobe drill rig;
- Advancement of three soil borings using a hand auger; and
- Collection of 19 soil and three groundwater samples for laboratory analysis.

### **1.3 Site Description and Background**

The VA operates an outpatient healthcare facility on the 42.35-acre property. The facility currently maintains business occupancy with no future plans to revert to hospital occupancy. Portions of the property are leased to the Connecticut Army National Guard and used primarily as administrative offices for three military units, the 143rd Area Support Group, the 118th Medical Battalion, and the Soldier Airman Support Group.

The subject area of this investigation consisted of approximately 5.1-acres in the southwest corner of the property approximately 430 feet north to south and 500 east to west plus a strip of land extending from the northeast corner of the site to an existing roadway (see Figure 2).

The approximate 5.1-acre subject area is mostly covered with grass. The area is currently vacant. The VA is proposing to lease the subject area to a private entity for construction and operation of an assisted living residential facility.

Public water is supplied to the adjoining VA facility by the Metropolitan District Commission (MDC). The facility was reportedly connected to the MDC sanitary sewer system about the 1950s. Connecticut Natural Gas (CNG) provides natural gas to the site.

## 2.0 PREVIOUS ENVIRONMENTAL SITE ASSESSMENTS

The following is a summary of the previous environmental investigations completed by DTC and Woodard & Curran.

### *Phase II Subsurface Investigation Report, W&C, dated December 27, 2005*

W&C completed a Phase II Subsurface Investigation of the subject site in September and October 2005. W&C completed 16 soil borings and installed three monitoring wells as part of this investigation. Soil borings were advanced to depths ranging from 4.5 to 15 feet below surface grade.

A total of 16 soil samples were submitted for laboratory analysis for one or more of the following: total arsenic and lead, leachable arsenic and lead by the Synthetic Precipitation Leaching Procedure (SPLP), polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270C, VOCs by EPA Method 8260B, pesticides by EPA Method 8081A, and/or herbicides by EPA Method 8151A. Three groundwater samples were submitted for laboratory analysis for ETPH by the Connecticut Department of Public Health (DPH) approved method, total arsenic and lead by EPA Method 200.7, and VOCs by EPA Method 8260B.

Coal ash was observed in boring VA-GP1 at a depth of 1 to 1.5 feet below surface grade.

Total arsenic was detected above the method detection limit in two of the 16 soil samples. Total arsenic was detected in sample VA-GP15 (1-3') at a concentration exceeding the Residential Direct Exposure Criteria (DEC). Total lead was detected in soil at concentrations well below the RES DEC of 500 mg/kg. SPLP arsenic and lead were not detected in sample VA-GP15 (1-3').

ETPH, total arsenic and lead, and VOCs were not detected above the method detection limits in any of the groundwater samples.

### *Phase I ESA and Phase I ESA Update, DTC, dated December 2004 and October 2011*

The subject area had reportedly been used as a baseball field. According to the Phase I ESAs, ash from the facility's previous coal-fired boilers was dumped within this area from the 1930s through the 1950s.

The area was also used as a construction yard from 1996 to 1998 when a new entrance lobby for the hospital facility was constructed. During that time, dirt and construction materials were stockpiled at the subject area. The area may also have been used as a staging area and for temporary parking in the early 1990s for another construction project. The Army National Guard used the subject area from about October to December 2003 when units were mobilized for service in Iraq. At that time, approximately 40 to 50 trucks were parked within the area.

DTC determined that the VA site meets the definition of an Establishment as defined by Connecticut Transfer Act. The VA facility was listed as a small quantity generator of hazardous wastes regulated under the Resource Conservation and Recovery Act (RCRA) and Connecticut Hazardous Waste Management Regulations. According to a letter dated September 26, 2007, addressed to the Town of Newington Fire Department by Angelo Aglicco, Safety Officer for the Department of Veteran Affairs, their status changed to a large quantity generator in 2007 due to the P-list waste associated with Pharmacy Service Operations. Waste oil and waste antifreeze were reportedly stored within Building T3 north of the subject area until 1999.

There was no information that suggested that regulated hazardous wastes have been generated or stored within the subject area.

Based on the findings of the Phase I ESA Update, three on-site AOCs were identified.

The AOCs (as summarized in the Phase I ESA Update report) included the following:

- AOC 1 *Entire 5.1-acre Area* – Confirmed releases have occurred associated with the possible historic disposal of ash and with the use of the site as a stockpile during construction activities. The constituents of concern include metals (arsenic and lead), PAHs, and asbestos.
- AOC 2 *Vicinity of Water Tower* – This area includes the northern portion of the subject area. Lead is the constituent of concern, associated with the removal of lead-based paint from the water tower by sand blasting and leaching from painted surfaces.
- AOC 3 *Vehicle Parking and Storage of Gasoline Containers* – This area generally includes the entire site except for the peripheral areas, and includes the dirt area at the end of the paved access road to the site, and the area where truck trailers and gasoline containers are currently stored. The constituents of concern include petroleum hydrocarbons and aromatic volatile organic compounds (AVOCs)



### **3.0 GEOLOGY, HYDROGEOLOGY, AND GROUNDWATER QUALITY**

#### **3.1 Topography and Site Drainage**

The subject site slopes slightly downward to the west and northwest but the center of the property is relatively flat. The eastern portion of the property slopes more steeply upward toward the east, to the neighboring paved parking area that is about 15 feet higher in elevation.

Two storm water catch basins are located at the end of the paved access road that enters the site on the northwest. Some storm water runoff is directed toward this paved area. A 24-inch reinforced concrete pipe runs under the eastern margin of the road and directs the storm water runoff to the north. In general, the current site drainage is relatively poor. A lawn drain is located within the grassy area on the north central portion of the subject site. The lawn drain, which connects to a sedimentation basin prior to discharging offsite, was clogged during the Phase I ESA Update site reconnaissance. Slight depressions and tire or tractor ruts within grassy areas were observed on the site on the day of the site reconnaissance. According to Mr. Bruce, the ruts were made during the removal of the water tower, formerly located to the north of the property.

Storm water runoff from much of the VA property is directed toward the northwest into a culvert that carries water from the northwestern corner of the property toward Piper Brook.

The subject site is located within the Connecticut River major drainage basin, the Park River regional drainage basin, and the Piper Brook sub-regional drainage basin.

#### **3.2 Surficial Geology**

According to the "The Surficial Geology of the Hartford South Quadrangle (Deane, 1967), the surficial materials at the subject site consist of glacial till, which generally consists of a heterogeneous mix of gravel, sand, silt, and possibly boulders.

Based on the findings of this investigation, the surficial materials were observed to consist of brown to reddish-brown medium to fine sand with varying percentages of silt and gravel.

#### **3.3 Bedrock Geology**

According to the "Bedrock Geologic Map of Connecticut" (Rodgers, 1985), the subject site is in an area mapped as containing Portland Arkose bedrock. The formation is described as a reddish brown arkose. Bedrock was not encountered during this investigation.

#### **3.4 Surface Water Quality**

No surface water bodies are present within the subject area. Piper Brook, a tributary of the Park River, is located approximately one quarter mile west-northwest of the subject area. Piper Brook flows in a general southwest to northeast direction to its confluence with the South Branch, Park River about 2.5 miles northeast of the subject area.

Piper Brook is classified as a Class "B" surface water body, according to the CT DEEP Water Quality Classifications, updated February 2011. The CT DEEP classifies Class "B" surface water bodies as suitable for "recreational use; fish and wildlife habitat; agricultural and industrial supply and other legitimate uses, including navigation."

### **3.5 Groundwater Quality and Groundwater Flow Direction**

Based on a review of the CT DEEP Water Quality Classifications, updated February 2011, the CT DEEP has designated groundwater beneath the site and surrounding area as “GA” quality. Groundwater of this classification is defined by the CT DEEP as “groundwater within the area of existing private water supply wells or an area with the potential to provide water to public or private water supply wells.” Groundwater in a “GA” area is presumed by the CT DEEP to be suitable for drinking or other domestic uses without treatment.

Based on surface topography and the presence of Piper Brook to the west, the direction of groundwater flow at the subject parcel is expected to be toward the west and northwest.

DTC measured the depth to groundwater at the site on November 17, 2011. Monitoring well gauging data and well elevation survey data are summarized in Table 2. Based on groundwater depth measurements obtained during the previous investigation, the groundwater flow direction is generally to the northwest.

Generally, groundwater flows from topographic high to topographic low areas with local changes near bodies of surface water and contrasting rock types. The presence of subsurface structures, impervious surfaces, and the character of the subsurface stratigraphy will also locally influence the direction of groundwater movement.

## 4.0 REGULATORY CRITERIA

The soil and groundwater analytical results were compared to the numeric criteria listed in the Connecticut Remediation Standard Regulations (RSRs), Sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies (RCSA), dated January 1996, and to numeric criteria in the CT DEEP Regulated Criteria Summary Tables, last updated October 11, 2007.

The RSRs were developed by the CT DEEP to define the remediation performance standards for soil and groundwater, specific numeric cleanup criteria, and processes for establishing alternative site-specific standards. The RSRs apply specifically to sites at which remedial actions are required by the CT DEEP under Chapters 445 or 446k of the CGS such as under an administrative order, subsequent to a transfer of an "Establishment" under CGS Section 22a-134a, and to sites that are enrolled in a Voluntary Remediation Program under CGS Sections 22a-133x or 22a-133y.

The site is not currently regulated under any of these State statutes. However, DTC used the numeric criteria in the RSRs as guidelines to assess the site and to make conclusions regarding the concentrations of regulated compounds detected in soil and groundwater.

The following summarizes the regulatory criteria that were used to evaluate site conditions.

### 4.1 Soil Criteria

#### *Direct Exposure Criteria (DEC)*

The DEC are designed to protect human health from risks associated with exposure to pollutants in contaminated soil within 15 feet of the ground surface. Different DEC apply to a property depending on land use, either "residential" or "industrial/commercial", as defined by the RSRs.

The less stringent Industrial/Commercial (I/C) DEC cannot be used unless an Environmental Land Use Restriction (ELUR) has been recorded on the property deed restricting the site to industrial/commercial uses. An ELUR has not been recorded; therefore, the soil analytical results were compared to the Residential (RES) DEC.

#### *Pollutant Mobility Criteria (PMC)*

The PMC are designed to protect groundwater quality by reducing or eliminating the potential for migration of pollutants to the groundwater from contaminated soil. Different PMC apply to a property depending on the groundwater quality at the site, as designated by the CT DEEP. In a "GA" groundwater classification area the PMC apply to soil located above the seasonal low water table.

### 4.2 Groundwater Criteria

#### *Groundwater Protection Criteria (GWPC)*

The GWPC apply to groundwater within "GA" classified areas. The goal of the GWPC is to preserve the designated use of the groundwater resource as an existing or potential future supply of water suitable for drinking or other uses without treatment. The site is located within a "GA" area, therefore, the groundwater analytical data were compared to the GWPC.

#### *Groundwater Volatilization Criteria (VC)*

The Groundwater VC are designed to protect human health from contaminants that may volatilize from contaminated groundwater into overlying buildings. The VC apply to groundwater within 15 feet of the lowest level of a building or the ground surface.

Different VC may apply to a property, depending on land use, either "residential" or "industrial/commercial", as defined by the RSRs. The less stringent I/C VC cannot be used unless an ELUR has been recorded on the property deed restricting the site to industrial/commercial uses. Therefore, the groundwater analytical results were compared to the RES VC (1996).

The 1996 RSRs do not provide VC for all COCs detected at the site. In accordance with Section 22a-133k-3(c)(4)(B), alternative VC may be used with the approval of CT DEEP. The alternative VC listed in Table 4 were obtained from the DEEP Proposed Revisions to the Volatilization Criteria, dated March 2003.

#### *Surface Water Protection Criteria (SWPC)*

The SWPC establish criteria for contaminants in groundwater that are protective of surface water bodies into which the groundwater discharges. Groundwater flowing from the site potentially discharges into Piper Brook located approximately one quarter mile west-northwest of the subject area. Therefore, the groundwater analytical results were compared to the SWPC.

## 5.0 SOIL AND GROUNDWATER SAMPLING ACTIVITIES

### 5.1 Pre-drilling Activities

Prior to drilling, DTC marked each of the exploration locations with wooden stakes and/or white paint. The Call-Before-You-Dig (CBYD) utility mark-out service was contacted to mark publicly owned subsurface utilities at the site. DTC also reviewed each of the planned exploration locations with the drilling subcontractor.

### 5.2 Soil Borings and Soil Sample Collection

#### *Geoprobe Soil Borings*

DTC contracted with Logical Environmental Solutions, LLC (Logical) of Tolland, Connecticut to advance 16 soil borings to a maximum depth of five feet below surface grade in exterior locations at the site. The borings were identified as GP-1A, GP-1B, GP-1C, GP-1D, GP-7A, GP-7B, GP-7C, GP-7D, GP-15, GP-15A, GP-15B, GP-15C, GP-15D, SB-1, SB-2, and SB-3. The locations of the borings are depicted on Figure 2. Borings SB-1, SB-2, and SB-3 are located within a planned utility work area associated with the proposed assisted living facility construction project.

The borings were advanced using a track-mounted Geoprobe drill rig on November 17, 2011. Continuous soil sampling was conducted for all borings. Soil boring logs were prepared by the DTC field scientist which noted the soils encountered in each boring, any observed contamination, and photoionization detector (PID) readings. Soil boring logs are included in Appendix A.

During the investigation, soil cores were collected using a 2-inch diameter 5-foot long, thin-walled, sampling device equipped with disposable acetate liners. Upon bringing each 5-foot core to the surface, the acetate liners were opened. A representative portion of each 5-foot soil core was immediately collected by the DTC field scientist and placed within a clean polyethylene zip-lock bag for field screening with a PID. The PID was equipped with a 10.6 eV bulb and was calibrated to isobutylene standard gas (100 parts per million). The results of the PID screening are provided on the boring logs.

#### *Exterior Hand Auger Borings*

On November 17, 2011, DTC completed three hand auger borings, identified as HA-1, HA-2, and HA-3 in the vicinity of the former water tower. The hand augers were advanced to depths of one foot below grade.

Soil samples were selected for laboratory analysis based upon the visual appearance of the soil and the results of the field screening. The soil samples were submitted to Con-Test Analytical Laboratory (Con-Test) of East Longmeadow, Massachusetts, a State of Connecticut Department of Public Health (DPH) certified laboratory, under proper chain of custody.

All excess soil generated during advancement of the borings was backfilled into the individual boreholes to the best degree possible.

### 5.3 Groundwater Gauging and Sampling

The depth to groundwater and the bottom of three existing on-site monitoring wells were measured, relative to the PVC casing, on November 17, 2011. The PVC casing elevations, depths to groundwater, and depths to bottom of each well are provided in Table 2.

The wells were sampled using a peristaltic pump (set at a low-flow rate) and dedicated tubing. Groundwater parameters including pH, dissolved oxygen, oxygen reduction potential (ORP), specific conductance, and temperature were measured periodically in the field using a YSI 556 meter equipped with a flow through cell. Turbidity was measured using a LaMotte 2020e meter.

Groundwater samples were collected into laboratory provided sample containers once the field parameters stabilized and turbidity decreased to below 5 Nephelometric units (NTUs). The Groundwater Sampling Logs are provided in Appendix B.

Less than four inches of water was present in monitoring well MW-1 at the time of sampling; therefore, groundwater from monitoring well MW-1 was decanted directly into the pre-preserved sample containers without measuring field parameters.

Upon collection, the groundwater samples were immediately placed within a cooler with ice. The groundwater samples were submitted to Con-Test under proper chain of custody.

## 6.0 SOIL ANALYTICAL TESTING

A total of 19 soil samples were collected and laboratory analyzed by DTC for one or more of the following parameters: total VOCs by EPA Method 8260, PAHs by EPA Method 8270, ETPH by the CT DPH Approved Method, and total arsenic and/or lead.

Samples collected by DTC were analyzed utilizing the CT DEEP Reasonable Confidence Protocols (RCP).

The soil laboratory analytical results for this investigation are summarized in Table 3 and the laboratory analytical report is included as Appendix C. The following provides a summary of the results obtained during this investigation as compared to the RSR soil cleanup criteria.

### VOCs

Samples SB-1 (0.4-1.7'), SB-2 (0.2-2.5'), and SB-3 (0.2-2.4') were analyzed for total VOCs. Acetone, a common lab contaminant, was detected in sample SB-3 (0.2-2.4') and its duplicate at a concentration of 0.15 mg/kg and 0.14 mg/kg, respectively, both of which are well below the RSR criteria. VOCs were not detected in the other samples submitted for VOC analysis.

### PAHs

The PAH compound pyrene was detected in soil sample SB-1 (0.4-1.7') at a concentration of 0.24 mg/kg, which is below the RSR criteria. PAHs were not detected above the method detection limits in any of the other samples submitted for PAHs analysis.

### ETPH

ETPH was detected in sample SB-1 (0.4-1.7') at a concentration of 31 mg/kg. ETPH was also detected in sample SB-3 (0.2-2.4') and its duplicate at concentrations of 42 mg/kg and 32 mg/kg, respectively. None of the concentrations detected exceed the RSR criteria. ETPH was not detected in sample SB-2 (0.2-2.5'), which was the only other sample analyzed for ETPH.

### Total Arsenic

Total arsenic was detected in sample GP-1D (1-1.6') at a concentration of 43 mg/kg, which exceeds the RES DEC of 10 mg/kg.

Total arsenic was also detected in samples GP-1A (0.2-1'), GP-15 (1-2'), GP-15A (2-3.5'), GP-15C (1-2'), GP-15D (2-3.3'), SB-2 (0.2-2.5'), and SB-3 (0.2-2.4') at concentrations ranging from 3.1 to 7.3 mg/kg, which are below the RSR criteria.

Arsenic was not detected above the method detection limits in the remaining eight samples analyzed for total arsenic.

### Total Lead

Total lead was detected in sample HA-2 (0-0.5') at a concentration of 510 mg/kg, which exceeds the RES DEC of 500 mg/kg.

Lead was also detected in all of the other samples analyzed for total lead at concentrations ranging from 9.4 to 390 mg/kg, which are below the RES DEC of 500 mg/kg.

Soil samples Duplicate-1 ((GP-1A (0.2-1')), SB-3 (0.2-2.4'), HA-1 (0-0.5'), HA-2 (0-0.5'), and HA-3 (0-0.5')) were also analyzed for leachable lead using the Synthetic Precipitation Leaching Procedure (SPLP).

Leachable lead was detected in sample Duplicate-1 (0.074 mg/l), SB-3 (0.12 mg/l), HA-1 (0.13 mg/l), HA-2 (0.16 mg/l), and HA-3 (0.33 mg/l) at concentrations exceeding the GA PMC of 0.015 mg/l.

Soil sample HA-2 (0-0.5') was also analyzed by the Toxicity Characteristic Leaching Procedure (TCLP) to evaluate whether hazardous levels of lead were present in site soils. Leachable lead was detected at a concentration of 0.62 mg/l, well below the EPA RCRA Characteristically Hazardous Waste Regulatory Limit for lead of 5 mg/l.

#### Quality Control/Quality Assurance (QA/QC) Sample Results

DTC obtained two duplicate soil samples to evaluate both field and laboratory precision. Duplicate samples were obtained and analyzed for PAHs and total arsenic and lead from sample GP-1A (0.2-1') and total VOCs and ETPH from SB-3 (0.2-2.4').

For sample GP-1A (0.2-1'), the results indicated that there was a 6.67 Relative Percent Difference (RPD) in total arsenic concentrations, which is within the 50 RPD allowed for non-aqueous samples, according to the CT DEEP Laboratory QA/QC Guidance document, dated May 2009. The analytical results indicated a 36.2 RPD in total lead concentrations, which is acceptable.

PAHs were not detected in the original or duplicate sample at concentrations exceeding the method detection limits.

For sample SB-3 (0.2-2.4'), the results indicated that there was a 6.9 RPD in acetone concentrations and a 27.03 RPD in ETPH concentrations, which are acceptable.

According to the laboratory report, the analytical results meet the RCP requirements. Therefore, the soil analytical data met the requirements for Reasonable Confidence as defined by the CT DEEP.



## 7.0 GROUNDWATER ANALYTICAL TESTING

A total of three groundwater samples were collected and laboratory analyzed by DTC for total VOCs by EPA Method 8260, PAHs by EPA Method 8270, and total arsenic and lead by EPA Method 6010. The samples collected by DTC were analyzed utilizing the DEEP RCPs.

The groundwater laboratory analytical results are summarized in Table 4 and the laboratory analytical report is included as Appendix C. The following provides a summary of the results obtained during this investigation as compared to the RSR groundwater criteria.

### VOCs

VOCs were not detected at concentrations above the method detection limits in the three groundwater samples submitted for analysis.

### PAHs

PAHs were not detected at concentrations above the method detection limits in the two groundwater samples submitted for analysis.

### Arsenic and Lead

Total arsenic and lead were not detected at concentrations above the method detection limits in the three groundwater samples submitted for analysis.

### QA/QC Sample Results

A duplicate groundwater sample was obtained from well MW-2. The duplicate and original samples were analyzed for the same parameters. VOCs, PAHs, total arsenic and lead were not detected in the original or duplicate samples collected from well MW-2 at concentrations above the method detection limits.

A water trip blank sample was analyzed for VOCs to evaluate the potential for cross-contamination of the samples during transport. The trip blank sample accompanied the sample jars from the laboratory, to the field, and back to the laboratory. The VOC acetone was detected in the trip blank sample at a concentration of 8 ug/l, which is well below the RSR criteria.

One field blank sample was collected by running de-ionized water through the sampling equipment into the laboratory provided sample containers. The purpose of the field blank sample was to evaluate the potential for cross-contamination due to the sampling equipment or technique. The field blank sample was analyzed for VOCs, PAHs, and total arsenic and lead. PAHs, total arsenic and lead were not detected in the field blank sample at concentrations above the method detection limits. The VOC acetone was detected at a concentration of 9.3 ug/l, which is well below the RSR criteria.

The presence of acetone in the trip blank and field blank samples is likely due to laboratory contamination.

According to the laboratory reports, the analytical results met the RCP requirements. Therefore, the groundwater analytical data met the requirements for Reasonable Confidence as defined by the CT DEEP.

## **8.0 CONCEPTUAL SITE MODEL**

### **8.1 Areas of Concern and Contaminant Concentrations in Soil**

A total of three on-site AOCs were identified where regulated compounds may have been potentially released to the environment. The locations of these AOCs are depicted on Figure 2. During this Additional Soil and Groundwater Investigation, the identified AOCs were investigated by collecting soil and groundwater samples for laboratory analysis to further evaluate the horizontal and vertical extent of contamination in soil and confirm previous groundwater sampling results. Soil samples were also collected within the proposed utility work area.

Based on the findings of this investigation, DTC identified three areas where regulated compounds were detected at concentrations above the RSR criteria.

#### **Arsenic and Lead Impacted Soil in the Vicinity of GP-1A and GP-1D**

Based on the soil analytical data, soil located at approximately zero to two feet below grade at soil boring locations GP-1A and GP-1D is impacted with total arsenic exceeding the Residential DEC and leachable lead exceeding the GA PMC. The arsenic and lead impact is likely related to historic disposal of ash and the use of the site as a stockpile during construction activities

#### **Lead Impacted Soil in the Vicinity of HA-1, HA-2, and HA-3**

Based on the soil analytical data, soil located at approximately zero to 0.5 feet below grade at soil boring locations HA-1, HA-2, and HA-3 is impacted with total lead exceeding the Residential DEC and/or leachable lead exceeding the GA PMC. The lead impact is likely related to the removal of lead-based paint from the water tower by sand blasting and leaching from painted surfaces.

#### **Lead Impacted Soil in the Vicinity of SB-3**

Based on the soil analytical data, soil located at approximately zero to 2.4 feet below grade at soil boring location SB-3 is impacted with leachable lead at a concentration exceeding the GA PMC. The source of the lead is unknown.

## 9.0 CONCLUSIONS

The Additional Soil and Groundwater Investigation included the advancement of 16 soil borings using a Geoprobe drill rig and the analysis of 19 soil samples and three groundwater samples.

Soil and groundwater analytical testing data obtained during this investigation were compared to the Residential DEC and GA PMC for soil and the proposed Residential VC, GWPC, and SWPC for groundwater. Based on the findings of this investigation, three areas were identified where regulated compounds are present in site soils at concentrations above the RSR criteria. The approximate locations of these areas are depicted in Figure 3. No constituents of concern were detected in the groundwater samples at concentrations above the RSR criteria.

### **Arsenic and Lead Impacted Soil in the Vicinity of GP-1A and GP-1D**

Based on the soil analytical data, soil located at approximately zero to two feet below grade at soil boring locations GP-1A and GP-1D is impacted with total arsenic exceeding the Residential DEC and leachable lead exceeding the GA PMC. The arsenic and lead impact is likely related to historic disposal of ash and the use of the site as a stockpile during construction activities.

### **Lead Impacted Soil in the Vicinity of HA-1, HA-2, and HA-3**

Based on the soil analytical data, soil located at approximately zero to 0.5 feet below grade at soil boring locations HA-1, HA-2, and HA-3 is impacted with total lead exceeding the Residential DEC and/or leachable lead exceeding the GA PMC. The lead impact is likely related to the removal of lead-based paint from the water tower by sand blasting and leaching from painted surfaces.

### **Lead Impacted Soil in the Vicinity of SB-3**

Based on the soil analytical data, soil located at approximately zero to 2.4 feet below grade at soil boring location SB-3 is impacted with leachable lead at a concentration exceeding the GA PMC. The source of the lead is unknown.

## 10.0 RECOMMENDATIONS

In developing recommendations for the site, DTC used the RSRs as guidelines. As the site is not currently regulated by the CT DEEP, the recommended approaches to soil handling would bring the site into "informal" compliance with the RSRs.

DTC recommends that excavations be performed in the three identified areas to remove the soil which contains arsenic and lead at concentrations exceeding the RSR criteria. These actions should be performed concurrent, or immediately prior to site development.

In the absence of a development plan and based on the results of this investigation and Woodard and Curran's December 2005 investigation, the lead impacted soil in the vicinity of soil borings SB-3, HA-1, HA-2, and HA-3 should be excavated to a depth of 2.5 feet below grade, the lead and arsenic impacted soil in the vicinity of soil borings GP-1A and GP-1D should be excavated to a depth of 2 feet below grade, and arsenic impacted soil in the vicinity of VA-GA15 should be excavated to a depth of three feet below grade and properly disposed of off site at a permitted disposal facility.

The total quantity of soil that would require excavation and off-site disposal is anticipated to be minimal. Confirmation soil samples should be obtained along the sidewalls of the excavations to confirm that the impacted soil with concentrations of arsenic and lead exceeding the RSR criteria is removed.

Alternatively, this soil may be temporarily stockpiled and later placed under the new building during construction, thus rendering the soil "inaccessible" and "environmentally isolated", as defined by the CT DEEP RSRs.

A DTC environmental professional should be at the site during excavation activities to visually inspect the soil at the bottom and sidewalls of the excavations, screen the soil for the presence of compounds of concern, and obtain soil confirmation samples.

Any backfill material, including topsoil that is brought to the site should be tested to assure that no substances are present at concentrations that exceed the RES DEC and/or GA PMC in the RSRs. Representative sampling of this material should be performed at a sufficient frequency prior to shipment to the site.

## 11.0 LIMITATIONS OF WORK

All work products and reports provided in connection with the performance of this Additional Soil and Groundwater Investigation are subject to the following limitations.

Where visual observations have been provided in this report, they represent conditions at the time of observation and may not be indicative of past or future conditions.

DTC's work presented herein was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area. DTC observed a degree of care and skill generally exercised by other consultants under similar circumstances and conditions. DTC's findings and conclusions must be considered not as scientific certainties, but as our professional opinion concerning the significance of the limited data gathered during the course of the investigation. Specifically, DTC does not and cannot represent that the site contains no hazardous material, oil, or other latent condition beyond that observed by DTC during the investigation and remediation work.

In completing this investigation, DTC has relied upon information and/or data provided by other environmental consultants, drillers, analytical laboratories, municipal agencies, and State agencies. DTC provides no warranty regarding the accuracy of the data provided by these parties.

No specific attempt was made to check the compliance of the owners/operators of the site with other Federal, State, or local laws and regulations, environmental or otherwise.

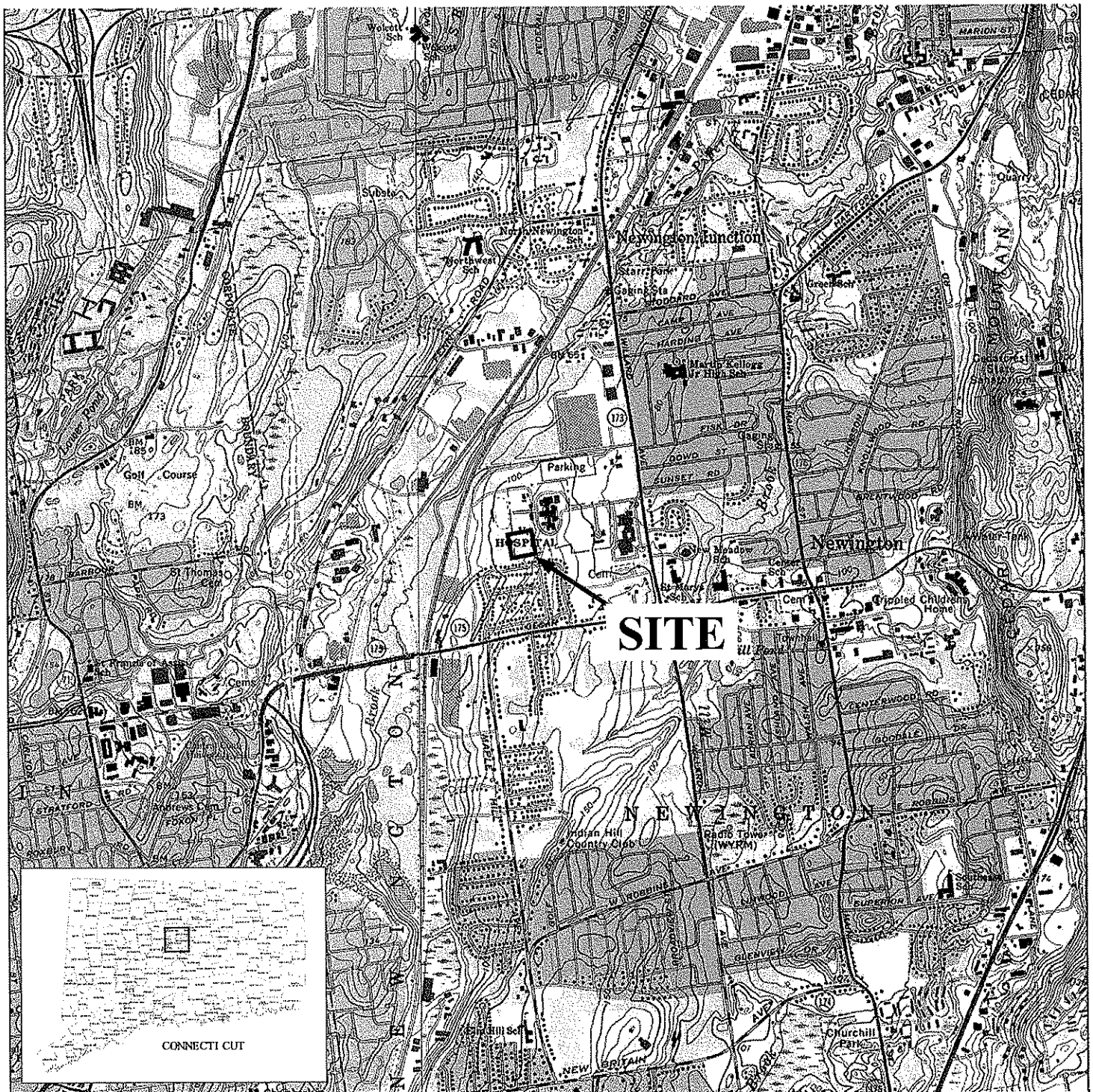
This report was prepared for the exclusive use of the Concourse Federal Group, LLC. The findings and conclusions presented in this report may not be valid in a context other than the stated purpose of this investigation. If conditions or activities on or near the site change, the conclusions in this report may no longer be valid. DTC should be made aware of such changes so that the conclusions presented in this report may be modified (if necessary).

The conclusions and recommendations contained in this report are based upon data obtained from a limited number of soil, groundwater, and soil vapor samples obtained from locations selected by DTC and other environmental consultants. The nature and extent of variations between these sample locations may not be evident from the data obtained.

## 12.0 REFERENCES

1. "Bruce, Deane, Project Engineer, VA Facilities Management, personal communication, October 20, 2004 and October 4, 2011.
2. CT DEEP, "Connecticut Aquifer Protection Areas Map", August 29, 2011.
3. CT DEEP, Water Quality Classifications Map, updated February 2011.
4. CT DEEP RSRs, Sections 22a-133k-1 through -3 of the Regulations of Connecticut State Agencies, effective January 30, 1996.
5. Deane, R.E., "The Surficial Geology of the Hartford South Quadrangle", State Geological and Natural History Survey of Connecticut, 1967.
6. Deschenes, James; Operations Supervisor, VA Facilities Management, personal communications, October 20 and December 1, 2004.
7. DTC, "Limited Environmental Baseline Study," VA Hospital, February 2001.
8. DTC, "Phase I ESA Update," Portion of VA Connecticut Healthcare System – Newington Campus, October 2011.
9. Rodgers, J., "Bedrock Geological Map of Connecticut," State Geological and Natural History Survey of Connecticut, 1985.
10. Stone, J., "Surficial Materials Map of Connecticut", 1992, USGS.
11. Woodard & Curran, Phase II Subsurface Investigation Report, Portion of VA Connecticut Healthcare System, December 27, 2005.

## FIGURES



USGS Quadrangle, Hartford South, CT

1 inch = 2,100 feet

## Site Location Map

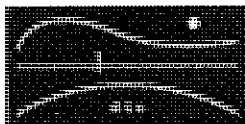
Portion of VA Connecticut Healthcare System Newington Campus  
555 Willard Avenue  
Newington, Connecticut



DTC Project No. 11-358-201

December 2011


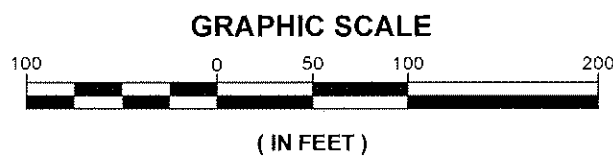
Figure 1



Diversified Technology Consultants, Inc.  
2321 Whitney Avenue, Suite 301 Hamden CT 06518  
Andover, MA



▲ WOODARD & CURRAN SOIL BORING LOCATION  
● DTC SOIL BORING LOCATION  
⊕ MONITORING WELL LOCATION



**DIVERSIFIED TECHNOLOGY CONSULTANTS**  
2321 Whitney Avenue - Suite 310 - Hamden CT 06518  
Ph: 203 239 4200 Fax: 203 224 7378

555 WILLARD AVE  
NEWINGTON, CONNECTICUT

# LEGEND

- ▲ WOODARD & CURRAN SOIL BORING LOCATION
- DTC SOIL BORING LOCATION
- ⊕ MONITORING WELL LOCATION

SPLP LEAD 0.12 > GA PMC

SPLP LEAD 0.33 > GA PMC

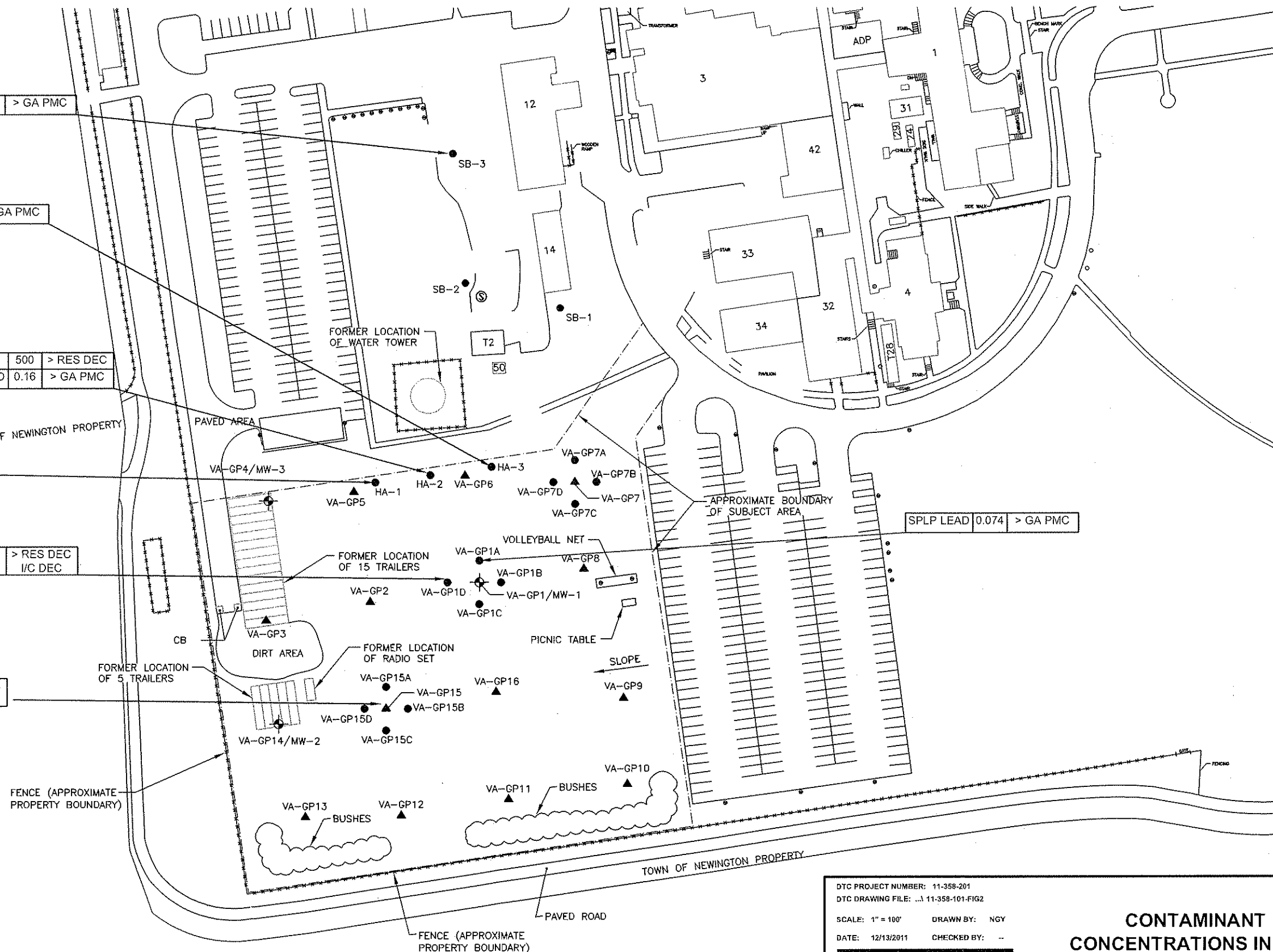
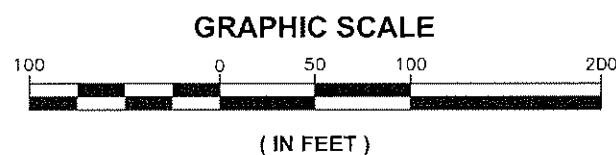
LEAD 500 > RES DEC  
SPLP LEAD 0.16 > GA PMC

SPLP LEAD 0.13 > GA PMC

ARSENIC 43 > RES DEC  
I/C DEC

ARSENIC 14.1 > RES DEC

SPLP LEAD 0.074 > GA PMC



DTC PROJECT NUMBER: 11-358-201  
DTC DRAWING FILE: ...11-358-101-FIG2

SCALE: 1" = 100' DRAWN BY: NGY  
DATE: 12/13/2011 CHECKED BY: --

DIVERSIFIED TECHNOLOGY CONSULTANTS  
2321 Whitney Avenue - Suite 310 - Hamden CT 06518  
Ph: 203 239 4200 Fax: 203 234 7370

## CONTAMINANT CONCENTRATIONS IN SOIL

PORTION OF VETERAN'S ADMINISTRATION MEDICAL CENTER

555 WILLARD AVE  
NEWINGTON, CONNECTICUT

FIGURE 3

## TABLES

**TABLE 1**

**Laboratory Analytical Parameters Summary**  
**Additional Soil and Groundwater Investigation**  
Portion of VA Connecticut Healthcare System – Newington Campus  
555 Willard Avenue, Newington, Connecticut

Sample Identification	Sample Interval (feet)	Location Rationale	Full VOCs (8260)	PAHs (8270)	ETPH	Total Lead	Total Arsenic
GP-1A	0.2-1 (Duplicate-1)	North of W&C boring GP-1		X		X*	X
GP-1B	0.5-1	East of W&C boring GP-1		X		X	X
GP-1C	0.2-1.5	South of W&C boring GP-1		X		X	X
GP-1D	1-1.6	West of W&C boring GP-1		X		X	X
GP-7A	1.5-3	North of W&C boring GP-7		X		X	X
GP-7B	2-2.8	East of W&C boring GP-7		X		X	X
GP-7C	2-3	South of W&C boring GP-7		X		X	X
GP-7D	2.1-3.4	West of W&C boring GP-7		X		X	X
GP-15	1-2	W&C boring GP-15					X
GP-15A	2-3.5	North of W&C boring GP-15					X
GP-15B	1.2-2	East of W&C boring GP-15					X
GP-15C	1-2	South of W&C boring GP-15					X
GP-15D	2-3.3	West of W&C boring GP-15					X
SB-1	0.4-1.7	Location of proposed utility work	X	X	X	X	X
SB-2	0.2-2.5	Location of proposed utility work	X	X	X	X	X
SB-3	0.2-2.4 (Duplicate-2)	Location of proposed utility work	X	X	X	X*	X
HA-1	0-0.5	Vicinity of former water tower				X*	
HA-2	0-0.5	Vicinity of former water tower				X*/**	
HA-3	0-0.5	Vicinity of former water tower				X*	
MW-1	Groundwater	Central portion of site	X			X	X
MW-2	Groundwater	Western portion of site	X	X		X	X
MW-3	Groundwater	Northern portion of site	X	X		X	X

Notes: \* Sample also analyzed by SPLP.

\*\* Sample also analyzed by TCLP.

# TABLE 2

Monitoring Well Gauging Data  
Additional Soil and Groundwater Investigation  
VA CT Healthcare System  
555 Willard Avenue, Newington, CT

Well I.D.	Screened Interval (feet)	Reference Point Elevation (feet)	Depth to Water (11/17/11)	Depth to Bottom (feet)	Groundwater Elevation (11/17/11)
MW-1	3-13	100	15.45	15.75	84.55
MW-2	5-15	96.74	5.02	18.31	91.72
MW-3	4-14	93	2.8	17	90.2
<b>Notes:</b> Depth to water and bottom of well reference point is the top of PVC. Ground elevation and reference point data surveyed by W&C in October 2005.					

**TABLE 3**  
**Soil Sample Analytical Results**  
 Additional Soil and Groundwater Investigation  
 Portion of VA CT Healthcare System - Newington Campus  
 555 Willard Ave, Newington, CT

Parameters	Remediation Standard Regulations			GP-1A 0.2-1'	Duplicate-1 GP-1A 0.2-1'	GP-1B 0.5-1'	GP-1C 0.2-1.5'	GP-1D 1-1.6'	GP-7A 1.5-3'	GP-7B 2-2.8'	GP-7C 2-3'	GP-7D 2.1-3.4'	GP-15 1-2'	GP-15A 2-3.5'	GP-15B 1.2-2'	GP-15C 1-2'	GP-15D 2-3.3'	HA-1 0-0.5'	HA-2 0-0.5'	HA-3 0-0.5'	SB-1 0.4-1.7'	SB-2 0.2-2.5'	SB-3 0.2-2.4'	Duplicate-2 SB-3 0.2-2.4'
	RES DEC	I/C DEC	GA PMC	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11
<b>VOCs per EPA 8260 (mg/kg)</b>	Various	Various	Various	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	0.15	0.14
Acetone	500	1,000	14																		--	--		
1,2,4-Trimethylbenzene	500	2,500	7																		--	--		
1,3,5-Trimethylbenzene	500	1,000	7																		--	--		
Benzene	21	200	0.02																		--	--		
Ethylbenzene	500	1,000	10.1																		--	--		
Isopropylbenzene	NE	NE	0.6																		--	--		
n-Butylbenzene	500	1,000	1.4																		--	--		
n-Propylbenzene	500	1,000	1.4																		--	--		
Toluene	500	1,000	20																		--	--		
Total Xylenes	500	1,000	19.5																		--	--		
<b>PAHs per EPA 8270 (mg/kg)</b>													NA	NA	NA	NA	NA	NA	NA	NA				NA
Benzo (a) anthracene	1	7.8	1	--	--	--	--	--	--	--	--	--									--	--	--	--
Benzo (a) pyrene	1	1	1	--	--	--	--	--	--	--	--	--									--	--	--	--
Benzo (b) fluoranthene	1	7.8	1	--	--	--	--	--	--	--	--	--									--	--	--	--
Benzo (g,h,i) perylene	1,000	2,500	4.2	--	--	--	--	--	--	--	--	--									--	--	--	--
Benzo (k) fluoranthene	8.4	78	1	--	--	--	--	--	--	--	--	--									--	--	--	--
Chrysene	84	780	1	--	--	--	--	--	--	--	--	--									--	--	--	--
Fluoranthene	1,000	2,500	5.6	--	--	--	--	--	--	--	--	--									--	--	--	--
Fluorene	1,000	2,500	5.6	--	--	--	--	--	--	--	--	--									--	--	--	--
Indeno (1,2,3-cd) pyrene	1	7.8	1	--	--	--	--	--	--	--	--	--									--	--	--	--
Naphthalene	1,000	2,500	5.6	--	--	--	--	--	--	--	--	--									--	--	--	--
Phenanthrene	1,000	2,500	4	--	--	--	--	--	--	--	--	--									--	--	--	--
Pyrene	1,000	2,500	4	--	--	--	--	--	--	--	--	--									0.24	--	--	--
<b>ETPH per CTDEP method (mg/kg)</b>	500	2,500	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31	--	42	32
<b>Total RCRA Metals per EPA 6010 &amp; 7471 (mg/kg)</b>																								
Arsenic	10	10	NE	3.1	--	--	--	43	--	--	--	--	6.7	3.7	--	4.5	4.7	NA	NA	NA	--	7.3	5.2	NA
Lead	500	1,000	NE	52	75	14	17	63	14	17	13	14	NA	NA	NA	NA	NA	82	510	390	48	9.4	61	NA
<b>SPLP Metals per EPA 6010 (mg/l)</b>																								
Arsenic	NA	NA	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	0.015	NA	0.074													NA	NA	NA			NA	NA
<b>TCLP Metals per EPA 6010 (mg/l)</b>																								
Lead	NA	NA	5*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.62	NA	NA	NA	NA	NA

Notes:  
 RES DEC = Residential Direct Exposure Criteria.  
 I/C DEC = Industrial/Commercial Direct Exposure Criteria.  
 GA PMC = GA Pollutant Mobility Criteria.  
 VOCs = Volatile Organic Compounds.  
 PAHs = Polynuclear Aromatic Hydrocarbons.  
 ETPH = Extractable Total Petroleum Hydrocarbons.  
 SPLP = Synthetic Precipitation Leaching Procedure.  
 TCLP = Toxicity Characteristic Leaching Procedure.  
 mg/kg = milligrams per kilogram.  
 mg/l = milligrams per liter.  
 \* RCRA Characteristically Hazardous Waste Regulatory Limit  
 -- = not detected, see laboratory reports for specific detection limits.  
 NA = not applicable / not analyzed for this compound.  
 NE = Criteria not established.  
 Shaded values indicate an exceedance of the RES DEC.  
 Bold values indicate an exceedance of the GA PMC.

**TABLE 4**  
**Groundwater Analytical Results**  
 Additional Soil and Groundwater Investigation  
 Portion of VA CT Healthcare System  
 555 Willard Avenue, Newington, Connecticut

Parameters	Remediation Standard Regulations			MW-1	MW-2	Duplicate (MW-2)	MW-3	Field Blank	Trip Blank
	RES VC	GWPC	SWPC	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11	11/17/11
<b>VOCs per EPA 8260 (ug/l)</b>									
Acetone	50,000 <sup>A</sup>	700	NE	--	--	--	--	9.3	8
2-Butanone (MEK)	50,000	400	NE	--	--	--	--	--	--
n-Butylbenzene	1,500 <sup>A</sup>	61	NE	--	--	--	--	--	--
sec-Butylbenzene	1,500 <sup>A</sup>	61	NE	--	--	--	--	--	--
Chloroethane	12,000 <sup>A</sup>	NE	NE	--	--	--	--	--	--
Chloromethane	390 <sup>A</sup>	2.7	NE	--	--	--	--	--	--
Dibromochloromethane	NE	0.5	1,020	--	--	--	--	--	--
1,2-Dichlorobenzene	30,500	600	170,000	--	--	--	--	--	--
1,4-Dichlorobenzene	50,000	75	26,000	--	--	--	--	--	--
1,1-Dichloroethane	34,600	70	NE	--	--	--	--	--	--
cis-1,2-Dichloroethylene	860 <sup>A</sup>	70	NE	--	--	--	--	--	--
Isopropylbenzene	2,800 <sup>A</sup>	30	NE	--	--	--	--	--	--
4-Isopropyltoluene	1,600 <sup>A</sup>	30	NE	--	--	--	--	--	--
Methyl tert butyl ether	50,000	100	NE	--	--	--	--	--	--
n-Propylbenzene	NE	61	NE	--	--	--	--	--	--
Tert-Butanol / butyl alcohol	NE	NE	NE	--	--	--	--	--	--
Tetrachloroethylene	1,500	5	88	--	--	--	--	--	--
1,1,1-Trichloroethane	20,400	200	62,000	--	--	--	--	--	--
Trichloroethylene	219	5	2,340	--	--	--	--	--	--
Tetrahydrofuran	NE	NE	NE	--	--	--	--	--	--
1,2,4-Trimethylbenzene	360 <sup>A</sup>	350	NE	--	--	--	--	--	--
1,3,5-Trimethylbenzene	280 <sup>A</sup>	350	NE	--	--	--	--	--	--
<b>PAHs per EPA 8270 (ug/l)</b>									
Acenaphthene	NE	420	NE	NA	--	--	--	--	NA
Acenaphthylene	NE	420	0.3	--	--	--	--	--	--
1-Methylnaphthalene	NE	NE	NE	--	--	--	--	--	--
Anthracene	NE	2,000	1,100,000	--	--	--	--	--	--
Benzo(a)anthracene	NE	0.06	0.3	--	--	--	--	--	--
Benzo(a)pyrene	NE	0.2	0.3	--	--	--	--	--	--
Benzo(b)fluoranthene	NE	0.08	0.3	--	--	--	--	--	--
Benzo(g,h,i)perylene	NE	210	NE	--	--	--	--	--	--
Benzo(k)fluoranthene	NE	0.5	0.3	--	--	--	--	--	--
Chrysene	NE	4.8	NE	--	--	--	--	--	--
Fluoranthene	NE	280	3,700	--	--	--	--	--	--
Fluorene	NE	280	140,000	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	NE	0.5	NE	--	--	--	--	--	--
2-Methylnaphthalene	NE	49	NE	--	--	--	--	--	--
Naphthalene	NE	280	NE	--	--	--	--	--	--
Phenanthrene	NE	200	0.077	--	--	--	--	--	--
Pyrene	NE	200	110,000	--	--	--	--	--	--
<b>Total Metals per EPA 6010/200.7 (ug/l)</b>									
Arsenic	NE	50	4	--	--	--	--	--	NA
Lead	NE	15	13	--	--	--	--	--	--

**Notes:**

RES VC = Residential Volatilization Criteria.

SWPC = Surface Water Protection Criteria.

GWPC = Groundwater Protection Criteria.

VOCs = volatile organic compounds.

PAHs = polynuclear aromatic hydrocarbons.

<sup>A</sup> For compounds that do not have a 1996 RES VC, the analytical results were compared to the RES VC as proposed by the CT DEP in a March 2003 document.

NE = no criteria established.

ug/l = micrograms per liter.

-- = not detected, see laboratory reports for specific detection limits (Detection Limit < Criteria).

BRL = not detected (noted when Detection Limit > Criteria).

NA = not analyzed for this parameter.

NS = Not Sampled

Bold and shaded values indicate an exceedance of RSR criteria.

## **APPENDIX A**

### **Soil Boring Logs**



[illegible]







[illegible]









[illegible]

[illegible]



[illegible]





[illegible]





[illegible]



[illegible]

## **APPENDIX B**

### **Groundwater Sampling Logs**

# GROUNDWATER SAMPLING LOG

ENGINEERED  
SOLUTIONS



LAND  
STRESSURES  
WATER

Well / Sample ID.: MW-1

Sampling Sequence: 3

Date: 11-17

Weather Conditions: 40s cloudy

## WELL LOCATION:

SITE NAME: VA Campus  
ADDRESS: 555 Willard Avenue Newington, CT  
PROJECT NO.: 11-358-200  
SAMPLING TEAM: J. Vossler

## WELL CONDITION

Protective Casing: Intact / Damaged Locked: Yes / No  
Well # Visible: Yes No Well Cap: OK / Damaged  
Water Between Steel & PVC: Yes / No Ponding Around Well: Yes No  
Lock Condition: OK / Damaged PVC Riser Condition: OK / Damaged  
Concrete Base: Intact / Damaged Well Diameter: 2 4" 6" 8"  
Well Material: PVC / Steel / Other \_\_\_\_\_

## BOTTLES / ANALYTICAL PARAMETERS

Container	Quantity	Preservative	Parameters
VOA Vial	3	HCL	Full VOCs
1 Liter Amber	1	None	PAHs
250 ml plastic	1	HNO3	Total As & Pb

## ELEVATION DATA

(Total Depth: 15.75 ft) - (Depth to Water: 15.46 ft) = (Height: \_\_\_\_\_ ft)  
(Height: \_\_\_\_\_ ft) X (Well Dia Fur: \_\_\_\_\_ gal/ft) = (Well Volume: \_\_\_\_\_ gal)  
(Well Volume: \_\_\_\_\_ gal) X ( 1 2 3 ) = \_\_\_\_\_ gallons to be purged  
Well Diameter Factors: 1.5" = 0.1 2" = 0.16 4" = 0.6  
5.75" = 1.35 6" = 1.47 8" = 2.6  
Pre-purge Water Column Observations: Floating Product: Yes / No

## SAMPLE DATA

Sample Method:	
Pump Type:	Sample Depth:
Controller:	Field Filtered:
Compressor:	Filter Method:
Controller Setting:	LNAPLs (ft):
Flow Rate:	DNAPLs (ft):
Draw Down (ft):	Total Purge Vol.

Odor: Yes / No Product Thickness: \_\_\_\_\_

## GROUNDWATER MONITORING

	Time	Temp. (°C)	pH	Specific Conductance (uS/cm)	Dissolved Oxygen (mg/L)	ORP (mv)	Turbidity (NTU)	Depth to Water (ft)
Initial								
1 <sup>st</sup>								
2 <sup>nd</sup>								
3 <sup>rd</sup>								
4 <sup>th</sup>								
5 <sup>th</sup>								
6 <sup>th</sup>								
7 <sup>th</sup>								
8 <sup>th</sup>								
9 <sup>th</sup>								
10 <sup>th</sup>								
11 <sup>th</sup>								
12 <sup>th</sup>								
13 <sup>th</sup>								
Stabilization Parameters		3%	±0.1	3%	10%	±10	10% or ≤5	<0.3

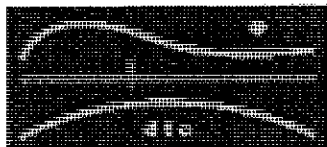
## COMMENTS:

not enough H<sub>2</sub>O to low-flow sample

Sample Time:

# GROUNDWATER SAMPLING LOG

ENGINEERED  
SOLUTIONS



LAND  
STRUCTURES  
WATER

Well / Sample ID.: Mw-2  
Sampling Sequence: 1

Date: 11-17  
Weather Conditions: 40s, cloudy

SITE NAME: VA Campus  
ADDRESS: 555 Willard Avenue Newington, CT  
PROJECT NO.: 11-358-200  
SAMPLING TEAM: J. Vossler

## WELL LOCATION:

## WELL CONDITION

Protective Casing: (Intact) / Damaged Locked: (Yes) / No  
Well # Visible: Yes / (No) Well Cap: (Okay) / Damaged  
Water Between Steel & PVC: Yes / (No) Ponding Around Well: Yes / (No)  
Lock Condition: (Okay) / Damaged PVC Riser Condition: (Okay) / Damaged  
Concrete Base: (Intact) / Damaged Well Diameter: (7) 4" 6" 8"  
Well Material: (PVC) / Steel / Other

## BOTTLES / ANALYTICAL PARAMETERS

Container	Quantity	Preservative	Parameters
VOA Vial	3	HCL	Full VOCs
1 Liter Amber	1	None	PAHs
250 ml plastic	1	HNO3	Total As & Pb

## ELEVATION DATA

(Total Depth: 18.31 ft) - (Depth to Water: 5.02 ft) = (Height: \_\_\_\_\_ ft)  
(Height: \_\_\_\_\_ ft) X (Well Dia Ftr: \_\_\_\_\_ gal/ft) = (Well Volume: \_\_\_\_\_ gal)  
(Well Volume: \_\_\_\_\_ gal) X ( 1 2 3 ) = \_\_\_\_\_ gallons to be purged  
Well Diameter Factors: 1.5" = 0.1 2" = 0.16 4" = 0.6  
(gallons/ft) 5.75" = 1.35 6" = 1.47 8" = 2.6  
Pre-purge Water Column Observations: Floating Product: Yes / No  
Odor: Yes / No Product Thickness: \_\_\_\_\_

## SAMPLE DATA

Sample Method:		
Pump Type:		Sample Depth:
Controller:		Field Filtered:
Compressor:		Filter Method:
Controller Setting:		LNAPLs (ft):
Flow Rate:		DNAPLs (ft):
Draw Down (ft):		Total Purge Vol.

## GROUNDWATER MONITORING

	Time	Temp. (°C)	pH	Specific Conductance (uS/cm)	Dissolved Oxygen (mg/L)	ORP (mv)	Turbidity (NTU)	Depth to Water (ft)
Initial	1215	12.39	7.59	965	5.37	41.9	7.71	5.02
1 <sup>st</sup>	1220	12.92	7.57	953	1.28	37.0	5.09	5.02
2 <sup>nd</sup>	1225	12.93	7.53	948	1.14	34.7	4.01	5.03
3 <sup>rd</sup>	1230	12.92	7.55	951	1.15	34.5	3.84	5.03
4 <sup>th</sup>	1235	12.92	7.55	952	1.19	35.2	2.71	5.03
5 <sup>th</sup>								
6 <sup>th</sup>								
7 <sup>th</sup>								
8 <sup>th</sup>								
9 <sup>th</sup>								
10 <sup>th</sup>								
11 <sup>th</sup>								
12 <sup>th</sup>								
13 <sup>th</sup>								
Stabilization Parameters		3%	±0.1	3%	10%	±10	10% or ≤5	<0.3

## COMMENTS:

Duplicate taken

Sample Time: 1240

# GROUNDWATER SAMPLING LOG

ENGINEERED  
COLLECTIONS



LAND  
STRUCTURES  
WATER

Well / Sample ID.: MW-3  
Sampling Sequence: 3

Date: 11-17

Weather Conditions: 40% cloudy

## WELL LOCATION:

SITE NAME: VA Campus  
ADDRESS: 555 Willard Avenue Newington, CT  
PROJECT NO.: 11-358-200  
SAMPLING TEAM: J. Vossler

## WELL CONDITION

Protective Casing: Intact / Damaged Locked: Yes / No  
Well # Visible: Yes / No Well Cap: Okay / Damaged  
Water Between Steel & PVC: Yes / No Ponding Around Well: Yes / No  
Lock Condition: Okay / Damaged PVC Riser Condition: Okay / Damaged  
Concrete Base: Intact / Damaged Well Diameter: 2 4" 6" 8"  
Well Material: PVC Steel / Other

## BOTTLES / ANALYTICAL PARAMETERS

Container	Quantity	Preservative	Parameters
VOA Vial	3	HCL	Full VOCs
1 Liter Amber	1	None	PAHs
250 ml plastic	1	HNO3	Total As & Pb

## ELEVATION DATA

(Total Depth: 17.0 ft) - (Depth to Water: 2.8 ft) = (Height: \_\_\_\_\_ ft)  
(Height: \_\_\_\_\_ ft) X (Well Dia Ftr: \_\_\_\_\_ gal/ft) = (Well Volume: \_\_\_\_\_ gal)  
(Well Volume: \_\_\_\_\_ gal) X ( 1 2 3 ) = \_\_\_\_\_ gallons to be purged  
Well Diameter Factors: 1.5" = 0.1 2" = 0.16 4" = 0.6  
(gallons/ft) 5.75" = 1.35 6" = 1.47 8" = 2.6  
Pre-purge Water Column Observations: Floating Product: Yes / No  
Odor: Yes / No Product Thickness:

## SAMPLE DATA

Sample Method:		Sample Depth:	
Pump Type:		Field Filtered:	
Controller:		Filter Method:	
Compressor:		LNAPLs (ft):	
Controller Setting:		DNAPLs (ft):	
Flow Rate:		Total Purge Vol.	
Draw Down (ft):			

## GROUNDWATER MONITORING

	Time	Temp. (°C)	pH	Specific Conductance (uS/cm)	Dissolved Oxygen (mg/L)	ORP (mv)	Turbidity (NTU)	Depth to Water (ft)
Initial	1320	12.13	7.32	210	3.96	63.1	12.4	2.8
1 <sup>st</sup>	1325	12.52	7.33	209	0.65	26.8	7.45	2.81
2 <sup>nd</sup>	1330	12.51	7.31	208	0.67	25.3	5.17	2.81
3 <sup>rd</sup>	1335	12.50	7.32	209	0.60	5.1	3.69	2.82
4 <sup>th</sup>	1340	12.40	7.31	210	0.70	26.2	3.74	2.82
5 <sup>th</sup>								
6 <sup>th</sup>								
7 <sup>th</sup>								
8 <sup>th</sup>								
9 <sup>th</sup>								
10 <sup>th</sup>								
11 <sup>th</sup>								
12 <sup>th</sup>								
13 <sup>th</sup>								
Stabilization Parameters		3%	±0.1	3%	10%	±10	10% or ≤5	<0.3

## COMMENTS:

Sample Time: 1345

## **APPENDIX C**

### **Soil and Groundwater Analytical Laboratory Reports**





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

December 1, 2011

Joy Kloss  
Diversified Technology Consultants  
2321 Whitney Avenue, Hampden Ctr. II, Suite 301  
Hamden, CT 06518

Project Location: VA-Newington  
Client Job Number:  
Project Number: 11-358-200  
Laboratory Work Order Number: 11K0682

Enclosed are results of analyses for samples received by the laboratory on November 18, 2011. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads 'Holly L. Folsom'. The signature is written in a cursive, flowing style.

Holly L. Folsom  
Project Manager



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-8405 \* TEL. 413/525-2332

Diversified Technology Consultants  
2321 Whitney Avenue, Hampden Ctr. II, Suite 301  
Hamden, CT 06518  
ATTN: Joy Kloss

REPORT DATE: 12/1/2011

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 11-358-200

### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 11K0682

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

PROJECT LOCATION: VA-Newington

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
GP-15A (2ft-3.5ft)	11K0682-02	Soil		SM 2540G SW-846 6010C	
GP-15 (1ft-2ft)	11K0682-04	Soil		SM 2540G SW-846 6010C	
GP-15D (2ft-3.3ft)	11K0682-07	Soil		SM 2540G SW-846 6010C	
GP-15C (1ft-2ft)	11K0682-09	Soil		SM 2540G SW-846 6010C	
GP-15B (1.2ft-2ft)	11K0682-12	Soil		SM 2540G SW-846 6010C	
GP-1D (1ft-1.6ft)	11K0682-15	Soil		SM 2540G SW-846 6010C SW-846 8270D	
GP-1C (0.2ft-1.5ft)	11K0682-17	Soil		SM 2540G SW-846 6010C SW-846 8270D	
GP-1B (0.5ft-1ft)	11K0682-19	Soil		SM 2540G SW-846 6010C SW-846 8270D	
GP-1A (0.2ft-1ft)	11K0682-21	Soil		SM 2540G SW-846 6010C SW-846 8270D	
Duplicate-1	11K0682-22	Soil		SM 2540G SW-846 6010C SW-846 8270D	
GP-7D (2.1ft-3.4ft)	11K0682-25	Soil		SM 2540G SW-846 6010C SW-846 8270D	
GP-7C (2ft-3ft)	11K0682-27	Soil		SM 2540G SW-846 6010C SW-846 8270D	
GP-7B (2ft-2.8ft)	11K0682-29	Soil		SM 2540G SW-846 6010C SW-846 8270D	
GP-7A (1.5ft-3ft)	11K0682-32	Soil		SM 2540G SW-846 6010C SW-846 8270D	
HA-1 (0ft-0.5ft)	11K0682-33	Soil		SM 2540G SW-846 6010C	
HA-2 (0ft-0.5ft)	11K0682-34	Soil		SM 2540G SW-846 6010C	



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Diversified Technology Consultants  
2321 Whitney Avenue, Hampden Ctr. II, Suite 301  
Hamden, CT 06518  
ATTN: Joy Kloss

REPORT DATE: 11/30/2011

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 11-358-200

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 11K0682

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

PROJECT LOCATION: VA-Newington

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
HA-3 (0ft-0.5ft)	11K0682-35	Soil		SM 2540G SW-846 6010C	
SB-1 (0.4ft-1.7ft)	11K0682-36	Soil		CTDEP ETPH SM 2540G SW-846 6010C SW-846 8260C SW-846 8270D	
SB-2 (0.2ft-2.5ft)	11K0682-38	Soil		CTDEP ETPH SM 2540G SW-846 6010C SW-846 8260C SW-846 8270D	
SB-3 (0.2ft-2.4ft)	11K0682-40	Soil		CTDEP ETPH SM 2540G SW-846 6010C SW-846 8260C SW-846 8270D	
Duplicate-2	11K0682-41	Soil		CTDEP ETPH SM 2540G SW-846 8260C	
MW-2	11K0682-43	Ground Water		SW-846 6020A SW-846 8260C SW-846 8270D	
Duplicate/GW	11K0682-44	Ground Water		SW-846 6020A SW-846 8260C SW-846 8270D	
MW-3	11K0682-45	Ground Water		SW-846 6020A SW-846 8260C SW-846 8270D	
Field Blank	11K0682-46	Water		SW-846 6020A SW-846 8260C SW-846 8270D	
Trip Blank	11K0682-47	Trip Blank Water		SW-846 8260C	
MW-1	11K0682-48	Ground Water		SW-846 6020A 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, only As for samples 11K0682-02, 04, 07, 09, and 12, only As and Pb for samples 11K0682-15, 17, 19, 21, 22, 25, 27, 29, 32, 36, 38, and 40, and only Pb for samples 11K0682-33, 34 and 35 were requested and reported.

For method 6020, only As and Pb were requested and reported for samples 11K0682-43, 45, 46, and 48.

For method 8270, only PAH compounds were requested and reported.

## CTDEP ETPH

## Qualifications:

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

## Analyte &amp; Samples(s) Qualified:

CT ETPH

B041438-MS1

SW-846 6010C

## Qualifications:

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

## Analyte &amp; Samples(s) Qualified:

Lead

11K0682-33[HA-1 (0ft-0.5ft)], B041401-MS1

SW-846 8260C

## Qualifications:

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

## Analyte &amp; Samples(s) Qualified:

2,2-Dichloropropane, Chloromethane, Vinyl Chloride

11K0682-43[MW-2], 11K0682-44[Duplicate/GW], 11K0682-45[MW-3], 11K0682-46[Field Blank], 11K0682-47[Trip Blank], 11K0682-48[MW-1], B041343-BLK1, B041343-BS1, 11K0682-36[SB-1 (0.4ft-1.7ft)], 11K0682-38[SB-2 (0.2ft-2.5ft)], 11K0682-40[SB-3 (0.2ft-2.4ft)], 11K0682-41[Duplicate-2], B041418-BLK1, B041418-BS1

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 &amp; Samples(s) Qualified:

2,2-Dichloropropane, Dichlorodifluoromethane (Freon 12)

11K0682-43[MW-2], 11K0682-44[Duplicate/GW], 11K0682-45[MW-3], 11K0682-46[Field Blank], 11K0682-47[Trip Blank], 11K0682-48[MW-1], B041343-BLK1, B041343-BS1, 11K0682-36[SB-1 (0.4ft-1.7ft)], 11K0682-38[SB-2 (0.2ft-2.5ft)], 11K0682-40[SB-3 (0.2ft-2.4ft)], 11K0682-41[Duplicate-2], B041418-BLK1, B041418-BS1

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

## Analyte &amp; Samples(s) Qualified:

Tetrahydrofuran

11K0682-36[SB-1 (0.4ft-1.7ft)], 11K0682-38[SB-2 (0.2ft-2.5ft)], 11K0682-40[SB-3 (0.2ft-2.4ft)], 11K0682-41[Duplicate-2], B041418-BLK1, B041418-BS1

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 &amp; Samples(s) Qualified:

1,2-Dibromo-3-chloropropane (DBCP)

B041418-BS1

SW-846 8270D

## Qualifications:

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

## Analyte &amp; Samples(s) Qualified:

Fluorene


11K0682-43[MW-2], 11K0682-44[Duplicate/GW], 11K0682-45[MW-3], 11K0682-46[Field Blank], B041482-BLK1, B041482-BS1, B041482-BSD1

SW-846 8260C

All water reporting limits specified on the chain-of-custody were met except for Acrylonitrile, where the most protective criteria are not met since the laboratory cannot achieve the required RCP calibration criteria at these levels, unless otherwise listed in this narrative.

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



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-15A (2ft-3.5ft)

Sampled: 11/17/2011 08:09

Sample ID: 11K0682-02

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	3.7	2.7	mg/Kg dry	1		SW-846 6010C	11/22/11	11/24/11 1:29	OP



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-15A (2ft-3.5ft)

Sampled: 11/17/2011 08:09

Sample ID: 11K0682-02

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	89.6		% Wt	1		SM 2540G	11/22/11	11/23/11 4:56	ESH





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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-15 (1ft-2ft)

Sampled: 11/17/2011 08:15

Sample ID: 11K0682-04

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	6.7	2.8	mg/Kg dry	1		SW-846 6010C	11/22/11	11/24/11 1:34	OP



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-15 (1ft-2ft)

Sampled: 11/17/2011 08:15

Sample ID: 11K0682-04

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	85.9		% Wt	1		SM 2540G	11/22/11	11/23/11 4:56	ESH



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-15D (2ft-3.3ft)

Sampled: 11/17/2011 08:27

Sample ID: 11K0682-07

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	4.7	2.7	mg/Kg dry	1		SW-846 6010C	11/22/11	11/24/11 1:38	OP



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-15D (2ft-3.3ft)

Sampled: 11/17/2011 08:27

Sample ID: 11K0682-07

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	87.6		% Wt	1		SM 2540G	11/22/11	11/23/11 4:56	ESH



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-15C (1ft-2ft)

Sampled: 11/17/2011 08:38

Sample ID: 11K0682-09

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	4.5	2.7	mg/Kg dry	1		SW-846 6010C	11/22/11	11/24/11 1:43	OP



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-15C (1ft-2ft)

Sampled: 11/17/2011 08:38

Sample ID: 11K0682-09

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.2		% Wt	1		SM 2540G	11/22/11	11/23/11 4:56	ESH



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-15B (1.2ft-2ft)

Sampled: 11/17/2011 08:47

Sample ID: 11K0682-12

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.7	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 19:43	OP



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-15B (1.2ft-2ft)

Sampled: 11/17/2011 08:47

Sample ID: 11K0682-12

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	89.9		% Wt	1		SM 2540G	11/22/11	11/23/11 4:56	ESH





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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-1D (1ft-1.6ft)

Sampled: 11/17/2011 09:12

Sample ID: 11K0682-15

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Acenaphthylene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Anthracene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Benzo(a)anthracene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Benzo(a)pyrene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Benzo(b)fluoranthene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Benzo(g,h,i)perylene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Benzo(k)fluoranthene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Chrysene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Dibenz(a,h)anthracene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Fluoranthene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Fluorene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Indeno(1,2,3-cd)pyrene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
2-Methylnaphthalene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Naphthalene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Phenanthrene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Pyrene	ND	0.24	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 13:25	BGL
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	55.3	30-130						11/30/11 13:25	
2-Fluorobiphenyl	55.6	30-130						11/30/11 13:25	
Terphenyl-d14	59.7	30-130						11/30/11 13:25	



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-ID (1ft-1.6ft)

Sampled: 11/17/2011 09:12

Sample ID: 11K0682-15

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	43	3.4	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 19:48	OP
Lead	63	1.0	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 19:48	OP



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-1D (1ft-1.6ft)

Sampled: 11/17/2011 09:12

Sample ID: 11K0682-15

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	71.3		% Wt.	1		SM 2540G	11/22/11	11/23/11 4:56	ESH

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-1C (0.2ft-1.5ft)

Sampled: 11/17/2011 09:19

Sample ID: 11K0682-17

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 15:50	CDT
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	42.8	30-130							
2-Fluorobiphenyl	42.2	30-130							
Terphenyl-d14	47.5	30-130							

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-1C (0.2ft-1.5ft)

Sampled: 11/17/2011 09:19

Sample ID: 11K0682-17

Sample Matrix: Soil

## Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.8	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 19:53	OP
Lead	17	0.83	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 19:53	OP

Work Order: 11K0682

Sampled: 11/17/2011 09:19

Sample Matrix: Soil

Analyte		Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids		87.8		% Wt.	1		SM 2540G	11/22/11	11/23/11 4:56	ESH

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-1B (0.5ft-1ft)

Sampled: 11/17/2011 09:29

Sample ID: 11K0682-19

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/28/11 21:50	CDT
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	42.5	30-130							
2-Fluorobiphenyl	44.2	30-130							
Terphenyl-d14	50.2	30-130							



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-1B (0.5ft-1ft)

Sampled: 11/17/2011 09:29

Sample ID: 11K0682-19

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.7	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 19:58	OP
Lead	14	0.82	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 19:58	OP





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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-1B (0.5ft-1ft)

Sampled: 11/17/2011 09:29

Sample ID: 11K0682-19

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.8		% Wt	1		SM 2540G	11/27/11	11/28/11 12:56	WAL

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-1A (0.2ft-1ft)

Sampled: 11/17/2011 09:40

Sample ID: 11K0682-21

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Benzo(a)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Benzo(a)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Benzo(b)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Chrysene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Phenanthrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:00	BGL
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	53.8	30-130						11/30/11 14:00	
2-Fluorobiphenyl	55.2	30-130						11/30/11 14:00	
Terphenyl-d14	58.5	30-130						11/30/11 14:00	



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-1A (0.2ft-1ft)

Sampled: 11/17/2011 09:40

Sample ID: 11K0682-21

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	3.1	3.0	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 20:03	OP
Lead	52	0.89	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 20:03	OP



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-1A (0.2ft-1ft)

Sampled: 11/17/2011 09:40

Sample ID: 11K0682-21

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	83.2		% Wt	1		SM 2540G	11/27/11	11/28/11 12:56	WAL

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Duplicate-1

Sampled: 11/17/2011 00:00

Sample ID: 11K0682-22

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Benzo(a)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Benzo(a)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Benzo(b)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Chrysene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Phenanthrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 14:36	BGL
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	36.8	30-130							
2-Fluorobiphenyl	36.3	30-130							
Terphenyl-d14	40.6	30-130							

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Duplicate-1

Sampled: 11/17/2011 00:00

Sample ID: 11K0682-22

Sample Matrix: Soil

## Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.9	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 20:07	OP
Lead	75	0.87	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 20:07	OP



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Sampled: 11/17/2011 00:00

Field Sample #: Duplicate-1

Sample ID: 11K0682-22

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	83.8		% Wt	1		SM 2540G	11/27/11	11/28/11 12:56	WAL

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-7D (2.1ft-3.4ft)

Sampled: 11/17/2011 09:57

Sample ID: 11K0682-25

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 16:24	CDT
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	44.6	30-130							
2-Fluorobiphenyl	46.3	30-130							
Terphenyl-d14	49.0	30-130							



Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-7D (2.1ft-3.4ft)

Sampled: 11/17/2011 09:57

Sample ID: 11K0682-25

Sample Matrix: Soil

## Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.8	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 20:12	OP
Lead	14	0.83	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 20:12	OP



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-7D (2.1ft-3.4ft)

Sampled: 11/17/2011 09:57

Sample ID: 11K0682-25

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	87.8		% Wt	1		SM 2540G	11/27/11	11/28/11 12:56	WAL

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-7C (2ft-3ft)

Sampled: 11/17/2011 10:05

Sample ID: 11K0682-27

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:03	CDT
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	37.4	30-130							
2-Fluorobiphenyl	37.4	30-130							
Terphenyl-d14	59.5	30-130							



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-7C (2ft-3ft)

Sampled: 11/17/2011 10:05

Sample ID: 11K0682-27

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.8	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 20:17	OP
Lead	13	0.83	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 20:17	OP



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-7C (2ft-3ft)

Sampled: 11/17/2011 10:05

Sample ID: 11K0682-27

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.6		% Wt	1		SM 2540G	11/27/11	11/28/11 12:56	WAL

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-7B (2ft-2.8ft)

Sampled: 11/17/2011 10:14

Sample ID: 11K0682-29

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Benzo(a)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Benzo(a)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Benzo(b)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Chrysene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Phenanthrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 0:36	CDT
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	50.1	30-130							
2-Fluorobiphenyl	51.0	30-130							
Terphenyl-d14	77.8	30-130							

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-7B (2ft-2.8ft)

Sampled: 11/17/2011 10:14

Sample ID: 11K0682-29

Sample Matrix: Soil

## Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.8	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 20:22	OP
Lead	17	0.85	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 20:22	OP



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-7B (2ft-2.8ft)

Sampled: 11/17/2011 10:14

Sample ID: 11K0682-29

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date	Date/Time	Analyst
							Prepared	Analyzed	
% Solids	85.8		% Wt	1		SM 2540G	11/27/11	11/28/11 12:56	WAL



Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-7A (1.5ft-3ft)

Sampled: 11/17/2011 10:27

Sample ID: 11K0682-32

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Benzo(a)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Benzo(a)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Benzo(b)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Chrysene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Phenanthrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:12	BGL
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	52.6	30-130							
2-Fluorobiphenyl	52.3	30-130							
Terphenyl-d14	62.0	30-130							



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-7A (1.5ft-3ft)

Sampled: 11/17/2011 10:27

Sample ID: 11K0682-32

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.8	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 20:26	OP
Lead	14	0.84	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 20:26	OP



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: GP-7A (1.5ft-3ft)

Sampled: 11/17/2011 10:27

Sample ID: 11K0682-32

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	85.8		% Wt	1		SM 2540G	11/27/11	11/28/11 12:56	WAL



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: HA-1 (0ft-0.5ft)

Sampled: 11/17/2011 11:35

Sample ID: 11K0682-33

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	82	1.0	mg/Kg dry	1	MS-11	SW-846 6010C	11/22/11	11/23/11 18:49	OP



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: HA-1 (0ft-0.5ft)

Sampled: 11/17/2011 11:35

Sample ID: 11K0682-33

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	68.4		% Wt	1		SM 2540G	11/27/11	11/28/11 12:56	WAL



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: HA-2 (0ft-0.5ft)

Sampled: 11/17/2011 11:40

Sample ID: 11K0682-34

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	510	1.0	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 20:48	OP



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: HA-2 (0ft-0.5ft)

Sampled: 11/17/2011 11:40

Sample ID: 11K0682-34

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	72.8		% Wt	1		SM 2540G	11/27/11	11/28/11 12:56	WAL



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: HA-3 (0ft-0.5ft)

Sampled: 11/17/2011 11:45

Sample ID: 11K0682-35

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	390	0.92	mg/Kg dry	1		SW-846 6010C	11/22/11	11/28/11 10:30	OP



Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: HA-3 (0ft-0.5ft)

Sampled: 11/17/2011 11:45

Sample ID: 11K0682-35

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	76.9		% Wt	1		SM 2540G	11/27/11	11/28/11 12:56	WAL

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-1 (0.4ft-1.7ft)

Sampled: 11/17/2011 10:33

Sample ID: 11K0682-36

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.071	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Acrylonitrile	ND	0.0042	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Benzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Bromobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Bromodichloromethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Bromoform	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Bromomethane	ND	0.0071	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
2-Butanone (MEK)	ND	0.028	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
n-Butylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
sec-Butylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
tert-Butylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Carbon Disulfide	ND	0.0042	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Carbon Tetrachloride	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Chlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Chlorodibromomethane	ND	0.00071	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Chloroethane	ND	0.014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Chloroform	ND	0.0028	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Chloromethane	ND	0.0071	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
2-Chlorotoluene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
4-Chlorotoluene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,2-Dibromoethane (EDB)	ND	0.00071	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Dibromomethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,2-Dichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,3-Dichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,4-Dichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
trans-1,4-Dichloro-2-butene	ND	0.0028	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.014	mg/Kg dry	1	V-05	SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,1-Dichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,2-Dichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,1-Dichloroethylene	ND	0.0028	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
cis-1,2-Dichloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
trans-1,2-Dichloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,2-Dichloropropane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,3-Dichloropropane	ND	0.00071	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
2,2-Dichloropropane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,1-Dichloropropene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
cis-1,3-Dichloropropene	ND	0.00071	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
trans-1,3-Dichloropropene	ND	0.00071	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Ethylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Hexachlorobutadiene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
2-Hexanone (MBK)	ND	0.014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Isopropylbenzene (Cumene)	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-1 (0.4ft-1.7ft)

Sampled: 11/17/2011 10:33

Sample ID: 11K0682-36

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
p-Isopropyltoluene (p-Cymene)	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0028	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Methylene Chloride	ND	0.014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Naphthalene	ND	0.0028	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
n-Propylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Styrene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,1,1,2-Tetrachloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,1,2,2-Tetrachloroethane	ND	0.00071	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Tetrachloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Tetrahydrofuran	ND	0.0071	mg/Kg dry	1	V-16	SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Toluene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,2,3-Trichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,2,4-Trichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,1,1-Trichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,1,2-Trichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Trichloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0071	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,2,3-Trichloropropane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0071	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,2,4-Trimethylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
1,3,5-Trimethylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Vinyl Chloride	ND	0.0071	mg/Kg dry	1	L-03	SW-846 8260C	11/22/11	11/22/11 10:16	MFF
m+p Xylene	ND	0.0028	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
o-Xylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:16	MFF
Surrogates	% Recovery	Recovery Limits	Flag						
1,2-Dichloroethane-d4	112	70-130							
Toluene-d8	94.9	70-130							
4-Bromofluorobenzene	80.5	70-130							

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-1 (0.4ft-1.7ft)

Sampled: 11/17/2011 10:33

Sample ID: 11K0682-36

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Benzo(a)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Benzo(a)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Benzo(b)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Chrysene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Phenanthrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Pyrene	0.24	0.20	mg/Kg dry	1		SW-846 8270D	11/28/11	11/30/11 15:00	BGL
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	37.6	30-130							
2-Fluorobiphenyl	40.3	30-130							
Terphenyl-d14	47.8	30-130							



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-1 (0.4ft-1.7ft)

Sampled: 11/17/2011 10:33

Sample ID: 11K0682-36

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	31	12	mg/Kg dry	1		CTDEP ETPH	11/22/11	11/23/11 19:18	SCS
Surrogates		% Recovery	Recovery Limits		Flag				
o-Terphenyl		59.2	50-150					11/23/11 19:18	



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-1 (0.4ft-1.7ft)

Sampled: 11/17/2011 10:33

Sample ID: 11K0682-36

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.9	mg/Kg dry	1		SW-846 6010C	11/22/11	11/23/11 20:59	OP
Lead	48	0.87	mg/Kg dry	1		SW-846 6010C	11/22/11	11/28/11 10:35	OP



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-1 (0.4ft-1.7ft)

Sampled: 11/17/2011 10:33

Sample ID: 11K0682-36

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	83.6		% Wt	1		SM 2540G	11/27/11	11/28/11 12:56	WAL

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-2 (0.2ft-2.5ft)

Sampled: 11/17/2011 10:41

Sample ID: 11K0682-38

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.095	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Acrylonitrile	ND	0.0057	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Benzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Bromobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Bromodichloromethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Bromoform	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Bromomethane	ND	0.0095	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
2-Butanone (MEK)	ND	0.038	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
n-Butylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
sec-Butylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
tert-Butylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Carbon Disulfide	ND	0.0057	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Carbon Tetrachloride	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Chlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Chlorodibromomethane	ND	0.00095	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Chloroethane	ND	0.019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Chloroform	ND	0.0038	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Chloromethane	ND	0.0095	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
2-Chlorotoluene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
4-Chlorotoluene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,2-Dibromoethane (EDB)	ND	0.00095	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Dibromomethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,2-Dichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,3-Dichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,4-Dichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
trans-1,4-Dichloro-2-butene	ND	0.0038	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.019	mg/Kg dry	1	V-05	SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,1-Dichloroethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,2-Dichloroethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,1-Dichloroethylene	ND	0.0038	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
cis-1,2-Dichloroethylene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
trans-1,2-Dichloroethylene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,2-Dichloropropane	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,3-Dichloropropane	ND	0.00095	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
2,2-Dichloropropane	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,1-Dichloropropene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
cis-1,3-Dichloropropene	ND	0.00095	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
trans-1,3-Dichloropropene	ND	0.00095	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Ethylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Hexachlorobutadiene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
2-Hexanone (MBK)	ND	0.019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Isopropylbenzene (Cumene)	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF



Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-2 (0.2ft-2.5ft)

Sampled: 11/17/2011 10:41

Sample ID: 11K0682-38

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
p-Isopropyltoluene (p-Cymene)	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0038	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Methylene Chloride	ND	0.019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Naphthalene	ND	0.0038	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
n-Propylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Styrene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,1,1,2-Tetrachloroethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,1,2,2-Tetrachloroethane	ND	0.00095	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Tetrachloroethylene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Tetrahydrofuran	ND	0.0095	mg/Kg dry	1	V-16	SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Toluene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,2,3-Trichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,2,4-Trichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,1,1-Trichloroethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,1,2-Trichloroethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Trichloroethylene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0095	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,2,3-Trichloropropane	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0095	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,2,4-Trimethylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
1,3,5-Trimethylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Vinyl Chloride	ND	0.0095	mg/Kg dry	1	L-03	SW-846 8260C	11/22/11	11/22/11 10:42	MFF
m+p Xylene	ND	0.0038	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
o-Xylene	ND	0.0019	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 10:42	MFF
Surrogates	% Recovery	Recovery Limits	Flag						
1,2-Dichloroethane-d4	115	70-130							
Toluene-d8	99.4	70-130							
4-Bromofluorobenzene	89.8	70-130							



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-2 (0.2ft-2.5ft)

Sampled: 11/17/2011 10:41

Sample ID: 11K0682-38

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:15	CDT
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	57.6	30-130							
2-Fluorobiphenyl	60.8	30-130							
Terphenyl-d14	71.4	30-130							

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-2 (0.2ft-2.5ft)

Sampled: 11/17/2011 10:41

Sample ID: 11K0682-38

Sample Matrix: Soil

# Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	ND	12	mg/Kg dry	1		CTDEP ETPH	11/22/11	11/23/11 15:26	SCS
Surrogates	% Recovery	Recovery Limits	Flag						
o-Terphenyl	70.8	50-150						11/23/11 15:26	



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-2 (0.2ft-2.5ft)

Sampled: 11/17/2011 10:41

Sample ID: 11K0682-38

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	7.3	2.9	mg/Kg dry	1		SW-846 6010C	11/22/11	11/24/11 1:48	OP
Lead	9.4	0.86	mg/Kg dry	1		SW-846 6010C	11/22/11	11/28/11 12:51	OP



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-2 (0.2ft-2.5ft)

Sampled: 11/17/2011 10:41

Sample ID: 11K0682-38

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	86.7		% Wt	1		SM 2540G	11/27/11	11/28/11 12:56	WAL



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-3 (0.2ft-2.4ft)

Sampled: 11/17/2011 10:51

Sample ID: 11K0682-40

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	0.15	0.12	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Acrylonitrile	ND	0.0075	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Benzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Bromobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Bromodichloromethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Bromoform	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Bromomethane	ND	0.012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
2-Butanone (MEK)	ND	0.050	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
n-Butylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
sec-Butylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
tert-Butylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Carbon Disulfide	ND	0.0075	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Carbon Tetrachloride	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Chlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Chlorodibromomethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Chloroethane	ND	0.025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Chloroform	ND	0.0050	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Chloromethane	ND	0.012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
2-Chlorotoluene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
4-Chlorotoluene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Dibromomethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,2-Dichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,3-Dichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,4-Dichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
trans-1,4-Dichloro-2-butene	ND	0.0050	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.025	mg/Kg dry	1	V-05	SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,1-Dichloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,2-Dichloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,1-Dichloroethylene	ND	0.0050	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
cis-1,2-Dichloroethylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
trans-1,2-Dichloroethylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,2-Dichloropropane	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,3-Dichloropropane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
2,2-Dichloropropane	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,1-Dichloropropene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
cis-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
trans-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Ethylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Hexachlorobutadiene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
2-Hexanone (MBK)	ND	0.025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Isopropylbenzene (Cumene)	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-3 (0.2ft-2.4ft)

Sampled: 11/17/2011 10:51

Sample ID: 11K0682-40

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
p-Isopropyltoluene (p-Cymene)	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0050	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Methylene Chloride	ND	0.025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Naphthalene	ND	0.0050	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
n-Propylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Styrene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,1,1,2-Tetrachloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,1,2,2-Tetrachloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Tetrachloroethylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Tetrahydrofuran	ND	0.012	mg/Kg dry	1	V-16	SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Toluene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,2,3-Trichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,2,4-Trichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,1,1-Trichloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,1,2-Trichloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Trichloroethylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,2,3-Trichloropropane	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,2,4-Trimethylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
1,3,5-Trimethylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Vinyl Chloride	ND	0.012	mg/Kg dry	1	L-03	SW-846 8260C	11/22/11	11/22/11 11:07	MFF
m+p Xylene	ND	0.0050	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
o-Xylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:07	MFF
Surrogates	% Recovery	Recovery Limits	Flag						
1,2-Dichloroethane-d4	117	70-130							
Toluene-d8	96.8	70-130							
4-Bromofluorobenzene	82.7	70-130							



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-3 (0.2ft-2.4ft)

Sampled: 11/17/2011 10:51

Sample ID: 11K0682-40

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Acenaphthylene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Benzo(a)anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Benzo(a)pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Benzo(b)fluoranthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Benzo(g,h,i)perylene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Benzo(k)fluoranthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Chrysene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Dibenz(a,h)anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Fluoranthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Fluorene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Indeno(1,2,3-cd)pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
2-Methylnaphthalene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Naphthalene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Phenanthrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	11/28/11	11/29/11 2:47	CDT
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	45.8	30-130						11/29/11 2:47	
2-Fluorobiphenyl	51.1	30-130						11/29/11 2:47	
Terphenyl-d14	63.0	30-130						11/29/11 2:47	





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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-3 (0.2ft-2.4ft)

Sampled: 11/17/2011 10:51

Sample ID: 11K0682-40

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	42	12	mg/Kg dry	1		CTDEP ETPH	11/22/11	11/23/11 15:26	SCS
Surrogates	% Recovery	Recovery Limits		Flag					
o-Terphenyl	60.6	50-150						11/23/11 15:26	

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-3 (0.2ft-2.4ft)

Sampled: 11/17/2011 10:51

Sample ID: 11K0682-40

Sample Matrix: Soil

## Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	5.2	3.0	mg/Kg dry	1		SW-846 6010C	11/22/11	11/24/11 1:52	OP
Lead	61	0.89	mg/Kg dry	1		SW-846 6010C	11/22/11	11/28/11 13:19	OP

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: SB-3 (0.2ft-2.4ft)

Sampled: 11/17/2011 10:51

Sample ID: 11K0682-40

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	81.9		% Wt	1		SM 2540G	11/27/11	11/28/11 12:56	WAL



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Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Duplicate-2

Sampled: 11/17/2011 00:00

Sample ID: 11K0682-41

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	0.14	0.12	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Acrylonitrile	ND	0.0069	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Benzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Bromobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Bromodichloromethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Bromoform	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Bromomethane	ND	0.012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
2-Butanone (MEK)	ND	0.046	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
n-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
sec-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
tert-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Carbon Disulfide	ND	0.0069	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Carbon Tetrachloride	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Chlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Chlorodibromomethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Chloroethane	ND	0.023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Chloroform	ND	0.0046	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Chloromethane	ND	0.012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
2-Chlorotoluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
4-Chlorotoluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Dibromomethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,2-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,3-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,4-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
trans-1,4-Dichloro-2-butene	ND	0.0046	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.023	mg/Kg dry	1	V-05	SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,1-Dichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,2-Dichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,1-Dichloroethylene	ND	0.0046	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
cis-1,2-Dichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
trans-1,2-Dichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,2-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,3-Dichloropropane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
2,2-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,1-Dichloropropene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
cis-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
trans-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Ethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Hexachlorobutadiene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
2-Hexanone (MBK)	ND	0.023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Isopropylbenzene (Cumene)	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Duplicate-2

Sampled: 11/17/2011 00:00

Sample ID: 11K0682-41

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
p-Isopropyltoluene (p-Cymene)	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0046	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Methylene Chloride	ND	0.023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Naphthalene	ND	0.0046	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
n-Propylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Styrene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,1,1,2-Tetrachloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,1,2,2-Tetrachloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Tetrachloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Tetrahydrofuran	ND	0.012	mg/Kg dry	1	V-16	SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Toluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,2,3-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,2,4-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,1,1-Trichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,1,2-Trichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Trichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,2,3-Trichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.012	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,2,4-Trimethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
1,3,5-Trimethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Vinyl Chloride	ND	0.012	mg/Kg dry	1	L-03	SW-846 8260C	11/22/11	11/22/11 11:33	MFF
m+p Xylene	ND	0.0046	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
o-Xylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/22/11	11/22/11 11:33	MFF
Surrogates	% Recovery	Recovery Limits	Flag						
1,2-Dichloroethane-d4	117	70-130							
Toluene-d8	94.9	70-130							
4-Bromofluorobenzene	78.2	70-130							



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Duplicate-2

Sampled: 11/17/2011 00:00

Sample ID: 11K0682-41

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	32	12	mg/Kg dry	1		CTDEP ETPH	11/22/11	11/23/11 15:45	SCS
Surrogates	% Recovery		Recovery Limits		Flag				
o-Terphenyl	67.8		50-150						



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Duplicate-2

Sampled: 11/17/2011 00:00

Sample ID: 11K0682-41

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	81.1		% Wt	1		SM 2540G	11/27/11	11/28/11 12:56	WAL



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-8405 \* TEL. 413/525-2332

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: MW-2

Sampled: 11/17/2011 12:40

Sample ID: 11K0682-43

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Acrylonitrile	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Benzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Bromobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Bromoform	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Bromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
2-Butanone (MEK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Carbon Disulfide	ND	10	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Carbon Tetrachloride	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Chlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Chloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Chloroform	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Chloromethane	ND	0.50	µg/L	1	L-03	SW-846 8260C	11/21/11	11/22/11 5:40	EEH
2-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
4-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Dibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,2-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,3-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,4-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,1-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,2-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,1-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
cis-1,2-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,2-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
2,2-Dichloropropane	ND	0.50	µg/L	1	L-03, V-05	SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Ethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Hexachlorobutadiene	ND	0.40	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
2-Hexanone (MBK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Isopropylbenzene (Cumene)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH





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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: MW-2

Sampled: 11/17/2011 12:40

Sample ID: 11K0682-43

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
p-Isopropyltoluene (p-Cymene)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
4-Methyl-2-pentanone (MIBK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,2,3-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,1,2-Trichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,2,3-Trichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Vinyl Chloride	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:40	EEH
Surrogates	% Recovery	Recovery Limits	Flag						
1,2-Dichloroethane-d4	90.8	70-130							
Toluene-d8	101	70-130							
4-Bromofluorobenzene	89.9	70-130							

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: MW-2

Sampled: 11/17/2011 12:40

Sample ID: 11K0682-43

Sample Matrix: Ground Water

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.30	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Acenaphthylene	ND	0.30	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Anthracene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Benzo(a)anthracene	ND	0.050	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Benzo(a)pyrene	ND	0.10	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Benzo(b)fluoranthene	ND	0.050	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Benzo(g,h,i)perylene	ND	0.50	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Benzo(k)fluoranthene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Chrysene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Dibenz(a,h)anthracene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Fluoranthene	ND	0.50	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Fluorene	ND	1.0	µg/L	1	R-05	SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Indeno(1,2,3-cd)pyrene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
2-Methylnaphthalene	ND	1.0	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Naphthalene	ND	1.0	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Phenanthrene	ND	0.050	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Pyrene	ND	1.0	µg/L	1		SW-846 8270D	11/22/11	11/25/11 1:30	CDT
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	66.5	30-130							
2-Fluorobiphenyl	60.1	30-130							
Terphenyl-d14	42.0	30-130							

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: MW-2

Sampled: 11/17/2011 12:40

Sample ID: 11K0682-43

Sample Matrix: Ground Water

## Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	11/21/11	11/22/11 12:11	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	11/21/11	11/22/11 12:11	KSH

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Duplicate/GW

Sampled: 11/17/2011 00:00

Sample ID: 11K0682-44

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Acrylonitrile	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Benzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Bromobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Bromoform	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Bromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
2-Butanone (MEK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Carbon Disulfide	ND	10	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Carbon Tetrachloride	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Chlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Chloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Chloroform	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Chloromethane	ND	0.50	µg/L	1	L-03	SW-846 8260C	11/21/11	11/22/11 6:11	EEH
2-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
4-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Dibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,2-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,3-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,4-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,1-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,2-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,1-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
cis-1,2-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,2-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
2,2-Dichloropropane	ND	0.50	µg/L	1	L-03, V-05	SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Ethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Hexachlorobutadiene	ND	0.40	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
2-Hexanone (MBK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Isopropylbenzene (Cumene)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Duplicate/GW

Sampled: 11/17/2011 00:00

Sample ID: 11K0682-44

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
p-Isopropyltoluene (p-Cymene)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
4-Methyl-2-pentanone (MIBK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,2,3-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,1,2-Trichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,2,3-Trichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Vinyl Chloride	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:11	EEH
Surrogates	% Recovery	Recovery Limits	Flag						
1,2-Dichloroethane-d4	93.1	70-130							
Toluene-d8	100	70-130							
4-Bromofluorobenzene	88.5	70-130							

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Duplicate/GW

Sampled: 11/17/2011 00:00

Sample ID: 11K0682-44

Sample Matrix: Ground Water

## Semi-volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.30	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Acenaphthylene	ND	0.30	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Anthracene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Benzo(a)anthracene	ND	0.050	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Benzo(a)pyrene	ND	0.10	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Benzo(b)fluoranthene	ND	0.050	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Benzo(g,h,i)perylene	ND	0.50	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Benzo(k)fluoranthene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Chrysene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Dibenz(a,h)anthracene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Fluoranthene	ND	0.50	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Fluorene	ND	1.0	µg/L	1	R-05	SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Indeno(1,2,3-cd)pyrene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
2-Methylnaphthalene	ND	1.0	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Naphthalene	ND	1.0	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Phenanthrene	ND	0.050	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Pyrene	ND	1.0	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:04	CDT
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	66.2	30-130							
2-Fluorobiphenyl	59.7	30-130							
Terphenyl-d14	47.0	30-130							



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Duplicate/GW

Sampled: 11/17/2011 00:00

Sample ID: 11K0682-44

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	11/21/11	11/22/11 12:15	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	11/21/11	11/22/11 12:15	KSH

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: MW-3

Sampled: 11/17/2011 13:45

Sample ID: 11K0682-45

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Acrylonitrile	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Benzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Bromobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Bromoform	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Bromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
2-Butanone (MEK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Carbon Disulfide	ND	10	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Carbon Tetrachloride	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Chlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Chloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Chloroform	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Chloromethane	ND	0.50	µg/L	1	L-03	SW-846 8260C	11/21/11	11/22/11 12:31	EEH
2-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
4-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Dibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,2-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,3-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,4-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,1-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,2-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,1-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
cis-1,2-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,2-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
2,2-Dichloropropane	ND	0.50	µg/L	1	L-03, V-05	SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Ethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Hexachlorobutadiene	ND	0.40	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
2-Hexanone (MBK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Isopropylbenzene (Cumene)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH



Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: MW-3

Sampled: 11/17/2011 13:45

Sample ID: 11K0682-45

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
p-Isopropyltoluene (p-Cymene)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
4-Methyl-2-pentanone (MIBK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,2,3-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,1,2-Trichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,2,3-Trichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Vinyl Chloride	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 12:31	EEH
Surrogates	% Recovery	Recovery Limits	Flag						
1,2-Dichloroethane-d4	98.1	70-130							
Toluene-d8	100	70-130							
4-Bromofluorobenzene	96.8	70-130							



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: MW-3

Sampled: 11/17/2011 13:45

Sample ID: 11K0682-45

Sample Matrix: Ground Water

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.30	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Acenaphthylene	ND	0.30	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Anthracene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Benzo(a)anthracene	ND	0.050	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Benzo(a)pyrene	ND	0.10	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Benzo(b)fluoranthene	ND	0.050	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Benzo(g,h,i)perylene	ND	0.50	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Benzo(k)fluoranthene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Chrysene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Dibenz(a,h)anthracene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Fluoranthene	ND	0.50	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Fluorene	ND	1.0	µg/L	1	R-05	SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Indeno(1,2,3-cd)pyrene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
2-Methylnaphthalene	ND	1.0	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Naphthalene	ND	1.0	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Phenanthrene	ND	0.050	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Pyrene	ND	1.0	µg/L	1		SW-846 8270D	11/22/11	11/25/11 2:40	CDT
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	65.0	30-130							
2-Fluorobiphenyl	56.0	30-130							
Terphenyl-d14	42.3	30-130							

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: MW-3

Sampled: 11/17/2011 13:45

Sample ID: 11K0682-45

Sample Matrix: Ground Water

## Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	11/21/11	11/22/11 12:30	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	11/21/11	11/22/11 12:30	KSH



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Field Blank

Sampled: 11/17/2011 14:10

Sample ID: 11K0682-46

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	9.3	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Acrylonitrile	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Benzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Bromobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Bromoform	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Bromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
2-Butanone (MEK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Carbon Disulfide	ND	10	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Carbon Tetrachloride	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Chlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Chloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Chloroform	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Chloromethane	ND	0.50	µg/L	1	L-03	SW-846 8260C	11/21/11	11/22/11 4:35	EEH
2-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
4-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Dibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,2-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,3-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,4-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,1-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,2-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,1-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
cis-1,2-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,2-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
2,2-Dichloropropane	ND	0.50	µg/L	1	L-03, V-05	SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Ethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Hexachlorobutadiene	ND	0.40	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
2-Hexanone (MBK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Isopropylbenzene (Cumene)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Field Blank

Sampled: 11/17/2011 14:10

Sample ID: 11K0682-46

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
p-Isopropyltoluene (p-Cymene)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
4-Methyl-2-pentanone (MIBK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,2,3-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,1,2-Trichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,2,3-Trichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Vinyl Chloride	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 4:35	EEH
Surrogates	% Recovery	Recovery Limits	Flag						
1,2-Dichloroethane-d4	90.8	70-130							
Toluene-d8	100	70-130							
4-Bromofluorobenzene	90.0	70-130							



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Field Blank

Sampled: 11/17/2011 14:10

Sample ID: 11K0682-46

Sample Matrix: Water

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.30	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Acenaphthylene	ND	0.30	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Anthracene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Benzo(a)anthracene	ND	0.050	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Benzo(a)pyrene	ND	0.10	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Benzo(b)fluoranthene	ND	0.050	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Benzo(g,h,i)perylene	ND	0.50	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Benzo(k)fluoranthene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Chrysene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Dibenz(a,h)anthracene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Fluoranthene	ND	0.50	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Fluorene	ND	1.0	µg/L	1	R-05	SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Indeno(1,2,3-cd)pyrene	ND	0.20	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
2-Methylnaphthalene	ND	1.0	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Naphthalene	ND	1.0	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Phenanthrene	ND	0.050	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Pyrene	ND	1.0	µg/L	1		SW-846 8270D	11/22/11	11/25/11 3:14	CDT
Surrogates	% Recovery	Recovery Limits	Flag						
Nitrobenzene-d5	64.5	30-130							
2-Fluorobiphenyl	58.3	30-130							
Terphenyl-d14	56.2	30-130							

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Field Blank

Sampled: 11/17/2011 14:10

Sample ID: 11K0682-46

Sample Matrix: Water

## Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	11/21/11	11/22/11 12:33	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	11/21/11	11/22/11 12:33	KSH



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Trip Blank

Sampled: 11/17/2011 00:00

Sample ID: 11K0682-47

Sample Matrix: Trip Blank Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	8.0	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Acrylonitrile	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Benzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Bromobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Bromoform	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Bromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
2-Butanone (MEK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Carbon Disulfide	ND	10	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Carbon Tetrachloride	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Chlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Chloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Chloroform	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Chloromethane	ND	0.50	µg/L	1	L-03	SW-846 8260C	11/21/11	11/22/11 5:08	EEH
2-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
4-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Dibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,2-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,3-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,4-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,1-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,2-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,1-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
cis-1,2-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,2-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
2,2-Dichloropropane	ND	0.50	µg/L	1	L-03, V-05	SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Ethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Hexachlorobutadiene	ND	0.40	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
2-Hexanone (MBK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Isopropylbenzene (Cumene)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH



Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: Trip Blank

Sampled: 11/17/2011 00:00

Sample ID: 11K0682-47

Sample Matrix: Trip Blank Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
p-Isopropyltoluene (p-Cymene)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
4-Methyl-2-pentanone (MIBK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,2,3-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,1,2-Trichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,2,3-Trichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
Vinyl Chloride	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 5:08	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	91.0	70-130	11/22/11 5:08
Toluene-d8	101	70-130	11/22/11 5:08
4-Bromofluorobenzene	90.7	70-130	11/22/11 5:08



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-8405 \* TEL. 413/525-2332

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: MW-1

Sampled: 11/17/2011 14:45

Sample ID: 11K0682-48

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Acrylonitrile	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Benzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Bromobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Bromoform	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Bromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
2-Butanone (MEK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Carbon Disulfide	ND	10	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Carbon Tetrachloride	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Chlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Chloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Chloroform	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Chloromethane	ND	0.50	µg/L	1	L-03	SW-846 8260C	11/21/11	11/22/11 6:43	EEH
2-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
4-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Dibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,2-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,3-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,4-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,1-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,2-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,1-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
cis-1,2-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,2-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
2,2-Dichloropropane	ND	0.50	µg/L	1	L-03, V-05	SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Ethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Hexachlorobutadiene	ND	0.40	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
2-Hexanone (MBK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Isopropylbenzene (Cumene)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: MW-1

Sampled: 11/17/2011 14:45

Sample ID: 11K0682-48

Sample Matrix: Ground Water

## Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	11/21/11	11/22/11 12:36	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	11/21/11	11/22/11 12:36	KSH



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

Project Location: VA-Newington

Sample Description:

Work Order: 11K0682

Date Received: 11/18/2011

Field Sample #: MW-1

Sampled: 11/17/2011 14:45

Sample ID: 11K0682-48

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
p-Isopropyltoluene (p-Cymene)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
4-Methyl-2-pentanone (MIBK)	ND	5.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,2,3-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,1,2-Trichloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,2,3-Trichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Vinyl Chloride	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/21/11	11/22/11 6:43	EEH
Surrogates	% Recovery	Recovery Limits	Flag						
1,2-Dichloroethane-d4	91.1	70-130							
Toluene-d8	99.4	70-130							
4-Bromofluorobenzene	88.8	70-130							

### Sample Extraction Data

Prep Method: SW-846 3546-CTDEP ETPH

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
11K0682-36 [SB-1 (0.4ft-1.7ft)]	B041438	30.0	1.00	11/22/11
11K0682-38 [SB-2 (0.2ft-2.5ft)]	B041438	30.0	1.00	11/22/11
11K0682-40 [SB-3 (0.2ft-2.4ft)]	B041438	30.0	1.00	11/22/11
11K0682-41 [Duplicate-2]	B041438	30.0	1.00	11/22/11

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
11K0682-02 [GP-15A (2ft-3.5ft)]	B041437	11/22/11
11K0682-04 [GP-15A (1ft-2ft)]	B041437	11/22/11
11K0682-07 [GP-15D (2ft-3.3ft)]	B041437	11/22/11
11K0682-09 [GP-15C (1ft-2ft)]	B041437	11/22/11
11K0682-12 [GP-15B (1.2ft-2ft)]	B041437	11/22/11
11K0682-15 [GP-1D (1ft-1.6ft)]	B041437	11/22/11
11K0682-17 [GP-1C (0.2ft-1.5ft)]	B041437	11/22/11

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
11K0682-19 [GP-1B (0.5ft-1ft)]	B041585	11/27/11
11K0682-21 [GP-1A (0.2ft-1ft)]	B041585	11/27/11
11K0682-22 [Duplicate-1]	B041585	11/27/11
11K0682-25 [GP-7D (2.1ft-3.4ft)]	B041585	11/27/11
11K0682-27 [GP-7C (2ft-3ft)]	B041585	11/27/11
11K0682-29 [GP-7B (2ft-2.8ft)]	B041585	11/27/11
11K0682-32 [GP-7A (1.5ft-3ft)]	B041585	11/27/11
11K0682-33 [HA-1 (0ft-0.5ft)]	B041585	11/27/11
11K0682-34 [HA-2 (0ft-0.5ft)]	B041585	11/27/11
11K0682-35 [HA-3 (0ft-0.5ft)]	B041585	11/27/11
11K0682-36 [SB-1 (0.4ft-1.7ft)]	B041585	11/27/11
11K0682-38 [SB-2 (0.2ft-2.5ft)]	B041585	11/27/11
11K0682-40 [SB-3 (0.2ft-2.4ft)]	B041585	11/27/11
11K0682-41 [Duplicate-2]	B041585	11/27/11

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
11K0682-12 [GP-15B (1.2ft-2ft)]	B041401	1.03	50.0	11/22/11
11K0682-15 [GP-1D (1ft-1.6ft)]	B041401	1.03	50.0	11/22/11
11K0682-17 [GP-1C (0.2ft-1.5ft)]	B041401	1.03	50.0	11/22/11
11K0682-19 [GP-1B (0.5ft-1ft)]	B041401	1.03	50.0	11/22/11
11K0682-21 [GP-1A (0.2ft-1ft)]	B041401	1.02	50.0	11/22/11
11K0682-22 [Duplicate-1]	B041401	1.03	50.0	11/22/11
11K0682-25 [GP-7D (2.1ft-3.4ft)]	B041401	1.02	50.0	11/22/11
11K0682-27 [GP-7C (2ft-3ft)]	B041401	1.02	50.0	11/22/11
11K0682-29 [GP-7B (2ft-2.8ft)]	B041401	1.02	50.0	11/22/11
11K0682-32 [GP-7A (1.5ft-3ft)]	B041401	1.04	50.0	11/22/11
11K0682-33 [HA-1 (0ft-0.5ft)]	B041401	1.05	50.0	11/22/11
11K0682-34 [HA-2 (0ft-0.5ft)]	B041401	1.01	50.0	11/22/11
11K0682-35 [HA-3 (0ft-0.5ft)]	B041401	1.06	50.0	11/22/11
11K0682-36 [SB-1 (0.4ft-1.7ft)]	B041401	1.03	50.0	11/22/11

### Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
11K0682-02 [GP-15A (2ft-3.5ft)]	B041424	1.02	50.0	11/22/11
11K0682-04 [GP-15A (1ft-2ft)]	B041424	1.03	50.0	11/22/11
11K0682-07 [GP-15D (2ft-3.3ft)]	B041424	1.05	50.0	11/22/11
11K0682-09 [GP-15C (1ft-2ft)]	B041424	1.04	50.0	11/22/11
11K0682-38 [SB-2 (0.2ft-2.5ft)]	B041424	1.01	50.0	11/22/11
11K0682-40 [SB-3 (0.2ft-2.4ft)]	B041424	1.03	50.0	11/22/11

Prep Method: SW-846 3005A-SW-846 6020A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
11K0682-43 [MW-2]	B041365	50.0	50.0	11/21/11
11K0682-44 [Duplicate/GW]	B041365	50.0	50.0	11/21/11
11K0682-45 [MW-3]	B041365	50.0	50.0	11/21/11
11K0682-46 [Field Blank]	B041365	50.0	50.0	11/21/11
11K0682-48 [MW-1]	B041365	50.0	50.0	11/21/11

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
11K0682-36 [SB-1 (0.4ft-1.7ft)]	B041418	8.48	10.0	11/22/11
11K0682-38 [SB-2 (0.2ft-2.5ft)]	B041418	6.09	10.0	11/22/11
11K0682-40 [SB-3 (0.2ft-2.4ft)]	B041418	4.89	10.0	11/22/11
11K0682-41 [Duplicate-2]	B041418	5.35	10.0	11/22/11

Prep Method: SW-846 5030B-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
11K0682-43 [MW-2]	B041343	5	5.00	11/21/11
11K0682-44 [Duplicate/GW]	B041343	5	5.00	11/21/11
11K0682-45 [MW-3]	B041343	5	5.00	11/21/11
11K0682-46 [Field Blank]	B041343	5	5.00	11/21/11
11K0682-47 [Trip Blank]	B041343	5	5.00	11/21/11
11K0682-48 [MW-1]	B041343	5	5.00	11/21/11

Prep Method: SW-846 3546-SW-846 8270D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
11K0682-15 [GP-1D (1ft-1.6ft)]	B041590	30.1	1.00	11/28/11
11K0682-17 [GP-1C (0.2ft-1.5ft)]	B041590	30.2	1.00	11/28/11
11K0682-19 [GP-1B (0.5ft-1ft)]	B041590	30.2	1.00	11/28/11
11K0682-21 [GP-1A (0.2ft-1ft)]	B041590	30.1	1.00	11/28/11
11K0682-22 [Duplicate-1]	B041590	30.3	1.00	11/28/11
11K0682-25 [GP-7D (2.1ft-3.4ft)]	B041590	30.2	1.00	11/28/11
11K0682-27 [GP-7C (2ft-3ft)]	B041590	30.1	1.00	11/28/11
11K0682-29 [GP-7B (2ft-2.8ft)]	B041590	30.3	1.00	11/28/11
11K0682-32 [GP-7A (1.5ft-3ft)]	B041590	30.1	1.00	11/28/11
11K0682-36 [SB-1 (0.4ft-1.7ft)]	B041590	30.3	1.00	11/28/11
11K0682-38 [SB-2 (0.2ft-2.5ft)]	B041590	30.2	1.00	11/28/11
11K0682-40 [SB-3 (0.2ft-2.4ft)]	B041590	30.3	1.00	11/28/11

**Sample Extraction Data**

Prep Method: SW-846 3510C-SW-846 3270D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
11K0682-43 [MW-2]	B041482	1000	1.00	11/22/11
11K0682-44 [Duplicate/GW]	B041482	1000	1.00	11/22/11
11K0682-45 [MW-3]	B041482	1000	1.00	11/22/11
11K0682-46 [Field Blank]	B041482	1000	1.00	11/22/11

# 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 B041343 - SW-846 5030B										
Blank (B041343-BLK1)										
				Prepared: 11/21/11 Analyzed: 11/22/11						
Acetone	ND	5.0	µg/L							
Acrylonitrile	ND	2.0	µg/L							
Benzene	ND	0.50	µg/L							
Bromobenzene	ND	0.50	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	0.50	µg/L							
Bromomethane	ND	0.50	µg/L							
2-Butanone (MEK)	ND	5.0	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
Carbon Disulfide	ND	10	µg/L							
Carbon Tetrachloride	ND	0.50	µg/L							
Chlorobenzene	ND	0.50	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	0.50	µg/L							
Chloroform	ND	0.50	µg/L							
Chloromethane	ND	0.50	µg/L							L-03
2-Chlorotoluene	ND	0.50	µg/L							
4-Chlorotoluene	ND	0.50	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	0.50	µg/L							
1,2-Dichlorobenzene	ND	0.50	µg/L							
1,3-Dichlorobenzene	ND	0.50	µg/L							
1,4-Dichlorobenzene	ND	0.50	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	0.50	µg/L							
1,1-Dichloroethane	ND	0.50	µg/L							
1,2-Dichloroethane	ND	0.50	µg/L							
1,1-Dichloroethylene	ND	0.50	µg/L							
cis-1,2-Dichloroethylene	ND	0.50	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	0.50	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	0.50	µg/L							L-03, V-05
1,1-Dichloropropene	ND	0.50	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Ethylbenzene	ND	0.50	µg/L							
Hexachlorobutadiene	ND	0.40	µg/L							
2-Hexanone (MBK)	ND	5.0	µg/L							
Isopropylbenzene (Cumene)	ND	0.50	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	0.50	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	0.50	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	5.0	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							



### 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
<b>Batch B041343 - SW-846 5030B</b>										
<b>Blank (B041343-BLK1)</b>										
					Prepared: 11/21/11 Analyzed: 11/22/11					
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	0.50	µg/L							
1,2,4-Trichlorobenzene	ND	0.50	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	0.50	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	0.50	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	µg/L							
1,2,4-Trimethylbenzene	ND	0.50	µg/L							
1,3,5-Trimethylbenzene	ND	0.50	µg/L							
Vinyl Chloride	ND	1.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	22.4		µg/L	25.0		89.5	70-130			
Surrogate: Toluene-d8	24.9		µg/L	25.0		99.5	70-130			
Surrogate: 4-Bromofluorobenzene	22.2		µg/L	25.0		89.0	70-130			
<b>LCS (B041343-BS1)</b>										
					Prepared: 11/21/11 Analyzed: 11/22/11					
Acetone	102	5.0	µg/L	100		102	70-130			
Acrylonitrile	8.03	2.0	µg/L	10.0		80.3	70-130			
Benzene	10.7	0.50	µg/L	10.0		107	70-130			
Bromobenzene	9.77	0.50	µg/L	10.0		97.7	70-130			
Bromodichloromethane	9.61	0.50	µg/L	10.0		96.1	70-130			
Bromoform	8.73	0.50	µg/L	10.0		87.3	70-130			
Bromomethane	7.65	0.50	µg/L	10.0		76.5	70-130			
2-Butanone (MEK)	102	5.0	µg/L	100		102	70-130			
n-Butylbenzene	9.65	1.0	µg/L	10.0		96.5	70-130			
sec-Butylbenzene	10.0	1.0	µg/L	10.0		100	70-130			
tert-Butylbenzene	9.08	1.0	µg/L	10.0		90.8	70-130			
Carbon Disulfide	90.3	10	µg/L	100		90.3	70-130			
Carbon Tetrachloride	8.94	0.50	µg/L	10.0		89.4	70-130			
Chlorobenzene	9.71	0.50	µg/L	10.0		97.1	70-130			
Chlorodibromomethane	9.51	0.50	µg/L	10.0		95.1	70-130			
Chloroethane	8.09	0.50	µg/L	10.0		80.9	70-130			
Chloroform	10.4	0.50	µg/L	10.0		104	70-130			
Chloromethane	6.31	0.50	µg/L	10.0		63.1	70-130			L-03
2-Chlorotoluene	9.53	0.50	µg/L	10.0		95.3	70-130			
4-Chlorotoluene	9.28	0.50	µg/L	10.0		92.8	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.31	1.0	µg/L	10.0		93.1	70-130			
1,2-Dibromoethane (EDB)	11.8	0.50	µg/L	10.0		118	70-130			
Dibromomethane	10.3	0.50	µg/L	10.0		103	70-130			
1,2-Dichlorobenzene	9.89	0.50	µg/L	10.0		98.9	70-130			
1,3-Dichlorobenzene	9.77	0.50	µg/L	10.0		97.7	70-130			
1,4-Dichlorobenzene	9.94	0.50	µg/L	10.0		99.4	70-130			
trans-1,4-Dichloro-2-butene	8.08	2.0	µg/L	10.0		80.8	70-130			
Dichlorodifluoromethane (Freon 12)	9.37	0.50	µg/L	10.0		93.7	70-130			
1,1-Dichloroethane	8.10	0.50	µg/L	10.0		81.0	70-130			
1,2-Dichloroethane	8.40	0.50	µg/L	10.0		84.0	70-130			
1,1-Dichloroethylene	7.99	0.50	µg/L	10.0		79.9	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 B041343 - SW-846 5030B										
LCS (B041343-BS1)					Prepared: 11/21/11 Analyzed: 11/22/11					
cis-1,2-Dichloroethylene	7.91	0.50	µg/L	10.0		79.1	70-130			
trans-1,2-Dichloroethylene	8.22	1.0	µg/L	10.0		82.2	70-130			
1,2-Dichloropropane	9.79	0.50	µg/L	10.0		97.9	70-130			
1,3-Dichloropropane	10.8	0.50	µg/L	10.0		108	70-130			
2,2-Dichloropropane	6.58	0.50	µg/L	10.0		65.8	70-130			
1,1-Dichloropropene	9.69	0.50	µg/L	10.0		96.9	70-130			L-03, V-05
cis-1,3-Dichloropropene	9.51	0.50	µg/L	10.0		95.1	70-130			
trans-1,3-Dichloropropene	8.88	0.50	µg/L	10.0		88.8	70-130			
Ethylbenzene	9.42	0.50	µg/L	10.0		94.2	70-130			
Hexachlorobutadiene	8.37	0.40	µg/L	10.0		83.7	70-130			
2-Hexanone (MBK)	103	5.0	µg/L	100		103	70-130			
Isopropylbenzene (Cumene)	9.43	0.50	µg/L	10.0		94.3	70-130			
p-Isopropyltoluene (p-Cymene)	9.23	0.50	µg/L	10.0		92.3	70-130			
Methyl tert-Butyl Ether (MTBE)	8.83	0.50	µg/L	10.0		88.3	70-130			
Methylene Chloride	9.17	5.0	µg/L	10.0		91.7	70-130			
4-Methyl-2-pentanone (MIBK)	105	5.0	µg/L	100		105	70-130			
Naphthalene	10.6	2.0	µg/L	10.0		106	70-130			
n-Propylbenzene	9.65	1.0	µg/L	10.0		96.5	70-130			
Styrene	10.7	1.0	µg/L	10.0		107	70-130			
1,1,1,2-Tetrachloroethane	9.49	0.50	µg/L	10.0		94.9	70-130			
1,1,1,2,2-Tetrachloroethane	11.2	0.50	µg/L	10.0		112	70-130			
Tetrachloroethylene	10.3	1.0	µg/L	10.0		103	70-130			
Tetrahydrofuran	9.89	10	µg/L	10.0		98.9	70-130			
Toluene	10.2	1.0	µg/L	10.0		102	70-130			
1,2,3-Trichlorobenzene	10.0	0.50	µg/L	10.0		100	70-130			
1,2,4-Trichlorobenzene	9.55	0.50	µg/L	10.0		95.5	70-130			
1,1,1-Trichloroethane	9.64	1.0	µg/L	10.0		96.4	70-130			
1,1,2-Trichloroethane	11.3	0.50	µg/L	10.0		113	70-130			
Trichloroethylene	9.72	1.0	µg/L	10.0		97.2	70-130			
Trichlorofluoromethane (Freon 11)	9.53	2.0	µg/L	10.0		95.3	70-130			
1,2,3-Trichloropropane	10.6	0.50	µg/L	10.0		106	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.15	0.50	µg/L	10.0		91.5	70-130			
1,2,4-Trimethylbenzene	10.4	0.50	µg/L	10.0		104	70-130			
1,3,5-Trimethylbenzene	10.2	0.50	µg/L	10.0		102	70-130			
Vinyl Chloride	7.62	1.0	µg/L	10.0		76.2	70-130			
m+p Xylene	18.8	2.0	µg/L	20.0		94.0	70-130			
o-Xylene	8.99	1.0	µg/L	10.0		89.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	21.4		µg/L	25.0		85.8	70-130			
Surrogate: Toluene-d8	26.2		µg/L	25.0		105	70-130			
Surrogate: 4-Bromofluorobenzene	24.5		µg/L	25.0		98.0	70-130			

#### Batch B041418 - SW-846 5035

Blank (B041418-BLK1)				Prepared & Analyzed: 11/22/11						
Acetone	ND	0.10	mg/Kg wet							
Acrylonitrile	ND	0.0060	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	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							
2-Butanone (MEK)	ND	0.040	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 Limit	Notes
Batch B041418 - SW-846 5035										
Blank (B041418-BLK1)										
Prepared & Analyzed: 11/22/11										
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	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	0.020	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							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							V-05
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							
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							
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	0.020	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							V-16
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							

### 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 B041418 - SW-846 5035										
Blank (B041418-BLK1) Prepared & Analyzed: 11/22/11										
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	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							L-03
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0577		mg/Kg wet	0.0500		115	70-130			
Surrogate: Toluene-d8	0.0513		mg/Kg wet	0.0500		103	70-130			
Surrogate: 4-Bromofluorobenzene	0.0464		mg/Kg wet	0.0500		92.8	70-130			
LCS (B041418-BS1) Prepared & Analyzed: 11/22/11										
Acetone	0.218	0.10	mg/Kg wet	0.200		109	70-130			
Acrylonitrile	0.0157	0.0060	mg/Kg wet	0.0200		78.4	70-130			
Benzene	0.0172	0.0020	mg/Kg wet	0.0200		85.8	70-130			
Bromobenzene	0.0195	0.0020	mg/Kg wet	0.0200		97.3	70-130			
Bromodichloromethane	0.0189	0.0020	mg/Kg wet	0.0200		94.7	70-130			
Bromoform	0.0200	0.0020	mg/Kg wet	0.0200		99.9	70-130			
Bromomethane	0.0158	0.010	mg/Kg wet	0.0200		79.1	70-130			
2-Butanone (MEK)	0.173	0.040	mg/Kg wet	0.200		86.5	70-130			
n-Butylbenzene	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130			
sec-Butylbenzene	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130			
tert-Butylbenzene	0.0219	0.0020	mg/Kg wet	0.0200		109	70-130			
Carbon Disulfide	0.0190	0.0060	mg/Kg wet	0.0200		95.0	70-130			
Carbon Tetrachloride	0.0195	0.0020	mg/Kg wet	0.0200		97.4	70-130			
Chlorobenzene	0.0182	0.0020	mg/Kg wet	0.0200		91.0	70-130			
Chlorodibromomethane	0.0190	0.0010	mg/Kg wet	0.0200		94.9	70-130			
Chloroethane	0.0179	0.020	mg/Kg wet	0.0200		89.6	70-130			
Chloroform	0.0193	0.0040	mg/Kg wet	0.0200		96.3	70-130			
Chloromethane	0.0163	0.010	mg/Kg wet	0.0200		81.6	70-130			
2-Chlorotoluene	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-130			
4-Chlorotoluene	0.0207	0.0020	mg/Kg wet	0.0200		103	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0255	0.0020	mg/Kg wet	0.0200		128	70-130			V-20
1,2-Dibromoethane (EDB)	0.0191	0.0010	mg/Kg wet	0.0200		95.3	70-130			
Dibromomethane	0.0190	0.0020	mg/Kg wet	0.0200		95.0	70-130			
1,2-Dichlorobenzene	0.0215	0.0020	mg/Kg wet	0.0200		107	70-130			
1,3-Dichlorobenzene	0.0211	0.0020	mg/Kg wet	0.0200		105	70-130			
1,4-Dichlorobenzene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
trans-1,4-Dichloro-2-butene	0.0180	0.0040	mg/Kg wet	0.0200		90.2	70-130			
Dichlorodifluoromethane (Freon 12)	0.0174	0.020	mg/Kg wet	0.0200		86.9	70-130			V-05
1,1-Dichloroethane	0.0189	0.0020	mg/Kg wet	0.0200		94.7	70-130			
1,2-Dichloroethane	0.0217	0.0020	mg/Kg wet	0.0200		109	70-130			
1,1-Dichloroethylene	0.0201	0.0040	mg/Kg wet	0.0200		101	70-130			
cis-1,2-Dichloroethylene	0.0182	0.0020	mg/Kg wet	0.0200		90.8	70-130			
trans-1,2-Dichloroethylene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
1,2-Dichloropropane	0.0179	0.0020	mg/Kg wet	0.0200		89.3	70-130			
1,3-Dichloropropane	0.0183	0.0010	mg/Kg wet	0.0200		91.6	70-130			
2,2-Dichloropropane	0.0188	0.0020	mg/Kg wet	0.0200		93.9	70-130			
1,1-Dichloropropene	0.0175	0.0020	mg/Kg wet	0.0200		87.5	70-130			
cis-1,3-Dichloropropene	0.0186	0.0010	mg/Kg wet	0.0200		92.8	70-130			
trans-1,3-Dichloropropene	0.0212	0.0010	mg/Kg wet	0.0200		106	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 B041418 - SW-846 5035										
LCS (B041418-BS1)				Prepared & Analyzed: 11/22/11						
Ethylbenzene	0.0191	0.0020	mg/Kg wet	0.0200		95.7	70-130			
Hexachlorobutadiene	0.0223	0.0020	mg/Kg wet	0.0200		111	70-130			
2-Hexanone (MBK)	0.186	0.020	mg/Kg wet	0.200		93.2	70-130			
Isopropylbenzene (Cumene)	0.0220	0.0020	mg/Kg wet	0.0200		110	70-130			
p-Isopropyltoluene (p-Cymene)	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130			
Methyl tert-Butyl Ether (MTBE)	0.0184	0.0040	mg/Kg wet	0.0200		91.9	70-130			
Methylene Chloride	0.0209	0.020	mg/Kg wet	0.0200		105	70-130			
4-Methyl-2-pentanone (MIBK)	0.180	0.020	mg/Kg wet	0.200		90.1	70-130			
Naphthalene	0.0188	0.0040	mg/Kg wet	0.0200		93.9	70-130			
n-Propylbenzene	0.0196	0.0020	mg/Kg wet	0.0200		97.9	70-130			
Styrene	0.0191	0.0020	mg/Kg wet	0.0200		95.6	70-130			
1,1,1,2-Tetrachloroethane	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130			
1,1,2,2-Tetrachloroethane	0.0175	0.0010	mg/Kg wet	0.0200		87.3	70-130			
Tetrachloroethylene	0.0193	0.0020	mg/Kg wet	0.0200		96.5	70-130			
Tetrahydrofuran	0.0154	0.010	mg/Kg wet	0.0200		76.8	70-130			V-16
Toluene	0.0175	0.0020	mg/Kg wet	0.0200		87.3	70-130			
1,2,3-Trichlorobenzene	0.0217	0.0020	mg/Kg wet	0.0200		109	70-130			
1,2,4-Trichlorobenzene	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130			
1,1,1-Trichloroethane	0.0200	0.0020	mg/Kg wet	0.0200		99.8	70-130			
1,1,2-Trichloroethane	0.0177	0.0020	mg/Kg wet	0.0200		88.3	70-130			
Trichloroethylene	0.0191	0.0020	mg/Kg wet	0.0200		95.6	70-130			
Trichlorofluoromethane (Freon 11)	0.0190	0.010	mg/Kg wet	0.0200		94.9	70-130			
1,2,3-Trichloropropane	0.0171	0.0020	mg/Kg wet	0.0200		85.5	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0196	0.010	mg/Kg wet	0.0200		98.2	70-130			
1,2,4-Trimethylbenzene	0.0215	0.0020	mg/Kg wet	0.0200		108	70-130			
1,3,5-Trimethylbenzene	0.0193	0.0020	mg/Kg wet	0.0200		96.3	70-130			
Vinyl Chloride	0.0128	0.010	mg/Kg wet	0.0200		64.1	70-130			L-03
m+p Xylene	0.0407	0.0040	mg/Kg wet	0.0400		102	70-130			
o-Xylene	0.0199	0.0020	mg/Kg wet	0.0200		99.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0589		mg/Kg wet	0.0500		118	70-130			
Surrogate: Toluene-d8	0.0503		mg/Kg wet	0.0500		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.0466		mg/Kg wet	0.0500		93.2	70-130			

## QUALITY CONTROL

## Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B041482 - SW-846 3510C										
Blank (B041482-BLK1) Prepared: 11/22/11 Analyzed: 11/23/11										
Acenaphthene	ND	0.30	µg/L							
Acenaphthylene	ND	0.30	µg/L							
Anthracene	ND	0.20	µg/L							
Benzo(a)anthracene	ND	0.050	µg/L							
Benzo(a)pyrene	ND	0.10	µg/L							
Benzo(b)fluoranthene	ND	0.050	µg/L							
Benzo(g,h,i)perylene	ND	0.50	µg/L							
Benzo(k)fluoranthene	ND	0.20	µg/L							
Chrysene	ND	0.20	µg/L							
Dibenz(a,h)anthracene	ND	0.20	µg/L							
Fluoranthene	ND	0.50	µg/L							
Fluorene	ND	1.0	µg/L							R-05
Indeno(1,2,3-cd)pyrene	ND	0.20	µg/L							
2-Methylnaphthalene	ND	1.0	µg/L							
Naphthalene	ND	1.0	µg/L							
Phenanthrene	ND	0.050	µg/L							
Pyrene	ND	1.0	µg/L							
Surrogate: Nitrobenzene-d5	67.0		µg/L	100		67.0	30-130			
Surrogate: 2-Fluorobiphenyl	67.0		µg/L	100		67.0	30-130			
Surrogate: Terphenyl-d14	78.5		µg/L	100		78.5	30-130			
LCS (B041482-BS1) Prepared: 11/22/11 Analyzed: 11/23/11										
Acenaphthene	79.0	0.30	µg/L	100		79.0	40-140			
Acenaphthylene	73.8	0.30	µg/L	100		73.8	40-140			
Anthracene	80.4	0.20	µg/L	100		80.4	40-140			
Benzo(a)anthracene	86.3	0.050	µg/L	100		86.3	40-140			
Benzo(a)pyrene	82.7	0.10	µg/L	100		82.7	40-140			
Benzo(b)fluoranthene	88.1	0.050	µg/L	100		88.1	40-140			
Benzo(g,h,i)perylene	77.1	0.50	µg/L	100		77.1	40-140			
Benzo(k)fluoranthene	77.8	0.20	µg/L	100		77.8	40-140			
Chrysene	81.0	0.20	µg/L	100		81.0	40-140			
Dibenz(a,h)anthracene	84.4	0.20	µg/L	100		84.4	40-140			
Fluoranthene	93.4	0.50	µg/L	100		93.4	40-140			
Fluorene	79.1	1.0	µg/L	100		79.1	40-140			R-05
Indeno(1,2,3-cd)pyrene	84.1	0.20	µg/L	100		84.1	40-140			
2-Methylnaphthalene	82.4	1.0	µg/L	100		82.4	40-140			
Naphthalene	78.6	1.0	µg/L	100		78.6	40-140			
Phenanthrene	80.1	0.050	µg/L	100		80.1	40-140			
Pyrene	92.1	1.0	µg/L	100		92.1	40-140			
Surrogate: Nitrobenzene-d5	75.9		µg/L	100		75.9	30-130			
Surrogate: 2-Fluorobiphenyl	73.8		µg/L	100		73.8	30-130			
Surrogate: Terphenyl-d14	95.9		µg/L	100		95.9	30-130			

## QUALITY CONTROL

## Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B041482 - SW-846 3510C										
LCS Dup (B041482-BSD1)				Prepared: 11/22/11 Analyzed: 11/23/11						
Acenaphthene	85.6	0.30	µg/L	100		85.6	40-140	8.12	20	
Acenaphthylene	81.0	0.30	µg/L	100		81.0	40-140	9.28	20	
Anthracene	82.3	0.20	µg/L	100		82.3	40-140	2.32	20	
Benzo(a)anthracene	86.3	0.050	µg/L	100		86.3	40-140	0.00	50	
Benzo(a)pyrene	84.6	0.10	µg/L	100		84.6	40-140	2.33	20	
Benzo(b)fluoranthene	89.9	0.050	µg/L	100		89.9	40-140	2.02	20	
Benzo(g,h,i)perylene	76.9	0.50	µg/L	100		76.9	40-140	0.273	20	
Benzo(k)fluoranthene	77.7	0.20	µg/L	100		77.7	40-140	0.0386	20	
Chrysene	83.1	0.20	µg/L	100		83.1	40-140	2.54	20	
Dibenz(a,h)anthracene	84.8	0.20	µg/L	100		84.8	40-140	0.520	20	
Fluoranthene	93.6	0.50	µg/L	100		93.6	40-140	0.182	20	
Fluorene	110	1.0	µg/L	100		110	40-140	32.4 *	20	R-05
Indeno(1,2,3-cd)pyrene	85.0	0.20	µg/L	100		85.0	40-140	1.08	50	‡
2-Methylnaphthalene	95.0	1.0	µg/L	100		95.0	40-140	14.3	20	
Naphthalene	92.6	1.0	µg/L	100		92.6	40-140	16.3	20	
Phenanthrene	81.8	0.050	µg/L	100		81.8	40-140	2.14	20	
Pyrene	92.9	1.0	µg/L	100		92.9	40-140	0.854	20	
Surrogate: Nitrobenzene-d5	100		µg/L	100		100	30-130			
Surrogate: 2-Fluorobiphenyl	87.7		µg/L	100		87.7	30-130			
Surrogate: Terphenyl-d14	94.3		µg/L	100		94.3	30-130			

## Batch B041590 - SW-846 3546

Blank (B041590-BLK1)				Prepared & Analyzed: 11/28/11						
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
Phenanthrene	ND	0.17	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
Surrogate: Nitrobenzene-d5	2.58		mg/Kg wet	3.33		77.5	30-130			
Surrogate: 2-Fluorobiphenyl	2.84		mg/Kg wet	3.33		85.1	30-130			
Surrogate: Terphenyl-d14	2.80		mg/Kg wet	3.33		84.0	30-130			

### QUALITY CONTROL

#### Semivolatile 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 B041590 - SW-846 3546

#### LCS (B041590-BS1)

Prepared: 11/28/11 Analyzed: 11/29/11

Acenaphthene	1.30	0.17	mg/Kg wet	1.67		78.2	40-140			
Acenaphthylene	1.30	0.17	mg/Kg wet	1.67		78.2	40-140			
Anthracene	1.37	0.17	mg/Kg wet	1.67		82.4	40-140			
Benzo(a)anthracene	1.39	0.17	mg/Kg wet	1.67		83.1	40-140			
Benzo(a)pyrene	1.47	0.17	mg/Kg wet	1.67		88.1	40-140			
Benzo(b)fluoranthene	1.32	0.17	mg/Kg wet	1.67		79.1	40-140			
Benzo(g,h,i)perylene	1.89	0.17	mg/Kg wet	1.67		113	40-140			
Benzo(k)fluoranthene	1.39	0.17	mg/Kg wet	1.67		83.3	40-140			
Chrysene	1.37	0.17	mg/Kg wet	1.67		82.0	40-140			
Dibenz(a,h)anthracene	1.59	0.17	mg/Kg wet	1.67		95.3	40-140			
Fluoranthene	1.33	0.17	mg/Kg wet	1.67		79.9	40-140			
Fluorene	1.38	0.17	mg/Kg wet	1.67		82.9	40-140			
Indeno(1,2,3-cd)pyrene	1.62	0.17	mg/Kg wet	1.67		97.0	40-140			
2-Methylnaphthalene	1.21	0.17	mg/Kg wet	1.67		72.4	40-140			
Naphthalene	1.24	0.17	mg/Kg wet	1.67		74.3	40-140			
Phenanthrene	1.38	0.17	mg/Kg wet	1.67		82.7	40-140			
Pyrene	1.20	0.17	mg/Kg wet	1.67		71.8	40-140			
Surrogate: Nitrobenzene-d5	2.56		mg/Kg wet	3.33		76.9	30-130			
Surrogate: 2-Fluorobiphenyl	2.75		mg/Kg wet	3.33		82.6	30-130			
Surrogate: Terphenyl-d14	2.72		mg/Kg wet	3.33		81.6	30-130			

#### LCS Dup (B041590-BSD1)

Prepared & Analyzed: 11/28/11

Acenaphthene	1.32	0.17	mg/Kg wet	1.67		78.9	40-140	0.840	30	
Acenaphthylene	1.33	0.17	mg/Kg wet	1.67		79.8	40-140	1.92	30	
Anthracene	1.37	0.17	mg/Kg wet	1.67		82.5	40-140	0.0485	30	
Benzo(a)anthracene	1.36	0.17	mg/Kg wet	1.67		81.8	40-140	1.63	30	
Benzo(a)pyrene	1.39	0.17	mg/Kg wet	1.67		83.6	40-140	5.29	30	
Benzo(h)fluoranthene	1.19	0.17	mg/Kg wet	1.67		71.6	40-140	10.0	30	
Benzo(g,h,i)perylene	1.56	0.17	mg/Kg wet	1.67		93.6	40-140	19.1	30	
Benzo(k)fluoranthene	1.27	0.17	mg/Kg wet	1.67		76.0	40-140	9.14	30	
Chrysene	1.38	0.17	mg/Kg wet	1.67		82.6	40-140	0.802	30	
Dibenz(a,h)anthracene	1.46	0.17	mg/Kg wet	1.67		87.5	40-140	8.51	30	
Fluoranthene	1.12	0.17	mg/Kg wet	1.67		67.1	40-140	17.3	30	
Fluorene	1.51	0.17	mg/Kg wet	1.67		90.4	40-140	8.61	30	
Indeno(1,2,3-cd)pyrene	1.38	0.17	mg/Kg wet	1.67		82.8	40-140	15.8	30	
2-Methylnaphthalene	1.24	0.17	mg/Kg wet	1.67		74.1	40-140	2.38	30	
Naphthalene	1.26	0.17	mg/Kg wet	1.67		75.6	40-140	1.63	30	
Phenanthrene	1.40	0.17	mg/Kg wet	1.67		83.9	40-140	1.37	30	
Pyrene	1.44	0.17	mg/Kg wet	1.67		86.2	40-140	18.2	30	
Surrogate: Nitrobenzene-d5	2.57		mg/Kg wet	3.33		77.0	30-130			
Surrogate: 2-Fluorobiphenyl	2.70		mg/Kg wet	3.33		81.1	30-130			
Surrogate: Terphenyl-d14	3.30		mg/Kg wet	3.33		99.0	30-130			



# QUALITY CONTROL

## Petroleum Hydrocarbons Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B041438 - SW-846 3546										
Blank (B041438-BLK1)					Prepared: 11/22/11 Analyzed: 11/23/11					
CT ETPH	ND	10	mg/Kg wet							
Surrogate: o-Terphenyl	2.89		mg/Kg wet	3.33		86.7	50-150			
LCS (B041438-BS1)					Prepared: 11/22/11 Analyzed: 11/23/11					
CT ETPH	30.8	10	mg/Kg wet	33.3		92.5	60-120			
Surrogate: o-Terphenyl	3.08		mg/Kg wet	3.33		92.5	50-150			
LCS Dup (B041438-BSD1)					Prepared: 11/22/11 Analyzed: 11/23/11					
CT ETPH	29.3	10	mg/Kg wet	33.3		87.8	60-120	5.22	30	
Surrogate: o-Terphenyl	2.87		mg/Kg wet	3.33		86.0	50-150			
Matrix Spike (B041438-MS1)					Source: 11K0682-40 Prepared: 11/22/11 Analyzed: 11/23/11					
CT ETPH	55.6	12	mg/Kg dry	40.7	42.3	32.7 *	50-150			MS-22
Surrogate: o-Terphenyl	2.53		mg/Kg dry	4.07		62.2	50-150			
Matrix Spike Dup (B041438-MSD1)					Source: 11K0682-40 Prepared: 11/22/11 Analyzed: 11/23/11					
CT ETPH	66.4	12	mg/Kg dry	40.7	42.3	59.3	50-150	17.7	30	
Surrogate: o-Terphenyl	2.40		mg/Kg dry	4.07		58.8	50-150			

## QUALITY CONTROL

## Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B041365 - SW-846 3005A</b>										
<b>Blank (B041365-BLK1)</b>				Prepared: 11/21/11 Analyzed: 11/22/11						
Arsenic	ND	2.0	µg/L							
Lead	ND	5.0	µg/L							
<b>LCS (B041365-BS1)</b>				Prepared: 11/21/11 Analyzed: 11/22/11						
Arsenic	261	2.0	µg/L	250		104	80-120			
Lead	274	5.0	µg/L	250		110	80-120			
<b>LCS Dup (B041365-BSD1)</b>				Prepared: 11/21/11 Analyzed: 11/22/11						
Arsenic	260	2.0	µg/L	250		104	80-120	0.0417	20	
Lead	267	5.0	µg/L	250		107	80-120	2.64	20	
<b>Batch B041401 - SW-846 3050B</b>										
<b>Blank (B041401-BLK1)</b>				Prepared: 11/22/11 Analyzed: 11/23/11						
Arsenic	ND	2.5	mg/Kg wet							
Lead	ND	0.75	mg/Kg wet							
<b>LCS (B041401-BS1)</b>				Prepared: 11/22/11 Analyzed: 11/23/11						
Arsenic	110	5.0	mg/Kg wet	109		101	83.2-117.4			
Lead	76.2	1.5	mg/Kg wet	76.2		100	70.7-129			
<b>LCS (B041401-BS2)</b>				Prepared: 11/22/11 Analyzed: 11/23/11						
Lead	0.857	0.74	mg/Kg wet	0.740		116	80-120			
<b>LCS Dup (B041401-BSD1)</b>				Prepared: 11/22/11 Analyzed: 11/23/11						
Arsenic	111	5.0	mg/Kg wet	109		102	83.2-117.4	0.690	30	
Lead	76.0	1.5	mg/Kg wet	76.2		99.7	70.7-129	0.378	30	
<b>Duplicate (B041401-DUP1)</b>				Source: 11K0682-33 Prepared: 11/22/11 Analyzed: 11/23/11						
Arsenic	ND	3.5	mg/Kg dry		ND			NC	35	
Lead	92.3	1.0	mg/Kg dry		82.3			11.5	35	
<b>Matrix Spike (B041401-MS1)</b>				Source: 11K0682-33 Prepared: 11/22/11 Analyzed: 11/23/11						
Arsenic	29.4	3.6	mg/Kg dry	36.1	ND	81.4	75-125			
Lead	128	1.1	mg/Kg dry	36.1	82.3	127 *	75-125			MS-11
<b>Batch B041424 - SW-846 3050B</b>										
<b>Blank (B041424-BLK1)</b>				Prepared: 11/22/11 Analyzed: 11/23/11						
Arsenic	ND	2.5	mg/Kg wet							
Lead	ND	0.75	mg/Kg wet							

# QUALITY CONTROL

## Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B041424 - SW-846 3050B										
LCS (B041424-BS1)					Prepared: 11/22/11 Analyzed: 11/23/11					
Arsenic	115	5.0	mg/Kg wet	109		105	83.2-117.4			
Lead	71.3	1.5	mg/Kg wet	76.2		93.6	70.7-129			
LCS (B041424-BS2)					Prepared: 11/22/11 Analyzed: 11/28/11					
Lead	0.826	0.75	mg/Kg wet	0.747		111	80-120			
LCS Dup (B041424-BSD1)					Prepared: 11/22/11 Analyzed: 11/23/11					
Arsenic	104	5.0	mg/Kg wet	109		95.7	83.2-117.4	9.48	30	
Lead	68.0	1.5	mg/Kg wet	76.2		89.2	70.7-129	4.75	30	

# QUALITY CONTROL

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
<b>Batch B041585 - % Solids</b>								
<b>Duplicate (B041585-DUP3)</b>		<b>Source: 11K0682-41</b>		Prepared: 11/27/11 Analyzed: 11/28/11				
% Solids	81.8		% Wt		81.1		0.859	20
<b>Duplicate (B041585-DUP4)</b>		<b>Source: 11K0682-19</b>		Prepared: 11/27/11 Analyzed: 11/28/11				
% Solids	89.9		% Wt		88.8		1.23	20

## 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.
L-03	Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.
MS-11	Matrix spike recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
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 are 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
<i>CTDEP ETPH in Soil</i>	
CT ETPH	CT
<i>SW-846 6010C in Soil</i>	
Arsenic	CT,NH,NY,ME,NC
Lead	CT,NH,NY,AIHA,ME,NC
<i>SW-846 6020A in Water</i>	
Arsenic	CT,NH,NY,RI,NC,ME
Lead	CT,NH,NY,RI,NC,ME
<i>SW-846 8260C in Soil</i>	
Acetone	CT,NH,NY,ME
Acrylonitrile	CT,NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	CT,NH,NY,ME
sec-Butylbenzene	CT,NH,NY,ME
tert-Butylbenzene	CT,NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
2-Chlorotoluene	CT,NH,NY,ME
4-Chlorotoluene	CT,NH,NY,ME
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NH,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
1,4-Dichlorobenzene	CT,NH,NY,ME
Dichlorodifluoromethane (Freon 12)	NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	CT,NH,NY,ME
1,1-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	CT,NH,NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,3-Dichloropropane	NH,NY,ME
2,2-Dichloropropane	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
Ethylbenzene	CT,NH,NY,ME
Hexachlorobutadiene	NH,NY,ME

# CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Soil</i>	
2-Hexanone (MBK)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	CT,NH,NY,ME
Methylene Chloride	CT,NH,NY,ME
4-Methyl-2-pentanone (MIBK)	CT,NH,NY
Naphthalene	NH,NY,ME
Styrene	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME
Tetrachloroethylene	CT,NH,NY,ME
Toluene	CT,NH,NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME
1,1,2-Trichloroethane	CT,NH,NY,ME
Trichloroethylene	CT,NH,NY,ME
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME
1,2,3-Trichloropropane	NH,NY,ME
1,2,4-Trimethylbenzene	CT,NH,NY,ME
1,3,5-Trimethylbenzene	CT,NH,NY,ME
Vinyl Chloride	CT,NH,NY,ME
m+p Xylene	CT,NH,NY,ME
o-Xylene	CT,NH,NY,ME
<i>SW-846 8260C in Water</i>	
Acetone	CT,NH,NY,ME
Acrylonitrile	CT,NY,ME,RI
Benzene	CT,NH,NY,ME,RI
Bromodichloromethane	CT,NH,NY,ME,RI
Bromoform	CT,NH,NY,ME,RI
Bromomethane	CT,NH,NY,ME,RI
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	NY,ME
sec-Butylbenzene	NY,ME
tert-Butylbenzene	NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME,RI
Chlorobenzene	CT,NH,NY,ME,RI
Chlorodibromomethane	CT,NH,NY,ME,RI
Chloroethane	CT,NH,NY,ME,RI
Chloroform	CT,NH,NY,ME,RI
Chloromethane	CT,NH,NY,ME,RI
2-Chlorotoluene	NY,ME
4-Chlorotoluene	NY,ME
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NY,ME,RI
1,3-Dichlorobenzene	CT,NH,NY,ME,RI
1,4-Dichlorobenzene	CT,NH,NY,ME,RI
trans-1,4-Dichloro-2-butene	NH,NY,ME

## CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
Dichlorodifluoromethane (Freon 12)	NH,NY,ME,RI
1,1-Dichloroethane	CT,NH,NY,ME,RI
1,2-Dichloroethane	CT,NH,NY,ME,RI
1,1-Dichloroethylene	CT,NH,NY,ME,RI
cis-1,2-Dichloroethylene	ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME,RI
1,2-Dichloropropane	CT,NH,NY,ME,RI
1,3-Dichloropropane	NY,ME
2,2-Dichloropropane	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME
cis-1,3-Dichloropropene	CT,NH,NY,ME,RI
trans-1,3-Dichloropropene	CT,NH,NY,ME,RI
Ethylbenzene	CT,NH,NY,ME,RI
Hexachlorobutadiene	CT,NH,NY,ME
2-Hexanone (MBK)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	NY,ME
p-Isopropyltoluene (p-Cymene)	CT,NH,NY,ME
Methyl tert-Butyl Ether (MTBE)	CT,NH,NY,ME
Methylene Chloride	CT,NH,NY,ME,RI
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,ME
Naphthalene	NH,NY,ME
n-Propylbenzene	CT,NH,NY,ME
Styrene	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME,RI
Tetrachloroethylene	CT,NH,NY,ME,RI
Toluene	CT,NH,NY,ME,RI
1,2,3-Trichlorobenzene	NH,NY,ME
1,2,4-Trichlorobenzene	CT,NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME,RI
1,1,2-Trichloroethane	CT,NH,NY,ME,RI
Trichloroethylene	CT,NH,NY,ME,RI
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME,RI
1,2,3-Trichloropropane	NH,NY,ME
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NY
1,2,4-Trimethylbenzene	NY,ME
1,3,5-Trimethylbenzene	NY,ME
Vinyl Chloride	CT,NH,NY,ME,RI
m+p Xylene	CT,NH,NY,ME,RI
o-Xylene	CT,NH,NY,ME,RI
<i>SW-846 8270D in Soil</i>	
Acenaphthene	CT,NY,NH,ME,NC
Acenaphthylene	CT,NY,NH,ME,NC
Anthracene	CT,NY,NH,ME,NC
Benzo(a)anthracene	CT,NY,NH,ME,NC
Benzo(a)pyrene	CT,NY,NH,ME,NC



# con-test

ANALYTICAL LABORATORY

Phone: 413-525-2332  
Fax: 413-525-6405  
Email: info@contestlabs.com  
www.contestlabs.com

## CHAIN OF CUSTODY RECORD

39 Spruce Street  
East Longmeadow, MA 01028

Page 1 of 5

Company Name: Diversified Technology Consultants

Telephone: 203-239-4200

Address: 232 Whitney Ave

Project # 11-358-200

Attention: Joy Kloss

Client PO#

DATA DELIVERY (check all that apply)

☐ FAX ☒ EMAIL ☐ WEBSITE

Project Location: VA-DeWinston

Fax # 203-239-4200

Sampled By: Jean Vosler

Email: joy.kloss@diversified.com

Format: ☒ OF ☐ EXCEL ☐ OGIS

Project Proposal Provided? (for billing purposes)  
☒ Yes ☐ No  
proposal date 10/25/11

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix	Run Date	Analysis Requested	# of Containers	** Preservation	** Container Code
01	GP-15A 0.3-2'	11/17	0805		*	S	U				
02	GP-15A 2-3.5'	11/17	0809		*	S	U				
03	GP-15 0.2-1'	11/17	0812		*	S	U				
04	GP-15 1-2'	11/17	0815		*	S	U				
05	GP-15 2-3'	11/17	0818		*	S	U				
06	GP-15D 0.2-2'	11/17	0824		*	S	U				
07	GP-15D 2-3.3'	11/17	0827		*	S	U				
08	GP-15C 0.2-1'	11/17	0835		*	S	U				
09	GP-15C 1-2'	11/17	0838		*	S	U				
10	GP-15C 2-3'	11/17	0840		*	S	U				

11-13-11 16:20 IN

11-18-11 16:12 IN MKC

H - High; M - Medium; L - Low; C - Clean; U - Unknown

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:

Relinquished by (signature) Joy Kloss Date/Time: 11/18 0900

Turnaround ☐ 7-Day ☐ 10-Day ☒ Rush ☐ 14-Day ☐ 14-Day

Detection Limit Requirements: Massachusetts:

Is your project MCP or RCP? ☐ MCP Analytical Certification Form Required ☒ RCP Analysis Certification Form Required

MA State DW Form Required PW/SID #         

Relinquished by (signature) Joy Kloss Date/Time: 11/18 1340

Relinquished by (signature) Joy Kloss Date/Time: 11/18 1540

Received by (signature) Joy Kloss Date/Time: 11/18 1500

Require lab approval ☐ Other: Res DEC SA PMC GW/SCPC

NEIAC & AIHA Certified

WB/DBE Certified

ACCREDITED IN ACCORDANCE WITH

AIHA

NEIAC

TURNAROUND TIME (business days) STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS UNLESS THERE ARE QUESTIONS ARE ANSWERED. COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED. PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

# CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8270D in Soil</i>	
Benzo(b)fluoranthene	CT,NY,NH,ME,NC
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC
Benzo(k)fluoranthene	CT,NY,NH,ME,NC
Chrysene	CT,NY,NH,ME,NC
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC
Fluoranthene	CT,NY,NH,ME,NC
Fluorene	CT,NY,NH,ME,NC
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC
2-Methylnaphthalene	CT,NY,NH,ME,NC
Naphthalene	CT,NY,NH,ME,NC
Phenanthrene	CT,NY,NH,ME,NC
Pyrene	CT,NY,NH,ME,NC

## *SW-846 8270D in Water*

Acenaphthene	NY,CT,NH
Acenaphthylene	NY,CT,NH
Anthracene	NY,CT,NH
Benzo(a)anthracene	NY,CT,NH
Benzo(a)pyrene	NY,CT,NH
Benzo(b)fluoranthene	NY,CT,NH
Benzo(g,h,i)perylene	NY,CT,NH
Benzo(k)fluoranthene	NY,CT,NH
Chrysene	NY,CT,NH
Dibenz(a,h)anthracene	NY,CT,NH
Fluoranthene	NY,CT,NH
Fluorene	NY,CT,NH
Indeno(1,2,3-cd)pyrene	NY,CT,NH
Naphthalene	NY,CT,NH
Phenanthrene	NY,CT,NH
Pyrene	NY,CT,NH

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	01/1/2012
MA	Massachusetts DEP	M-MA100	06/30/2012
CT	Connecticut Department of Public Health	PH-0567	09/30/2013
NY	New York State Department of Health	10899 NELAP	04/1/2012
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2012
RI	Rhode Island Department of Health	LAO00112	12/30/2011
NC	North Carolina Div. of Water Quality	652	12/31/2011
NJ	New Jersey DEP	MA007 NELAP	06/30/2012
FL	Florida Department of Health	E871027 NELAP	06/30/2012
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2012
WA	State of Washington Department of Ecology	C2065	02/23/2012
ME	State of Maine	2011028	06/9/2013



ANALYTICAL LABORATORY

Phone: 413-525-2332  
Fax: 413-525-6405  
Email: info@contestlabs.com  
www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street  
East Longmeadow, MA 01028

Page 2 of 5

Company Name: Diversified Technology Casters Telephone: 203-239-4200

Address: 2321 Whitney Ave Project # 11-358-200

Attention: Jay Bloss Client/PO#

Project Location: 11-358-200

Sampled By: Jean Jossier

Project Proposal Provided? (for billing purposes)  
Yes 2011025 proposal date 10/25/11

Format: ☒ PDF ☐ EXCEL ☐ OGIS

Collection: ☐ "Enhanced Data Package"

DATA DELIVERY (check all that apply) ☒ FAX ☒ EMAIL ☐ WEBSITE

FAX# SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS @ steomacinc.com

QUESTIONS @ steomacinc.com

1 1 1  
I I I  
A A A

ANALYSIS REQUESTED

# of Containers  
\*\* Preservation  
\*\*\* Container Code  
Dissolved Metals  
O Field Filtered  
O Lab to Filter

\*\*\* Cont. Code:

A=amber glass  
G=glass  
P=plastic  
ST=sterile  
V=vial  
S=summary can  
T=tedar bag  
O=Other

\*\* Preservation

I = Iced  
H = HCL  
M = Methanol  
N = Nitric Acid  
S = Sulfuric Acid  
B = Sodium bisulfate  
X = Na hydroxide  
T = Na thiosulfate  
O = Other

\* Matrix Code:

GW = groundwater  
WW = wastewater  
DW = drinking water  
A = air  
S = soil/solid  
SL = sludge  
O = other

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:

H - High; M - Medium; L - Low; C - Clean; U - Unknown

Is your project MCP or RCP?

☐ MCP Analytical Certification Form Required  
☒ REP Analysis Certification Form Required  
☐ MA State DW Form Required PWSD #



NELAC & AIHA Certified  
WBE/DBE Certified

Detection Limit Requirements  
Massachusetts:

Connecticut: RESDEC  
GAPMC

SWC/SWC

Turnaround  
☐ 7-Day  
☐ 10-Day  
☒ Other 5 day  
RUSH

Require lab approval  
☐ 24-Hr ☐ 48-Hr  
☐ 72-Hr ☐ 14-Day

Other:

Requisitioned by: (signature) Date/Time: 4/18 0900

Requisitioned by: (signature) Date/Time: 4/18 13:40

Requisitioned by: (signature) Date/Time: 4/18 15:10

Requisitioned by: (signature) Date/Time: 4/18 15:10

11-18-11 16:20 IN MCK

Comments:

Con-Test Lab ID	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix	Lab Code
11	GP-15B 0.3-1.8'	4/17	0844		*	S	U
12	GP-15B 1.2-2.1'	4/17	0847		*	S	U
13	GP-15B 2.3-3.5'	4/17	0850		*	S	U
14	GP-10 0.3-1'	4/17	0910		*	S	U
15	GP-10 1-1.6'	4/17	0912		*	S	U
16	GP-10 1.6-2.5'	4/17	0914		*	S	U
17	GP-10 0.2-1.5'	4/17	0919		*	S	U
18	GP-10 1.5-3'	4/17	0922		*	S	U
19	GP-10 0.5-1'	4/17	0929		*	S	U
20	GP-10 1-2.3'	4/17	0932		*	S	U

TURNAROUND TIME (business days) STARTS AT 9:00 A.M. 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.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

**CHAIN OF CUSTODY RECORD**

39 Spruce Street  
East Longmeadow, MA 01028

Company Name: Diversified Technology Services  
Address: 2330 Wilshire Ave  
Attention: Joy Bloss  
Project # 11-358-200

Client PO# 11K0682  
DATA DELIVERY (check all that apply)  
☐ FAX ☒ EMAIL ☐ WEBSITE

Project Location: VA Detachment  
Sampled By: Sean Vosler  
Format: PDF EXCEL GIS

Project Proposal Provided? (for billing purposes)  
☒ Yes 2011035 proposal date 10/25/11

Con-Test Lab ID (Laboratory use only)	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Long Code
21	GR-1A 0.2-1'	11/17	0940		*	S	U
22	Duplicate-1	11/17			*	S	U
23	GR-1A 1-2'	11/17	0942		*	S	U
24	GR-7D 0.3-2.1'	11/17	0955		*	S	U
25	GR-7D 2.1-3.4'	11/17	0957		*	S	U
26	GR-7C 1-2'	11/17	1002		*	S	U
27	GR-7C 2-3'	11/17	1005		*	S	U
28	GR-7B 0.4-2.1'	11/17	1011		*	S	U
29	GR-7B 2-2.8'	11/17	1014		*	S	U
30	GR-7B 2.8-3.6'	11/17	1019		*	S	U

Comments: 11-13-11 16:20 IN  
11-13-11 18:12 TN  
h4

Relinquished by: (signature) [Signature] Date/Time: 11/10 0700

Received by: (signature) [Signature] Date/Time: 11/8/11 13:40

Relinquished by: (signature) [Signature] Date/Time: 11/17/11 15:10

Received by: (signature) [Signature] Date/Time: 11/18 15:00

Turnaround ☐ 7-Day ☐ 10-Day ☒ Other 5 Day  
☐ 12-24 Hr ☐ 148 Hr  
Require lab approval ☐ Other: Guaranteed

Detection Limit Requirements  
Massachusetts: Read DEC  
6 APRC  
Guaranteed

Is your project MCP or RCP?  
☐ MCP Analytical Certification Form Required  
☒ RCP Analysis Certification Form Required  
☐ MA State DW Form Required PWSD #         

# of Containers	** Preservation	*** Container Code	Dissolved Metals	Field Filtered	Lab to Filter

\*\*\*Cont. Code:  
A=amber glass  
G=glass  
P=plastic  
ST=sterile  
V=vial  
S=summary can  
T=tetradar bag  
O=Other

\*\*Preservation  
I = Iced  
H = HCL  
M = Methanol  
N = Nitric Acid  
S = Sulfuric Acid  
B = Sodium bisulfate  
X = Na hydroxide  
T = Na thiosulfate  
O = Other

\*Matrix Code:  
GW = groundwater  
WW = wastewater  
DW = drinking water  
A = air  
S = soil/solid  
SL = sludge  
O = other



NELAC & AIHA Certified  
WB/DBE Certified



ANALYTICAL LABORATORY

Phone: 413-525-2332  
Fax: 413-525-6405  
Email: info@contestlabs.com  
www.contestlabs.com

# CHAIN OF CUSTODY RECORD

39 Spruce Street  
East Longmeadow, MA 01028

Page 4 of 5

Company Name: Diversified Technology Consultants

Telephone: 203-231-4200

ANALYSIS REQUESTED

# of Containers  
\*\* Preservation  
\*\*\* Container Code

Address: 2321 Wilbur Ave

Project # 11-358-200

Dissolved Metals

Attention: Joe Bloss

Client PO#

Field Filtered  
Lab to Filter

Project Location: VA - Lexington

DATA DELIVERY (check all that apply)  
☐ FAX ☒ EMAIL ☐ WEBSITE  
Fax # 203-231-4200  
Email: joey.bloss@con-test.com

Project Proposal Provided? (for billing purposes)  
☒ Yes 2011025 proposal date 10/25

Format: ☒ PDF ☐ EXCEL ☐ GIS

Con-Test Lab ID

Client Sample ID / Description

Beginning Date/Time

Ending Date/Time

31

GR-7A 0.4-1.5'

11/17 1023

11/17 1023

32

GR-7A 1.5-3'

11/17 1027

11/17 1027

33

HA-1 0-0.5'

11/17 1135

11/17 1135

34

HA-2 0-0.5'

11/17 1140

11/17 1140

35

HA-3 0-0.5'

11/17 1145

11/17 1145

36

SB-1 0.4-1.7'

11/17 1033

11/17 1033

37

SB-1 1.7-3.4'

11/17 1035

11/17 1035

38

SB-2 0.2-2.5'

11/17 1041

11/17 1041

39

SB-2 2.5-3.8'

11/17 1044

11/17 1044

40

SB-3 0.2-2.4'

11/17 1051

11/17 1051

Comments:

11-18-11 15:20 IN

11-18-11 10:12 AM

11-18-11 10:12 AM

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:

H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)

Date/Time: 11/18 0900

Turnaround ☐ 7-Day ☐ 10-Day ☒ Other: 5-Day

Detection Limit Requirements

Is your project MCP or RCP?

MCP Analytical Certification Form Required

Received by: (signature)

Date/Time: 11/18 13:40

Require lab approval ☐ 72-Hr ☐ 14-Day

Connecticut: RESDEC

MA State DW Form Required PW/SID #

NEIAC & AIHA Certified

Received by: (signature)

Date/Time: 11/18 15:10

Require lab approval ☐ 72-Hr ☐ 14-Day

Connecticut: RESDEC

MA State DW Form Required PW/SID #

NEIAC & AIHA Certified

TURNAROUND TIME (business days) STARTS AT 9:00 A.M. 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.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

**CHAIN OF CUSTODY RECORD**

39 Spruce Street  
East Longmeadow, MA 01028

Page 5 of 5

Company Name: Diversified Technology Consultants  
Address: 2321 Wilshire Ave  
Telephone: 263-239-4200  
Project # 11-358-200

Attention: John Bloss

Client PO#  
DATA DELIVERY (check all that apply)  
☐ FAX ☒ EMAIL ☐ WEBSITE

Project Location: 11A-12-13-14

Sampled By: Sean Vossler

Email: John.Bloss@teconinc.com  
Format: ☒ PDF ☐ EXCEL ☐ OGIS

Project Proposal Provided? (for billing purposes)  
☒ yes ☐ no  
proposal date 10/25/11

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix	Lab Date	Total As of Pb	PAHs 8270	VOCs 8260	ETPH	VOCs 8260	PAHs 8270	Total As	Total Pb
41	Duplicate-2	11/17				S	U								
42	SB-3 2.4-4'	11/17	1055			S	U								
43	MW-2	11/17	1240			GW	U								
44	Duplicate (GW)	11/17				GW	U								
45	MW-3	11/17	1345			GW	U								
46	Field Blank	11/17	1410			C	U								
47	Tip Blank	11/17				C	U								
48	MW-1	11/17	1445			GW	U								

Comments:

11-13-11 16:20 LN

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:  
H - High, M - Medium, L - Low, C - Clean, U - Unknown

Relinquished by (signature)  
John Bloss  
Date/Time: 11/18, 0700

Turnaround  
☐ 7-Day  
☐ 10-Day  
☒ RUSH

Detection Limit Requirements  
Massachusetts

Is your project MCP or RCP?  
☐ MCP Analytical Certification Form Required  
☒ RCP Analysis Certification Form Required  
MA State DW Required PWSID #

\*\*\*Container Code  
# of Containers  
\*\* Preservation  
\*\*\*Container Code

Relinquished by (signature)  
John Bloss  
Date/Time: 11/18/11 13:42

Relinquished by (signature)  
John Bloss  
Date/Time: 11/18/11 15:10

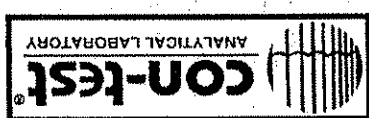
Connecticut RESDEC  
GA 8MC  
Gupe / Gupe

Received by (signature)  
John Bloss  
Date/Time: 11/18

\*\*\*Container Code  
# of Containers  
\*\* Preservation  
\*\*\*Container Code

TURNAROUND TIME (business days) STARTS AT 9:00 A.M. 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.  
PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

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



### Sample Receipt Checklist



CLIENT NAME: Diversified RECEIVED BY: mk DATE: 11-18-11

- 1) Was the chain(s) of custody relinquished and signed? Yes  
2) Does the chain agree with the samples? Yes  
3) Are all the samples in good condition? Yes  
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  
Temperature °C by Temp gun 30c  
5) Are there Dissolved samples for the lab to filter? No  
Who was notified Yes Date 11-18-11 Time 3:00  
6) Are there any RUSH or SHORT HOLDING TIME samples? No  
Who was notified Yes Date 11-18-11 Time 3:00  
7) Location where samples are stored: 109-11

Permission to subcontract samples? Yes No  
(Walk-in clients only) if not already approved  
Client Signature: \_\_\_\_\_

Containers received at Con-Test			
# of containers		# of containers	
1 Liter Amber		4	
500 mL Amber			
250 mL Amber (8oz amber)			
1 Liter Plastic			
500 mL Plastic			
250 mL plastic		5	
40 mL Vial - type listed below		1826	
Collisura / bacteria bottle			
Dissolved Oxygen bottle			
Encore			
Flashpoint bottle			
Perchlorate Kit			
Other			
# of containers		# of containers	
8 oz amber/clear jar		42	
4 oz amber/clear jar			
2 oz amber/clear jar			
Air Cassette			
Hg/Hopcalite Tube			
Plastic Bag / Ziploc			
PM 2.5 / PM 10			
PUF Cartridge			
SOC Kit			
TO-17 Tubes			
Non-Contest Container			
Other glass jar			
Other			

40 mL vials: # HCl 18 # Methanol 6 # DI Water 12 # Bisulfate 12 # Thiosulfate 12  
Do all samples have the proper Acid pH: Yes No N/A  
Do all samples have the proper Base pH: Yes No N/A

Time and Date Frozen: 11-18-11 16:12 IN  
Doc# 277



CT ETPH DISCRIMINATION CHECK

Date Acquired 11/23/11  
Data File Name A1123032.D  
Sample Name ETPH 1500  
Instrument Name 5890DFID

Compound	Ret Time	Target Response	Average Response	%D +/- 20
c - 9	1.29	409706	426227	-4
c - 10	1.66	419887	426227	-1
c - 12	2.40	431072	426227	1
c - 14	3.09	440961	426227	3
c - 16	3.70	449974	426227	6
c - 18	4.34	454492	426227	7
o-Terphenyl	4.63	521370	426227	5
c - 20	4.94	449561	426227	2
c - 22	5.44	436606	426227	5
c - 24	5.88	445999	426227	3
c - 26	6.27	438686	426227	1
c - 28	6.64	430524	426227	-1
c - 30	6.97	419988	426227	-5
c - 32	7.29	405403	426227	-9
c - 34	7.59	388547	426227	-13
c - 36	7.97	372001	426227	

\* One compound allowed %D <= 50%

Samples

11K0691-01  
11K0691-02  
11K0691-04  
11K0682-38  
11K0691-10  
11K0682-36  
11K0720-01@5X



CT ETPH DISCRIMINATION CHECK

Date Acquired 11/23/11  
Data File Name A1123033.D  
Sample Name ETPH 1500  
Instrument Name 5890DFID

Compound	Ret Time	Target Response	Average Response	%D +/- 20
c - 9	1.31	346620	365076	-5
c - 10	1.66	355856	365076	-3
c - 12	2.39	367296	365076	1
c - 14	3.07	376437	365076	3
c - 16	3.67	382106	365076	5
c - 18	4.30	385023	365076	5
o-Terphenyl	4.59	435586	365076	
c - 20	4.90	378824	365076	4
c - 22	5.40	367193	365076	1
c - 24	5.83	375671	365076	3
c - 26	6.23	371256	365076	2
c - 28	6.59	367779	365076	1
c - 30	6.92	363191	365076	-1
c - 32	7.24	355910	365076	-3
c - 34	7.54	346417	365076	-5
c - 36	7.89	336557	365076	-8

\* One compound allowed %D <= 50%

Samples

11K0691-06  
11K0691-07  
11K0682-40  
11K0682-41  
11K0691-09  
11K0691-03  
B041438-MS1  
B041438-MSD1



# REASONABLE CONFIDENCE PROTOCOL LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Con-Test Analytical Laboratory  
Project Location: VA-Newington  
Client: Diversified Technology Consultants  
Project Number: 11K0682

Laboratory Sample ID(s):

11K0682-02 thru 11K0682-48

Sample Date(s):

11/17/2011

List RCP Methods Used:

CTDEP ETPH, SW-846 6010C, SW-846 6020A, SW-846 8260C, SW-846 8270D

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1B	VPH and EPH Methods only: Was the VPH and EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A <input type="checkbox"/> No
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Were samples received at an appropriate temperature (< 6 degrees C)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5A	Were reporting limits specified or referenced on the chain-of-custody?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5B	Were these reporting limits met?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."  
This form may not be altered and all questions must be answered.

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

Authorized Signature:

*Michael A. Erickson*

Printed Name: Michael A. Erickson

Date: 11/30/11

Position: Laboratory Director

Name of Laboratory: Con-Test Analytical Laboratory

This certification form is to be used for RCP methods only.

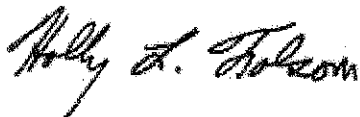
December 8, 2011

Joy Kloss  
Diversified Technology Consultants  
2321 Whitney Avenue, Hampden Ctr. II, Suite 301  
Hamden, CT 06518

Project Location: VA-Newington  
Client Job Number:  
Project Number: 11-358-200  
Laboratory Work Order Number: 11L0022

Enclosed are results of analyses for samples received by the laboratory on December 1, 2011. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Holly L. Folsom  
Project Manager



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

Diversified Technology Consultants  
2321 Whitney Avenue, Hampden Ctr. II, Suite 301  
Hamden, CT 06518  
ATTN: Joy Kloss

REPORT DATE: 12/8/2011

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 11-358-200

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 11L0022

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

PROJECT LOCATION: VA-Newington

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Duplicate-1	11L0022-02	Soil		SW-846 1312	
				SW-846 6020A	
HA-1 (0ft-0.5ft)	11L0022-03	Soil		SW-846 1312	
				SW-846 6020A	
HA-2 (0ft-0.5ft)	11L0022-04	Soil		SW-846 1311	
				SW-846 1312	
				SW-846 6010C	
				SW-846 6020A	
HA-3 (0ft-0.5ft)	11L0022-05	Soil		SW-846 1312	
				SW-846 6020A	
SB-3 (0.2ft-2.4ft)	11L0022-06	Soil		SW-846 1312	
				SW-846 6020A	

**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, only lead was requested and reported.

For method 6020, only lead was requested and reported.

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.



Daren J. Damboragian  
Laboratory Manager

Project Location: VA-Newington

Sample Description:

Work Order: 11L0022

Date Received: 12/1/2011

Field Sample #: Duplicate-1

Sampled: 11/17/2011 00:00

Sample ID: 11L0022-02

Sample Matrix: Soil

## SPLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	74	5.0	µg/L	5		SW-846 6020A	12/2/11	12/5/11 12:10	KSH



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Project Location: VA-Newington

Sample Description:

Work Order: 11L0022

Date Received: 12/1/2011

Field Sample #: HA-1 (0ft-0.5ft)

Sampled: 11/17/2011 11:35

Sample ID: 11L0022-03

Sample Matrix: Soil

SPLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	130	5.0	µg/L	5		SW-846 6020A	12/2/11	12/5/11 12:14	KSH



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Project Location: VA-Newington

Sample Description:

Work Order: 11L0022

Date Received: 12/1/2011

Field Sample #: HA-2 (0ft-0.5ft)

Sampled: 11/17/2011 11:40

Sample ID: 11L0022-04

Sample Matrix: Soil

TCLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	0.62	0.010	mg/L	1		SW-846 6010C	12/2/11	12/2/11 17:49	OP





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Project Location: VA-Newington

Sample Description:

Work Order: 11L0022

Date Received: 12/1/2011

Field Sample #: HA-2 (0ft-0.5ft)

Sampled: 11/17/2011 11:40

Sample ID: 11L0022-04

Sample Matrix: Soil

SPLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	160	5.0	µg/L	5		SW-846 6020A	12/2/11	12/5/11 12:17	KSH



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

Project Location: VA-Newington

Sample Description:

Work Order: 11L0022

Date Received: 12/1/2011

Field Sample #: HA-3 (0ft-0.5ft)

Sampled: 11/17/2011 11:45

Sample ID: 11L0022-05

Sample Matrix: Soil

SPLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	330	5.0	µg/L	5		SW-846 6020A	12/2/11	12/5/11 12:32	KSH



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

Project Location: VA-Newington

Sample Description:

Work Order: 11L0022

Date Received: 12/1/2011

Field Sample #: SB-3 (0.2ft-2.4ft)

Sampled: 11/17/2011 10:51

Sample ID: 11L0022-06

Sample Matrix: Soil

SPLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	120	5.0	µg/L	5		SW-846 6020A	12/2/11	12/5/11 12:35	KSH

**Sample Extraction Data**

Prep Method: SW-846 3010A-SW-846 6010C

Leachates were extracted on 12/1/2011 per SW-846 1311 in Batch B041897

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
11L0022-04 [HA-2 (0ft-0.5ft)]	B041989	50.0	50.0	12/02/11

Prep Method: SW-846 3010A-SW-846 6020A

Leachates were extracted on 12/1/2011 per SW-846 1312 in Batch B041898

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
11L0022-02 [Duplicate-1]	B041997	50.0	50.0	12/02/11
11L0022-03 [HA-1 (0ft-0.5ft)]	B041997	50.0	50.0	12/02/11
11L0022-04 [HA-2 (0ft-0.5ft)]	B041997	50.0	50.0	12/02/11
11L0022-05 [HA-3 (0ft-0.5ft)]	B041997	50.0	50.0	12/02/11
11L0022-06 [SB-3 (0.2ft-2.4ft)]	B041997	50.0	50.0	12/02/11



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QUALITY CONTROL

TCLP - Metals Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B041989 - SW-846 3010A										
Blank (B041989-BLK1)				Prepared & Analyzed: 12/02/11						
Lead	ND	0.010	mg/L							
LCS (B041989-BS1)				Prepared & Analyzed: 12/02/11						
Lead	0.479	0.010	mg/L	0.500		95.9	80-120			
LCS Dup (B041989-BSD1)				Prepared & Analyzed: 12/02/11						
Lead	0.457	0.010	mg/L	0.500		91.5	80-120	4.68	20	



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QUALITY CONTROL

SPLP - Metals Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B041997 - SW-846 3010A										
Blank (B041997-BLK1)				Prepared: 12/02/11 Analyzed: 12/05/11						
Lead	ND	5.0	µg/L							
LCS (B041997-BS1)				Prepared: 12/02/11 Analyzed: 12/05/11						
Lead	255	5.0	µg/L	250		102	80-120			
LCS Dup (B041997-BSD1)				Prepared: 12/02/11 Analyzed: 12/05/11						
Lead	242	5.0	µg/L	250		96.9	80-120	5.01	20	
Matrix Spike (B041997-MS1)				Source: 11L0022-02 Prepared: 12/02/11 Analyzed: 12/05/11						
Lead	310	5.0	µg/L	250		73.6 94.6	75-125			

**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.

# CERTIFICATIONS

## Certified Analyses included in this Report

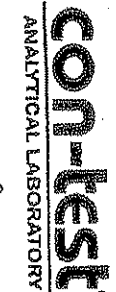
Analyte	Certifications
SW-846 6010C in Water	

Lead NY,CT,ME,NC,NH

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	I00033	01/1/2012
MA	Massachusetts DEP	M-MA100	06/30/2012
CT	Connecticut Department of Public Health	PH-0567	09/30/2013
NY	New York State Department of Health	I0899 NELAP	04/1/2012
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2012
RI	Rhode Island Department of Health	LAO00112	12/30/2011
NC	North Carolina Div. of Water Quality	652	12/31/2011
NJ	New Jersey DEP	MA007 NELAP	06/30/2012
FL	Florida Department of Health	E871027 NELAP	06/30/2012
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2012
WA	State of Washington Department of Ecology	C2065	02/23/2012
ME	State of Maine	2011028	06/9/2013





Phone: 413-525-2332  
Fax: 413-525-6405  
Email: [info@confestlabs.com](mailto:info@confestlabs.com)  
[www.confestlabs.com](http://www.confestlabs.com)

# CHAIN OF CUSTODY RECORD

39 Spruce Street  
East Longmeadow, MA 01028

Page 01 of 5

Page 15 of 20

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Fax: 413-525-6405  
Email: [info@contestlabs.com](mailto:info@contestlabs.com)  
[www.contestlabs.com](http://www.contestlabs.com)

# CHAIN OF CUSTODY RECORD

39 Spruce Street  
East Longmeadow, MA 01028

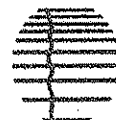
Page 3 of 5

Page 16 of 20

<b>Company Name:</b> Juvieseez Technology Consultants		<b>Telephone:</b> 803-234-4200	<b>Project #</b> 11-358-200	<b>ANALYSIS REQUESTED</b>	# of Containers						
<b>Address:</b> 2321 Chimes Ave Hanna CT 06518		<b>Client PO#</b>			** Preservation						
<b>Attention:</b> Jay Bloss		<b>DATA DELIVERY</b> (check all that apply) <input type="checkbox"/> FAX <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> WEBSITE			** Container Code						
<b>Project Location:</b> VA - Denhamton		<b>Fax #</b>			Dissolved Metals						
<b>Sampled By:</b> Sean Vosler		<b>Email:</b> jay.bloss@jvtech.com			<input type="radio"/> Field Filtered <input type="radio"/> Lab to Filter						
<b>Project Proposal Provided?</b> (for billing purposes) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 201103 proposal date 10/25/11		<b>Format:</b> <input checked="" type="radio"/> PDF <input type="radio"/> EXCEL <input type="radio"/> OGIS <input type="radio"/> OTHER									
Con-Test Lab ID	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Graab	*Matrix Label	Durc Label	Total Arsenic	Total Lead	PANs 8270	SPLP Lead
21	GR-1A 0.2-1'	11/7	0940	*	S	C		*	*	*	(X)
22	Duplicate-1	11/7		*	S	C		*	*	*	
23	GR-1A 1-2'	11/7	0942	*	S	C		*	*	*	
24	GR-7D 0.3-2.1'	11/7	0955	*	S	C		*	*	*	
25	GR-7D 2.1-3.4'	11/7	0957	*	S	C		*	*	*	
26	GR-7C 1-2'	11/7	1002	*	S	C		*	*	*	
27	GR-7C 2-3'	11/7	1005	*	S	C		*	*	*	
28	GR-7B 0.4-2.1'	11/7	1011	*	S	C		*	*	*	
29	GR-7B 2-2.8'	11/7	1014	*	S	C		*	*	*	
30	GP-7E 2.8-3.6'	11/7	1019	*	S	C		*	*	*	
<b>Comments:</b> 11-18-11 16:20 IN 44-78-11 18:12 TN											
<b>Relinquished by:</b> (signature) [Signature]		<b>Date/Time:</b> 11/10 0700	<b>Turnaround</b> <input type="checkbox"/> 7-Day <input type="checkbox"/> 10-Day <input checked="" type="checkbox"/> Other 5 Day RUSH		<b>Detection Limit Requirements</b> Massachusetts: Connecticut: READ DEC 6 HRM GURC/SURC		<b>Is your project MCP or RCP?</b> <input type="radio"/> MCP Analytical Certification Form Required <input checked="" type="radio"/> RCP Analysis Certification Form Required <input type="radio"/> MA State DW Form Required PW/SID # _____		<b>ACCREDITED BY:</b> NELAC & AIHA Certified WB/DBE Certified		
<b>Relinquished by:</b> (signature) [Signature]		<b>Date/Time:</b> 11/19/11 13:46									
<b>Relinquished by:</b> (signature) [Signature]		<b>Date/Time:</b> 11/17/11 15:10									
<b>Received by:</b> (signature) [Signature]		<b>Date/Time:</b> 11/18 15:00									
<b>Require lab approval</b>											

TURNAROUND TIME (business days) STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE A COMPLETELY OR IS INCORRECT. TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT



**con-test**  
ANALYTICAL LABORATORY

Phone: 413-525-2332  
Fax: 413-525-6405  
Email: info@contestlabs.com  
www.contestlabs.com

# CHAIN OF CUSTODY RECORD

39 Spruce Street  
East Longmeadow, MA 01028

Page 4 of 5

Company Name: Diversified Technology Consultants Telephone: 203-239-4300

Address: 2321 Wilshire Ave Project # 11-358-200

Attention: Jay Kloss Client PO# 11-0022  
Project Location: VA - Alexandria DATA DELIVERY (check all that apply)  
Sampled By: Sean Downer Fax # 203-239-4300  
Project Proposal Provided? (for billing purposes) Email: jay.kloss@diversified.com  
☒ Yes 2011/03/05 proposal date 10/1/15 Format: PDF EXCEL OGIS

Con-Test Lab ID	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Bulk	Lab Code
31	GP-7A 6.4-15.1	11/13	1023	*	S	U	
32	GP-7A 15-3.1	11/13	1027	*	S	U	
33	HA-1 0-0.5 (1)	11/13	1135	*	S	U	
34	HA-2 0-0.5 (1)	11/13	1140	*	S	U	
35	HA-3 0-0.5 (1)	11/13	1145	*	S	U	
36	SR-1 0.4-1.7	11/13	1033	*	S	U	
37	SR-2 1.7-3.4	11/13	1035	*	S	U	
38	SR-2 0.2-2.5	11/13	1041	*	S	U	
39	SR-2 2.5-3.8	11/13	1044	*	S	U	
40	SR-3 0.2-2.4 (1)	11/13	1051	*	S	U	

Total Arsenic							
Total Lead							
PAHs 8270							
ETPH							
VOCs 8260							
SRP Lead (1)							
TCLP Lead (1)							

\*\*\*Containers  
# of Containers  
\*\* Preservation  
\*\*\* Container Code  
Dissolved Metals  
O Field Filtered  
O Lab to Filter  
\*\*\* Cont. Code:  
A=amber glass  
G=glass  
P=plastic  
ST=sterile  
V=vial  
S=somma can  
T=tetral bag  
O=Other

\*\*Preservation  
I = iced  
H = HCL  
M = Methanol  
N = Nitric Acid  
S = Sulfuric Acid  
B = Sodium bisulfate  
X = Na hydroxide  
T = Na thiosulfate  
O = Other  
\*Matrix Code:  
GW= groundwater  
WW= wastewater  
DW= drinking water  
A = air  
SL = soil/solid  
S = sludge  
O = other

Relinquished by (signature) [Signature] Date/Time: 11/18 0900  
Received by (signature) [Signature] Date/Time: 11/18 13:46  
Relinquished by (signature) [Signature] Date/Time: 11/18 15:10  
Received by (signature) [Signature] Date/Time: 11/18 15:10

Turnaround Time (business days) STARTS AT 9:00 A.M. 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.

Is your project MCP or RCP?  
O MCP Analytical Certification Form Required  
O RCP Analysis Certification Form Required  
MA State DW Form Required PWSID #         

NEIAC & AIHA Certified  
WBEDBE Certified

COMPLETED BY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED.

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



### Sample Receipt Checklist



CLIENT NAME: Diversified RECEIVED BY: mx DATE: 11-18-11

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

30°C

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 \_\_\_\_\_

7) Location where samples are stored:

10g-1n

Permission to subcontract samples? Yes No

(Walk-in clients only) if not already approved

Client Signature:

### Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber	4	8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	42
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Air Cassette	
500 mL Plastic		Hg/Hopcalite Tube	
250 mL plastic	5	Plastic Bag / Ziploc	
40 mL Vial - type listed below	1836	PM 2.5 / PM 10	
Collisure / bacteria bottle		PUF Cartridge	
Dissolved Oxygen bottle		SOC Kit	
Encore		TO-17 Tubes	
Flashpoint bottle		Non-ConTest Container	
Perchlorate Kit		Other glass jar	
Other		Other	

Laboratory Comments:

40 mL vials: # HCl 18 # Methanol 6  
# Bisulfate \_\_\_\_\_ # DI Water 12  
# Thiosulfate \_\_\_\_\_ Unpreserved \_\_\_\_\_

Time and Date Frozen:  
11-18-11 16:12 IN

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

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

Doc# 277

Rev. 1 May 2011

## Holly Folsom

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**From:** Vossler, Jean [jean.vossler@teamdtc.com]  
**Sent:** Thursday, December 01, 2011 1:49 PM  
**To:** hfolsom@contestlabs.com  
**Cc:** Kloss, Joy  
**Subject:** DTC Lab Work Order Number 11K0682

Holly,

I would like to add the following analysis to samples that were submitted to you guys on November 18<sup>th</sup> for the above referenced work order.

DTC project number 11-358-200 – VA-Newington

Please run SPLP Lead on the following samples:

<u>Sample ID</u>	<u>Lab ID</u>
Duplicate-1	11K0682-22
GP-1D (1-1.6')	11K0682-15
HA-1 (0-0.5')	11K0682-33
HA-2 (0-0.5')	11K0682-34
HA-3 (0-0.5')	11K0682-35
SB-3 (0.2-2.4')	11K0682-40

Please run TCLP Lead on the following sample:

<u>Sample ID</u>	<u>Lab ID</u>
HA-2 (0-0.5')	11K0682-34

Please run SPLP and TCLP Arsenic on the following sample:

<u>Sample ID</u>	<u>Lab ID</u>
GP-1D (1-1.6')	11K0682-15

If I could get the results on a 5-day turnaround, that would be great. Please let me know if you have any questions.

Jean Marie Vossler  
Environmental Scientist



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# REASONABLE CONFIDENCE PROTOCOL LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

**Laboratory Name:** Con-Test Analytical Laboratory

**Client:** Diversified Technology Consultants

**Project Location:** VA-Newington

**Project Number:** 11L0022

**Laboratory Sample ID(s):**

11L0022-02 thru 11L0022-06

**Sample Date(s):**

11/17/2011

**List RCP Methods Used:**

SW-846 1311, SW-846 1312, SW-846 6010C, SW-846 6020A

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1B	VPH and EPH Methods only: Was the VPH and EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Were samples received at an appropriate temperature (< 6 degrees C.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5A	Were reporting limits specified or referenced on the chain-of-custody?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5B	Were these reporting limits met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

This form may not be altered and all questions must be answered.

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

**Authorized Signature:**

**Position:** Laboratory Manager

**Printed Name:** Daren J. Damboragian

**Date:** 12/08/11

**Name of Laboratory:** Con-Test Analytical Laboratory

This certification form is to be used for RCP methods only.